# **URS**

# Report

Independent Environmental Audit 2014

# Pine Dale Mine / Yarraboldy Extension

15 October 2014 43177926/IEA/01

Prepared for: Enhance Place Pty Ltd

Prepared by URS Australia Pty Ltd













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#### **ABBREVIATIONS**

Abbreviation Description

AHMP Aboriginal Heritage Management Plan

AEMR Annual Environmental Management Report

AQGHGMP Air Quality and Greenhouse Gas Management Plan

BFMP Bushfire Management Plan

BMP Blast Management Plan

BWMP Baseline Water Monitoring Plan

Care and maintenance

Period following temporary cessation of operations when infrastructure remains

largely intact and the site continues to be managed.

CCC Community Consultative Committee

CoA Condition of Approval

Council Lithgow City Council

DoE Department of the Environment formerly Department of Sustainability, Environment,

Water, Population and Communities

GPS Global Positioning System

PA Project Approval

Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm

Day Sundays and Public Holidays

Department Department of Planning and Infrastructure

Director-General Director-General of Department of Planning, or delegate

DPE Department of Planning and Environment

DTIRIS-DRE Department of Trade and Investment, Regional Infrastructure and Services

EA Environmental Assessment

EC Electrical Conductivity
Enhance Place Enhance Place Pty Ltd

EPA Environment Protection Authority

EP&A Act Environmental Planning and Assessment Act 1979
EP&A Regulation Environmental Planning and Assessment Regulation 2000

EPBC Act Environment Protection and Biodiversity Conservation (EPBC) Approval 2011-6016

issued under the Environment Protection and Biodiversity Conservation Act 1999

(Cth)

EPL Environment Protection Licence
ESCP Erosion and Sediment Control Plan

Evening Evening is defined as the period between 6pm and 10pm.

GWMP Groundwater Management Plan

Ha Hectares

IEMS Integrated Environmental Management System

INP Industrial Noise Policy

ISO International Organization for Standardization

km Kilometres

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Mine Water

Abbreviation Description

Land means the whole of a lot, or contiguous lots owned by the same landowner, in

a current plan registered at the Land Titles Office at the date of this approval

LCC Lithgow City Council

Water that accumulates within active mining areas, ROM, workshop, infrastructure

areas, synonymous with dirty water

Includes all coal extraction, processing, and transportation activities carried out on

Mining Operations site

Minister for Planning, or delegate

ML Mining Lease

Modification 1 to project approval (PA 10 0041) dated March 2012 for the

MOD 1 Yarraboldy extension area MOP Mine Operations Plan

m Metre(s)

tpa tonnes per annum

Night The period from 10pm to 7am on Monday to Saturday

NOW NSW Office of Water (adopted certain responsibilities of DWE from July 2009)

NMP Noise Management Plan

OCE Open Cut Examiner

POEO Act Protection of the Environment and Operations Act 1997

PIRMP Pollution Incident Response Management Plan

PuCB Purple Copper Butterfly

RABQSA Registrar Accreditation Board and Quality Society of Australasia

ROM Run of Mine

SEWPaC Department of Sustainability, Environment, Water, Population and Communities

now Department of the Environment (DoE)

SLR SLR Consulting Pty Ltd

Strategy Environmental Management Strategy

TSS Total Suspended Solids
WaMP Waste Management Plan

URS URS Australia Pty Ltd

WMP Water Management Plan



#### **EXECUTIVE SUMMARY**

URS Australia Pty Ltd (URS) was engaged by Enhance Place Pty Ltd (Enhance Place) to carry out an Independent Environmental Audit of the Pine Dale Mine Yarraboldy Extension Area (Pine Dale) located at Blackman's Flat near Lithgow, New South Wales.

A condition of the Project Approval (PA) 10\_0041 (dated 20 January 2011 and including Modification 1 dated 1 March 2011) requires Enhance Place to commission an independent environmental audit by the end June 2014.

This is the second independent environmental audit to be carried out under PA 10\_0041 at Pine Dale and for the purpose of this audit, the audit period has been defined as from the 31 January 2013 to 29 August 2014 (date of site inspection conducted as part of this audit). This report presents the findings of this audit. The previous audit was conducted by URS with the audit period being defined as 20 February 2011 to 31 January 2013. The Site inspections were conducted on 30 and 31 January 2013 and the IEA report dated June 2013 (URS, 2013).

#### Care and Maintenance

The current Project Approval (PA 10\_0041) allows Enhance Place to continue mining operations on-site until 31 December 2014 only; however, Enhance Place is required under the approval to rehabilitate the Site and carry out additional undertakings to the satisfaction of both the Director-General and the Executive Director, Mineral Resources in Department of Trade and Investment, Regional Infrastructure and Services (DTRIS-DRE) as well as comply with all other requirements of the approval.

Enhance Place was progressing an extension to the Yarraboldy Stage 2 Extension Project however, this was not approved during the audit period. Enhance Place anticipated that the Stage 2 Extension would be determined prior to coal being exhausted in the currently approved Yarraboldy Extension and that it would have enabled the orderly progression of mining to continue.

Due to delays in the environmental assessment studies for the Stage 2 Extension Project, Pine Dale was placed in care and maintenance in April 2014. That is, there is no coal production from the Site and staff consists of a 'skeleton' crew as dictated by law. At the time of the audit there was uncertainty concerning the future operations of Pine Dale and the timing of the recommencement of mining operations. Pine Dale management reported that it was expected that strategies, plans and programs would be revised and implemented following the determination of the Stage 2 Project Extension Project; however, as approval was not received during the audit period strategies, plans and programs have remained unchanged since the previous IEA (URS, 203). URS consider that recommendations that have not been addressed since the previous IEA (URS, 2013) concerning strategies, plans and programs remain valid and these have been identified as repeat recommendations throughout the report.

Pine Dale has prepared a draft Care and Maintenance Mining Operations Plan / Rehabilitation Management Plan that addresses the proposed environmental management procedures during the care and maintenance period. The draft Care and Maintenance Mining Operations Plan including the Rehabilitation Management Plan has been provided to DTRIS-DRE for consultation. Comments received from DTRIS-DRE in July 2014 requested further information

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and detail concerning rehabilitation success criteria. Pine Dale is reportedly in the process of revising the draft Care and Maintenance Mining Operations Plan/ Rehabilitation Management Plan to address the comments. The draft Care and Maintenance Mining Operations Plan/ Rehabilitation Management Plan has also been submitted to Environment Protection Authority, NSW Office of Water and the Pine Dale Community Consultative Committee for review and feedback.

## 2013 Audit Findings

A total of 26 conditions were identified as non-compliant or indeterminate during the previous IEA (URS, 2013). An additional 53 conditions were provided with continuous improvement recommendations. Of the 26 conditions identified as non-compliant or indeterminate, 20 conditions had been closed during the audit period (for this IEA) whilst six remained open or ongoing (four non-compliant and two indeterminate). Further details are provided in Section 6.3. The six 2013 non-compliant conditions and recommendations that remain open are summarised in **Table ES 1**.

Table ES 1 Ongoing 2013 IEA Non-compliances

Condition	2013 IEA Recommendation
PA10_0041	Non-compliant (Implementation) - Ongoing
3.27 (b)	Section 4.6.2 of the Baseline Water Monitoring Plan states that following the completion of the plan Pine Dale intend to review water quality trigger values. It is recommended that consultation be undertaken with NOW, OEH and DP&I to review water quality trigger values and where required additional monitoring be undertaken to determine appropriate trigger values. Following identification of revised trigger levels, the WMP should be updated to reflect the required monitoring program. The trigger level review has been placed on hold pending approval of Yarraboldy Stage 2 Development application. Enhance Place had planned to conduct the review when the Stage 2 application was approved; however, this was put on hold.
PA 10_0041	Non-compliant (Implementation) – Ongoing
3.27 (c)	It is recommended that an investigation of groundwater quality and levels is undertaken as triggered during the audit period by exceedances of GWP trigger criteria (Table WM11). This includes a review of groundwater levels from July 2011 to present to determine if operations have impacted groundwater levels.
	As provided in CoA 3.27(b) it is recommended that consultation with NOW, OEH and DP&I is undertaken to review water quality trigger values and based on the outcomes, the WMP be updated to reflect the required monitoring program.
	Remove EP PDH3/GW and EP PDH4/GW water quality analyses from Table WM11 as identified in the GWP.
	The trigger level review has been placed on hold by Enhance Place pending approval of the Yarraboldy Stage 2 Development application.
EPL 4911	Non-compliant - Ongoing
M5.2	All complaint records must be completed in their entirety. In particular actions carried out and/or no actions taken should be documented correctly. It is noted that the complaint supplied by DTRIS-DRE on 28 February 2014 was not included on the complaints register.



Condition	2013 IEA Recommendation
ML 1664 C7	Non-compliant (For Area A) - Ongoing
	As identified in the 2011 AEMR site inspection by DRE, letter dated 22.06.11, rehabilitation monitoring results must be provided in the 2012 AEMR and additional rehabilitation of Area A undertaken to reduce erosion and increase vegetation abundance. The 2012 AEMR was not available for review during this audit.
	No further correspondence from the department was reportedly received by Pine Dale during the audit period.
	Pine Dale have been assessed as Not Compliant due to the letter from DRE and required actions to address rehabilitation in Area A however it is noted that rehabilitation was in progress (some trees had been planted and some drainage lines constructed) and additional works are scheduled for 2013. Evidence was sighted that showed rehabilitation was being conducted; however, this condition remains ongoing.

#### 2014 Findings

The Independent Environmental Audit (IEA) was completed in accordance with Condition 8, Schedule 5 of PA 10\_0041 and the project brief as detailed in URS' proposal (dated 17 July 2014). The audit methodology comprised the following activities:

- Initial discussions with Pine Dale to organise the audit, including the provision of documentation, the Site inspection and timing;
- Preparation of a Site compliance register and other documentation provided by Pine Dale;
- A two-day site inspection and interviews with key site personnel, on 28 and 29 August 2014;
- Consultation with key government agencies;
- Review of additional documentation provided by Pine Dale after the site inspection; and
- Submission of this Report to Pine Dale outlining the audit findings.

The IEA assessed compliance with relevant approvals, licences and other management plans applicable to Pine Dale. The detailed compliance assessment, including comments and recommendations, is presented in **Appendix A**. Non-compliance with relevant approvals is discussed in **Section 9** and summarised in **Table ES 3**.

The scope of the audit also included a review of the adequacy of the strategies, plans and programs required under the Project Approval. The findings of the adequacy review are presented in **Section 7**.

A number of continuous improvement opportunities were identified and presented. A summary of recommended actions is presented in **Section 9**.

The auditors noted an improvement in the availability and awareness of documentation during the audit compared with the previous audit (URS, 2013). Consultation with the DTIRIS-DRE officer responsible for Pine Dale on 15 August 2014 indicated that Pine Dale is generally good



to work with and Site management respond to requests and concerns in timely and professional manner.

Table ES 2 2014 Overall Compliance Assessment

Approval	Number of Conditions Non Compliant	Number of Conditions Indeterminate
Project Approval Enhance Place Project PA 10_0041	5	4
Environment Protection Licence No. 4911	0	0
Mining Lease 1664 and 1569	3	2
Statement of Commitments (PA 10_0041 Mod 1)	0	3

Table ES 3 2014 IEA Non-compliances

Condition / Requirement No.	Summary of Condition / Requirement	Comment	Compliance Status and Recommendation
PA 10_0041, Condition 3.27 (c)	c) a Groundwater Management Plan, which includes:  i. groundwater assessment criteria, including trigger levels for investigating and potentially adverse groundwater impacts;  ii. a program to monitor:  i. groundwater inflows to the open cut mining operation ii. the impacts of the project on;  - baseflows to Neubecks Creek;  - any groundwater bores on privately owned land; and  iii. a program to validate the groundwater model for the project, and calibrate it to site specific conditions; and  iv. a plan to respond to any exceedances of the performance criteria, and offset the loss of any baseflow to Neubecks Creek caused by the project.	Pine Dale was assessed as non-compliant with this condition as groundwater monitoring results identified exceedances of trigger values as defined by the GWMP for pH and EC and the WMP has not been updated to reflect the current reporting criteria adopted (i.e. the previous version of the sites' Groundwater Monitoring Program (Dec 2005)).	Preparation – Compliant (2013)  Implementation – Non-compliant  Repeat Recommendation 2013/IEA/009  Consult with NOW, OEH and DPE to review water quality trigger values and based on the consultation update and implement the WMP (incorporating the GWMP).
PA 10_0041, Condition 3.52	By the end of April 2011, the Proponent shall prepare and implement a <b>Bushfire Management Plan</b> for the site, to the satisfaction of the State Forest in consultation with the local Rural Fire Service.	The previous IEA (URS, 2013, p.A-18) identified that this condition was noncompliant on the basis that the Bushfire Management Plan was not approved by State Forests by the end of April 2011. The Bushfire Management Plan has not been developed to the satisfaction of State Forests and has not been updated to reflect the Site response for a care and maintenance situation, as opposed to a mining operation.	Non-compliant  2014IEA/022 Recommendation  Update the Bushfire Management Plan with respect to the Site being on care and maintenance. Ensure State Forests and the local RFS have involvement in the update of the Plan and confirm satisfaction of the plan from State Forests.

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Condition / Requirement No.	Summary of Condition / Requirement	Comment	Compliance Status and Recommendation
PA 10_0041, Condition 5.1	Environmental Management Strategy Refer to Appendix A for full Condition requirements.	Pine Dale has been found non-compliant with this Condition as a number of key revisions and updates have not occurred to the Environmental Management Strategy during the audit period.	Preparation – Compliant (2013) Implementation – Non-compliant  2014/IEA/011 Recommendation  Update the Environmental Management Strategy and relevant figures and plans to reflect current monitoring programs and reports as well as explain and reflect that the Site has moved from operational activities to a care and maintenance status and that controls as detailed in the strategy and plans will remain relevant.
PA 10_0041, Condition 5.4	Revision of Strategies, Plans and Programs Refer to Appendix A for full Condition requirements.	This Condition was found non-compliant in accordance with Condition 5.4(c) as strategies, plans and programs were not updated following submission of the previous IEA (URS, 2013).	Non-compliant  2014/IEA/012 Recommendation  Strategies, plans, and programs should be reviewed and revised to reflect recommendations provided in the previous Independent Environmental Audit report and to reflect the care and maintenance status of the Site.
PA 10_0041, Condition 5.8	INDEPENDENT ENVIRONMENTAL AUDIT Refer to Appendix A for full Condition requirements.	Pine Dale was found non-compliant with this Condition due to timing of the 2014 independent environmental audit as the audit was not commenced until August 2014 as compared to the condition requirement of June 2014.	Non-compliant (due to timing)

Condition / Requirement No.	Summary of Condition / Requirement	Comment	Compliance Status and Recommendation
ML 1569, Condition 2	Mining, Rehabilitation, Environmental Management Process (MREMP) - Mining Operations Plan (MOP) Refer to Appendix A for full Condition requirements.	Refer to ML 1664, Condition 3(a).  This condition was found to be noncompliant given the MOP expired on 28 February 2014 whilst mining operations were continuing (the Site went into care and maintenance in April 2014) and the draft Care and Maintenance MOP was yet to be formally approved at the time of writing this report.	Refer to ML 1664, Condition 3(a).  Non-compliant (due to expiration of previous MOP and no approval of draft C&M MOP)  2014/IEA/018 Recommendation Prepare and implement a plan identifying detailed rehabilitation measures for the entire length of Neubecks Creek.
ML 1569, Condition 3(a)	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.	This condition was found to be non-compliant given the MOP expired on 28 February 2014 whilst mining operations were continuing (the Site went into care and maintenance in April 2014). Pine Dale has been consulting with DTRIS-DRE concerning the requirements for the draft Care and Maintenance Mining Operations Plan / Rehabilitation Management Plan since April 2014 and was in the process of actioning DTRIS-DRE requests for the draft MOP at the time of the audit with a view to approval by the end of 2014. Therefore DTRIS-DRE are aware of the situation with respect to the status of the MOP.	Non-compliant (due to expiration of previous MOP and no approval of draft C&M MOP)

Condition / Requirement No.	Summary of Condition / Requirement	Comment	Compliance Status and Recommendation
ML 1569, Condition 3(e)	A MOP ceases to have effect 7 years after date of approval or other such period as identified by the Director-General.	This condition was found to be non-compliant given the 2011 MOP expired in February 2014 and a replacement MOP was in the process of being prepared but had not formally been approved.	Non-compliant



#### 1 INTRODUCTION

#### 1.1 Background

URS Australia Pty Ltd (URS) was engaged by Enhance Place Pty Ltd to carry out an Independent Environmental Audit (IEA) of Pine Dale Mine Yarraboldy Extension (Pine Dale) located at Blackman's Flat Lithgow in New South Wales.

Schedule 5 Condition 8 of the Project Approval (PA) 10\_0041 (dated 20 January 2011 and including Modification 1 dated 1 March 2011) requires Enhance Place to commission an independent environmental audit by the end of December 2012 and June 2014. This report presents the findings of this audit.

The audit was completed in accordance with the Condition 8, Schedule 5 of PA 10\_0041 and the project brief as detailed in URS' proposal (dated 17 July 2014).

This is the second independent environmental audit to be carried out at Pine Dale and for the purpose of this audit, the audit period has been defined as from the 31 January 2013 to 29 August 2014 (date of site inspection conducted as part of this audit) with the focus being on activities over the last year of the audit period. The previous audit was conducted by URS with the audit period being defined as 20 February 2011 to 31 January 2013. The Site inspections were conducted on 30 and 31 January 2013 and the IEA report dated June 2013 (URS, 2013).

At the time of the audit the Site was operating on care and maintenance status. That is, there was no coal production from the Site and staff consisted of a 'skeleton' crew as dictated by law. The Site had been operating on care and maintenance since April 2014. The Mine Manager and Environmental Manager were on secondment to Pine Dale from Coalpac Pty Ltd through the Site's owners EnergyAustralia at the time of the audit. Enhance Place was acquired by EnergyAustralia in 2012.

A State Significant Development Application (SSD5086) was lodged by Enhance Place with the NSW Department of Planning and Environment (DPE) on 19 December 2012 under Part 4 of the *Environmental Planning and Assessment Act 1979* NSW (EP&A Act) for the Pine Dale Mine Stage 2 extension (Stage 2 Extension). Enhance Place has undertaken a number of environmental studies and revisions of the mine plan for the Stage 2 Extension. These preliminary studies have identified several environmental and coal resource related sensitivities that require further assessment. These additional assessments have delayed the submission of an Environmental Assessment in support of SSD5086 to DPE.

Due to the delays experienced the approved mining area (the Yarraboldy Extension) at Pine Dale was exhausted in April 2014 and mining activities ceased prior to the determination of SSD5086. Pine Dale was placed in care and maintenance in April 2014 and was in the process of revising the draft Care and Maintenance Mining Operations Plan / Rehabilitation Plan at the time of the audit. The draft Care and Maintenance Mining Operations Plan / Rehabilitation Management Plan has been provided to DTRIS-DRE for consultation. Comments received from DTRIS-DRE in July 2014 requested further information and detail concerning rehabilitation success criteria. Pine Dale is reportedly in the process of revising the draft Care and Maintenance Mining Operations Plan/ Rehabilitation Management Plan to address the comments. The draft Care and Maintenance Mining Operations Plan/ Rehabilitation Management Plan has also been submitted to Environment Protection



Authority, NSW Office of Water and the Pine Dale Community Consultative Committee for review and feedback.

PA 10\_0041 allows Enhance Place to continue mining operations on-site until 31 December 2014; however, under the approval Enhance Place is required to rehabilitate the Site and carry out additional undertakings to the satisfaction of both the Director-General and the Executive Director, Mineral Resources in DTRIS-DRE. Consequently, the approval will continue to apply in all other respects, other than the right to conduct mining operations, until the rehabilitation of the Site and the additional undertakings specified in the approval have been successfully carried out.

#### 1.2 Scope of Work

The audit was conducted in accordance with the requirements set out in Project Approval (PA) 10\_0041, Condition 8, Schedule 5 issued by the Director-General on 20 February 2011, that require that the following scope of works be carried out:

'By the end of December 2012 and June 2014, 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 a 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 assess whether it is complying with the requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
- d) Review the adequacy of strategies, plans or programs required under the abovementioned approvals; and
- e) Recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under the abovementioned approvals.

Note: This audit team must be led by a suitably qualified auditor and include experts in any field specified by the Director-General'.

DPE did not specify that the audit team include ecological specialist as per the previous IEA (URS, 2013).

#### 1.3 Audit Methodology

The purpose of this IEA was to assess the environmental performance of the project and assess whether it is complying with requirements of the PA, Environment Protection Licence (EPL) and Mining Lease (ML), including any assessment, plan or program required under these approvals, and review the adequacy of these assessment, plans or programs. The IEA was undertaken in accordance with the Condition of Consent as described above and the method described in URS' Proposal (dated 17 July 2014).



A compliance register was created by URS which formed the basis of the audit protocol. It included a list of conditions and commitments to be assessed for compliance, including Project Approval (10\_0041), Environment Protection Licence (EPL) No.4911 and Mining Lease (ML) No. 1664. A complete list of approvals relevant to Pine Dale is provided in **Table 5-1**.

A summary of the assessments, plans and programs that were reviewed for adequacy is provided in **Table 7-1**.

The Audit was carried out in accordance with International Organization for Standardization (ISO) 19011:2003 - Guidelines for quality and/or environmental management systems auditing (ISO, 2002), which superseded the ISO 14000 series.

The audit methodology comprised:

- Initial discussions with Pine Dale to organise the audit Site inspection, including the provision of documentation;
- A phone call with the DPE to discuss areas for particular focus during the audit and if they
  had particular concerns to follow up;
- Consultation with key government agencies;
- Preparation of site compliance register and review of documentation provided by Pine Dale;
- A two day Site inspection and interviews with key Site personnel. Tasks undertaken during the audit Site inspection included:
  - Opening meeting.
  - Review of Environmental Management Plans (EMPs).
  - Site inspection with the Operations Manager and Environmental Manager, including assessment of the implementation of EMPs.
  - Review of relevant documentation provided by the Operations Manager.
  - Interviews with key personnel including Operations Manager, the Open Cut Examiner,
     Support Officer and Downer EDI Blast Engineer.
  - A close out meeting.
- Review of additional documentation provided by Pine Dale after the Site inspection; and
- Submission of this Report to Pine Dale outlining the audit findings.

This report presents a summary of findings including details of non-compliances identified in the audit and recommended actions to improve the environmental performance of the project.

Given the small period of time since the first audit was completed in June 2013 this second audit is largely a review and update of the 2013 audit report and findings. Where strategies, plans and programs have not been updated or recommendations not implemented since June 2013 the auditors considered the findings of the previous audit to be relevant and remain relevant.



#### 1.3.1 Documents Reviewed

The following information was reviewed during the audit process:

- Regulatory approvals as listed in Table 5-2;
- Management Plans as listed in **Table 7-1**;
- EPL No. 4911;
- Site environmental plans, procedures;
- Selected correspondence with relevant government agencies and stakeholders;
- EPL Annual Returns:
- Annual Environmental Management Report (AEMR) for 2013;
- Selected records of induction and training;
- Selected meeting minutes;
- · Selected reports; and
- · Evidence of monitoring and review.

Documents used as part of the audit are referenced within the text discussing compliance status in the various compliance tables.

#### 1.4 Personnel and Timing

In accordance with PA 10\_0041, Condition 8, Schedule 5 the audit was conducted by a qualified, experienced and independent team of specialists whose appointment has been endorsed by the Director-General. The audit team comprised of the following URS personnel, as approved by the Director-General (letter dated 11 August 2014):

- Michael Woolley, Lead Auditor (MCW Environmental Consulting Pty Ltd); and
- Nick Ballard, URS, Auditor.

Michael Woolley is registered by Exemplar Global<sup>1</sup> as a Certified Lead Auditor for Environmental Management and Compliance Auditing.

The Site inspection for the audit was conducted by the team listed above on the 28 and 29 August 2014. Personnel interviewed during the Site inspected included the following people:

- Graham Goodwin, Mine Manager (on-site part-time since April 2013);
- Ben Eastwood, Environment Manager (on-site part time since June 2013); and
- Karen Tripp, Senior Environmental Scientist (RCA Laboratories Pty Ltd and on-site for regular inspections/sampling since 2006).

Opening and closing meeting minutes are presented in Appendix D.

<sup>&</sup>lt;sup>1</sup> Formerly the Registrar Accreditation Board and Quality Society of Australasia (RABQSA).



#### 1.5 Format of Report

The format of this report is as follows:

- Section 1 is introductory and defines the scope and nature of the audit.
- Section 2 describes the Pine Dale operations as observed during the Site inspection.
- Section 3 summarises the consultation with key regulatory agencies.
- **Section 4** describes the approach to the assessment against the relevant standards, performance measures and statutory requirements.
- Section 5 provides a summary of Site observations made during the Site inspection;
- **Section 6** provides an assessment of the environmental performance of the development and its effects on the surrounding environment.
- **Section 7** presents the findings of the review of the adequacy of the Environmental Management Strategy and environmental management and monitoring plans.
- Section 8 provides an overview of Pine Dale's approach to rehabilitation during the audit period.
- **Section 9** summarises the Non Compliances and Recommendations made throughout the report.

**Appendix A** is a tabulated review of the results of the assessment against PA 10\_0041 and Statement of Commitments, EPL conditions and ML conditions.

**Appendix B** provides a tabulated summary of actions against the recommendations identified in the previous IEA (URS, 2013).



#### 2 SITE DESCRIPTION

This section provides a brief overview of the development of Pine Dale Mine and operations carried out on-site.

#### 2.1 Site Location and History

Pine Dale Open Cut Coal Mine is located at Blackmans Flat, 16 kilometres (km) north of Lithgow on the Castlereagh Highway in the Western Coalfields of NSW. The mine is approximately 3 km by road from the Mt. Piper Power Station across the Highway from Blackmans Flat. A Site Location Plan and Site Layout Plan are presented as **Figure 1** and **Figure 2** at the end of this Section.

Prior to its current operation, the Pine Dale Mine Site was known as the Wallerawang Colliery. The Wallerawang Colliery commenced operations in 1910 as an extension to the first mine in the district, which started about 1855. The mine operated as a bord and pillar mine until mining operations ceased in 1986. The area of surface disturbance was estimated to be 50 ha.

Between 1987 and 1990 the surface infrastructure was removed and the shafts and adits sealed. Approximately 10 hectares (ha) of the surface area disturbed by the operation were rehabilitated in 1991. Rehabilitation was performed in accordance with the document "Specification for General Earthworks and Rehabilitation/Revegetation of Washery Reject Emplacement Area at Wallerawang NSW" as approved by the then Department of Mineral Resources. The mine bathhouse was removed in 1994. Little work was done thereafter, other than improved control of site discharge of surface water, some grassing and seeding and noxious weed control.

The Yarraboldy Pond Fines Removal Operation began operations north of the Angus Place Haul Road in 1999 and ceased on the 9th December 2005. The Yarraboldy Briquette Company (on site prior to Pine Dale) had no rehabilitation clause in its contract with The Wallerawang Collieries Ltd. The Wallerawang Collieries Ltd (Wallerawang) requested in 2002 Enhance Place consider undertaking the extensive surface rehabilitation of the derelict site in exchange for the sale of certain land holdings and transfer of coal leases.

Enhance accepted the offer, and on 13 February 2003, Wallerawang signed an agreement providing Enhance with the Site management rights, access to the remnant coal reserves on the lease while rehabilitating the site, and, the transfer of most of the former colliery's landholdings and part of its coal lease, CCL770 (Act 1992). The name of the Site was changed to "Pine Dale" by Enhance.

The company prepared the Wallerawang Colliery Pit Top Rehabilitation Plan (MOP), which was approved by the Department of Primary Industries (Mineral Resources) (DPI-MR). An EPA Licence was granted and site activity commenced towards the end of 2003. Development Application 461/04 was lodged with Lithgow City Council (LCC). Planning direction was given to the project and work commenced on an Environmental Impact Statement (EIS). The EIS was lodged with the LCC, a Public Exhibition followed and Development was consented to in November 2005. Mining Lease 1578 was subsequently granted.

In early 2006 the Pine Dale Open Cut Mine began producing coal from the first of three planning areas known as Areas A, B and C. The following is noted concerning Areas A, B and C:



- Area A was mined between 28 March and 31 October 2006, with surface profiling work following in 2007. Rehabilitation of Area A was completed, including additional seeding, in spring 2009.
- Mining commenced in Area B on 13 November 2006 and lasted two years, followed by the mining of Area C.
- Mining in Area C was completed in December 2010.
- Rehabilitation of Areas B and C is substantially completed, save the east-west mine access road.

An Environmental Assessment (EA) was submitted to the NSW DPE in June 2010 for extension of the Pine Dale Open Cut Mine (Yarraboldy Extension). The project was approved by the DPE (PA 10\_0041, dated 20 February 2011) that included construction, mining and rehabilitation and Department of Environment (DoE formerly Federal Government Department of Sustainability, Environment, Water, Populations & Communities (SEWPaC)) approval on 26 October 2011. First coal deliveries commenced in February 2012. Having produced up to 350,000 tonnes per year for EnergyAustralia's Mt Piper power station, mineable resources within the Yarraboldy Extension have been exhausted.

Enhance Place was acquired by EnergyAustralia in 2012 to provide a strategic fit with their two nearby power stations, Mt Piper and Wallerawang.

Pine Dale operates under EPL No. 4911 administered by the Environment Protection Authority (EPA).

#### 2.2 Activities Occurring During Site Audit Inspection

At the time of the audit Site inspection Pine Dale was functioning under care and maintenance conditions with very few people working at the mine on a part time basis only, primarily conducting statutory inspections. There are no current full time staff at the mine. The following activities were observed:

- Care and maintenance operations of key infrastructure and equipment;
- Progressive rehabilitation (refer to Section 8); and
- Environmental monitoring by RCA Laboratories Pty Ltd.

The mine is required under mining legislation to maintain systems as operable including systems for water management, electrical and plant. A skeleton crew is available to maintain these systems. The Mine Manager attends the Site every other day to conduct inspections and check security. The Open Cut Examiner (OCE) attends the Site once a week to conduct inspections and conduct maintenance activities. Photos of environmentally significant aspects of the operation, taken during the Site inspection on 28 and 29 August 2014, are provided throughout the report.

Up to April 2014 when the care and maintenance program was implemented the mine was operated by contractors Dukes Mining Pty Ltd (Dukes). It was reported that there were approximately twenty people on-site when the mine was operational.



Activities since the previous IEA were noted to be:

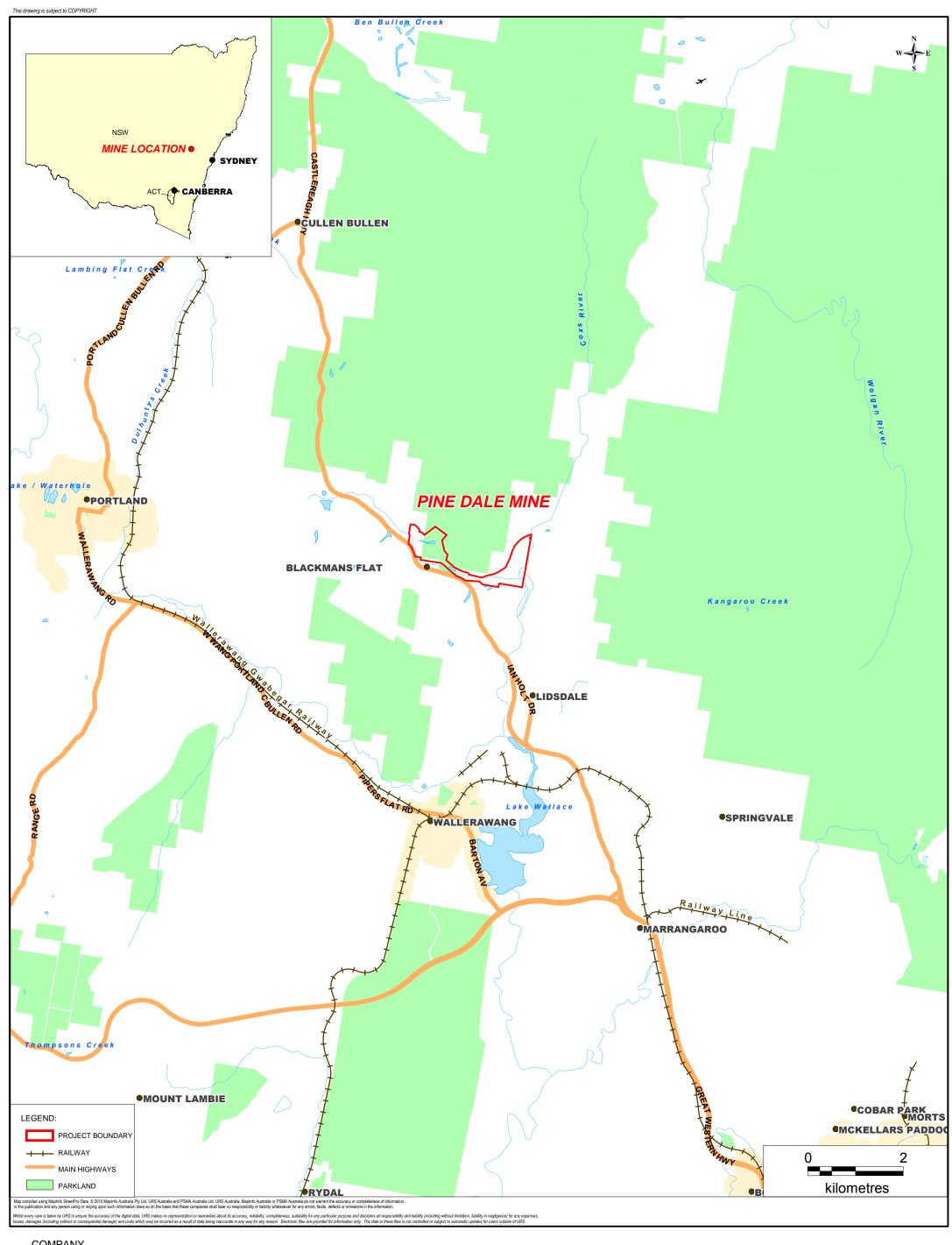
- Open cut mining of the south-east corner of the Yarraboldy Extension up until March/April 2014.
- Blasting in the south-east area on the Yarraboldy Extension up until March/April 2014.
- Crushing, sorting and stockpiling of coal at the Run of Mine (ROM) pad up until March/April 2014.
- Transportation of coal trucks via the private Haul Road to Mt Piper Power Station up until March/April 2014.
- Drainage works in the mining area.
- Progressive backfilling and contouring and partial rehabilitation of the north-west corner and northern portion of the Yarraboldy Extension.
- Progressive rehabilitation of Area A with agricultural lime and gypsum and a charcoal and mushroom compost mix and maintenance of Area C with agricultural lime and gypsum.
- Progressive rehabilitation including planting of screening trees for short-term amenity value and planting of native species to achieve longer-term rehabilitation requirements.
- Reshaping of the amenity bund angle of repose and progressive rehabilitation with a small cover crop of native grass.

Infrastructure on-site at the time of the Site inspection was observed to include:

- Administration offices.
- A small workshop for servicing plant on-site.
- A small earth dam for the storage of water for dust suppression.
- Two diesel pumps to pump water from the dam and to the 'bong', a former EPL discharge point that returns surface water to former underground mining works.
- The Angus Place Haul road that dissects the Site and separates the administration areas and mining areas.

Photos of environmentally significant aspects of the operation, taken during the Site inspection on 28 and 29 February 2014, are provided throughout the report and in **Figures 3** and **4**.

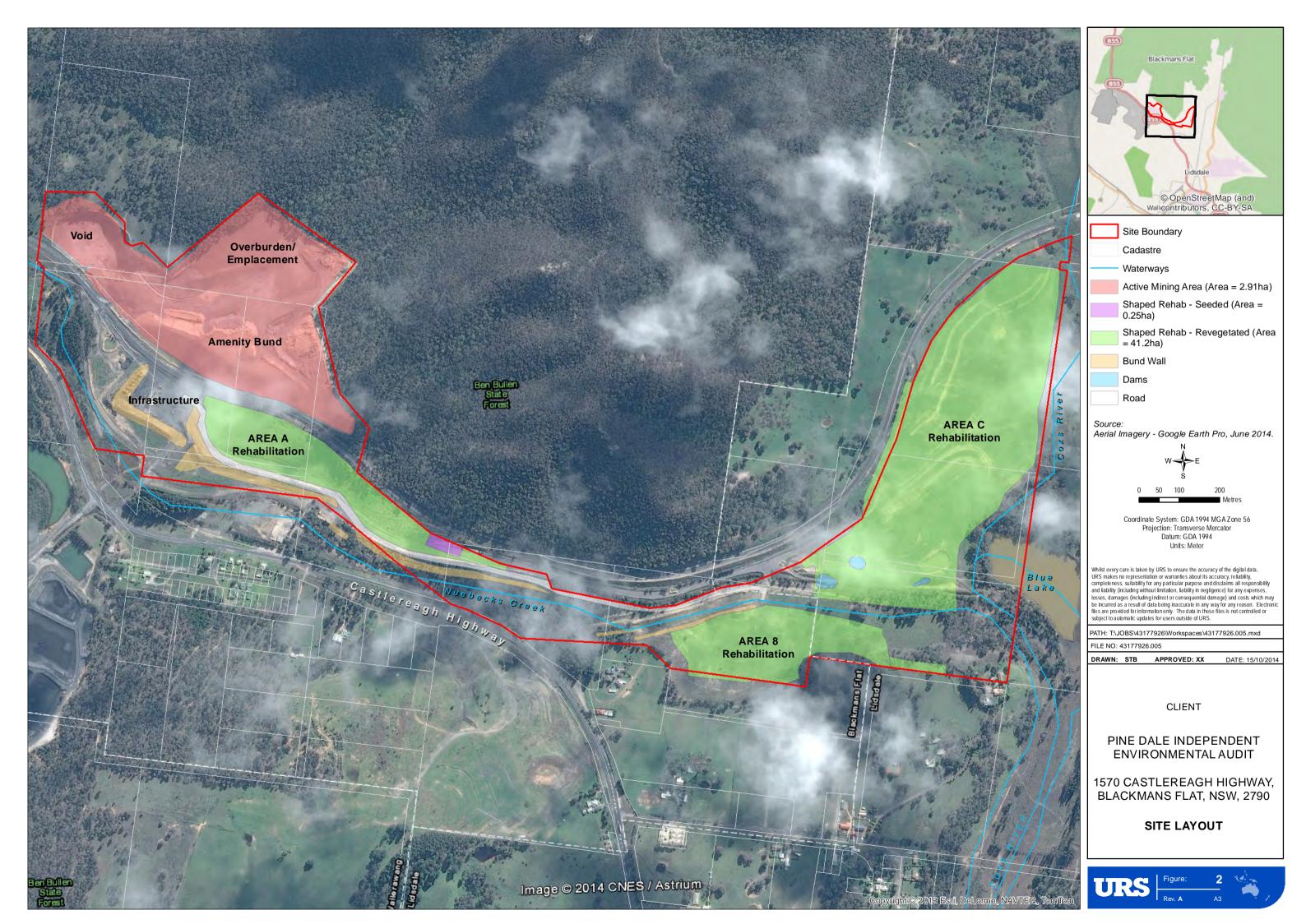
Additional plans of the mine, locations of monitoring points relative to mining can be found in Annual Environmental Management Reports (AEMRs) found on the Pine Dale website.



COMPANY NAME/LOGO INSERTED HERE

PINE DALE INDEPENDENT ENVIRONMENTAL AUDIT

Site Locality Map





#### 3 CONSULTATION WITH KEY GOVERNMENT AGENCIES

As part of the audit process, URS contacted key government agencies to seek their views on the environmental performance of Pine Dale. This section also provides feedback by agencies as provided following annual site inspections and reviews of Annual Environmental Management Reports.

#### 3.1 NSW Department of Planning and Environment (DPE)

URS discussed the audit with DPE on 15 August 2014 prior to the audit site inspection. DPE requested that given the Site was under care and maintenance the audit assess the appropriateness of management measures going forward over a number of years for issues such as erosion sediment control and public safety management.

DPE also requested that the audit assess if anything can be done to progress rehabilitation given the care and maintenance regime does not have a foreseeable endpoint. Rehabilitation has been discussed in Section 8 of the report and within the various compliance tables as relevant in **Appendix A**.

Compliance with blast, noise and dust management is discussed in the Compliance Table in **Appendix A**.

# 3.2 NSW Department of Trade and Investment, Regional Infrastructure and Services - Division of Resources and Energy (DTIRIS-DRE)

Feedback was sought on 15 August 2014 from the DTIRIS-DRE officer responsible for Pine Dale who reported the following:

- Pine Dale operators are good to work with and generally respond to requests and concerns in a timely and professional manner.
- The Draft MOP/Rehabilitation Management Plan covering care and maintenance activities has been reviewed by the Department and comments have been provided to Pine Dale who (at the time of writing this report) were in the process of following up on the changes requested by DTRIS-DRE. An email (DTRIS-DRE, 2014-D) from the Department to Pine Dale was sighted that detailed required changes to the Draft Care and Maintenance MOP/Rehabilitation Management Plan. The Department followed the email with a second email on 9 July 2014 (DTRIS-DRE, 2014-E) concerning rehabilitation success criteria indicating the criteria needed to be measurable targets. Pine Dale was in the process of revising the Draft Care and Maintenance MOP to address the comments raised by DTRIS-DRE.
- The Department received a complaint via email on 28 February 2014 from a community member concerning the following issues:
  - 'the visual Impact of earth mound adjacent to Castlereagh Highway is unacceptable, particularly to residents of Blackmans Flat.
  - the lack of rehabilitation of previous mining areas to natural forest vegetation (dominance of pasture).
  - the excessive amount of industry in the area (cumulative impacts).
  - impacted residents should be relocated at no cost to them' (DTRIS-DRE, 2014-B).



Enhance Place responded to DTRIS-DRE via letter (Enhance Place, 2014) on 5 March 2014 indicating that Site was due to enter care and maintenance and the issue of the bund and rehabilitation would be addressed in the Draft MOP/Rehabilitation Management Plan. The issues concerning industry and relocation were addressed by Enhance Place through PA 10\_0041 and the Environmental Assessment. Enhance Place stated in the letter that it has not been approached by a landowner requesting acquisition of their property.

- In their communication with URS, DTRIS-DRE noted that Pine Dale has recently
  reshaped the amenity bund at the request of the Department and that the bund had been
  a point of contention for many years due to the visual impact it had from the highway.
- A specific concern DTRIS-DRE had at the Site was regarding the rehabilitation success in Area A. The Department reported that 'this rehabilitation does not appear to be on a sustainable trajectory towards the final land use of native forest. Works have been undertaken recently to try to improve the success of the rehabilitation, however improvements to the success will take time to show. This is something that DRE will continue to work closely with Pine Dale operators on in the future' (DTRIS-DRE-2014-C).

#### 3.2.1 2014 DTRIS-DRE AEMR Review

The 2013 AEMR was accepted in a letter by DTRIS-DRE to Pine Dale on 16 July 2014. The letter acknowledged that an AEMR Site meeting and Site inspection was conducted on 29 April 2014. In addition to Pine Dale and DTIRIS-DRE staff attendees were noted to include EnergyAustralia and the EPA.

The following comments are summarised from the DTRIS-DRE Site inspection and subsequent letter 16 July 2014 (DTRIS-DRE, 2014-A):

- 'Plans submitted as part of the 2013 AEMR were satisfactory.
- During the inspection, it was observed that environmental management at the Mine appears to be satisfactory. Rehabilitation works were underway during the inspection. Seeding was being undertaken of the rehabilitated high wall slope. Discussions were held with the contractor supplying and spreading the seed regarding systems and processes to achieve rehabilitation success. The discussions confirmed that best practice rehabilitation was being undertaken at the Pine Dale Mine (in relation to the works sighted at the time).
- Re-contouring works on the amenity bund was underway during the inspection. The bund was being re-shaped to a 1 in 3 slope from the former angle of repose (1 in 1).
- Rehabilitation on the Enhance Place site is showing signs of improvement. Recent rainfalls have allowed the pasture species to establish healthy foliage. The land owner is running horses on the land which is maintaining low pasture heights. The treed area in the north east section of the site bordering the Castlereagh Highway is showing limited success with poor growth of trees and bare earth evident. Pine Dale Mine needs to actively manage this area to ensure it maintains a trajectory towards a sustainable final land use'. This last point relates to the former Enhance Place open cut coal mine (Enhance Place Mine) located to the south of Castlereagh Highway not Pine Dale mine. Enhance Place Mine is not included in the scope of this audit.



**Table 3-1** summarises the actions requested by DTRIS-DRE following the Site inspection and review of the 2013 AEMR.

Table 3-1 DTRIS-DRE 2013 AEMR Action Table

DTRIS-DRE Issue / Observation	DTRIS-DRE Required Action	DTRIS-DRE Due Date	Status @2014
No results provided of the Purple Copper Butterfly monitoring.	Provide results for the Purple Copper Butterfly monitoring in next year's AEMR.	Next AEMR	Pine Dale management reported this will be included in the next AEMR. Monitoring was conducted in Spring 2013 (EcoLogical, 2013) and was reported to have been conducted in the week commencing 1 September 2014.
Results of monitoring against the rehabilitation completion criteria.	DRE requests that monitoring is undertaken against the rehabilitation completion criteria and results are reported in the rehabilitation section of future AEMR's.	Next AEMR	Pine Dale management reported this will be included in the next AEMR.
Water management structures within Area C appear to be controlling erosion on the sloped sections. These structures are largely bare earth.	Pine Dale should consider seeding the exposed earth within the water management structures in Area C.	ASAP	Water management structures within Area C were observed to be present during the audit. Seeding of exposed areas will be addressed by the engagement of SLR Pty Ltd who will provide rehabilitation criteria and recommendations for rehabilitation in the draft care and maintenance MOP and rehabilitation plan that is in the process of being developed. Pine Dale suggested the contour drains may be in filled and rehabilitated as a means of addressing the issue.

The 2014 AEMR was in the process of being prepared by Pine Dale. The 2014 AEMR had not been formally submitted to DTRIS-DRE or DPE at the time of the audit and has not been formally reviewed by URS as part of this audit.



#### 3.3 NSW Environment Protection Authority (EPA)

Feedback was sought by URS on 13 August 2014 from Andrew Helms, the EPA officer responsible for Pine Dale who reported by telephone the following:

- There have been no complaints concerning the Pine Dale mine during the audit period.
- There have been no non-conformances concerning the Site's EPL during the audit period.
- The EPA has not been required to issue any letters or notices to Pine Dale mine during the audit period.
- The EPA conducted a recent site visit on the 7 August 2014. No environmental issues were identified or reported by the EPA following the Site visit.
- Rehabilitation in Areas A, B and C and the Yarraboldy extension is progressing.

#### 4 SITE OBSERVATIONS

## 4.1 Site Inspection Observations

This section provides a brief overview of key observations made during the Site inspection on 28 and 29 August 2014. Geo-referenced photographs are also presented in **Figure 3** and **Figure 4** at the end of this Section. Additional photos showing rehabilitation activities are provided in Section 8.

The auditors were escorted around the Site by mine personnel (as listed in Section 1.4) who made themselves available for this purpose.

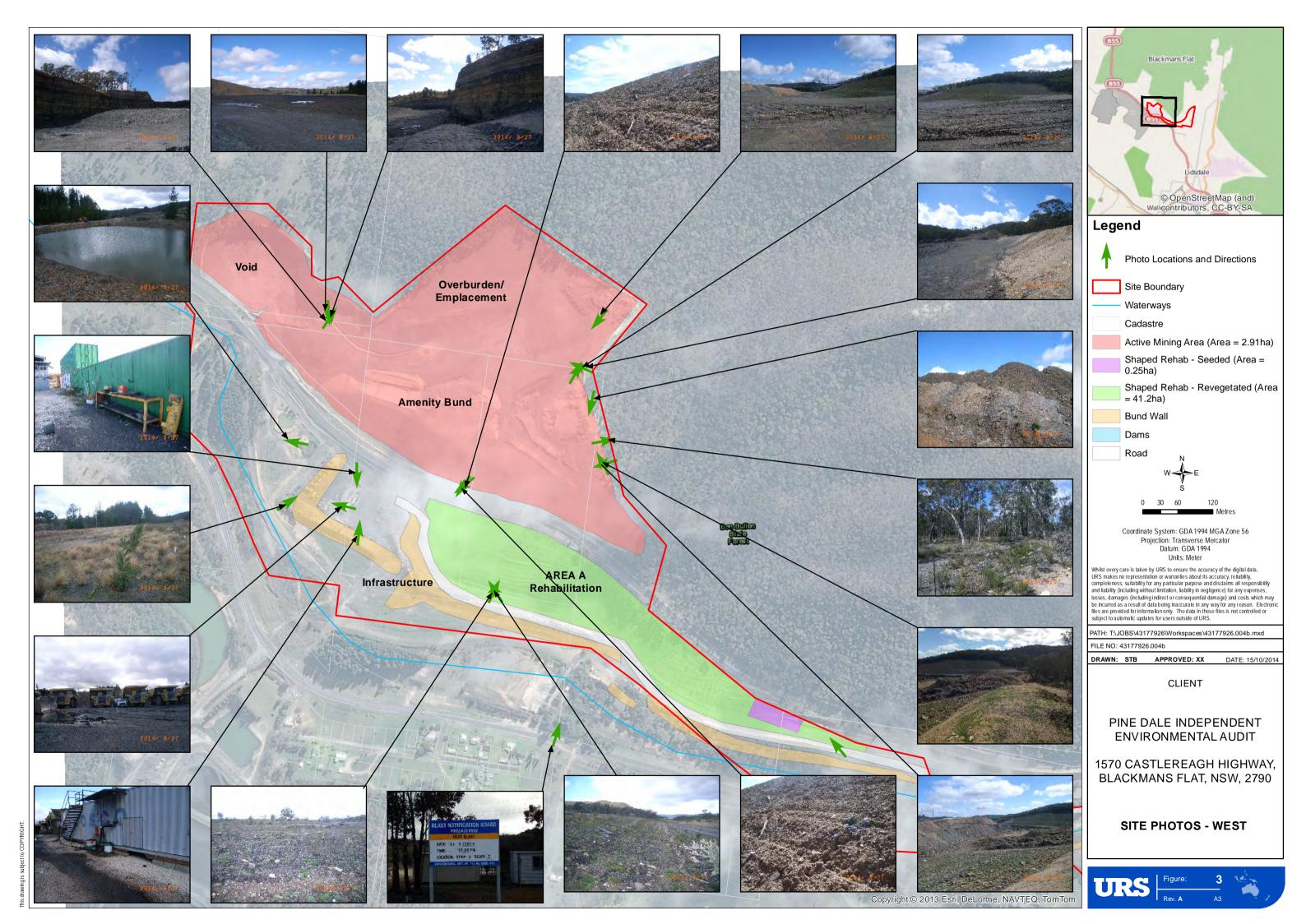
Table 4-1 Site Inspection Photographs

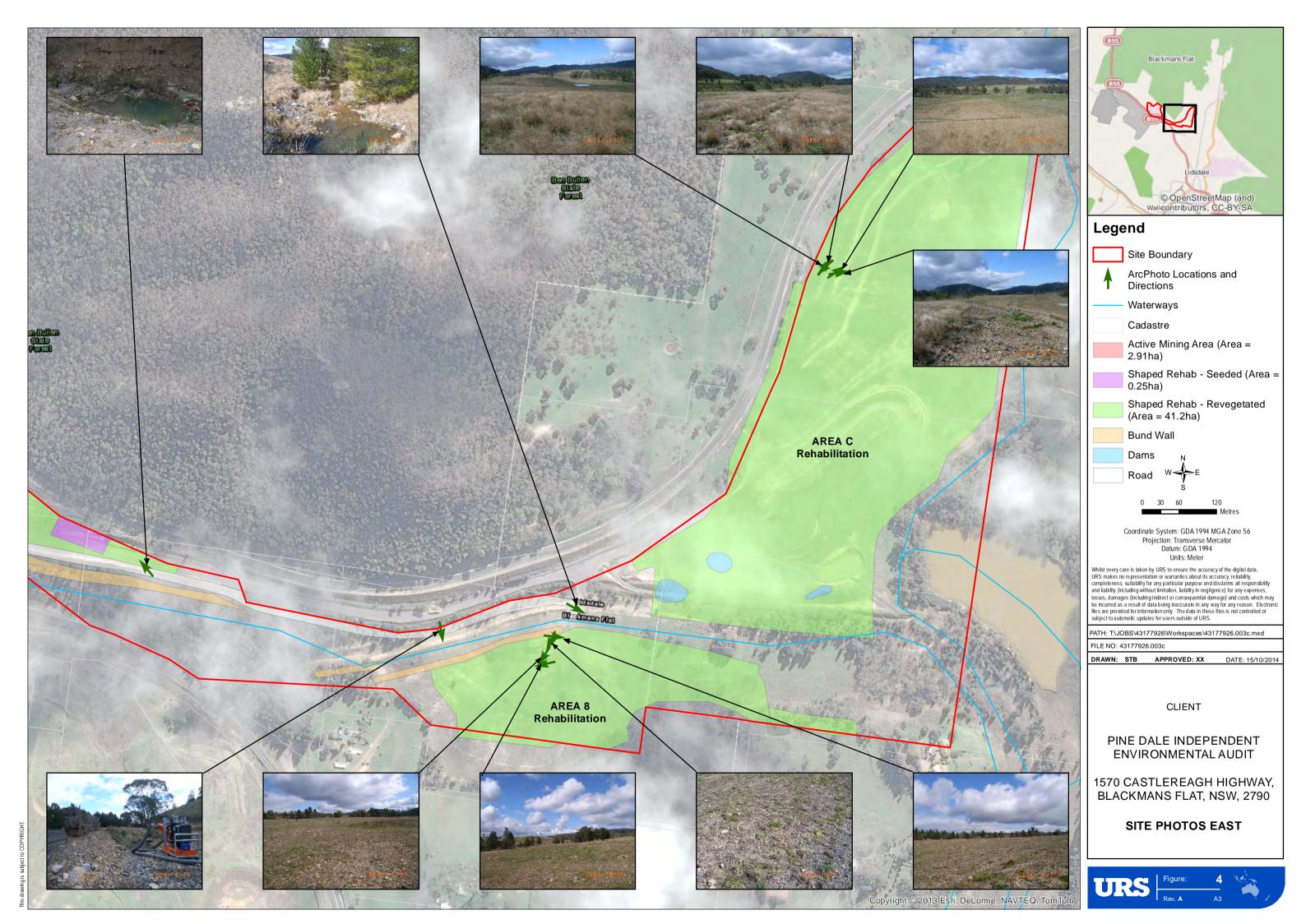
Photo #	Comment	Photo
4-1.	View from NE corner of pit towards west showing subsoils and topsoils stockpiled behind the visual bund and (to the right of the photo) materials pushed up against the highwall, topsoiled and grass seeded.	
4-2.	Topsoil stockpile and bunding was observed at the northern and north east boundary of the Yarraboldy extension.	

# **Photo** Comment **Photo** # 4-3. The diesel water pump for the 'bong' water pumping point. Hay bales have been placed around the pump following a noise complaint from a local resident. During care and maintenance the pump is operated infrequently (less than once a month) for maintenance purposes. 4-4. The surface water dam and pump that collects water from the amenity bund. During care and maintenance the pump is operated once a month for maintenance purposes. 4-5. The double skinned diesel above ground storage tank located to the rear of the workshop. The tank was empty at the time of the Site inspection. Observations made during the Site inspection noted open drip trays (half a 200 Litre (L) steel drum and redundant equipment such as used vehicle batteries at the workshop. Localised staining was also

observed on the

Photo #	Comment	Photo
	gravel hardstand.	
	Materials at the Worksop Refer to Recommendation 2014/IEA/001, Appendix A, PA 10 041, Condition 3.39	2014/8/27
4-6.	Mining plant and equipment was parked at the Site in the workshop area. The machinery is owned and maintained by the Pine Dale contractor (Dukes) who were reported to visit the Site periodically to maintain the equipment.	2014/ 8/27





#### 5 COMPLIANCE WITH RELEVANT STATUTORY REQUIREMENTS

This Section fulfils the requirement to assess whether the project is complying with the relevant requirements in its Project Approvals, mining leases and statutory licences (e.g. EPL).

**Table 5-1** identifies the major approvals, licences and leases in place for Pine Dale and provides relevant information were applicable.

Table 5-1 Summary of Major Approvals and Licences

Approval	Relevant Dates	Description	Authority
PA 10_0041	Expiry - 31 January 2014	Pine Dale Yarraboldy Extension	DPE
EPL No. 4911	Review Date: 18 August 2014	Coal works and Mining for Coal – Pine Dale Mine	EPA
		Varied on 29 August 2014	
Consolidated Coal Lease (CCL)	Expiry - 2025	CCL770 (renewed in 2003) covered 432 ha of land1, approximately 40 ha of which is now owned by Enhance.	DTIRIS-DRE
		The remainder owned by NSW State Forests, some as freehold and the rest as Crown Land.	
ML 1664	Dated 10 January 2012	Mining Lease 1664 incorporates 4.1 Hectares of land within the boundary of the Pine dale mine site.	DTIRIS-DRE
ML 1578	Dated 15 March 2006	ML 1578 incorporates 69.4ha of land within the boundary of the Pine Dale mine site.	DTIRIS-DRE
ML 1569	Dated 4 July 2007	ML 1569 incorporates 161 ha, about one third of the existing CCL770	DTIRIS-DRE
Flood Control Works Licence (10CW801601)	Dated 23 December 2005	Issued by the Department of Natural Resources (DNR) under Part 8 of the Water Act 1912 for the construction of noise/ flood bunding along the southern boundary of mining Area A and the southern and eastern boundaries of mining Areas B and C.	NOW
EPBC Referral Decision	20 October 2011	Issued by DoE under Section 18 and 18A of the EPBC Act to avoid significant impacts on the vulnerable purple copper butterfly (Paralucia spinifera).	DoE
Bore Licence (10BL165933)	Dated 22 December 2005	Issued under Part 5 of the Water Act 1912 for the use of six piezometers for monitoring groundwater levels and quality.	NOW

43177926/IEA/01

Approval	Relevant Dates	Description	Authority
Bore Licence (10BL604181)	Dated 23 November 2010	Issued under Part 5 of the Water Act 1912 for interception and use of up to 200ML of groundwater per year.	NOW
Bore Licence (10BL604437)	Dated 12 April 2011	Issued under Part 5 of the Water Act 1912 for interception and use of up to 200ML of groundwater per year.	NOW
Bore Licence (10BL604438)	Dated 12 April 2011	Issued under Part 5 of the Water Act 1912 for interception and use of up to 200ML of groundwater per year.	NOW

In keeping with the previous IEA (URS, 2013), and given the Site's current care and maintenance status, not all Approvals were considered in the audit. **Table 5-1** lists the approvals, licences and leases audited.

Table 5-2 List of Approvals, Licences and Leases Audited

Approval	Authority
Project Approval 10_0041	DPE
Environmental Protection Licence 4911	EPA
Mining Leases 1664 and 1569	DTIRIS-DRE

The EPBC Referral Decision issued by DoE (formerly SEWPaC) has not been considered in this audit as being required to be assessed as it was considered a Commonwealth approval and therefore not part of the Approval Condition requirements for the audit.

The status of Pine Dale's performance during the audit, in respect of each of the CoA of the PA, EPL conditions and ML conditions is presented in **Appendix A**. Conditions considered to be not complied with, or indeterminate, have been listed in **Section 9** of this report.

Performance categories in respect of compliance are defined as follows:

Compliant	currently in compliance
Non-Compliant	currently not in compliance
Not Applicable	condition of consent not applicable at time of audit; condition of consent not applicable at time of audit or had not been triggered
Indeterminate	it has not been possible to determine whether compliance exists
Not Assessed	the condition has not been assessed as part of the scope of this audit

Comments are listed beside each condition to explain aspects of the audit review. Where considered relevant, observations have been made regarding specific compliance issues.

Where compliance with a condition had not been achieved during the audit period, but the site could demonstrate current compliance, this has been recorded as such.

In general, no specific or rigorous assessment of documents required as part of meeting the CoA has been undertaken during the assessment, particularly where they have been signed

off by other parties (for example, DPE). It is noted that for the ML some conditions not related to the environment have not been assessed.

#### 6 ENVIRONMENTAL PERFORMANCE

This Section addresses the requirement of the scope of works to "assess the environmental performance of the Project".

Pine Dale has developed an Environmental Management Strategy (Strategy) and a number of management plans to define and monitor the environmental performance of the project and mitigate the mine's effect on the surrounding environment. These are discussed further in Section 6. The auditors based the assessment of the environmental performance of the Project on the assessment of implementation of the key management plans as well as the assessment of compliance with the PA, EPL and ML. The findings of this assessment are provided in **Appendix A** with the identified non compliances and associated recommendations summarised in **Section 9**. **Section 7** provides an overview of environmental management documents and an assessment of the adequacy of selected documents.

In addition, to further gauge the Project's environmental performance, the auditors reviewed the environmental incidents and complaints recorded during the audit period. The discussion of incidents and complaints is provided below.

#### 6.1 Incident Management

No environmental incidents were reported by Pine Dale management to have occurred during the audit period under PA 10\_0041, EPL 4911, ML 1664 and ML1569. One environmental incident was reported to have occurred under the EPBC Referral Decision Approval 2011-6016 issued by DoE (refer to Section 8.8).

Pine Dale management reported that incidents (if they were to occur) would be managed through the Strategy, Section 7 Response to Non-Compliances. The Strategy identifies that "compliance with approvals, plans and procedures will be the responsibility of all the personnel employed on in association with the mine". Under the Strategy, programs to identify and promote responsibilities will be developed through promotion of project ownership. A template for recording incidents was sighted by URS.

Although no incidents were reported during the audit period under PA 10\_0041, EPL 4911, ML 1664 and ML 1569 non-compliances with the management plans required by PA 10\_0041 were identified during the audit. Refer to Section 9 and **Appendix A** for non-compliances. No exceedances of EPL criteria were recorded or reported in the Annual Return (24 November 2012 to 23 November 2013) for the audit period.

Observations made during the Site inspection on the 28 and 29 August 2014 included open drip trays (half a 200 Litre (L) steel drum and redundant equipment such as used vehicle batteries at the workshop indicating that a more active incident reporting system would assist in applying best practice environmental management on-site.

The Site has prepared a Pollution Incident Response Management Plan (PIRMP) (Enhance Place, 2013). The PIRMP was prepared following the 2013 IEA. It is noted that the PIRMP is due for a review in September 2014. The 2012/2013 Annual Return identifies that the PIRMP has not been tested.

As identified in the previous IEA (URS, 2013, p.17) the Site does not have a formal Environmental Incident Management Procedure and one has not been prepared or implemented. The PIRMP includes an assessment of potential environmental risks from potential hazards at the Site. The PIRMP provides guidance for responding to an actual

pollution incident and includes a flow chart concerning the process for managing a hydrocarbon spill as well as responsibilities of designated Pine Dale Mine staff during a pollution incident; however, it does address how staff should report observations, near misses and incidents not relating to an actual pollution incident, such as encroachment into the *Thesium Australe* (Austral Toadflax) plant buffer zone. Even though the Site is in care and maintenance there is still a potential for environmental incidents to occur, therefore the previous IEA recommendation is considered to remain valid.

#### Recommendation

2014/IEA/002 - It is recommended that prior to revision of the Pollution Incident Response Management Plan in September 2014 the plan be tested as required by the POEO Act.

## Repeat Recommendation

Refer to Appendix B, 2013/IEA/047.

## 6.2 Complaints Management

Complaints can be made via two phone numbers, 02 6355 1761 or 02 6355 7893. The 02 6355 7893 number is advertised on the Pine Dale website, the 02 6355 1761 is advertised to residents as the 'Environmental Hotline' on the blast notification information board at the entrance to the Site office. Both numbers report to the Site office and but only one is forwarded to the Mine manger's mobile phone. URS consider that the two telephone numbers could be potentially confusing to the community. **Plate 6-1** shows the blast notification board and one of the environmental hotline telephone numbers.

BLAST NOTIFICATION BOARD
PINEDALE MINE
NEXT BLAST

DATE: 21 1/2014
TIME: 12.00 PM
LOCATION: STRIP 3 BLOCK 2
ENVIRONMENTAL HOTLINE TEL No. 6355 1761

Plate 6-1 Pine Dale Blast Board and Environmental Hotline Telephone Number

At the time of the audit the complaints hotline was directed to Pine Dale Reception and the Mine Manager's office. If the call is not answered an option to leave a message on the message bank is provided. Complaints are reportedly responded to within 24 hours of being received. Under the Pine Dale Strategy the complaints line operates 24 hrs / 7 days a week. The complaints line was tested by the auditors during the Site inspection. During the audit the

complaints line was only operational during working hours, with a message bank service for after hours.

Complaints are logged by the Mine Manager, or delegate, on the Complaints Register. The register is an Excel based system that includes the following information:

- Complainant;
- Date received:
- Issue:
- Enhance Place comment of nature of complaint in relation to approved parametric limits;
- Action taken to address the complaint; and
- Blast results (where required).

The Mine Manager discusses complaints received during the Community Consultation Committee (CCC) meetings. A summary of complaints is also provided in the AEMRs. The 2013 AEMR was reviewed and identified that 13 complaints were made by three complainants for one or more issue during the 2013 AEMR reporting period. The 2013 complaints register recorded complaints from 8 January 2013 to 17 July 2013.

A complaint letter received by the Chairman of the CCC on the morning of 27 June 2013 for inclusion in that evening's meeting did not appear in the 2013 Complaints Register. The letter included a number of complaints, including but not limited to blasting and TSP exceedances as well as comments concerning the accuracy of consultant's reports. A letter response from Pine Dale dated 11 July 2013 to the complaint was included in the minutes of the June 2013 CCC meeting. The letter noted that due to a lack of time to review the complainant's letter prior to the meeting the Site took the decision to respond via a four page letter rather than wait to address the concerns at the next CCC meeting. The letter responded to each point raised by the complainant and provided details and explanations concerning technical issues.

A review of the 2014 complaints registers dated January through to August 2014 was undertaken that identified one noise complaint was received in January. It is noted that DTRIS-DRE received a compliant via email on 28 February 2014 from a community member concerning the following issues:

- 'The visual Impact of earth mound adjacent to Castlereagh Highway is unacceptable, particularly to residents of Blackmans Flat.
- The lack of rehabilitation of previous mining areas to natural forest vegetation (dominance of pasture).
- The excessive amount of industry in the area (cumulative impacts).
- Impacted residents should be relocated at no cost to them' (DTRIS-DRE, 2014-B).

The Department notified Pine Dale via email on 3 March 2014 and requested the Site provide a response to the above items. The complaint was not noted in the 2014 Complaints Register. As noted in Section 3.2 Pine Dale has recently reshaped the amenity bund at the request of the Department. The reshaped bund was observed by the auditors. Enhance Place responded to DTRIS-DRE via letter (Enhance Place, 2014) on 5 March 2014 indicating that Site was due to enter care and maintenance and the issue of the bund and rehabilitation would be addressed in the draft Care and Maintenance MOP. The issues concerning industry in the area and landholder relocation were addressed by Enhance Place by reference to PA

10\_0041 and the Environmental Assessment that supports the Project Approval. Enhance Place stated in the letter that it has not been approached by a landowner requesting acquisition of their property and was committed to working with DTRIS-DRE to ensure potential adverse impacts from its operations to the environment and the community were mitigated where practicable.

**Table 6-1** summarises the complaints received during the audit period by type as reported in the 2013 and 2014 complaints register. A total of 14 complaints were recorded, that included 18 issues, for example in some instances one complaint recorded three complaint types such as blasting, noise and dust.

Table 6-1 Summary of Complaints by Issue Received for Period 8 January 2013 to June 2014

Nature of Complaint	2013	2014 Note 1
Blasting	9	0
Dust	3	0
Noise	5	1
Odour	0	0
Visual	0	1
Road Closures	0	0
Rehabilitation	0	1
Not Identified	0	2
Total	17 <sup>Note 2</sup>	5 Note 3

Note 1 Up to end of June 2014 only.

As shown by **Table 6-1**, the majority of complaints related to blasting (53%); however, no exceedences of blasting criteria identified in the PA 10\_0041 and EPL criteria for air blast pressure and vibration were recorded during the audit period.

The previous IEA (URS, 2013, p.19) recommended that 'a continuous improvement opportunity exists to better document (for recording purposes) the nature of the complaint and final resolution or action taken to close out a complaint to the satisfaction of the complainant. Additional training may also be useful in defining the nature of a complaint and ensuring that all complaints are recorded. It was observed that the 2013 complaints register and the January 2014 complaints register contained a description of actions taken.

The previous IEA (URS, 2013, p.19) also noted that 'the EMS [Strategy] states that the complaints register will be updated monthly on the Pine Dale website which had not been undertaken since July 2012. It is recommended that Pine Dale ensure that the website is updated as defined in the Strategy. It was observed that complaints register had been updated and that the website included the 2013 register and monthly registers dated January 2014 through to July 2014.

Note 2 From three complainants.

 $<sup>^{\</sup>mbox{\scriptsize Note 3}}$  From two complainants (i.e. four issues from one complainant)

# Repeat Recommendation

Refer to Appendix B, 2013/IEA/054.

Further comments concerning recording of complaints are provided in **Appendix A**, EPL 4910 Conditions M5.1 to M6.1.

# 6.3 Addressing Recommendations from the Previous Independent Environment Audit

The previous IEA Report in (URS, 2013) included a number of recommendations for improvement. This audit has assessed whether recommendations have been carried out in the period since the last audit.

A total of 26 conditions were identified as non-compliant or indeterminate during the previous IEA (URS, 2013). An additional 53 conditions were provided with continuous improvement recommendations. Of the 26 conditions identified as non-compliant or indeterminate, 20 conditions had been closed whilst six remained open or ongoing. **Table 6-2** summaries those conditions identified as non-compliant or indeterminate in the 2013 IEA (URS, 2013).

Table 6-2 2013 IEA Conditions Identified as Non-compliant or Indeterminate that Remain Open or Ongoing

	Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at November 2013)	Timeframe for Compliance at November 2013	2014 Update – Assessment by URS	Status 2014
2013/IEA/ 005	PA10_0041 3.27 (b)	Non-compliant (Implementation)  Section 4.6.2 of the Baseline Water Monitoring Plan states that following the completion of the BWMP Pine Dale intend to review water quality trigger values. It is recommended that consultation be undertaken with NOW, OEH and DP&I to review water quality trigger values and where required additional monitoring be undertaken to determine appropriate trigger values. Following identification of revised trigger levels, the WMP should be updated to reflect the required monitoring program.	Background monitoring ceased as of 1 August 2013. A review of the trigger levels will be undertaken in consultation with NOW and EPA.	Completed – Trigger level review ongoing	The trigger level review has been placed on hold pending approval of Yarraboldy Stage 2 Development application. Enhance Place had planned to conduct the review when the Stage 2 application was approved; however, this was put on hold. It is recommended that consultation with NOW, OEH and DPE be undertaken to review water quality trigger values and where required additional monitoring be undertaken to determine appropriate trigger values. Following identification of revised trigger levels, the WMP should be updated to reflect the required monitoring program.	Ongoing
2013/IEA/ 009	PA 10_0041 3.27 (c)	Non-compliant (Implementation)  It is recommended that an investigation of groundwater quality and levels is undertaken as triggered during the audit period by exceedances of GWP trigger criteria (Table WM11). This includes a review of groundwater levels from July 2011 to present to determine if operations have impacted groundwater levels.  As provided in CoA 3.27(b) it is recommended that consultation with NOW, OEH and DP&I is undertaken to review water quality trigger values and based on the outcomes, the WMP be updated to reflect the required monitoring program.  Remove EP PDH3/GW and EP PDH4/GW water quality analyses from Table WM11 as identified in the GWP.	PDM acknowledge the non-compliance.  Due to the inconsistencies in trigger values noted in documented reports as noted in the audit PDM will conduct a review of groundwater monitoring data and previous assessment reports, in consultation with NOW and EPA, to determine appropriate trigger values for the site. The WMP will be updated to reflect the any revised trigger values.  The groundwater data will be recorded in a separate database as recommended. Trends in groundwater and surface water data has previously been presented in an annual environmental monitoring report submitted to PDM by RCA which forms an Appendix of the AEMR.	Completed – Trigger level review ongoing	The trigger level review has been placed on hold by Enhance Place pending approval of the Yarraboldy Stage 2 Development application. Pine Dale reported in the AEMR (2013, p.23) that 'the site specific Trigger Values developed for the Pine Dale Mine, as stipulated in the sites' Water Management Plan in accordance with Schedule 3, Condition 27(c) of the Project Approval (PA 10_0041) are currently under review, therefore the Trigger Level values presented in the previous version of the sites' Groundwater Monitoring Program (Dec 2005) have been adopted for the purpose of compliance assessment in this report'. Given the time period since the previous IEA it is recommended that consultation with NOW, OEH and DPE be undertaken to review water quality trigger values and based on the outcomes, the WMP be updated to reflect the required monitoring program.  Pine Dale management reported that a review of the groundwater levels was completed via analysis of data from bores outlined in Table WM11 and that no mine impact was observed.  The groundwater data is now recorded in a separate database as recommended and that trends are plotted graphically. Trends are presented in the spreadsheet and the AEMR reports (sighted Appendix B, p.13 – Groundwater Assessment Criteria and Pine Dale Cumulative Data Excel spread sheet).  Pine Dale management reported that EP PDH3/GW and EP PDH4/GW water quality analyses will be removed from Table WM11 when Trigger Values and WMP is updated for Stage 2.	Ongoing
2013/IEA/ 020	EPL 4911 M5.2	Non-compliant  All complaint records must be completed in their entirety. In particular actions carried out and/or no actions taken should be documented	PDM acknowledge the non-compliance.  PDM has revised its procedures to ensure all details of the complaint are recorded at the time of the complaint via	Complete	The auditors sighted evidence of a selection of hand written complaint register forms and the 2013/2014 Complaints Register. URS consider this finding closed.	Ongoing
		correctly.	completion of the Pine Dale Coal Mine Complaint Record form. The hand written complaint is then tabulated in an		It is noted that the complaint supplied by DTRIS-DRE on 28 February 2014 was not included on the complaints register. Refer	

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Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at November 2013)	Timeframe for Compliance at November 2013	2014 Update – Assessment by URS	Status 2014
		excel spread sheet and displayed on the website on a monthly basis.		to EPL 4911, Condition M5.1 and M5.2 for recommendations. URS consider the recording and closeout of complaints is ongoing.	
2013/IEA/ ML 1664 C7 023	Non-compliant (For Area A)  As identified in the 2011 AEMR site inspection by DRE, letter dated 22.06.11, rehabilitation monitoring results must be provided in the 2012 AEMR and additional rehabilitation of Area A undertaken to reduce erosion and increase vegetation abundance. The 2012 AEMR was not available for review during this audit.  No further correspondence from the department was reportedly received by Pine Dale during the audit period.  Pine Dale have been assessed as Not Compliant due to the letter from DRE and required actions to address rehabilitation in Area A however it is noted that rehabilitation was in progress (some trees had been planted and some drainage lines constructed) and additional works are scheduled for 2013.	PDM have continued to address the issue of revegetation in Area A. A site visit was made on 19/06/13 by Global Soils consultants to review the rehabilitation progress and suggest measures to aid soil improvement and vegetation growth.	Ongoing	Sighted recommendations provided by Global Soil Systems Pty Ltd dated 9 July 2013 Pine Dale Rehabilitation Recommendations for Pit A, B and C rehabilitation.  Sighted proposal from Global Soil Systems Pty Ltd dated 12 July 2013 to conduct the recommendations provided in their report dated 9 July 2013.  Sighted Proposal for a revised direct seeding of Area A dated 15 August 2014.  Sighted two Rehabilitation Monitoring Reports prepared by FirstField Environmental Pty Ltd dated June and July 2014.  The auditors observed that Area A had been mulched with a charcoal and mushroom compost and had been fertilised with gypsum and agricultural lime during the audit period. SLR Consulting Pty Ltd has been engaged to assess Areas A, C and 8 and provide recommendation for improvement and developing closure criteria for the care and maintenance MOP. An SLR Site visit is planned for September 2014. URS consider the issue of rehabilitation across the Site to be ongoing.	Ongoing
2013/IEA/ SoC 1.7 024	Indeterminate  Refer to PA CoA 3.24 and 3.27 for a detailed discussion of surface water and groundwater monitoring.  Due to the inconsistencies within the monitoring requirements of surface water and groundwater detailed within the WMP this condition has not been able to be adequately assessed. It is noted that exceedences of groundwater trigger values defined with the WMP for pH and EC were recorded during the audit period. These levels were not followed up as Pine Dale reported that the trigger values previously used for Pine Dale were reported against within the 2011 AEMR, and no exceedances against these criteria were recorded.  As identified in the CoC a detailed review of groundwater and surface water monitoring requirements needs to be undertaken to ensure effective monitoring of water quality.	Due to the inconsistencies in trigger values noted in documented reports as noted in the audit PDM will conduct a review of groundwater monitoring data and previous assessment reports, in consultation with NOW and EPA, to determine appropriate trigger values for the site. The WMP will be updated to reflect any revised trigger values.	Completed – Trigger level review ongoing	Refer to Table B-2, PA 10_0041 3.27 (c).	Ongoing
2013/IEA/ SoC 4.4 025	Indeterminate  Bursaria spinosa spp lasiophylla had not been planted as required in Area A as identified in the MOP at the time of the audit, however was planned to be planted in 2013 to coincide with the lifecycle periods of the Purple Copper Butterfly. As no timing restriction has been applied to	Rehabilitation is ongoing and still in the early developmental phase of establishing (5 years old). PDM is committed to establishing <i>Bursaria spinosa spp lasiophylla</i> within its rehabilitation through either the inclusion of seeds in the rehabilitation seed mix or direct planting. The programed	Reviewed annually	Area A was covered with cover crop in April 2014 (sighted during the audit) and with a second stage of Direct Seeding of native species scheduled for Spring 2014. Proposed native species in direct seeding includes <i>Bursaria spinosa spp</i> . Refer to Appendix, SoC, 4.4 for further details.	Ongoing

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Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at November 2013)	Timeframe for Compliance at November 2013	2014 Update – Assessment by URS	Status 2014
	this condition and Pine Dale have expressed plans to begin planting in 2013 this condition has been assessed as Indeterminate during the audit period.	timing of seeding shall correspond with the seasonal requirements for plant growth.			
	It should be noted that Pine Dale have in place the Purple Copper Butterfly Monitoring Program since June 2011 which aims to identify potential sources of indirect impacts on the butterfly / butterfly larvae and identify relevant management measures.				

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Refer to **Appendix B, Table B-1** and **Table B-2** for further details and information concerning actions from the previous IEA (URS, 2013). It is noted that Pine Dale only formally addressed recommendations that related to conditions that were identified to be non-compliant or indeterminate in their submission to DPE. Recommendations provided for continuous improvement as identified in Table 8-2 of the 2013 IEA report were not formally addressed and tracked during the audit period. A review of the status of these continuous improvements recommendations was provided to URS following the Site inspection and is shown in **Table B-2**.

#### 7 REVIEW OF ENVIRONMENTAL MANAGEMENT SYSTEM

This section fulfils the requirement to assess the adequacy of any assessment, plan or program required under the PA. The implementation of the management plans / programs is discussed in Appendix A.

# 7.1 Environmental Management during the Audit Period

Enhance Place was progressing an extension to the Yarraboldy Stage 2 Extension Project and at the time, Enhance Place anticipated that the Stage 2 Extension would be determined prior to coal being exhausted in the currently approved Yarraboldy Extension. Due to delays in the planning of the Stage 2 Extension Project process, Pine Dale was placed in care and maintenance in April 2014, meaning there is no coal production from the Site and staff consists of a 'skeleton' crew as dictated by statutory requirements. At the time of the audit there was uncertainty concerning the future operations of Pine Dale and the timing of the recommencement of mining operations. Pine Dale management reported that it was expected that strategies, plans and programs would have been revised and implemented following the determination of the Stage 2 Project Extension Project; however, as approval was not received during the audit period strategies, plans and programs have remained unchanged since the previous IEA (URS, 2003). URS consider that recommendations that have not been addressed since the previous IEA (URS, 2013) concerning strategies, plans and programs remain valid and these have been identified as repeat recommendations throughout the report.

## 7.2 Environmental Management Overview

Pine Dale operates under the Integrated Environmental Management System (IEMS) that includes the Environmental Management System, the Mine Operations Plan (MOP), the Biodiversity Management Plan and Emergency Response, Hazard and Complaints System.

Pine Dale has developed a Site specific Integrated Environmental Management System (IEMS) incorporating environmental management plans and the MOP. The IEMS structure has been reorganised during the audit period to align with ISO 14001:2004 - Environmental Management Systems -- Requirements with guidance for use. The auditors noted an improvement in the availability and awareness of documentation during the audit compared with the previous audit (URS, 2013).

A schematic of the IEMS framework (reproduced from the EMS) is provided in Figure 7-1.

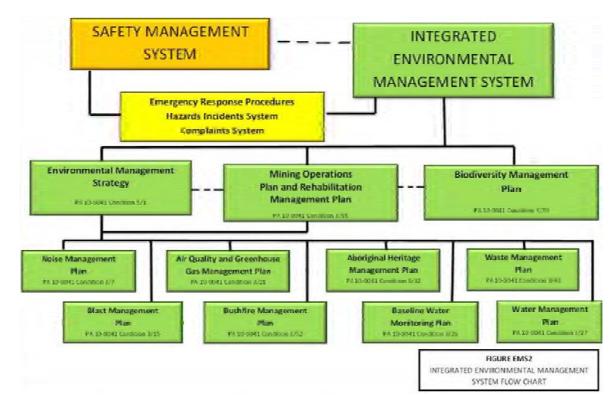


Figure 7-1 Pine Dale IEMS Framework (reproduced from EMS, 2011)

The components of the EMS are discussed in further detail below.

## 7.3 Environmental Management Strategy

An Environmental Management Strategy (Strategy) was prepared by Pine Dale in 2011 to satisfy the requirements of Condition 1, Schedule 5 of PA 10\_0041. The Strategy was approved by the DPE on the 17 August 2011 and has not been revised or updated since the previous IEA (URS, 2013).

The structure of the Strategy is generally based on the ISO 14001:2004<sup>2</sup> standard 'Plan-Do-Check-Act' process. **Figure 7-2** provides the strategic context of the environmental management strategy.

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<sup>&</sup>lt;sup>2</sup> ISO14001:2004 - Environmental management systems -- Requirements with guidance for use

## Strategic Context of the Environmental Management Strategy

Feature	Context within EMS	EMS Section
Plan	Maintain register of legal and other requirements     Maintain register of environmental aspects and impacts     Set environmental objectives and targets     Develop environmental programs and management plans	Section 3 5.1 Appendix 2 Section 5
Do	Identify and allocate responsibilities for environmental management     Develop and maintain operating procedures     Maintain external communications with regulators, members of the public and other stakeholders     Effectively manage complaints     Effectively manage disputes     Undertake operations in compliance with PA 10_0041     Implement emergency preparedness and response strategies / plans	Section 4 & Appendix 2 Section 5 Sections 6 and 7  6.2 6.3 Appendix 2 Section 8
Check	Complete an annual review of compliance with environmental statutory requirements during the preparation of the Annual Environmental Management Report     Undertake environmental monitoring     Undertake environmental inspections     Review non-compliances and corrective/preventive action plans     Commission independent audits of operations	5.1  Section 5  Section 7  Section 7  Section 7
Act	Undertake a periodic review and revision of the EMS by senior personnel     Implement and review non-compliance and corrective/preventive actions	Section 9 Section 7

Figure 7-2 Pine Dale strategic context of the Environmental Management Strategy - 'Plan-Do-Check-Act' process (reproduced from the Strategy, 2011)

The Strategy was developed by Pine Dale incorporating the following components to comply with PA 10 0041 and meet the strategic context:

- Strategy Framework (Section 1.2)
- Statutory Requirements (Section 3)
- Environmental Management Responsibility, Personnel and Roles (Section 4)
- Environmental Performance Management and Monitoring (Section 5)
- Information Dissemination, Complaints Management and Dispute Resolution (Section 6)
- Response to Non-Compliances (Section 7)
- Emergency Response (Section 8)
- Review and Improvement (Section 9)

Appendix 2 of the Strategy details a program for implementation of PA 10\_0041 Conditions (including the SoC). PA 10\_0041 has been separated into three main categories then further divided into sub categories:

- Part A: Actions prior to nominated hold points
- Part B: Administrative general requirements and documentation
- Part C: Environmental Management

This tool identifies the requirements, actions required to achieve compliance, documentation required to demonstrate compliance, responsibility and timing.

It is noted URS did not complete a detailed audit of the mine's implementation of the Strategy. Commentary on implementation of the Strategy is provided in the compliance section (**Appendix A**) of the report.

# 7.3.1 Adequacy Review

The Strategy Framework document provides the strategic context and an overview of Pine Dale's system for managing the environmental impacts of its operations.

The 2013 IEA (URS, 2013) identified the following continuous improvement opportunities relating to general environmental management at the Site following a brief review of the Strategy. The recommendations were considered to have remained valid and appropriate notwithstanding the care and maintenance status of the Site. Many of the opportunities are systems related i.e. they do not generally have a direct impact on ongoing environmental management at the mine, however; if implemented should ensure more effective and efficient systems and implementation (note that the review was desk top and brief, and not a full audit of the EMS against any standard):

## Repeat Recommendations

- Refer to Appendix B, 2013/IEA/057.
- Refer to Appendix B, 2013/IEA/058.
- Refer to Appendix B, 2013/IEA/059.

# 7.4 Management Plans

The management plans required by PA 10\_0041 are summarised in **Table 7-1**.

Table 7-1 Management Plans required by the Development Consent

Strategy / Plan	Approval Agency	Approval Date	Last Updated / Revised
Aboriginal Heritage Management Plan (AHMP)	DPE	20 March 2011	20 March 2011
Air Quality and Greenhouse Gas Management Plan (AQGHGMP)	DPE	17 August 2011	17 August 2011
Baseline Water Management Plan (BWMP)	DPE	17 August 2011	17 August 2011
Blast Management Plan (BMP) (Revision 1)	DPE	14 August 2012	14 August 2012
Bushfire Management Plan (BFMP)	Forests NSW	19 September 2011	19 September 2011
Noise Management Plan	DPE	17 August 2011	17 August 2011
Rehabilitation Management Plan (included in the MOP)	DPE	21 March 2011	21 March 2011
Waste Management Plan (WaMP)	DPE	17 August 2011	17 August 2011
Water Management Plan (WMP)	DPE	17 August 2011	17 August 2011

The scope of this audit was limited to a review of the adequacy of the plans required by PA 10\_0041. The 2013 IEA (URS, 2013) identified the following general "continuous improvement opportunities" are made concerning the adequacy of the Management Plans. The recommendations are considered to remain valid and appropriate notwithstanding the care and maintenance status of the Site:

Repeat Recommendation

Refer to Appendix B, 2013/IEA/047.

# 7.4.1 Adequacy Review

None of the plans identified in **Table 7-2** have been updated since the 2013 IEA (URS, 2013).

It is recognised that Pine Dale is currently on care and maintenance status. That is, there is no coal production from the Site and staff consists of a 'skeleton' crew as dictated by law; however, this does not mean that the plans cannot be implemented and maintained. Implementation of the plans during the audit period is addressed in **Appendix A**. The 2013 IEA (URS, 2013) provided the following adequacy reviews of the management plans. The recommendations provided for the plans are considered to remain valid and appropriate notwithstanding the care and maintenance status of the Site and should be considered when the plans are next updated.

A summary of rehabilitation issues and management during the audit period is discussed in **Section 8**.

The findings of the review of the adequacy of the remaining management plans and subsequent recommendations are provided in **Table 7-2**.

Table 7-2 Adequacy Review of Management Plans/Monitoring Programs and Recommendations

Management Plan	Adequacy Review and Recommendations
Aboriginal Heritage Management Plan (AHMP)	The Aboriginal Heritage Management Plan (AHMP) was prepared for Pine Dale by R.W Corkery in March 2011 as a requirement of PA 10_0041 (CoA 3.32) and approved by DPE on the 7 March 2011.
	The AHMP was prepared in consultation with the Gundungurra Tribal Council (GTC).
	As identified in the Aboriginal Heritage Assessment (June 2010) two sites of potential Aboriginal significance were identified within the original proposed boundary of the Yarraboldy Extension. On identifying these sites, Pine Dale amended the boundary to exclude these areas. These sites were not visited as part of the site inspection. In the absence of archaeological artefacts the Aboriginal Heritage Assessment (June 2010) identified 'that the impacts on cultural and archaeological significance would be negligible with no need to implement any special operational safeguards'.
	On the basis that the mine is relatively small, the Plan was reviewed and approved by DPE, and that the project was determined to have negligible impacts on cultural and archaeological significance (as defined by surveys sighted) the AHMP is considered to be adequate for the operations taking place at Pine Dale Yarraboldy Extension.
	Refer to Appendix B, Table B-2, Row 61.
Air Quality and Greenhouse Gas Management Plan (AQGHGMP)	The Air Quality and Greenhouse Gas Management Plan (AQGHGMP) was prepared for Pine Dale by R. W. Corkery in June 2011 as a requirement of PA 10_0041 (CoA 3.21) and approved by DPE on the 17 August 2011.
	A brief review of the AQGHGMP identified that the plan has been developed to manage dust emissions generated on-site that appear appropriate for the size of the Yarraboldy Extension area. The key measures for dust mitigation on-site include the use of water carts and progressive rehabilitation.
	The Coal Mine Particulate Matter Control Best Practice Report (required under EPL Condition U1, PRP) identified that the majority of dust emissions are from haulage on unsealed roads. Given the care and maintenance status of the Site activity inside the mine on unsealed roads is minimal. A water cart is available during care and maintenance. The Coal Mine Particulate Matter Control Best Practice report found that implementation of an additional water cart and associated pumps and pipes would reduce dust emissions further, however 'as levels at receptors are already minor, the actual magnitude of the impact reduction would not be significant'. Additional measures had not been implemented at the time of the audit, however dust

Management Plan	Adequacy Review and Recommendations
	emissions would have been considerably lower given the care and maintenance status of the mine.
	The amenity bund, was reshaped during the audit period and planted with a cover crop of native grass; however the cover grass did not germinate. Global Soil Systems Pty Ltd proposed to handseed the bund in September 2014 with native tree seed which will assist with dust management.
	Monitoring of air quality parameters, PM10 and TSP is undertaken on-site next to the mine office. Under PA CoA 3.19 an exceedance is only applicable if the exceedance is recorded at any residence on privately owned land or on more than 25 percent of any privately owned land. As monitoring is not recorded offsite, to which this condition applies, should an exceedance occur (none has in the audit period), modelling may be required to determine if an exceedance is recorded in accordance with this condition.
	Repeat Recommendations  Refer to Appendix B, 2013/IEA/062.
Baseline Water Monitoring Plan (BWMP)	The BWMP is the overarching document for water management for the Site. From a water management and erosion control perspective it is recognised that Pine Dale is currently on care and maintenance status. That is, there is no coal production from the site and staff consists of a 'skeleton' crew as dictated by statutory requirements.
	The Baseline Water Monitoring Plan (BWMP) was prepared for Pine Dale by R. W. Corkery in July 2011 as a requirement of PA 10_0041 (CoA 3.26) and approved by DPE on the 17 August 2011.
	The BWMP was implemented by Aquaterra and a final Baseline Water Monitoring Report (BWMR) issued on 4 October 2011. The BWMR recommended a new set of trigger criteria for surface water and groundwater quality and water flow triggers.
	Following completion of the BWMR Pine Dale may use this report to discuss with the DPE adjustment of water quality trigger levels and to set water flow triggers. This review had not been undertaken by Pine Dale at the time of the audit.
	A brief overview of the BWMP identified that groundwater trigger levels as described in the WMP were not fully reviewed. No recommendations of revised trigger levels for groundwater levels were provided. It is noted that there is no monitoring of flows from disturbed mine areas that has been redirected from local creeks to the underground workings.
	Repeat Recommendations Refer to Appendix B, 2013/IEA/063.

Management Plan	Adequacy Review and Recommendations
Blast Management Plan (BMP)	Given the Site is on care and maintenance no blasting activities were being conducted at the time of the audit.
	The Blast Management Plan (BMP) was originally prepared for Pine Dale by R. W. Corkery in March 2011 as a requirement of PA 10_0041 (CoA 3.15) and approved by DPEon the 23 March 2011. The BMP was updated in August 2012 which was approved by the DPE on the 14 August 2012.
	No blasting is planned during the care and maintenance status of the Site.
	A brief review of the BMP was conducted and identified that the BMP has been prepared in accordance with the requirements of the PA CoA 3.15. It is noted that the URS auditors are not blast experts and are not in a position to assess the adequacy of the technical aspects of the Plan concerning blast management and modelling.
	It is noted that 53% of complaints received during 2013 related to blasting. No blasting complaints have been received in 2014.
	It I understood that additional approvals would be required to recommence any mining and blast activities. Consulting further with the community on blast management practices and protocols would be required as part of obtaining any further approvals.
Bushfire Management Plan (BFMP)	The Bushfire Management Plan (BFMP) was prepared for Pine Dale Mine by R. W. Corkery in June 2011 as a requirement of PA 10_0041 (CoA 3.52) and approved by Forests NSW on the 19 September 2011.
	The Bushfire Management Plan was not assessed for adequacy as the auditors are not bushfire experts. The BFMP included sections covering bushfire hazard identification; controls and audit and review processes.
	Notwithstanding this, URS consider that the BFMP should be updated to reflect the Care and Maintenance status of the site where there are less resources available to manage fire risks.
	See recommendation in CoA 3.52.
Noise Management Plan (NMP)	Given the Site is on care and maintenance no audible noise could be distinguished from activities at the mine during the site inspection.
	The Noise Management Plan (NMP) was prepared for Pine Dale by R. W. Corkery in June 2011 as a requirement of PA 10_0041 (CoA 3.7) and approved by DPE on the 17 August 2011.
	The NMP was been prepared in accordance with the CoA 3.7. The NMP incorporates management safeguards and mitigation measures which shall be implemented during site establishment, construction and general operations at the Yarraboldy Extension.
	It is noted that 29% of complaints received during 2013 related to noise. One noise complaint had been received at the Site in 2014 at the time of the audit.

Management Plan	Adequacy Review and Recommendations
	The reporting protocol activated in the event of an exceedance of EPL and PA noise criteria was considered adequate for the operations at Pine Dale however has not been required during the audit period.
	The following recommendations are provided to allow a clear interpretation of monitoring data against the noise criteria in the PA and EPL and ensure compliance with the Protection of the Environment Operations (POEO) Act 1997.
	Repeat Recommendation  Refer to Appendix B, 2013/IEA/064.
Dehabilitation Management	
Rehabilitation Management Plan (included in the MOP)	Refer to Section 8.
Waste Management Plan (WaMP)	The Waste Management Plan (WaMP) was prepared for Pine Dale by R. W. Corkery in June 2011 as a requirement of PA 10_0041 (CoA 3.40) and approved by DPE on the 17 August 2011.
	A brief review of the WaMP identified that the plan describes the approval and legislative requirements, objectives, mine waste streams, waste management measures and responsibilities and accountabilities. Waste on site was managed by Dukes Mining. Waste on-site is sorted and stored at the Workshop. Waste during care and maintenance is removed by SITA.
	Management of spills or loss of containment of waste (i.e. hydrocarbons) is not included in the WaMP.
	Repeat Recommendation Refer to Appendix B, 2013/IEA/065.

Management Plan	Adequacy Review and Recommendations
Water Management Plan (WMP)	The Water Management Plan (WMP) was prepared for Pine Dale by R. W. Corkery in July 2011 as a requirement of PA 10_0041 (CoA 3.27) and approved by DPE on the 17 August 2011.
	A brief review of the WMP identified that the Plan generally addresses the requirements of PA CoA 3.27. A full assessment of adequacy of mitigation measures was not able to be conducted. Monitoring of stream health on Neubecks Creek was carried out to demonstrate / monitoring the impact of the Yarraboldy Extension. Channel stability and stream health monitoring reports prepared by RCA (RCA, 2014 and RCA, 2013) were available for review. The initial survey was completed in August and October 2013, with follow-up six monthly surveys conducted in February and August 2014.
	During the site inspection in August 2014 rock drainage lines were observed to have been constructed in Area C to minimise erosion from rehabilitated surfaces with little ground cover. Overall erosion on-site was not identified as a major issue. Along dirty water drainage lines bank erosion was evident; however, these drainage lines are temporary and will be rehabilitated following mine closure.
	During the audit period monitoring at EPL LDP 4 and 5 was only carried out if discharge was occurring during a quarterly monitoring event. No surface water discharges to these LDP's were recorded prior to their removal from the EPL.
	Repeat Recommendations Refer to Appendix B, 2013/IEA/066.

# 7.5 General Findings Related to Environmental Management

As noted previously in this report, the plans have not been updated since the pervious IEA (URS, 2013) therefore the following general recommendations previously concerning the plans provided are considered to remain valid and appropriate notwithstanding the care and maintenance status of the Site and should be considered when the plans are next updated:

# Repeat Recommendations

Refer to Appendix B, 2013/IEA/067.

Refer to Appendix B, 2013/IEA/056.

#### 8 REHABILITATION MANAGEMENT

This section of the report discusses the findings of the review of rehabilitation activities at Pine Dale during the audit period. The audit team did not include an ecological specialist as was the case for the 2013 IEA (URS, 2013) and it is noted that the Director-General under PA 10\_0041, Condition 8, Schedule 5, did not request such a specialist for this audit. Therefore this Section provides comments concerning progress and actions since the previous IEA and plans for future rehabilitation works under extended care and maintenance only.

#### 8.1 Rehabilitation Overview

The following documents have been developed to meet PA 10\_0041 conditions concerning rehabilitation and biodiversity (Schedule 3, Conditions; 29, 30, 31, 53, 54 and 55 as well as Statement of Commitments for flora and fauna):

- Draft Care and Maintenance Mine Operations Plan/Rehabilitation Plan 2014
- Mine Operations Plan /Rehabilitation Management Plan, 2011;
- Mine Operations Plan (Flora and Fauna Management Plan and Weed Management Plan), 2011; and the
- Annual Environmental Management Report (AEMR) 2011 and associated AEMR Plan.

These plans have been prepared by suitably qualified experts in consultation with the relevant agencies and approved by DPE in accordance with PA 10\_0041.

## 8.2 Pine Dale Open Cut Coal Mine – Rehabilitation Areas

The Site has been segregated and rehabilitated generally in accordance with Appendix 3: Conceptual Rehabilitation Plan of PA 10\_0041. These areas are shown in **Figures 8-1** and **8-2**. The previous IEA (URS, 2013, pp.29-30) noted that.

- 'Area A The Area A rehabilitation is immediately south of the Coal Haul Road, Ben Bullen State Forest and the Yarraboldy extension active mine area. Area A is currently being rehabilitated to replicate "Native Woodland" as per the Project Approval.
- **Area B** The Area B rehabilitation is located immediately north of Neubecks Creek, adjoining Area C. Area B has been rehabilitated to "Pasture" as per the Project Approval.
- **Area C** The Area C rehabilitation is located to the north eastern boundary of the site. This area was being rehabilitated to "Pasture" as per the Project Approval.
- **Area 8** Area 8 rehabilitation is located immediately south of Neubecks Creek, this area has been rehabilitated to "Pasture" as per the Project Approval'.

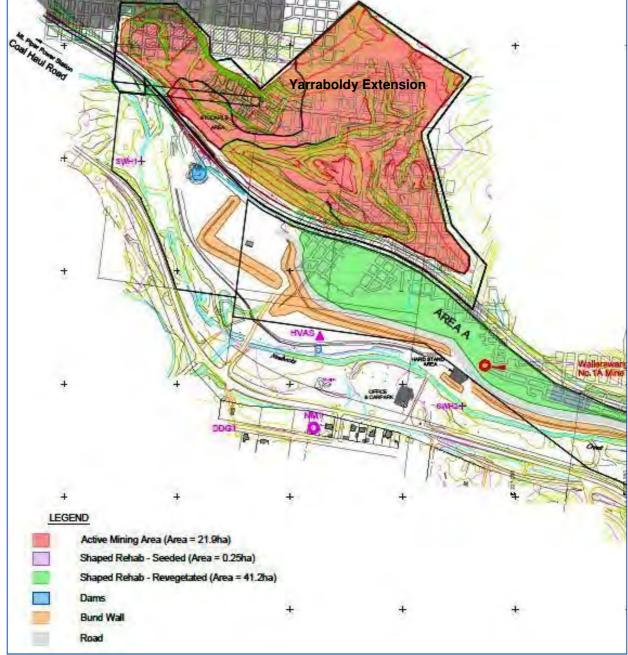


Figure 8-1 Area A Rehabilitation Area

(Source: Enhance Place 2013 AEMR)



Figure 8-2 Area C and Area B & 8 Rehabilitation Area

(Source: Enhance Place 2013 AEMR)

# 8.3 Rehabilitation Site Inspection Observations

Table 8-1 Rehabilitation Areas at Pine Dale Coal Mine

# Locality

#### **Photo**

#### Area A

Area A is immediately south of the Angus Place Coal Haul Road, Ben Bullen State Forest and the southeast corner of the Yarraboldy extension.

Area A is currently being rehabilitated to replicate "Native Woodland" as per the PA 10\_0041 and the approved MOP. Since the last IEA, the area has been mulched with a mixture of charcoal and mushroom compost and had been fertilised with gypsum and agricultural lime. Area A was covered with cover crop in April 2014 (sighted during the audit) and a second stage of Direct Seeding of native species was scheduled for Spring 2014. Proposed native species in the direct seeding includes Bursaria spinosa spp.

Pine Dale management acknowledged that rehabilitation in this area was not progressing as quickly as expected. Pine Dale indicated that one potential reason for poor rehabilitation performance was the potential for acid soils in the area and noted some soil sampling in the area had indicated acid soils.

Pine Dale indicated that the advice to be provided by SLR will assist them to form a long term approach to achieving compliance with closure criteria to be developed for the area and to help enable rehabilitation to be achieved in accordance with PA 10\_0041 and





## **Photo**

the MOP.



## Area B

The Area B rehabilitation is located immediately south of Neubecks Creek and Area C.

Area B has been rehabilitated to "Pasture" as per the Project Approval. Pine Dale management reported that no rehabilitation occurred in Area B during the audit period.

The area was noted to have sparse vegetation cover in many areas; was rocky and had some erosion in drainage lines.

The overall rehabilitation performance was considered low.

Pine Dale indicated that the advice to be provided by SLR will assist them to form a long term approach to achieving compliance with closure criteria to be developed for the area.





**Photo** 

#### Area C

The Area C rehabilitation is located to the north eastern boundary of the Site. This area was being rehabilitated to "Pasture" as per the Project Approval. The land is privately owned and leased from a local landowner. Other than an application of gypsum and lime no other works were conducted in Area C during the audit period. Pine Dale is in the process of addressing comments provided by DTRIS-DRE concerning the rehabilitation criteria in the draft care and maintenance MOP with the objective that this will allow an outcome of lease relinquishment that DTRIS-DRE and the landowner are satisfied with. An agronomist from SLR will assess this area and provide rehabilitation criteria and recommendations to achieve the criteria by the end of October 2014.

Pine Dale management reported that the landowner attempted to graze cattle in Area C during the audit period; however this was stopped by the mine to prevent damage to the pasture.

A key area of need for further rehabilitation, also noted during AEMR inspections, was that the rehabilitation of contour banks was poor (see photo) and required work. Pine Dale suggested one approach was to push in and revegetate the contour drains, given the extent of pasture growth.







#### **Photo**

#### Other Areas of the Site

Leylandii (an exotic pine) and native tube stock planting occurred during the audit period on areas of the Site that may be impacted by any future mining operations.

The leylandii has been planted in front of the native tube stock and is intended as a short-term measure to screen exposed areas of the Site from Castlereagh Highway. It is planned that the leylandii will be removed during site closure leaving the established native species.

It was noted that at the time of the audit there had been good success with the screening planting.





The amenity bund was reshaped during the audit period to a 1 in 3 slope from the former angle of repose of 1 in 1. A cover crop was planted; however, this did not germinate. Global Soil Systems Pty Ltd had been engaged to hand seed approximately 2 hectares of the bund with native tree seed in September 2014.



# Locality Photo



A grass cover crop was planted on shaped landform in the north-west corner of the Yarraboldy extension to reduce windblown dust. The reshaping is not considered permanent and may be removed should mining operations recommence. The majority of the remainder of the pit area had been compacted and prepared for topsoil. Various topsoil and subsoil stockpiles existed around the site for use in future rehabilitation.



The other side of the visual bund was not contoured. Pine Dale indicated the soil in the bund was to be used in the remaining void if no further mining occurred and the Site was rehabilitated. If mining was to recommence, the area was to be filled with waste from future mining areas.



#### **Photo**

The remaining void to the western end of the mine. Pine Dale indicated that should the Site be closed as it is, the intention is to relocate the visual bund into this void and push material up to the high wall. If further mining was approved, this void would be used for waste materials/over burden.



Topsoil stockpile in distance with contoured landform in foreground. While some areas have been seeded as temporary rehabilitation, other areas have been left with overburden at the surface awaiting either closure, whereby they will be topsoiled and revegetated, or further mining approvals, whereby the area would be likely used for waste rock dumps.



Nuebecks Creek has been significantly altered due to mining activities. In addition, Pines were observed along the bank to Nuebecks Creek and in numerous areas of the site. Pine Dale reported that there was no formal rehabilitation plan for the creek at the time of the Site inspection. Ref to Appendix A, ML 1569, Condition 2.



The prevalence of noxious weeds found during the Site investigation was low and limited to a hand full of sporadic noxious weeds; however, large areas of the Site are covered in pine trees which are weeds in the area.

### 8.4 Annual Environmental Management Reports

The Annual Environmental Management Report (AEMR), 2013 and associated AEMR Plans, provides a summary of the annual activities undertaken relevant to rehabilitation. The AEMR provided a brief summary of 2014 activities; however could be improved by including information regarding criteria and results of monitoring to demonstrate performance against the criteria year to year. Additionally future AEMRs could be improved by providing more detail on activities undertaken and targeted with respect to the rehabilitation areas.

The 2013 AEMR notes (Enhance Place, 2014, p.39) that proposed 'rehabilitation activities will be undertaken during the 2014 period on areas that will not be directly impacted by a future mining operation at the Pine Dale Mine. All maintenance activities required on the rehabilitation areas will continue throughout 2014 (sediment fences, fertilizing, re-seeding, weed control etc)'.

## 8.5 DTRIS-DRE Comments Concerning Rehabilitation

Pine Dale management acknowledged during the audit that rehabilitation in some areas of the Site that not performing as well as expected but works had been undertaken or were in the process of being completed to improve the situation.

As identified in the 2013 IEA (URS, 2013, p.34) 'Area A is the main rehabilitation area requiring further focus and works. The native cover is low across the area with a high soil exposure and evidence of erosion having occurred, as per the picture. Area A was identified as having poor rehabilitation in the AEMR site inspection held on site on 31 May 2012 attended by EPA, Forests NSW, LCC, and DRE. Pine Dale was required to investigate why revegetation in this area has been poor and develop a plan to rectify. Also it was required that Pine Dale review sediment and erosion control measures for the area and implement remediation works.

During the AEMR Site inspection on 29 April 2014 attended by Pine Dale, EnergyAustralia, the EPA and DTRIS-DRE the following was noted concerning rehabilitation at the Site:

- 'Rehabilitation works were underway during the inspection. Seeding was being undertaken of the rehabilitated high wall slope. Discussions were held with the contractor supplying and spreading the seed regarding systems and processes to achieve rehabilitation success. The discussions confirmed that best practice rehabilitation was being undertaken at the Pine Dale Mine.
- Re-contouring works on the amenity bund was underway during the inspection. The bund was being re-shaped to a 1 in 3 slope from the former angle of repose (1 in 1).
- Rehabilitation in Area A, Area C and Area 8 was inspected. Area A has been the focus of rehabilitation improvement works with the application of mulch to improve soil carbon. The rehabilitation in this area has not improved considerably since the application of the mulch. The success of the mulch application should be reported in future AEMR's as well as if the area is meeting the completion criteria.
- Rehabilitation at Area C and Area 8 appears to be progressing to plan. Water management structures within Area C appear to be controlling erosion on the sloped sections. These structures are largely bare earth (as they were implemented retrospectively) leading to potential for erosion and visual impact. Pine Dale should consider seeding the exposed earth within the water management structures in Area C' (DTRIS-DRE, 2014-A, pp.1-2).

Action items raised following the AEMR Site inspection have been summarised in Table 3-1.

DTRIS-DRE re-iterated their concerns regarding the success of rehabilitation in Area A during the consultation process for this audit noting that rehabilitation does not appear to be on a sustainable trajectory towards the final land use of native forest. DTRIS-DRE acknowledges that works have been undertaken recently by Pine Dale to try and improve the success of the rehabilitation; however, improvements to the success will take time to show.

A revision of the currently approved MOP is being undertaken in accordance with new guidelines issued by DTRIS-DRE in September 2013. This review is being undertaken in consultation with DTRIS-DRE and other relevant stakeholders. Feedback provided to Pine Dale from DTRIS-DRE (DTRIS-DRE, 2014-D) concerning the draft Care and Maintenance MOP identified that Appendix C (Rehabilitation Performance Criteria) be reviewed to provide greater detail and clarity on the rehabilitation performance criteria, including, but not limited to landform establishment, growth medium development and ecosystem establishment.

#### 8.6 Draft Care and Maintenance MOP/Rehabilitation Plan 2014

The Site is currently working under previously approved MOP (2011) which expired in February 2014; however, the current final land form of the Site is provided in the draft Care and Maintenance MOP. Pine Dale management expect the draft Care and Maintenance MOP to be approved by December 2014 (date of expiration of the current Project Approval for mining).

Pine Dale has prepared the draft Care and Maintenance MOP in accordance with the new DTRIS-DRE guidelines<sup>3</sup>. Pine Dale management reported that the draft MOP will be the first mine under care and maintenance to prepare a MOP in accordance with these guidelines. The draft MOP was submitted to DTRIS-DRE for comment on 11 March 2014. DTRIS-DRE provided comments to Pine Dale concerning submission the draft care and maintenance MOP on 19 May 2013 (DTRIS-DRE, 2014-D). DTRIS-DRE requested that Pine Dale review the rehabilitation performance criteria for the Site and provide detail, including, but not limited to, primary domains, measurable targets against related performance criteria, slope angles, water management, physical and chemical characteristics of soil(s) and a set of practical vegetation indicators for assessment. In response to these requests Pine Dale has recently engaged an agronomist from SLR Consulting Pty Ltd (SLR) to provide pasture management advice for the short, medium and long-term as well as rehabilitation criteria that will feed into the draft MOP. The agronomist is due to visit the Site in September 2014. Pine Dale indicated that SLR will provide advice for further rehabilitation efforts required in Areas A, B and C.

The draft MOP (Enhance Place, 2014-C, p.7) notes that 'there is no planned rehabilitation works proposed to be undertaken during the C&M MOP period. Ongoing maintenance works of existing rehabilitated areas will continue to be undertaken during the C&M MOP period'. The draft MOP (Enhance Place, 2014-C, p.7) also adds that 'it should be noted that any rehabilitation works will be completed prior to the site going into care and maintenance. Proposed rehabilitation works will include reshaping the visual bund and part of the overburden waste dump. The reshaping of the visual bund will include reducing the slope angle to a 1:3 (V:H) on the southern side, constructing contour drains as required, topsoiling and seeding with the rehabilitation seed mix. It is anticipated that the shaping and rehabilitation of the visual bund will be undertaken prior to the site going into care and maintenance'. The auditors observed that the amenity bund had been reshaped at the time of

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<sup>&</sup>lt;sup>3</sup> ESG3: Mining Operations Plan (MOP) Guidelines, September 2013

the site inspection and had undergone one round of seeding with another planned for September 2014. It was noted that water management structures included in the plans (Plans 1C, 2, 3, 4) to the draft 2014 MOP had been removed from overburden emplacement area. It was also noted that the draft MOP does not define or describe contours for final landform rehabilitation.

The Care and Maintenance Risk Assessment, November 2013 included in Appendix D of the draft 2014 MOP included an actions table (p.4). For example item four required the installation of a security fence around the office complex area to prevent public access. This had been completed at the time of the Site inspection on 28 and 29 August 2014. It is noted that the timeframes for action items was generally January and February 2014. The risk assessment included in Appendix D (p.6) also included hazards such as 'topsoil stockpiles' with a control measure of 'topsoil stockpiles seeded if left longer than 3 months' (i.e. July 2014) that had yet to be implemented.

The rehabilitation objectives for the area covered by the draft care and maintenance MOP (2014) are as follows.

- 'The rehabilitated landform is safe, stable, non-polluting and suitable for its intended longterm land use;
- The rehabilitated land is self-sustaining or maintenance requirements are consistent with the agreed post mining land use(s);
- Achievement of an acceptable post disturbance land use capability/suitability with downstream water quality preserved;
- Rehabilitation maintains or improves the species diversity and habitat value of the Yarraboldy Extension area, particularly the former Yarraboldy Open Cut Mine;
- The agreed post mining land use is compatible with the surrounding land fabric and land use requirements;
- The area rehabilitated is as close as practical to the waste rock dumps and mining area during the C&M MOP period (Enhance Place, 2014, p.17).

#### Recommendations

- 2014/IEA/003 It is recommended that the draft Care and Maintenance MOP/Rehabilitation Plan be updated to reflect those works that have occurred on-site since first drafted in March 2014 such as the reshaping of the amenity bund.
- 2014/IEA/004 The Summary of Action Items from Risk Assessment (Appendix D, p.4) should be updated to reflect those actions that have been completed (last deadline was 28 February 2014).
- 2014/IEA/005 Implement control measures in the Care and Maintenance Risk Assessment, November 2013 such as the seeding of topsoil stockpiles if left longer than 3 months.
- 2014/IEA/006 It is recommended plans included in the draft Care and Maintenance MOP/Rehabilitation Plan be updated to reflect the Site layout in care and maintenance, in particular the overburden emplacement area where water management structures had been removed.
- 2014/IEA/025 Pine Dale to consider updating the Draft Care and Maintenance MOP/Rehabilitation Plan to include contours for final rehabilitation so that key stakeholders can understand the end landform design.

### 8.6.1 Mine Closure Preparation

Pine Dale has not prepared a detailed Mine Closure Plan for the event that the Site is closed rather than additional areas for mining approved. For example Pine Dale management reported that there are no formal plans in place at the moment for the rehabilitation of Neubecks Creek. In addition, the long term intent and purpose of the amenity bund is unclear in terms of the final landform; however, Pine reported that there is an internal EnergyAustralia monetary provision to move the amenity bund into the Yarraboldy void if approval is not granted for Stage 2 Development. Pine Dale has prepared a rehabilitation cost estimate (RCE) for mining leases 1578, 1569, 1664 and 1637 that was submitted to DTRIS-DRE on 8 May 2014. DTRIS-DRE provided acknowledgement to Pine Dale concerning the security bond on 15 July 2014 (DTRIS-DRE, 2014-F).

URS has not completed a review of the accuracy of these costs, however, it was noted that the Security Bond calculation did not include the cost of rehabilitation of Neubecks Creek. It also did not include moving the spoil in the visual bund into the void as part of the calculated cost. The cost appeared to include reshaping of the back of the visual bund rather than moving all spoil, with high wall treatment by blasting. The costs to complete works according to profiles in the Care and Maintenance MOP (i.e. move the spoil within the visual bund to fill in the void and contour it with the high wall) would add a significant amount to the rehabilitation cost. This approach appears to have been accepted by DTRIS-DRE given its approval of the RCE; however, it does not appear to provide for the best closure outcomes or to provide a cost estimate relevant to the MOP.

It is acknowledged that the care and maintenance landform is temporary. URS is not aware of specific standards for rehabilitation relevant to care and maintenance. The standards acceptable for care and maintenance would be assumed to be at the discretion of DTRIS-DRE and have not been assessed by URS in this audit report.

#### Recommendation

- 2014/IEA/007 It is recommended that Pine Dale prepare a preliminary Mine Closure Plan that includes consideration for the rehabilitation of Nuebecks Creek. Refer to Appendix A, ML 1569, Condition 2.
- 2014/IEA.024 It is recommended that Pine Dale continue to ensure that provision is made and regularly assessed as being adequate for all closure requirements defined in the Care and Maintenance MOP including defined outcomes in terms of landform; meeting rehabilitation criteria; and ongoing monitoring.

## 8.7 Summary of Previous IEA Rehabilitation Observations

- 2013/IEA/070- Neubecks Creek will require management of Blackberry as soon as chemical application equipment (reportedly being sourced) is acquired so to allow safe effective treatment.
  - 2014 Blackberry was not observed in Nuebecks Creek at the time of the Site inspection; however, exotic trees such as pines were observed along the creek bank.
- 2013 Land form across Pine Dale Mine has been achieved through contour surveying using a clinometer and survey pegs. The landform appears to resemble Appendix 3 and is forming aesthetically with the surrounding landscape.
  - 2014 Landform to the east of the Site (Areas Ba and C) had not changed since the previous IEA. Area A had not changed during the audit period. Landform in the Yarraboldy extension had changed since the last audit and was progressing towards final landform in the event of Site closure. Further material would be required to fill the void for closure.
- 2013 Area A requires further seeding, mulching and habitat placement to enhance
  native woodland and achieve desired outcomes, i.e. re: creation of native woodland to
  resemble Ben Bullen State Forest.
  - 2014 URS concur with the previous comment. The engagement of a rehabilitation specialist from SLR and the development of rehabilitation criteria will provide guidance towards MOP final landuse. In addition, acid soils may be a reason for poor growth in this area and this should be investigated as part of the SLR assessment.
- 2013 Efforts to monitor and survey Purple Copper Butterfly (*Paralucia spinifera*), (not required through the Project Approval or associated Statement of Commitments), were seen to be commendable with Pine Dale Mine staff actively contributing new information to the scientific committee regarding a NSW and Commonwealth threatened species.
  - 2014 the Purple Copper Butterfly (PuCB) (Paralucia spinifera) area was observed during the Site inspection. Mitigation measures such as bunding, warning signs and fencing were observed in adjacent to the PuCB habitat. A dust monitoring point was observed inside the PuCB area as was a 2013 monitoring report (EcoLogical, 2013). Given mining operations ceased in April 2014 the immediate impact to the species is considered minimal. Pine Dale noted that previous monitoring of the butterfly may have been mistakenly of another butterfly. This was not investigated in detail as part of this audit. Table 8-2 shows evidence of PuCB mitigation measures.

Table 8-2 Purple Copper Butterfly Mitigation Measures

**Photo** 

# Area A

The PuCB habitat area is located adjacent to the eastern boundary of the Yarrboldy extension within an area of Bursaria. Mitigation measures were observed to include signage and fencing, dust monitoring and bunding.







### 8.8 Thesium Australe (Austral Toadflax)

The following issue is not a condition or requirement of PA 10\_0041 but has been reported as the incident occurred during the audit period.

Pine Dale has a *Thesium Australe* (Austral Toadflax) plant growing on land above the high wall to the north-west cornering of the Yarraboldy extension. Conditions (g) and (h) of the Environment Protection and Biodiversity Conservation (EPBC) Approval 2011-6016 issued under the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)* require that identified Austral Toadflax plants must be excluded from the Site using fences and that a 50 metre (m) buffer must be applied to mining activities near the identified Austral Toadflax plants. During the audit period Pine Dale identified that the 50 m buffer was encroached by mining activities.

Pine Dale wrote to the NSW Department of Environment on 6 December 2013 (Enhance Place, 2013-B) summarising the situation and the mitigation measures it employed that included obtaining expert advice to identify any potential impacts to the plant population following the encroachment. The letter identified that Cumberland Ecology Pty Ltd were engaged to inspect the plant area. Cumberland Ecology Pty Ltd concluded that 'the plants remained intact and that the incursion into the buffer had no significant impact upon the species' (Cumberland Ecology Pty Ltd citied in Enhance Place, 2013-B, pp.1-2). DoE responded to Pine Dale on 27 August 2014 via email and noted that whilst a contravention of occurred as works were undertaken inside the 50 m buffer contrary EPBC Approval 2011-6016 the department would not be taking any further action concerning the encroachment (DoE, 2014).

**Figure 8-3** shows the approximate location of the *Thesium Australe* (Austral Toadflax) habitat excluding the 50 m buffer zone and its proximity to the Yarraboldy extension.

Approximate location of Thesium
Australe excluding 50 m buffer
zone located outside of the mining
footprint. No population or plants
were disturbed during the audit
period.

Yarraboldy Extension

Figure 8-3 Approximate Location of *Thesium Australe* (Austral Toadflax) Habitat

(Source: Aerial Imagery ©2014CNES / Astrium, DigitalGlobe, Map, data ©2014Google, retrieved on 15 September 2014 from https://www.google.com.au/maps)

## 9 SUMMARY OF NON-COMPLIANCES AND RECOMMENDATIONS

Some Non-Compliances have been identified with PA 10\_0041, SoC, EPL conditions and ML conditions. These Non-Compliances as well as the conditions assessed as indeterminate and the associated recommendations have been consolidated and are summarised in **Table 9-1**. For a number of requirements that were assessed as compliant or not applicable, recommendations were made where continuous improvements were identified. These requirements and recommendations are summarised in **Table 9-2**.

Recommendations relating to the adequacy of the various plans are included in Section 8 and the rehabilitation chapter and have not been reproduced in this Section. Refer to **Appendix B** for repeat recommendations.

Table 9-1 Summary of Conditions / Requirements Assessed as Non-compliant or Indeterminate and Recommendations

Condition / Requirement No.	Summary of Condition / Requirement	Comment	Compliance Status and Recommendation
PA 10_0041, Condition 3.27 (c)	d) a Groundwater Management Plan, which includes: i. groundwater assessment criteria, including trigger levels for investigating and potentially adverse groundwater impacts; ii. a program to monitor: i. groundwater inflows to the open cut mining operation ii. the impacts of the project on; - baseflows to Neubecks Creek; - any groundwater bores on privately owned land; and iii. a program to validate the groundwater model for the project, and calibrate it to site specific conditions; and iv. a plan to respond to any exceedances of the performance criteria, and offset the loss of any baseflow to Neubecks Creek caused by the project.	Preparation  It is noted that the Water Management Plan that incorporates the Groundwater Management Plan (GWMP) has not been updated since July 2011. The previous IEA (URS, 2013, p.A-14) identified that the "preparation" of the Groundwater Management Plan was found to be compliant. Since there has been no update to the GWMP the preparation process has not been reviewed as part of this IEA.  Implementation  The GWMP states that an exceedance of the 80th percentile data will be used to initiate a review of monitoring trends whilst further investigations would not be triggered unless an exceedance of the maximum reported groundwater levels and quality is recorded. Pine Dale reported in the 2013 AEMR (RCA Laboratories citied in Enhance Place, 2014-A, Appendix B, p.13) that "the site specific Trigger Values developed for the Pine Dale Mine, as stipulated in the sites: Water Management Plan in accordance with Schedule 3, Condition 27(c) of the Project Approval (PA 10_0041) are currently under review, therefore the Trigger Level values presented in the previous version of the sites' Groundwater Monitoring Program (Dec 2005) have been adopted for the purpose of compliance assessment in this report.' Groundwater monitoring was not undertaken until the commencement of construction and mining operations, therefore a true baseline level is not available. In the absence of baseline values, average values have been calculated based on results from monitoring undertaken during the period October 2005 to December 2006. A subsequent round of baseline monitoring has been undertaken during the period January 2011 to July 2013, from which updated trigger levels are currently being developed.  It is noted that pH levels for groundwater do not exceed the trigger level for pH (8.5) or EC (2000 µS/cm) required for Pine Dale Mine prior to the preparation of the Yarraboldy Extension WMP. Pine Dale reported that they consider the current trigger values to be overly conservative and not practical (e.g. some trigger levels for pH are outs	Preparation – Compliant (2013)  Implementation – Non-compliant  Repeat Recommendation 2013/IEA/009  Consult with NOW, OEH and DPE to review water quality trigger values and based on the consultation update and implement the WMP (incorporating the GWMP).
PA 10_0041, Condition 3.52	By the end of April 2011, the Proponent shall prepare and implement a <b>Bushfire Management Plan</b> for the site, to the satisfaction of the State Forest in consultation with the local Rural Fire Service.	The previous IEA (URS, 2013, p.A-18) identified that this condition was non-compliant on the basis that the Bushfire Management Plan was not approved by State Forests by the end of April 2011.  The Bushfire Management Plan has not been developed to the satisfaction of State Forests and has not been updated to reflect the Site response for a care and maintenance situation, as opposed to a mining operation.	Non-compliant  2014IEA/022 Recommendation  Update the Bushfire Management Plan with respect to the Site being on care and maintenance. Ensure State Forests and the local RFS have involvement in the update of the Plan and confirm satisfaction of the plan from State Forests.

Condition / Requirement No.	Summary of Condition / Requirement	Comment	Compliance Status and Recommendation
PA 10_0041, Condition 5.1	<ol> <li>Environmental Management Strategy</li> <li>The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy must:         <ol> <li>be submitted to the Director-General for approval by the end of April 2011;</li> <li>provide the strategic framework for environmental management of the project;</li> <li>identify the statutory approvals that apply to the project;</li> <li>describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;</li> <li>describe the procedures that would be implemented to:</li></ol></li></ol>	Preparation The previous IEA (URS, 2013, p.A-21) identified that the preparation of the Environmental Management Strategy (Strategy) was found to be compliant. The Strategy has not been updated since June 2011. Since there has been no update to the Strategy the "preparation" process for the development of the document has not been reviewed as part of this IEA.  Implementation Staff and contractor responsibilities are communicated through toolbox talks that include environmental awareness. A selection of toolbox talks were sighted during the audit.  The following was noted concerning the Environmental Management Strategy at the time of the audit:  Appropriate management of chemicals and hydrocarbons to ensure that groundwater is not contaminated by spills of these substances (p.13) was not observed at the workshop. Refer to Condition 3.39 (Waste) for recommendation.  A Water Management Plan and Baseline Water Monitoring Plan will be prepared in accordance with Schedule 3 Conditions 26 and 27 of PA 10.0041 to ensure the implementation of appropriate management measures for surace water and groundwater together with ongoing monitoring to demonstrate compliance (p.13). It is noted this has been conducted. The Strategy needs to be updated to reflect the Water Management Plan and Baseline Water Monitoring Plan.  The Environmental Management Strategy does not refer to Thesium Australe (Austral Toadflax) in Section 5.3 (Ecology).  The Strategy states (p.16) that 'a maximum of 100 000 tonnes of coal will be transported on Castlereagh Highway in a calendar year, including a maximum of 30 000 tonnes transported via Castlereagh Highway during the audit period. The Strategy should be updated to reflect activities during care and maintenance.  The mine will be progressively rehabilitated, where possible, so that non-vegetated areas will be minimised (p.22). Progressive rehabilitation was observed in some areas of the Site.  Approvals, management plans / strategies / monitoring programs as well as results of independent audit	Implementation – Non-compliant  2014/IEA/011 Recommendation  Update the Environmental Management Strategy and relevant figures and plans to reflect current monitoring programs and reports as well as explain and reflect that the Site has moved from operational activities to a care and maintenance status and that controls as detailed in the strategy and plans will remain relevant.

Condition / Requirement No.	Summary of Condition / Requirement	Comment	Compliance Status and Recommendation
PA 10_0041, Condition 5.4	<ul> <li>Revision of Strategies, Plans and Programs</li> <li>Within 3 months of: <ul> <li>a) the submission of an annual review under Condition 3 above;</li> <li>b) the submission of an incident report under Condition 6 below;</li> <li>c) the submission of an audit report under Condition 8 below; and</li> <li>d) any modification to 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.</li> </ul> </li> <li>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.</li> </ul>	The following is noted:  a) Submission of the 2013 AEMR did not identify a requirement to update management plans under this PA 10_0041 therefore (a) has not been triggered.  b) Pine Dale reported that no incidents were recorded on-site under PA 10_0041, EPL 4911, ML 1664 and ML 1569 from January 2013 to 29 August 2014 therefore (b) has not been triggered (based on no incidents having reportedly occurred under PA 10_0041, EPL 4911, ML 1664 and ML 1569). It is noted that the encroachment into the <i>Thesium Australe</i> (Austral Toadflax) buffer zone was reported in accordance with the Environment Protection and Biodiversity Conservation (EPBC) Approval 2011-6016.  c) Strategies, plans, and programs were noted not to have been updated since submission of the previous IEA report in June 2013. Pine Dale management reported that the strategies, plans, and programs were due to be updated following approval of the Yarraboldy Stage 2 Development application; however, this application did not proceed.  d) Mod 1 was approved in March 2012. Mod 1 did not require any changes to management plans therefore (d) has not been triggered. The Pollution Incident Response Plan (PIRMP) and the <i>Thesium Australe</i> (Austral Toadflax) management plan were implemented during the audit period.  This Condition was found non-compliant in accordance with Condition 5.4(c) as strategies, plans and programs were not updated following submission of the previous IEA (URS, 2013).	2014/IEA/012 Recommendation Strategies, plans, and programs should be reviewed and revised to reflect recommendations provided in the previous Independent Environmental Audit report and to reflect the care and maintenance status of the Site.
PA 10_0041, Condition 5.8	INDEPENDENT ENVIRONMENTAL AUDIT  By the end of December 2012 and June 2014, 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 a 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 assess whether it is complying with the requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals); d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and e) recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under the abovementioned approvals.  Note: This audit team must be led by a suitably qualified auditor and include experts in any field specified by the Director-General.	URS was commissioned by Enhance Place to conduct an independent environmental audit in December 2012. The 2013 IEA was submitted to DPE on 15 June 2013.  2014  URS was approached by Pine Dale to conduct the 2014 IEA in July 2014. URS auditors were approved by DPE to conduct the independent environmental audit on 11 August 2014.  The audit inspection was carried out on the 28 and 29 August 2014. The audit included an assessment of compliance with PA 10_0041, EPL 4911, ML 1664, the EA and plans, strategies identified under these approvals/ licences.  This audit has been undertaken in consultation with the DPE, EPA and DTRIS-DRE. A summary of the consultation undertaken is provided in Section 3 of the main report.  Pine Dale was found non-compliant with this Condition due to timing of the 2014 independent environmental audit as the audit was not commenced until August 2014 as compared to the condition requirement of June 2014.	Non-compliant (due to timing)

Condition / Requirement No.	Summary of Condition / Requirement	Comment	Compliance Status and Recommendation
PA 10_0041, Condition 3.24	Baseflow Offsets  The Proponent shall offset the loss of any baseflow to the surrounding watercourses and/or associated creeks caused by the project to the satisfaction of the Director-General.  Notes:  This condition does not apply if the baseflow losses are negligible. Offsets should be provided via the retirement of adequate water entitlements to account for the loss attributable to the project.	The previous IEA (LPIS, 2013) identified that the preparation of the Water Management Plan (WMP) was found to be compliant. The WMP has not been updated since the previous IEA in 2013. Since there has been no update to the WMP the "preparation" process for the development of the document has not been reviewed as part of this IEA.  Pine Dale management reported that due to the Yarraboldy Stage 2 Development application being put on hold the WMP and associated trigger levels were not updated or reviewed. It was also reported that where trigger levels are exceeded the water quality improves; however, this was not confirmed during the audit. Site management reported that there has been 18 months of baseline data recorded for Nubecks Creek, however, a review has not been conducted to determine if there has been a reduction of surface flows. The PH range was reported by Pine Dale management to be an issue and Electrical Conductivity (EC) was reported to be reducing.  The following is noted concerning baseflow offsets:  Pine Dale management reported that no water was extracted from Neubecks Creek during the audit period. Pine Dale hold a licence to discharge water to Neubecks Creek under EPL 4911; however, the discharge point (LDP13) has not been used during the audit period.  Water is captured on-site for dust suppression purposes in the water storage dam. Overflows from the water storage dam (Photo4-4) are directed to underground workings (via the 'bong') maintaining zero discharge off-site (to the surface) during the audit period.  The previous IEA (URS, 2013, p.A-11) noted that 'as reported in the Baseline Water Monitoring Report (Aquaterra, 2011) groundwater, surface water monitoring and a 70 day pumping test was undertaken downstream of the Yaraboldy Extension area which indicated that Neubecks Creek is a losing stream at the Yaraboldy Extension. The monitoring indicated that there is negligible impact to the baseflow of surrounding watercourses and/or creeks. As part of the groundwater for the baseflow of surro	Indeterminate  Repeat Recommendations 2013/IEA/031  1. The impact of the reduction in surface flows to Neubecks Creek be considered in the assessment of loss of baseflow and the EA statement verified that reduction of surface flows has not occurred.  2. The WMP (Section 5.4.2) be updated to reflect the findings of the Hydrogeological Investigation Report for Water Licence Application and Baseline Water Monitoring Report prepared by Aquaterra in 2011 to reflect that groundwater impacts on the baseflow of Neubecks is negligible and that Section 5.4.2 is updated to reflect that monitoring bore EP PDH8/GW has been removed.  3. Groundwater level data be interpreted by a suitably qualified person to ensure that no reduction in baseflow has occurred since July 2011.

Condition / Requirement No.	Summary of Condition / Requirement	Comment	Compliance Status and Recommendation
PA 10_0041, Condition	Rehabilitation Objectives	The Pine Dale Rehabilitation Plan forms part of the Mine Operations Plan (MOP) signed off by DITRIS-DRE on the 21 March 2011.	Indeterminate
3.53	The Proponent shall rehabilitate the site to the satisfaction of the Executive Director, Mineral Resources in DRE. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the EA, however the area to be returned to native woodland	The Site was in the process of revising a draft MOP to cover for the care and maintenance status of the mine in accordance with new MOP guidelines (ESG3: Mining Operations Plan (MOP) Guidelines, September 2013) at the time of the audit that is due to be provided to DTRIS-DRE for approval prior to the end of December 2014. A Draft of the Plan had been provided to DTRIS-DRE with feedback provided on 19 May 2014 and 9 July 2014. The draft care and maintenance MOP was noted to be consistent with the cross-hatching on the figure in Appendix 3 of the EA.	
	and forests vegetation (i.e. Class VII land which is consistent with surrounding State Forest lands) must be increased to cover the area marked with cross-hatching on the figure in Appendix 3, to the satisfaction of the Executive Director, Mineral Resources in DRE.	In their feedback on the Draft Plan (see condition 3.55), DTRIS-DRE requested that Pine Dale review the rehabilitation performance criteria for the Site and include detail of, , but not limited to, primary domains, measurable targets against related performance criteria, slope angles, water management, physical and chemical characteristics of soil(s) and a set of practical vegetation indicators for assessment. In response to these requests Pine Dale has recently engaged an agronomist from SLR Consulting Pty Ltd (SLR) to provide pasture management advice for the short, medium and long-term as well as rehabilitation criteria that will feed into the draft MOP. The agronomist was due to visit the Site in September 2014. SLR will provide advice for Areas A, B and C.	
		Progressive rehabilitation was observed in some areas of the western pit with a grass cover crop to a re-shaped area against the northern highwall and to the reshaped amenity bund. The bund was partially seeded with cover crop in April 2014 and is due to be seeded again in September 2014.	
		Annual AEMR Site plans specific to the audit period correlate with Appendix 3 of the Project Approval. This was evident following the Site inspection that the AEMR Site plans are progressing towards the rehabilitation objectives and specifically Area A (native rehabilitation area). In addition the 2011 AEMR has been formally accepted by DRE on the 22.06.12, this correspondence however noted poor revegetation in Area A.	
		Refer to Section 8 for further comments concerning rehabilitation.	
		It is acknowledged that Pine Dale has commenced progressive rehabilitation including planting of screening trees for short-term amenity value and planting of native species to achieve longer-term rehabilitation requirements as well as reshaping of the amenity bund angle of repose and progressive rehabilitation with a small cover crop of native grass. However, given that:	
		The Site does not have an approved and in date MOP;	
		Is yet to reach agreement on rehabilitation criteria with DTRIS-DRE;	
		<ul> <li>The lack of progress concerning rehabilitation areas such as Areas A, B and C; and</li> <li>The need for the engagement of an agronomist and rehabilitation expert (SLR Consulting Pty Ltd) to provide rehabilitation criteria and advice on how to develop and achieve the criteria</li> </ul>	
		this condition is considered indeterminate.	

Condition / Requirement No.	Summary of Condition / Requirement	Comment	Compliance Status and Recommendation
PA 10_0041, Condition 3.54	Progressive Rehabilitation The Proponent shall carry out the rehabilitation of the site progressively, that is, as soon as reasonably practicable following disturbance.	The Site was in the process of revising a draft MOP to cover Care and Maintenance status of operations in accordance with new MOP guidelines (ESG3: Mining Operations Plan (MOP) Guidelines, September 2013). At the time of the audit Pine Dale anticipated submission of the MOP to DTRIS-DRE for approval prior to the end of December 2014 (the end date of the approval for the mine). The MOP (2011) expired in February 2014 during which time there has been no formally approved MOP for the Site. Pine Dale has continued to apply the principals of the MOP (2011) since February 2014 while the Site has been in care and maintenance during the drafting and consultation process of the draft MOP (2014) covering Care and Maintenance mine status.  Progressive rehabilitation was observed in the western pit with a grass cover crop and to the reshaped amenity bund. The bund was partially seeded with cover crop in April 2014 and is due to be seeded again in September 2014. Progressive rehabilitation of Area C continued with an application of agricultural lime and gypsum and a charcoal and mushroom compost mix was observed and maintenance of Area C continued with an application of agricultural lime and gypsum. The auditors also observed progressive rehabilitation including planting of screening trees for short-term amenity value adjacent to Castlereaph Highway and on top of bunds as well as planting of native species to achieve longer-term rehabilitation requirements. It is noted that controls will need to be developed and implemented to minimise the propagation of seeds from recently planted exotics used for their fast growth in providing a visual screen.  Pine Dale management considered that it was not practicable to fill in and then uncover the Yarraboldy extension and that it was reasonable that the high wall had been left exposed for future mining should this be approved.  FirstField (consultants to Pine Dale 2014, p.17) recommended that Pine Dale continue to implement integrated weed management control methods for noxious weeds	Indeterminate 2014/IEA/010 Recommendation Develop and implement control measures for maintenance and removal of planted exotics and propagation of seeds as the trees mature.  As proposed by Pine Dale; commission a rehabilitation expert to assess existing rehabilitation status in detail; define rehabilitation criteria; and develop long term approaches to ensure the whole Site meets the agreed rehabilitation criteria.
PA 10_0041, Condition 3.55	Rehabilitation Management Plan  The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the Executive Director, Mineral Resources in DRE. This plan must:  a) be prepared in consultation with the Department, OEH, NOW, and the CCC; b) be prepared in accordance with any relevant DRE guideline; c) build, to the maximum extent practicable, on the other management plans required under this approval; and be submitted to the Executive Director, Mineral Resources in DRE for approval by the end of July 2011.	The previous IEA (URS, 2013, p.A-18) noted that 'following approval of the MOP (including the Rehabilitation Plan) Pine Dale sought comments from NOW, DP&I and OEH in letters dated 21.07.11. The letter identified that the Plan had been prepared in accordance with the draft Rehabilitation and Environmental Management Guidelines'. The MOP was not resubmitted following initial approval in March 2011 and expired in February 2014.  Four letters addressed to EPA, NOW, DTRIS-DRE and the CCC were sighted by the auditors concerning the submission for review and comment of the MOP to cover the Care and Maintenance status of the mine (2014). Feedback was requested by late March 2014.  The draft MOP/Rehabilitation Management Plan for Care and Maintenance has been reviewed by the Department and comments have been provided to Pine Dale who are in the process of following up on the changes requested by DTRIS-DRE. An email (DTRIS-DRE, 2014-D) from the Department to Pine Dale was sighted that detailed required changes to the Draft MOP/Rehabilitation Management Plan. The Department followed the email with a second email on 9 July 2014 (DTRIS-DRE, 2014-E) concerning rehabilitation success criteria indicating the criteria needed to be measurable targets. Pine Dale is in the process of revising the Draft Care and Maintenance MOP to address the comments raised by DTRIS-DRE. Rehabilitation is discussed in Section 8 of the main report.  It is noted that a Site Closure Plan has been prepared.  A full review of the Plan against DRE guidelines has not been conducted as part of this audit.  The previous IEA (URS, 2013, p.A-18) identified this condition as compliant; however, given the draft MOP/Rehabilitation Management Plan for Care and Maintenance was in the process of being revised and updated following comments from DTRIS-DRE and that outstanding actions had still to be addressed this condition was found to be indeterminate.  As there was no current approved MOP, URS was not able to completely assess compliance with the implementation	Indeterminate

Condition / Requirement No.	Summary of Condition / Requirement	Comment	Compliance Status and Recommendation
ML 1569, Condition 2	Mining, Rehabilitation, Environmental Management Process (MREMP) - Mining Operations Plan (MOP) Refer to Appendix A for full Condition requirements.	Refer to ML 1664, Condition 3(a).  URS has not conducted a detailed review against all requirements of the condition. It is noted that DTRIS-DRE are in the process of reviewing the Care and Maintenance MOP.  Notwithstanding this, an audit report by Enhance Place (Feb 2012) was prepared in accordance with Condition 2(9) of Mining Leases (ML) 1569 and 1578. The purpose of the audit was 'to assess compliance with Condition 2(9) of Mining Leases (ML) 1569 and 1578. The purpose of the audit was 'to assess compliance with Condition 2(9) of ML 1569 and ML 1578, present information on what works have been completed to address acid rock drainage issues and detail what rehabilitation works are unistanding providing recommendations on how these can be addressed. The audit identified that 'the Mining Operations Plan for the Wallerawang Colliery Pit Top Rehabilitation has deequately addressed the requirements of Condition 2(9). The Mining Operations Plan for the Wallerawang Colliery Pit Top Rehabilitation has generally been implemented although some works remain ongoing and some additional works have been recommended.  The driat MOP (2014) notes that there is no planned mining activity proposed to be undertaken during the care and maintenance period (unspecified time period). However, mining machinery, infrastructure and ancillary equipment will remain in place at the Site. As there is no planned mining activity proposed to be undertaken during the care and maintenance period.  The draft MOP (2014), p.7) notes that 'there is no planned rehabilitation works proposed to be undertaken during the C&M MOP period. Orgoing maintenance works of existing rehabilitated areas will continue to be undertaken during the C&M MOP period.  The draft MOP (2014) addressed the issue of acid rock drainage and provided means to ameliorate its impact on Neubecks Creek.  The draft MOP (2014) addressed the issue of acid rock drainage and provided means to ameliorate its impact on Neubecks Creek.  The draft MOP (2014) addressed the issue of acid roc	Refer to ML 1664, Condition 3(a).  Non-compliant (due to expiration of previous MOP and no approval of draft C&M MOP)  2014/IEA/018 Recommendation  Prepare and implement a plan identifying detailed rehabilitation measures for the entire length of Neubecks Creek.

Condition / Requirement No.	Summary of Condition / Requirement	Comment	Compliance Status and Recommendation
ML 1569, Condition 3(a)	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.	The previous IEA (URS, 2013, p.A-45) identified this Condition as non-compliant due to timing.  Mining operations in April 2014 and the site has been operating on a care and maintenance status.  The Site was in the process of revising a draft care and maintenance MOP in accordance with new MOP guidelines (ESG3: Mining Operations Plan (MOP) Guidelines, September 2013) at the time of the audit that is due to be provided to DTRIS-DRE for approval prior to the end of December 2014. The MOP (2011) expired in February 2014 hence since this time there has been no formally approved MOP for the Site. Pine Dale has continued to apply the principals of the MOP (2011) since February 2014 while the Site has been in care and maintenance during the drafting and consultation process of the draft care and maintenance MOP (2014).  The draft care and maintenance MOP/Rehabilitation Management Plan has been reviewed by the Department and comments have been provided to Pine Dale who are in the process of following up on the changes requested by DTRIS-DRE. An email (DTRIS-DRE, 2014-D) from the Department to Pine Dale was sighted that detailed required changes to the Draft MOP/Rehabilitation Management Plan. The Department followed the email with a second email on 9 July 2014 (DTRIS-DRE, 2014-E) concerning rehabilitation success criteria indicating the criteria needed to be measurable targets. Pine Dale is in the process of revising the Draft Care and Maintenance MOP to address the comments raised by DTRIS-DRE.  This condition was found to be non-compliant given the MOP expired on 28 February 2014 whilst mining operations were continuing (the Site went into care and maintenance in April 2014). Pine Dale has been consulting with DTRIS-DRE concerning the requirements for the draft Care and Maintenance Mining Operations Plan / Rehabilitation Management Plan since April 2014 and was in the process of actioning DTRIS-DRE requests for the draft MOP at the time of the audit with a view to approval by the end of 2014. Therefore, DTRIS-DRE are	Non-compliant (due to expiration of previous MOP and no approval of draft C&M MOP)
ML 1569, Condition 3(e)	A MOP ceases to have effect 7 years after date of approval or other such period as identified by the Director-General.	The MOP (Enhance Place, 2011) states that the duration of this MOP is for approximately three years to 28 February 2014 which is equivalent to the expected project life.  The MOP expired during the audit period. A draft Care and Maintenance MOP (2014) was in the process of being revised having received comments from DTRIS-DRE. Four letters addressed to EPA, NOW, DTRIS-DRE and the CCC were sighted by the auditors concerning the submission for review and comment of the draft Care and Maintenance MOP (2014). Feedback was requested by late March 2014.  This condition was found to be non-compliant given the 2011 MOP expired in February 2014 and a replacement MOP was in the process of being prepared but had not formally been approved.	Non-compliant
ML 1569, Condition 7	Rehabilitation Any disturbance as a result of activities under this lease must be rehabilitated to the satisfaction of the Director-General.	An assessment of rehabilitation undertaken at Pine Dale is provided in Section 8 of the main report and Appendix A, PA 10_0041, Condition 3.53 and 3.54.	Indeterminate See recommendations in the main report and PA 10_0041, Condition 3.53 and 3.54

Condition / Requirement No.	Summary of Condition / Requirement	Comment	Compliance Status and Recommendation
ML 1569, Condition 13	<ul> <li>Rehabilitation</li> <li>a) Land disturbed must be rehabilitated to a stable and permanent form suitable for a subsequent land use acceptable to the Director- General and in accordance with the Mining Operations Plan so that:- <ul> <li>there is no adverse environmental effect outside the disturbed area and that the land is properly drained and protected from soil erosion.</li> <li>the state of the land is compatible with the surrounding land and land use requirements.</li> <li>the landforms, soils, hydrology and flora require no greater maintenance than that in the surrounding land.</li> <li>in cases where revegetation is required and native vegetation has been removed or damaged, the original species must be re-established with close reference to the flora survey included in the Mining Operations Plan. If the original vegetation was not native, any re-established vegetation must be appropriate to the area and at an acceptable density.</li> <li>the land does not pose a threat to public safety.</li> </ul> </li> <li>Any topsoil that is removed must be stored and maintained in a manner acceptable to the Director-General.</li> </ul>	An assessment of rehabilitation undertaken at Pine Dale is provided in Section 8 of the main report and Appendix A, PA 10_0041, Condition 3.53 and 3.54.	Indeterminate See recommendations in the main report and PA 10_0041, Condition 3.53 and 3.54
SoC, Condition 1.7	If a non-conformance with a nominated trigger value is determined to be the result of activities associated with the Project, then the impacted landholder and DECCW - NOW will be notified and a remediation strategy will be proposed for discussion and implementation.	Refer to PA 10_0041 Conditions 3.24 and 3.27 for a detailed discussion of surface water and groundwater monitoring.  Due to the inconsistencies within the monitoring requirements of surface water and groundwater detailed within the WMP this condition has not been able to be adequately assessed. It is noted that exceedences of groundwater trigger values defined with the WMP for pH and EC were recorded during the audit period.  As identified in PA 10_0041 a detailed review of groundwater and surface water monitoring requirements needs to be undertaken to ensure effective monitoring of water quality.	Indeterminate Refer to PA 10_0041 Conditions 3.24 and 3.27
SoC, Condition 2.6	Progressively rehabilitate disturbed areas no longer required by the Project soon after the cessation of mining activities.	Refer to PA 10_0041 Condition 3.54 for comments concerning progressive rehabilitation.	Indeterminate
SoC, Condition 4.5	Progressively increase forest and woodland communities within the already disturbed areas, the coaly residue areas and the rehabilitated land, to provide foraging and sheltering habitat.	The amenity bund is due to be seeded with a native seed mix in September 2014 and new native trees were observed at the front of the Site during the Site inspection. Area C is not required to be forested at the request of the landowner and planned end use is pasture. The Site inspection on 28 and 29 August 2014 showed placement of felled trees for habitat and stabilisation, and native tree rehabilitation in Area A.  In response to requests from DTRIS-DRE concerning the draft Care and Maintenance MOP/Rehabilitation Plan Pine Dale has recently engaged an agronomist from SLR Consulting Pty Ltd (SLR) to provide pasture management advice for the short, medium and long-term as well as rehabilitation criteria that will feed into the draft MOP. The agronomist is due to visit the Site in September 2014. SLR will provide advice for Areas A, B and C.  It is acknowledged that Pine Dale has commenced progressive rehabilitation including planting of screening trees for short-term amenity value and planting of native species to achieve longer-term rehabilitation requirements as well as reshaping of the amenity bund angle of repose and progressive rehabilitation with a small cover crop of native grass; however, given the lack of progress concerning rehabilitation areas such as Areas A, B and C and the need for the engagement of an agronomist and rehabilitation expert (SLR Consulting Pty Ltd) to provide rehabilitation criteria and advice on how to achieve the criteria this condition is considered indeterminate.	Indeterminate Repeat Recommendation 2013/IEA/051 Further seeding of Area A to utilise grasses and understory species as well as a more diverse range of shrubs and canopy species, so to enhance foraging and sheltering habitat.

## 9.1 Additional Recommendations (not related to non-compliances)

The following table has been reproduced from Appendix A. For details on the requirement, and for further discussion of the issue, please refer directly to the table in **Appendix A**. Many recommendations are based around continuous improvement opportunities identified during the audit and do not necessarily represent immediate potential non-compliance issues.

Table 9-2 Summary of Additional Recommendations from Independent Environmental Audit (not related to non compliances)

Condition	Recommendation
	2014/IEA/008 Recommendation
PA 10_0041, Condition 3.7	The EPL should be changed to reflect the purchase of Centennial Coal residences and those residences that are no longer required on the licence.  Repeat Recommendations 2013/IEA/028 and 2013/IEA/029
	2014/IEA/021 Recommendation
PA 10_0041, Condition 3.26	Prepare a formal report that analyses baseline monitoring data. The report to provide findings and recommendations concerning <b>s</b> urface water flows/levels and quality in creeks and other waterbodies (including the Neubecks Creek, the Blue Lake and the Coxs River).
	2014/IEA/001
	Recommendation
PA 10_0041, Condition 3.39	It is recommended that the workshop area be tidied and that redundant items be removed from Site. Localised oil spills should be cleaned up and waste material disposed of at an appropriately licenced facility. Equipment to remain on-site should be stored securely in the on-site containers.
	2014/IEA/009
	Recommendation
PA 10_0041, Condition 3.51	Review the suitability of the on-site fire truck and confirm if it is fit for purpose.
	It is recommended that Pine Dale invite NSW Rural Fire Services to inspect the Site and discuss fire management in the Blackmans Flat area.
	Repeat Recommendation 2013/IEA/037
PA 10_0041, Condition 5.2	The Bushfire Management Plan, Water Management Plan, Waste Management Plan and the Baseline Water Monitoring Plan should be updated to include a procedure for handling complaints and incidents as appropriate or reference other documents such as the Strategy where such processes are described.
	Repeat Recommendation 2013/IEA//039
PA 10_0041, Condition 5.6	Training on the use of the incident reporting systems for incidents, near misses and observations should be undertaken.
	2014/IEA/013 Recommendation
PA 10_0041, Condition 5.7	It is recommended that Pine Dale include an upload date next to each environmental monitoring document on the website so it is clear that they were uploaded within specified timeframe.

Condition	Recommendation
	2014/IEA/014 Recommendation
PA 10_0041, Condition 5.9	Ensure all recommendations provided in the audit report are included in the response to any recommendations
	Repeat Recommendation 2013/IEA/041
EPL 4911, Condition L4.8	Identify in future noise reporting if modifying factors were / were not applicable (Clause 6.6 of AS 1055.1).
	2014/IEA/001 Recommendation
	Refer to PA 10_0041 Condition 3.39
EPL 4911, Condition O1.1	Repeat Recommendation 2013/IEA/042
	Update the induction and bi-annual refresher training to include training of the storage, handling and disposal of materials and waste.
	Recommendation 2013/IEA044
EPL 4911, Condition M1.2	Update the Excel monitoring data record sheet for surface water, groundwater and noise to include a column to record who took the sample.
	2014/IEA/015 Recommendation
EPL 4911, Condition M5.1	Review complaints received from sources other than that the complaints records and ensure these are entered into the complaints register and that follow-up action is documented.
	Provide training on complaints procedures to ensure complaints are recorded and actioned.
	2014/IEA/016 Recommendation
EPL 4911, Condition M5.2	Complaint records must be completed in their entirety. In particular corrective actions carried out and a root cause description to minimise further occurrences should be included.
	2014/IEA/017 Recommendation
EPL 4911, Condition M6.2	Consolidate the telephone complaints phone number into one number and change the descriptor on the website to 'environmental and complaints hotline'.
	2014/IEA/019 Recommendation
ML 1664, Condition 4(b)	Ensure actions in the Action Plan provided by DTRIS-DRE dated 16 July 2014 are incorporated in the 2014 AEMR.
	Repeat Recommendation 2013/IEA/047
ML 1664, Condition 5	An incident management procedure should be developed for the site and all staff and contractors are inducted on their responsibility to report all observations, near misses and incidents.
	2014/IEA/023
SoC, Condition 3.2	Recommendation
555, 55113.11511 5.12	Pine Dale should consider control and management of the number of Pine Trees on site.
SoC, Condition 11.4	2014/IEA/020 Recommendation
555, 5511411571 1111	Grass soil stockpiles to minimise soil erosion.

#### 10 LIMITATIONS

URS Australia Pty Ltd (URS) has prepared this report in accordance with the usual care and thoroughness of the consulting profession for the use of Enhance Place Pty Ltd and only those third parties who have been authorised in writing by URS to rely on this Report.

It is based on generally accepted practices and standards at the time it was prepared. No other warranty, expressed or implied, is made as to the professional advice included in this Report.

It is prepared in accordance with the scope of work and for the purpose outlined in the contract dated 12 August 2014.

Where this Report indicates that information has been provided to URS by third parties, URS has made no independent verification of this information except as expressly stated in the Report. URS assumes no liability for any inaccuracies in or omissions to that information.

This Report was prepared between 13 August and 20 October 2014 is based on the conditions encountered and information reviewed at the time of preparation. URS disclaims responsibility for any changes that may have occurred after this time.

This Report should be read in full. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties. This Report does not purport to give legal advice. Legal advice can only be given by qualified legal practitioners.

Except as required by law, no third party may use or rely on this Report unless otherwise agreed by URS in writing. Where such agreement is provided, URS will provide a letter of reliance to the agreed third party in the form required by URS.

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It is the responsibility of third parties to independently make inquiries or seek advice in relation to their particular requirements and proposed use of the site.

Any estimates of potential costs which have been provided are presented as estimates only as at the date of the Report. Any cost estimates that have been provided may therefore vary from actual costs at the time of expenditure.

# APPENDIX A COMPLIANCE MATRIX



# Red Text = MOD 1, March 2012

Project A	oject Approval 10_0041						
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations		
PA 10_0041	2.1	Obligation to Minimise Harm to the Environment  The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation or rehabilitation of the project.	Department of Environment (2014), Enhance Place Pty Ltd - Pine Dale Coal Mine - EPBC 2011-6016     Particular Matter [Email] Message to Enhance Place Pty Ltd. Sent Wednesday 27 August 2014, 10:19am.      Enhance Place Pty ltd (2013-B), Enhance Place Pty ltd; Pine Dale Coal Mine EPBC 2011-6016: Stage 1 Yarraboldy Extension – particular manner Decision [Letter], 6 December 2013.	Other than where issues have been identified, in general Pine Dale appeared to be compliant with its obligation to minimise harm to the environment. Overall, it is considered that the intent of this condition is met.  The Environmental Management Strategy and associated management plans and procedures have been established and generally implemented to identify, plan for and manage environmental aspects and impacts related to the project.  The Site is on a care and maintenance program and coal production is not anticipated in 2014 and in the two year business plan up to 2016/2017.  During the audit period Pine Dale encroached into a 50 m buffer zone for the <i>Thesium Australe</i> (Austral Toadflax) plant setup as a requirement of the Environment Protection and Biodiversity Conservation (EPBC) Approval 2011-6016 issued under the <i>Environment Protection and Biodiversity Conservation Act</i> 1999 (Cth). Pine Dale wrote to the NSW Department of Environment on 6 December 2013 (Enhance Place, 2013-B) summarising the situation and the mitigation measures it employed that included obtaining expert advice to identify any potential impacts to the plant population following the encroachment. The letter identified that Cumberland Ecology Pty Ltd were engaged to inspect the plant area. Cumberland Ecology Pty Ltd concluded that 'the plants remained intact and that the incursion into the buffer had no significant impact upon the species' (Cumberland Ecology Pty Ltd citied in Enhance Place, 2013-B, pp.1-2). DoE responded to Pine Dale on 27 August 2014 via email and noted that whilst a contravention of occurred as works were undertaken inside the 50 m buffer contrary EPBC Approval 2011-6016 the department would not be taking any further action concerning the encroachment (DoE, 2014). Refer to Section 8.8 of the report for further information concerning the Austral Toadflax incident.  Pine Dale is considered compliant with this condition given no reported incidents of material harm to the environment during the audit period.	Compliant		
PA 10_0041	2.2	Terms of Approval  The Proponent shall carry out the project generally in accordance with the:  a) EA; b) statement of commitments; c) Mod 1; and d) conditions of this approval.  Notes:  The general layout of the project is shown in Appendix 2; and the statement of commitments is reproduced in Appendix 4.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	This compliance table includes an assessment of compliance with the Statement of Commitments, Mod 1 and the conditions of the approval. A brief review of the EA was also undertaken. A full detailed assessment of conformance with the EA has not been carried out.  The previous IEA (URS, 2013, p. A-1) states that 'the Yarraboldy Extension area has been constructed generally in accordance with the 'indicative project site layout (Figure B, EA). The sequence of mining operations "commencing north of the Private Haul Road in the western section of the Yarraboldy Extension area, progressing to the east for the initial 6 months site establishment period, then in a northerly direction for approximately 2 years" has been generally carried out.  Although reported in the EA that coal transport may be carried out along the Castlereagh Highway, Pine Dale reported that this has not been undertaken.  It is also noted that the EA sought approval for importation of 50,000tpa of alkaline boiler ash from the Oberon Timber Processing Works for use in rehabilitation purposes'. These works were not approved under EPL 4911 and on this basis Pine Dale reported that this activity has not taken place during the current audit period.	Compliant		
PA 10_0041	2.3	If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.	-	Noted	Noted		



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Project A	oject Approval 10_0041  Condition Co							
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
PA 10_0041	2.4	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 this approval; and  b) the implementation of any actions or measures contained in these documents.	Enhance Place Pty Ltd (2014), AEMR 2013, March 2014	Comments from the 2012 Annual Environmental Management Report (AEMR) inspections were addressed by Pine Dale in the AEMR for 2013 (Section 5.5).  This Condition was found to be compliant based on Pine Dale receiving and addressing requirements from DPE concerning AEMR's, management plans/strategies/monitoring programs.  A discussion of the implementation of these plans is provided in the subsequent sections of this approval and therefore has not been assessed under this condition.	Compliant			
PA 10_0041	2.5	Limits on Approval  The Proponent may carry out mining operations on the site until 31  December 2014.  Note: Under this approval, the Proponent is required to rehabilitate the site and carry out additional undertakings to the satisfaction of both the Director-General and the Executive Director, Mineral Resources in DRE. Consequently, this approval will continue to apply in all other respects - other than the right to conduct mining operations - until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.	-	Noted.  The date of the approval for mining operations had not been reached at the time of the Site inspection; however, it is noted that the Site is on a care and maintenance program and coal production is not anticipated in 2014 and in the two year business plan. Mining ceased in April 2014. Pine Dale's intention is to have the care and maintenance MOP approved prior to PA 10_0041 expiring.	Noted			
PA 10_0041	2.6	The Proponent shall not:  a) extract more than 350 000 tonnes of ROM coal from the site in a calendar year; b) extract more than 800 000 tonnes of ROM coal from the site over the life of the project; c) export more than 350 000 tonnes of coal from the site in a calendar year; and d) import any ash onto the site.	Enhance Place Pty Ltd (2014), AEMR 2013, March 2014     Coal Services November 2013 OC MCMR.xlsx     Overburden & Coal Monthly Data, 2014	The following is noted:  a) Coal extracted from Pine Dale Mine during the audit period was sent exclusively to Mt Piper Power Station:  - 2013: 291,166 tonnes of ROM coal was extracted.  - 2014: 56,211 tonnes of ROM coal was delivered to Mt Piper Power Station.  No coal was stored on-site at the time of the Site inspection.  b) A total of 592,698 tonnes of ROM coal was extracted from the Site between January 2012 and April 2014. Production of Coal under PA 10_0041 commenced in January 2012. Pine Dale are within the limit of allowable coal to be extracted under PA 10_0041.  c) Pine Dale is within the limits of the condition. Refer to point a).  d) Pine Dale reported that no ash had been imported to site during the audit period.  Annual and life time limits of extraction have not been exceeded during the audit period by Pine Dale.	Compliant			
PA 10_0041	2.7	Surrender of Consents  By the end of July 2011, or as otherwise agreed by the Director- General, the Proponent shall surrender the existing development consent (461-04) for the site in accordance with Section 104A of the EP&A Act.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	Closed out in previous audit period. Refer to previous Independent Audit Report (URS, 2013) for previous finding.	Compliant			
PA 10_0041	2.8	Prior to the surrender of the consent referred to in Condition 7 above, the conditions of this approval shall prevail to the extent of any inconsistency with the conditions of this consent.	-	Noted.	Noted			



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Project A	riject Approval 10_0041  le Condition Condition Evidence Source Comment Compliance Status &							
Title	Condition No.	Condition	<b>Evidence Source</b>	Comment	Compliance Status & Recommendations			
PA 10_0041	2.9	Structural Adequacy 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.  Notes:  Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works; and  Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.	<ul> <li>Enhance Place Pty Ltd (2014), AEMR 2013, March 2014</li> <li>Site observations</li> </ul>	Pine Dale management reported that no new buildings and/or structures were built during the audit period therefore this condition was not applicable.  No new structures were observed during the Site inspection.	Not Applicable (Not triggered)			
PA 10_0041	2.10	Demolition  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.	<ul> <li>Enhance Place Pty Ltd (2014), AEMR 2013, March 2014</li> <li>Site observations</li> </ul>	Pine Dale management reported that no demolition works were carried out during the audit period therefore this condition was not applicable.  No evidence of demolition was observed during the Site inspection.	Not Applicable (Not triggered)			
PA 10_0041	2.11	Operation Of Plant And Equipment  The Proponent shall ensure that all the plant and equipment used on site, or to transport coal from the site, is:  a) maintained in a proper and efficient condition; and b) operated in a proper and efficient manner.	Site observations     EnergyAustralia (2014),     Mine Care &     Maintenance Statutory     Inspections, 22 August     2014     Cullen Valley Open Cut     Mine Coal Mine —     Sykes Big Pump 250 Hr     Service, 20 August     2014     Cullen Valley Open Cut     Mine Coal Mine —     Sykes Big Pump 250 Hr     Service, 2 May2014	Dukes Mining were contracted to maintain and manage equipment and vehicles on-site when operational. Mining plant and equipment was observed at the workshop during the Site inspection. Pine Dale management reported that Dukes Mining is responsible for the maintenance of the plant and that Dukes attend site periodically to inspect the plant. Plant on-site at the time of the Site inspection included: four bulldozers, seven dump trucks, three excavators and one grader (Photo 4-6). Pine Dale own and operate two diesel water pumps that were sighted during the Site inspection (Photo 4-3). Inspection records for the pumps were sighted during the audit.  Records of training undertaken were not sighted by URS.  There was limited environmental monitoring equipment on-site to review. Monitoring equipment, such as noise and vibration monitors is provided, used and operated by consultants as and when required. This equipment was not reviewed as part of the audit.  It is noted this condition relates to many aspects of the mine's operation, and that a full assessment of all aspects potentially relevant this condition has not been undertaken as part of this audit given the care and maintenance status of Site. The comments made above summarise the extent of review of compliance with the condition given the shortened audit period and the care and maintenance status of the Site.	Compliant			
PA 10_0041	2.12	Staged Submission of Any Strategy, Plan or Program With the approval of the Director-General, the Proponent may submit any strategy, plan or program required by this approval on a progressive basis.  Note: While any strategy, plan or program may be submitted on a progressive basis, the Proponent will need to ensure that the existing operations of the site are covered by suitable strategies, plans or programs at all times.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	Closed out in previous audit period. Refer to previous Independent Audit Report (URS, 2013, p.A-2) for previous finding.  No management plans have been updated since the previous IEA.	Compliant			
PA 10_0041	2.13	The Proponent shall continue to implement the existing strategies, plans or programs that apply to any development on site until they are replaced by an equivalent strategy, plan or program approved under this approval.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	Closed out in previous audit period. Refer to previous Independent Audit Report (URS, 2013, p.A-2) for previous finding.  No management plans have been updated since the previous IEA. Implementation of management plans required under PA 10_0041 is discussed in detail within conditions below; however, in general Pine Dale operated under the existing approved management plans.	Compliant			



Append	ppendix A Pine Dale Mine Independent Environmental Audit							
Project A	Approval 10_0	0041						
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
PA 10_0041	2.15	Council Contributions  Prior to the production of saleable coal on site, the Proponent shall pay Council \$79,800 (GST inclusive) for the provision of community infrastructure and services.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	Closed out in previous audit period. Refer to previous Independent Audit Report (URS, 2013, p.A-2) for previous finding.	Compliant			



Append	lix A Pine I	Dale Mine Independent Environmental Audit			
Project A	pproval 10_0	041			
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
PA 10_0041	3.1	Noise Criteria  The Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 1 at any residence on privately-owned land or on more than 25 percent of any privately-owned land. Notes:  To identify the locations referred to in Table 1, see figures in Appendix 1;  Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy. However, these criteria do not apply if the Proponent has a written agreement with the relevant landowner to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.	<ul> <li>RCA (2013),     Environmental Noise     Survey Report     Compiled For Pine Dale     Mine Detailing     Operational Attended     Noise Survey of The     Yarraboldy Extension     January, April, July,     October 2013</li> <li>RCA (2013),     Environmental Noise     Survey Report     Compiled For Pine Dale     Mine Detailing     Operational Attended     Noise Survey of The     Yarraboldy Extension     January, April 2014</li> <li>Enhance Place (2011),     Noise Management     Plan, June 2011, Ref:     Ref No. 613/18</li> <li>Noise Monitoring Field     Sheets dated     15/04/2014, 16/04/2014,     20/01/2014, 30/10/2013     &amp; 24/06/2013.</li> <li>Annual Return – 24     November 2012 / 23     November 2013</li> <li>EPA (2012), No Title,     LIC1677-05:     DOC12/36639, 7     September 2012</li> <li>Enhance Place (2013),     Your Letter to Pine Dale     Yarraboldy CC Meeting     – 27 June 2013, 11 July     2013.</li> <li>RCA (2012), Noise     Report for Pine Dale     Mine [Email] Sent to     EPA, Monday 8     October 2012, 3:21pm.</li> <li>RCA (2013), PDM     Noise Report [Email]     Sent to EPA, Monday 4     March 2013, 10:57am.</li> </ul>	Noise monitoring was carried out by RCA (consultants to Pinedale) on the following dates:  2 2 and 23 April 2013  2 4 and 25 June 2013  3 3 and 31 Cotber 2013  2 2 and 21 January 2014  5 15 and 16 April 2014  2 013/2014 monitoring events were carried out in accordance with the Noise Management Plan.  The following exceedances were recorded during these events:  2 2 and 23 January 2013 - The LAeq (15 minute) contribution from the Site during the monitoring period was lower than the noise assessment criteria at monitoring locations NM1, NM3 and NM5. Noise monitoring locations NM2 and NM6 recorded noise levels above the noise assessment criteria by 1 dB and 2 dB respectively. The NSW Industrial Noise Policy (Environmental Protection Authority, 2000) stipulates that a non-compliance of noise consent or licence conditions has occurred only if the 'monitored noise level is more than 20fB above the statutory noise limit specified in the consent or licence condition. The noise from the Site at NM4 showed exceedances of the noise assessment criteria is more than 20fB above the statutory noise limit specified in the consent or licence condition. The noise from the Site at NM4 showed exceedances of the noise assessment criteria post by RCA to be a major contributor to the overall acoustic climate at the monitoring locations except NM6.  2 2 and 23 April 2013 – Noise monitoring locations NM1 and NM2 recorded noise levels above the noise assessment criteria by 1 dB and were not considered by RCA to be non-compliant in accordance with the NSW Industrial Noise Policy. The measured noise from the site at NM4 was greater than criteria go at Dy 2.5 dB(A), 3.8 dB(A), 3.5 dB(A), over three 15 minute sample periods. RCA considered that these levels were not exceedances as the source to receiver winds speed at a 10 metre height measured at the Site's meteorological; station was greater than 3m/s and therefore the noise limits did not apply. The measured noise from the Site at NM6 was greater than criteria by 1.3 dB(A), 1.4 dB(A), 2.	Compliant



Appen	dix A Pine I	Dale Mine Independ	lent Environmenta	Audit			
Project	Approval 10_0	0041					
Title	Condition No.	Condition			Evidence Source	Comment	Compliance Status & Recommendations
		Continued:			Continued:	Continued:	
						A complaint letter received by the Chairman of the CCC on the morning of 27 June 2013 for inclusion in that evening's meeting included comments concerning the accuracy of the Site's noise monitoring reports. It is understood the complainant had previously written to the EPA Bathurst Office in 2012 concerning the issue but had not received a response until June 2013. Pine Dale received communication from the EPA concerning the complainants concerns on 7 September 2012. The EPA letter included the following two recommendations concerning noise monitoring and noise reports:	
						<ul> <li>Future noise non-attended noise monitoring events should give consideration to including an attachment that enables audio recordings to be saved to a hard drive to allow a third party to capture a particular sound they may consider offence; and</li> <li>Results of noise monitoring be presented in a more concise and descriptive manner. The EPA requested copies of noise reports be provided for review.</li> </ul>	
						A letter response from Pine Dale dated 11 July 2013 to the complaint was included in the minutes of the June 2013 CCC meeting. The letter noted that due to a lack of time to review the complainant's letter prior to the meeting the Site took the decision to respond via a four page letter rather than wait to address the concerns at the next CCC meeting. The letter responded to the EPA's recommendations noting that noise reports had been issued to the EPA for comment and that the noise consultant has the equipment to record if required. Evidence of communication between the noise consultant and the EPA was sighted by the auditors. Given the care and maintenance status of the Site at the time of the Site inspection noise issues are considered not to be a concern. It is noted that the care and maintenance status of the Site at the time of the Site inspection has reduced noise emissions as compared to when the mine was operating.	
		Table 1				of the one inspection has reduced holds emissions as compared to when the mine was operating.	
		Table 1: Noise Criteria dB(A	4)				
		Loca	ation	Day	Evening		
				LAeq (15 min)	LAeq (15 min)		
			18, 32 and 33	42	39		
			23, 25 and 27-29	42	36		
		Residences 8		42	35		
		Residences 2		35	35		
		All other re		35	35		
		During construction and removal of the amenity bund	Residences 8, 10- 12, 14, 18, 20- 23, 25, 27-29 and 32 - 33	46	N/A		



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Title	Condition No.	Condition		Evidence Source	Comment	Compliance Status & Recommendations
PA 10_0041	3.2	Noise Acquisition Criteria  If the noise generated by the project exceeds the criteria in Table 2 at any residence on privately-owned land or on more than 25 % of any privately-owned land, then upon receiving a written request for acquisition from the landowner, the Proponent shall acquire the land in accordance with the procedures in Conditions 6 - 7 of Schedule 4.  Notes:  To identify the locations referred to in Table 2, see figures in Appendix 1;  Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.  For this condition to apply, the exceedances of the criteria must be systemic.  Table 1		Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	Pine Dale management reported that there have been no requests received from landholders concerning acquisition during the audit period. On this basis, the condition has been assessed as not applicable. The previous IEA (URS, 2013, p.A-3) notes that 'Pine Dale reported that residents within a 2 km radius where notified via letter (letter sighted by URS) dated 21 April 2011 of the rights of landholders under condition 3.2 and 3.3.	Not Applicable (Not triggered)
		Table 1; Noise Criteria dB(A)		<u> </u>		
		Location	Day  LAeq (15 min)	Evening  Laeq (15 min)		
		Residences 18, 32 and 33     Residences 20-23, 25 and 27-29     Residences 8, 10-12 and 14     Residences 2, 5-7 and 35     All other residences     During construction   Residences 8, 10-   and removal of   12, 14, 18, 20-   the amenity   23, 25, 27-29     bund   and 32 - 33	42 42 42 42 35 35 35	39 36 35 35 35 35 N/A		



Appenic	IIX A PINE	Dale Mine Independent Environmental Aud	III.			
Project A	Approval 10_0	0041				
Title	Condition No.	Condition		Evidence Source	Comment	Compliance Status & Recommendations
PA 10_0041	3.3	Additional Noise Mitigation Measures  If noise generated by the project is greater than or equivels in Table 3 at any residence on privately owned Proponent shall implement additional noise mitigation (such as double glazing, insulation, and/or air condition residence in consultation with the owner.  If within 3 months of receiving this request from the owner proponent and the owner cannot agree on the measure implemented, or there is a dispute about the implemented measures, then either party may refer the matter to the General for resolution.  Notes:  To identify the locations referred to in Table 3, see fig Appendix 1;  Noise generated by the project is to be measured in a the relevant procedures and exemptions (including cometeorological conditions) of the NSW Industrial Nois For this condition to apply, the exceedances of the crisystemic.  Table 3	land, the measures oning) at the wher, the res to be notation of these e Director-  weres in accordance with ortain e Policy.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	Pine Dale management reported that there have been no requests concerning requirement for additional noise mitigation measures. On this basis, the condition has been assessed as not applicable. Hay bales were placed around the diesel pump for the 'bong' to minimise noise impacts at a nearby residence.  The previous IEA (URS, 2013, p.A-3) notes that 'residents within a 2km radius where notified via letter (sighted by URS) dated 21 April 2011 of the rights of landholders under condition 3.2 and 3.3.	Not Applicable (Not triggered)
		Table 3: Noise treatment criteria dB(A) L <sub>Aeq (15min)</sub>	Day			
		Location Residences 8, 10-12, 14, 18, 20-23, 25, 27-	44	Evening 42		
		29 and 32 - 33 Residences 2, 5-7 and 35	40	38		
		All other residences	38	38		



Append	lix A Pine I	Dale Mine Independent Environmental Audit			
Project A	pproval 10_0	0041			
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
PA 10_0041	3.4	Traffic Noise Impact Assessment Criteria  The Proponent shall take all reasonable and feasible measures to ensure that the traffic noise generated by the project does not exceed the traffic noise impact assessment criteria in Table 4.  Note:  Traffic noise generated by the project is to be measured in accordance with the relevant procedures in the OEH's Environmental Criteria for Road Traffic Noise.	<ul> <li>Site observations</li> <li>RCA (2013),         Environmental Noise         Survey Report         Compiled For Pine Dale         Mine Detailing         Operational Attended         Noise Survey of The         Yarraboldy Extension         January, April, July,         October 2013</li> <li>RCA (2013),         Environmental Noise         Survey Report         Compiled For Pine Dale         Mine Detailing         Operational Attended         Noise Survey of The         Yarraboldy Extension         January, April 2014</li> <li>RCA (2014), AEMR         Summary Report         Compiled for Pine Dale,         Environmental         Performance Monitoring         January – December         2013, 24 February         2014, Ref: 6880-840/0</li> </ul>	traffic noise from Castlereagh Highway. No noise monitoring was conducted during the Site inspection or as part of this audit.  The Site is care and maintenance and less than ten vehicles access the Site during the week.  Coal trucks travelled from Site to Mt Piper Power Station via a private Haul Road when the mine was operational. The haul road is leased by Centennial Coal.  RCA Laboratories noted in their AEMR Summary Report for 2013 that 'it is a requirement under AS 1055 that the noise surveys also document levels of ambient sound resulting from non mine sound sources. In the surveys conducted for Pine Dale Mine during 2013 traffic and natural sounds, which are represented by the "Overall" LAeq (15 minute) noise levels set out in Table 57 to 60, are usually significantly higher than the sound from Pinedale Mine' (RCA, 2014, p.63).	Compliant
		Table 4: Traffic noise impact assessment criteria dB(A)	Day		
		Road	L <sub>Aeg15 hour)</sub>		
		Castlereagh Highway (SH18)	60		
PA 10_0041	3.5	Operating Hours  Apart from equipment maintenance activities, the Proponent may only carry out development on site between 7 am and 6 pm from Monday to Saturday, excluding public holidays. Equipment maintenance activities may be carried out on site between the hours of 7 am to 10 pm from Monday to Saturday and between 9 am to 4 pm on Sundays, excluding public holidays.  Note: Condition 9 of Schedule 3 specifies blasting hours and Condition 34 of Schedule 3 specifies product transportation hours.	-	Refer to EPL, Condition L6.1.	Compliant



Append	ppendix A Pine Dale Mine Independent Environmental Audit							
Project A	Project Approval 10_0041							
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
PA 10_0041	3.6	The Proponent shall:  a) implement best practice noise management, including all reasonable and feasible noise mitigation measures to minimise the operational and road traffic noise generated by the project;  b) investigate ways to reduce the noise generated by the project;  c) report on these investigations and the implementation and effectiveness of these measures in the Annual Review, to the satisfaction of the Director-General.	<ul> <li>Enhance Place (2011), Noise Management Plan, June 2011, Ref No. 613/18</li> <li>URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00</li> <li>DTRIS-DRE (2014-A), Pine Dale Mine and Enhance Place Mine - Annual Environmental Management Report 2013 [Letter], 16 July 2014, Ref: OUT14/19819.</li> </ul>	<ul> <li>The following is noted: <ul> <li>a) The predominant form of noise mitigation is the noise amenity bund constructed of spoil along the southern edge of the Site that was completed in late 2012. The bund has recently been re-shaped from a 1 in 1 slope to a 1 in 3 slope and rehabilitated. In addition, noise levels are minimised through restriction of coal trucks to the Private Haul Road parallel to Castlereagh Highway. Noise monitoring is conducted on-site as described in the NMP to assess compliance with noise monitoring criteria. In response to a noise complaint received on the 5 February 2014 concerning an audible reversing alarm from a delta security vehicle patrolling the Site the mine responded by cancelling security patrols with Delta Electricity. Hay bales were installed around the diesel pump to the 'bong' water pumping point (sighted by the auditors). Bunding is provided around the workshop area where plant is stored and maintained (sighted by the auditors).</li> <li>b) The Noise Management Plan has not been updated since the previous IEA (URS, 2013). Section 5.2 of the NMP discusses modelling of potential noise generated by equipment and machinery used at Pine Dale to determine potentially affected areas. Exceedances of noise criteria were predicted at one location. Mitigation measures such as selection of equipment power levels, maintenance and direction placement of machinery are implemented to reduce noise on-site.</li> <li>c) In a letter dated 16 July 2014 from the DTRIS-DRE reviewing the 2013 AEMR the Department stated that 'environmental management at the Mine appears to be satisfactory' and no actions were identified concerning noise.</li> <li>As per the previous IEA (URS, 2013) this condition has been considered compliant as reasonable mitigation measures as identified in the NMP were implemented during the audit period.</li> </ul> </li> </ul>	Compliant			



Append	dix A Pine	Dale Mine Independent Environmental Audit			
Project A	pproval 10_0	0041			
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
PA 10_0041	3.7	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:  a) be prepared in consultation with OEH and Council, and submitted to the Director-General for approval by the end of April 2011; b) describe the noise mitigation measures that would be implemented to ensure compliance with the relevant conditions of this approval, including measures that would be implemented during the construction of the amenity bund; c) include a noise monitoring program that:  • uses attended monitoring to evaluate the performance of the project; and • includes a protocol for determining exceedance s of the relevant conditions of this approval.	<ul> <li>Enhance Place (2011), Noise Management Plan, June 2011, Ref No. 613/18</li> <li>URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00</li> <li>RCA (2013), Environmental Noise Survey Report Compiled For Pine Dale Mine Detailing Operational Attended Noise Survey of The Yarraboldy Extension January, April, July, October 2013</li> <li>RCA (2013), Environmental Noise Survey Report Compiled For Pine Dale Mine Detailing Operational Attended Noise Survey of The Yarraboldy Extension January, April 2014</li> <li>Enhance Place (2011), Noise Management Plan, June 2011, Ref: Ref No. 613/18</li> </ul>	Preparation The previous IEA (URS, 2013, p.A-21) identified that the preparation of the Noise Management Plan (NMP) was found to be compliant. The NMP has not been updated since June 2011. Since there has been no update to the NMP the "preparation" process for the development of the document has not been reviewed as part of this IEA. Implementation Implementation of the NMP was demonstrated through the following:  • The following noise mitigation measures were sighted during the Site inspection: the main amenity bund. No mining activities were being undertaken at the time of the Site inspection given the care and maintenance status.  • Noise monitoring was carried out on a quarterly basis on the following dates: 22 and 23 January 2013, 22 and 23 April 2013, 24 and 25 June 2013, 30 and 31 October 2013, 20 and 21 January 2014, 15 and 16 April 2014. Monitoring was carried out at the six monitoring locations (NM1, NM2, NM3, NM4, NM5 and NM6) as identified in the NMP.  • Quarterly reports prepared by RCA indicate that there exceedances of noise criteria specified in the EPL and PA but these were not considered true exceedances one the requirements of the Industrial Nise Policy were applied. RCA attributed the criteria exceedances to ambient noise, including traffic on Castlereagh Highway, birds and insects, etc. and not mine operations.  • The complaints register indicates that noise complaints were received during the audit period on the 10 January 2013, 17 January 2013, 25 January 2013, 11 April 2013 (2 separate complaints) and on the 1 January 2014. The register does not indicate that unattended continuous noise logging was conducted at the complainants' residence to investigate the complaints.  • The NMP did not identify which noise monitoring points (i.e. NM1, NM2, NM3, NM4, NM5 and NM6) correspond to the residences identified in the EPL (L4.1).  • The NMP did not reflect the purchase of residential properties by Centennial Coal Pty Ltd. The EPL would also require to be updated to reflect this change in residen	Preparation – Compliant Implementation - Compliant 2014/IEA/008 Recommendation The EPL should be changed to reflect the purchase of Centennial Coal residences and those residences that are no longer required on the licence. Repeat Recommendations 2013/IEA/028 and 2013/IEA/029



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Project A	hpproval 10_0	0041			
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
PA 10_0041	3.8	The Proponent shall ensure that the blasting on site does not cause exceedances of the criteria in Table 5.  Table 5  Table 5: Blast impact criteria    Airblast overpressure (dB(Lin Peak))   Ground vibration (mm/s)   Allowable exceedance     Residence on privately-owned land   115   5   5% of the total number of blasts over a period of 12 months     120   10   0%	<ul> <li>Blast Register 2013/2014</li> <li>Enhance Place (2011), Blast Management Plan, February 2011, Ref: Ref No. 613/19</li> <li>Pine Dale Mine EPA Compliance Data January, February, April, May 2014</li> <li>Pine Dale Mine EPA Compliance Data June, July, August, September, October, November, December 2013</li> <li>Annual Return – 24 November 2012 / 23 November 2013</li> </ul>	Pine Dale conducted 36 blasts from the 10 January 2013 to 7 February 2014. During this period no exceedances were recorded.  Blasts undertaken from the 10 January 2013 to 7 February 2014 did not record any exceedances. No blasting has been conducted since April 2014.	Compliant
PA 10_0041	3.9	Blasting Hours  The Proponent shall only carry out blasting on site between 10am and 3pm Monday to Friday inclusive.  No blasting is allowed on weekends or public holidays, or at any other time without the written approval of Director-General.	<ul> <li>Blast Register 2013/2014</li> <li>Annual Return – 24 November 2012 / 23 November 2013</li> </ul>	The auditors inspected the Blast Register dated 10 January 2013 to 12 December 2013 and 21 January 2014 to 7 February 2014. Blasts took place between 10:00am and 3:00pm. In addition, no blasting activities were reported to have been conducted on Saturdays and/or Sundays therefore Pine Dale was compliant with this condition. No blasting has been conducted since April 2014.	Compliant
PA 10_0041	3.10	Blasting Frequency The Proponent shall not carry out more than 1 blast a day on site, unless an additional blast is required following a blast misfire.  Note: A blast may involve a number of explosions within a short period, typically less than two minutes.	<ul> <li>Blast Register 2013/2014</li> <li>Annual Return – 24 November 2012 / 23 November 2013</li> </ul>	The auditors inspected the Blast Register dated 10 January 2013 to 12 December 2013 and 21 January 2014 to 7 February 2014 that reported that no more than one blast took place per day therefore Pine Dale has been considered compliant with this condition. No blasting has been conducted since April 2014.	Compliant
PA 10_0041	3.11	Property Inspections  If the Proponent receives a written request from the owner of any privately-owned land within 2 kilometres of the approved open cut mining pit on site for a property inspection to establish the baseline condition of any buildings and/or structures on his/her land, or to have a previous property inspection report updated, then within 2 months of receiving this request the Proponent shall:  a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to:  - establish the baseline condition of the buildings and/or structures on the land or update the previous property inspection report; and - identify any measures that should be implemented to minimise the potential blasting impacts of the project on these buildings and/or structures; and b) give the landowner a copy of the new or updated property inspection report.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	Pine Dale management reported that no requests were received during the audit period for a baseline condition assessment of buildings and/or structures therefore this condition has been assessed as not applicable.  The previous IEA (URS, 2008, p.A-6) notes that 'Mr L Morris from Barnson Pty was approved by the DG on the 11.07.11 to establish baseline conditions of buildings and/or structures (or update pervious inspections) and to identify any measures that should be implemented to minimise blast impacts'.	Not Applicable (Not triggered)



Drojest &	ject Approval 10_0041							
			Fuidance Course	Commont	Compliance Status			
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
A 0_0041	3.12	Property Investigations  If the owner of any privately-owned land within 2 kilometres of the approved open cut mining pit on site claims that the buildings and/or structures on his/her land have been damaged as a result of blasting on site, then within 2 months of receiving this claim the Proponent shall:  a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to investigate the claim; and b) give the landowner a copy of the property investigation report. If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Proponent shall repair the damages to the satisfaction of the Director-General. If the Proponent or landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Director-General for resolution.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	Pine Dale management reported that no property owners had claimed property damage as a result of blasting activities therefore this condition has been assessed as not applicable.	Not Applicable (Not triggered)			
PA 10_0041	3.13	The Proponent shall  a) implement best blasting management practice on site to:	<ul> <li>Site observations</li> <li>Enhance Place (2011), Blast Management Plan, February 2011, Ref: 613/19</li> <li>URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00</li> <li>PDEX 41.9, 9 May 2013 [Video]</li> </ul>	No blasting has been conducted since April 2014. The BMP has not been updated since July 2012. Pine Dale management reported that there were not any changes to the blasting protocol since the previous IEA. The previous IEA (URS, 2013, p.A-7) details operating conditions.  The Blast Management Plan (BMP) defines the general approach and controls for blasting. The plan was written in February 2011 and updated in July 2012 to amend the Blast Exclusion Zone. The BMP identifies an exclusion zone of 500 m.  In addition Pine Dale management reported they undertook the following to protect the safety of humans and property during the audit period (the auditors were unable to verify some of the measures as the information was maintained by third parties such as EDI Downer):  500 m exclusion zone  Close the highway, with traffic control  Blast notification board at the front of the Site that advertises the next blast date, time and environmental hotline (sighted by the auditors) and letter box drop to local residents.  No livestock are kept on-site.  Electronic blasting that enables accurate delineation of columns to allow energy generated to be directed away from sensitive receptors.  Utilising suitable software and a blast engineer / consultant to design and model each blast taking into consideration the geology, physical location and other blast design parameters to ascertain fly rock, vibration and over pressure results in and about the project area.  A video of a blast conducted on 9 May 2013 was viewed by the auditors. Blasts are recorded for reviewing performance and interpret blast monitoring data. The outputs are used as baseline inputs for the next blast design.  The blast notification protocol requires Pine Dale to notify all parties within a 2 km radius of blasting activities one week prior to blasting, via electronic notification. Following electronic notification (not sighted by URS). Each notification identifies the approximate time and date of a proposed blast.  Pine Dale reported that no mines in the sur	Compliant			



Append	Appendix A Pine Dale Mine Independent Environmental Audit								
Project A	pproval 10_0	0041							
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations				
PA 10_0041	3.14	The Proponent shall not carry out blasting on site within 500 metres of any privately-owned land or any public road unless the Proponent has:  a) demonstrated to the satisfaction of the Director-General that the blasting can be carried out without compromising the safety of people, or damaging buildings and/or structures; and b) (b) updated the Blast Management Plan to include the specific measures that would be implemented while blasting is being carried out within 500 metres of the land or public road.	-	Pine Dale management reported that no blasting within 500 metres of privately-owned land or a public road was conducted during the audit period therefore this condition is considered not applicable.	Not Applicable (Not triggered)				
PA 10_0041	3.15	Blast Management Plan  The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Director-General. This plan must:  a) be prepared in consultation with OEH and Council, and submitted to the Director-General for approval prior to undertaking any blasting on-site; b) describe the blast mitigation measures that would be implemented to ensure compliance with the relevant conditions of this approval; c) describe the measures that would be implemented to ensure the public can get up-to-date information on the proposed blasting schedule on site; d) include a blast monitoring program to evaluate the performance of the project; and e) include a protocol that has been prepared in consultation with the owners of all other operating open-cut mines within 2 kilometres of the site for minimising and managing the cumulative blasting impacts of the mines.	<ul> <li>Enhance Place (2011), Blast Management Plan, February 2011, Ref: 613/19</li> <li>B2013/2014 Blasting Results.xls</li> <li>Blast Register 2013/2014</li> <li>Annual Return – 24 November 2012 / 23 November 2013</li> <li>URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00</li> <li>Community notification letters</li> <li>EDI Downer (2013) – Shot Sheet PDEX 41</li> <li>PDEX 41.9, 9 May 2013 [Video]</li> <li>Enhance Place (2013) Blast Notification Letter</li> <li>PDEX41IR Fly Rock Modelling A 020513</li> </ul>	Preparation The previous IEA (URS, 2013, p.A-8) identified that the preparation of the Blast Management Plan (BMP) was found to be compliant. The BMP has not been updated since July 2012. Since there has been no update to the BMP the "preparation" process for the development of the document has not been reviewed as part of this IEA.  Implementation  No blasting has been conducted since April 2014 therefore full implementation of the plan was not assessed; however, in general implementation of the BMP was demonstrated through a review of the following documents:  Implementation of a Blast Register;  Community and industry notification letters prior to blast activity. Sighted letter to residents and owners for a 12:00pm blast on 6 September 2013 from the OCE;  Public blast notification board at the entrance to the Site;  Technical specialist reports identifying modelling by Downer EDI Blasting Specialists;  Video recording of the blast, including a review of video indicating no flyrock;  Monitoring of airblast overpressure and vibration at Blackman's Flat.  Pine Dale reported that no mines in the surrounding area undertook blasting operations during the audit period and that mines in the area are provided notification prior to blasting. In addition, Pine Dale reported that the EPA is provided notification.  Pine Dale prepared the BMP during the previous audit period in accordance with the requirements of this condition. The BMP appeared to have been implemented on-site during the audit period as demonstrated by the above mentioned documents and actions, therefore Pine Dale has been assessed as compliant with this condition.	Compliant — Preparation (2012/2013) Implementation — Compliant (2014)				



Appendix A Pine Dale Mine Independent Environmental Audit								
Project A	pproval 10_0	0041						
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
PA 10_0041	3.16	Odour  The Proponent shall ensure that no offensive odours are emitted from the site, as defined under the POEO Act.	<ul> <li>Site observations</li> <li>Complaints Register 2012- 2014</li> <li>Global Soil Systems Proposal (2013)</li> <li>Global Soil Systems Proposal, 15 August 2014 - Proposal</li> <li>Brackenrig Soil Conservation Services Tax Invoice, 9 September 2013.</li> </ul>	No odour complaints were received during the audit period.  The previous IEA (URS, 2013, p.A-8) identified that non-compliance with this condition due to two odour complaints concerning use of fertiliser in Areas 8, B and C. The auditors sighted an invoice from Brackenrig Soil Conservation Soils Pty Ltd and a proposal from Global Soil Systems Pty Ltd that listed agricultural lime and gypsum and a mushroom compost as fertilisers indicating a change in fertiliser during the audit period.	Compliant			
PA 10_0041	3.17	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.	Enhance Place (2011),     Air Quality and     Greenhouse Gas     Management Plan,     June 2011, Ref No.     613/22     URS Australia Pty Ltd     (2013), Independent     Environmental Audit:     Pine Dale Mine -     Yarraboldy Extension,     June 2013,     43177857/KD/00     DTRIS-DRE (2014-A),     Pine Dale Mine and     Enhance Place Mine -     Annual Environmental     Management Report     2013 [Letter], 16 July     2014, Ref:     OUT14/19819.	Pine Dale management reported that no requests concerning greenhouse gas emissions were made by the Director-General during the audit period, therefore Pine Dale has been assessed as compliant with this condition. Given the care and maintenance status activities and operations at the Site are considered to be minimal, and consequently emissions have reduced.  As noted in the previous IEA (URS, 2013, p.A-8) 'the AQGHGMP was approved by the DPE on the 17 July 2011. Pine Dale minimises greenhouse gas emissions as described in the Air Quality and Greenhouse Gas Management Plan (AQGHGMP) through implementation of the following:  - Restricting haul route frequency through selection of larger capacity vehicles;  - Conducted annual National Greenhouse and Energy Report (NGER). In 2010-2011 no emissions were reported as Pine Dale did not meet any thresholds in section 13 of the NGER Act. In 2011-2012 Pine Dale recorded GHG emissions and energy data;  - Maintain equipment to OEM (Original Equipment Manufacturers) specifications and implement a maintenance schedule;  - Minimise disturbance (foot print) of project area through progressive rehabilitation; and  - Minimise mobile equipment idling time.  Implementation of these measures was not able to be fully assessed during the Site inspection given the care and maintenance status; however, progressive rehabilitation was inspected.  In a letter dated 16 July 2014 from DTRIS-DRE to the Site, DTRIS-DRE stated that 'environmental management appeared to be satisfactory' and no actions were identified in relation to greenhouse gas emissions.	Compliant			



Project Approval 10_0041							
Title	Condition No.	Condition		Evidence Source	e	Comment	Compliance Status Recommendations
PA 10_0041	3.18	Air Quality Criteria  The Proponent shall ensure that all avoidance and mitigation measures particulate emissions generated by criteria listed in Tables 6, 7 and 8 at land or on more than 25% of any pri Notes for Tables 6-8:  **Total impact (i.e. incremental increas plus background concentrations due to incremental impact (i.e. incremental project on its own);  **Deposited dust is to be assessed as Standards Australia, AS/NZS 3580.10.  **Methods for Sampling and Analysis of Particulate Matter - Deposited Matter d'Excludes extraordinary events such as storms, sea fog, fire incidents, illegal act the Director-General in consultation with	are employed so that the he project do not exceed any residence on privately vately owned land.  e in concentrations due to the other sources); increase in concentrations du insoluble solids as defined by 1:2003: Ambient Air - Determination Gravimetric Method; and bushfires, prescribed burning livities or any other activity against the project of th	• UKS Australi (2013), Inde Environment Pine Dale M Yarraboldy E June 2013, 43177857/K • Pine Dale Di HVAS - Cum Data 2013-1 • RCA Surface Depositional	urn – 24 2012 / 23 2013 lia Pty Ltd ependent tal Audit: line - Extension,  ED/00 usts & nulative 14 e Water, I Dust, cal Community e Committee anuary 2013	Three dust complaints were received by three separate complainants for two events (08/01/2013 and11/04/2013) during the audit period; however, there were no exceedances reported against EPL and PA 10_0041 criteria.  For care and maintenance the Site has grassed approximately six hectares of land to minimise windblown dust, vehicles use on-site is restricted and a water cart is available during dryer periods for roads and areas that have not been partially or fully rehabilitated. Wind breaks were observed to have been planted to screen the Site and the amenity bund was observed to have been partly rehabilitated and is due for further rehabilitation in September 2014 to minimise windblown dust.  As noted in the previous IEA (URS, 2013, pp.A-8-9) Pine Dale implements the following measures when operational to avoid and mitigate particulate emissions on-site:  'Regular watering of surfaces (haul road, dust generating sources i.e. the pit) with two water carts, which are on site full time;  Restricting vehicles movements to haul routes and restricting vehicles to speed limits;  Maintain equipment to OEM (Original Equipment Manufacturers) specifications and implement a maintenance schedule;  Minimise disturbance (foot print) of project area;  Utilise appropriate haul road construction materials which include reporting the Open Cut Administrators;  Loading techniques i.e. minimising drop heights;  Operators carry out constant visual inspections for dust;  In the event that local conditions are determined as too windy operations will be relocated;  Minimising the surface area available to wind erosion demonstrated through progressive rehabilitation. Rehabilitation had been halted at the time of the audit due to disturbance restrictions of the Purple Copper Butterfly'.	Compliant
		Tables 6, 7 & 8  Table 6: Long term criteria for particulate matter			assessed as compliant with this condition as there were no exceedances of the air quality criteria during the audit period. It is noted that the HVAS is located on Mine property and not on a residence and/or privately owned land therefore if an exceedance were to be recorded, a full assessment of compliance with PM10		
		Pollutant	Averaging period	d'Criterion		and TSP would require modelling to interpret PM10, TSP levels on a residence or private land. Given the location of the HVAS is on-site, it would be typical for any exceedances to be identified closer to the source,	
		Total suspended particulate (TSP) matter  Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a</sup> 90 μg/m <sup>3</sup> <sup>a</sup> 30 μg/m <sup>3</sup>	hence the current approach would appear to be conservative.		
		Table 7: Short term criterion for particulate matte					
		Pollutant	Averaging period	d' Criterion			
		Particulate matter < 10 μm (PM <sub>10</sub> )	24 hour	<sup>а</sup> 50 µg/m <sup>3</sup>			
		Table 8: Long term criteria for deposited dust					
		Pollutant Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level			
		<sup>c</sup> Deposited dust Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a</sup> 4 g/m <sup>2</sup> /month			



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Project A	Approval 10_0	0041					
Title	Condition No.	Condition			Evidence Source	Comment	Compliance S Recommenda
PA	3.19	Air Quality Acquisi	tion Criteria		-	Pine Dale management reported that no property owners had requested acquisition of property due to	Not Applicable
10_0041		the criteria in Tables owned land or on mo upon receiving a wri	s 9, 10, and 11 at a ore than 25 % of a tten request for ac acquire the land in	nerated by the project exceed any residence on privately- any privately owned land, the equisition from the landowned an accordance with the edule 4.	en	particulate matter emissions therefore this condition is not applicable.	triggered)
		Notes for Tables 9 -	11:				
				e in concentrations due to t	he		
				ns due to other sources); increase in concentrations (	due		
		to the project on its o		morease in concentrations (			
		<sup>c</sup> Deposited dust is to Standards Australia,		insoluble solids as defined 0.1:2003:	by		
				f Ambient Air - Determinatio - Gravimetric Method; and	n of		
		dust storms, sea fog	g, fire incidents, ille	as bushfires, prescribed bur egal activities or any other ral in consultation with OEH	-		
		Tables 9, 10 & 11  Table 9: Long term acquisition criteria for particulate matter					
		Po	llutant	Averaging period	d' Criterion		
		Total suspended parti	culate (TSP) matter	Annual	<sup>a</sup> 90 μg/m <sup>3</sup>		
		Particulate matter < 10	0 μm (PM <sub>10</sub> )	Annual	<sup>a</sup> 30 μg/m <sup>3</sup>		
		Table 10: Short term acqu	uisition criteria for partic	culate matter			
		Po	llutant	Averaging period	<sup>d</sup> Criterion		
		Particulate matter < 1	0 μm (PM <sub>10</sub> )	24 hour	<sup>а</sup> 150 µg/m <sup>3</sup>		
		Particulate matter < 1	0 μm (PM <sub>10</sub> )	24 hour	<sup>b</sup> 50 μg/m <sup>3</sup>		
		Table 11: Long term acqu	uisition criteria for depos	sited dust			
		Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level		
		<sup>c</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a</sup> 4 g/m <sup>2</sup> /month		



Append	Appendix A Pine Dale Mine Independent Environmental Audit								
Project A	pproval 10_0	0041							
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations				
PA 10_0041	3.20	Operating Conditions  The Proponent shall:  a) implement best practice air quality management on site, including all reasonable and feasible measures to minimise the off-site odour, fume and dust emissions generated by the project, including those generated by any spontaneous combustion on site; and  b) minimise any visible air pollution generated by the project; and c) regularly assess the air quality monitoring and meteorological forecasting data, and relocate, modify and/or stop operations on site to ensure compliance with the relevant conditions of this approval, to the satisfaction of the Director-General.	<ul> <li>Site observations</li> <li>Complaints Register 2012- 2014</li> <li>Pine Dale Weather November 2013.xlsx</li> <li>RCA Surface Water, Depositional Dust, HVAs and Meteorological Monitoring, Community Consultative Committee Reports – January 2013 to June 2014</li> </ul>	Air quality measures have been discussed in condition 3.16 to 3.18.  Site management reported there had been no fume or odour.  Pine Dale management reported that as part of the blasting protocol local weather conditions were assessed prior to blasts via visual inspection (use of vapour cloud from Mt Piper was reported to be a good indicator of wind direction at height and if an inversion is in place) and meteorological data from the weather station on-site.  No events of spontaneous combustion were reported during the audit period. Long term coal stockpiles were not present on-site during the Site inspection.  Based on the findings of PA 10_004, Conditions 3.16 to 3.19 and the Site observations of air quality management on-site, Pine Dale has been assessed as compliant with this condition.	Compliant				
PA 10_0041	3.21	Air Quality & Greenhouse Gas Management Plan  The Proponent shall prepare and implement a detailed Air Quality & Greenhouse Gas Management Plan for the project to the satisfaction of the Director-General. This plan must:  (a) be prepared in consultation with OEH and Council, and submitted to the Director-General for approval by the end of April 2011;  (b) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval; and  (c) include an air quality monitoring program, that uses a combination high volume samplers and dust deposition gauges to evaluate the performance of the project, and includes a protocol for determining exceedances with the relevant conditions of this approval.	Site observations     Enhance Place (2011),     Air Quality &     Greenhouse Gas     Management Plan,     June 2011, Ref: 613/22     Pine Dale Dusts &     HVAS - Cumulative     Data 2013-14     RCA Surface Water,     Depositional Dust,     HVAs and     Meteorological     Monitoring, Community     Consultative Committee     Reports – January 2013     to June 2014	Preparation The previous IEA (URS, 2013, p.A-21) identified that the preparation of the Air Quality & Greenhouse Gas Management Plan (AQGHGMP) was found to be compliant. The AQGHGMP has not been updated since July 2012. Since there has been no update to the AQGHGMP the "preparation" process for the development of the document has not been reviewed as part of this IEA.  Implementation Analysis and reporting is undertaken by Karen Tripp from RCA Laboratories. Pine Dale carry out additional dust monitoring for internal reporting requirements in the eastern area as part of the Purple Copper Butterfly (PuCB) monitoring program. This monitoring was not included in the scope of this audit.  Given the care and maintenance status of the Site at the time of the Site inspection, assessment of implementation of the plan for mining related activities was not possible. Implementation of the AQGHGMP was demonstrated during the Site inspection by the following:  Progressive rehabilitation of areas A, B, C and south eastern end of the pit.  The amenity bund was reshaped during the audit period to a 1 in 3 slope from the former angle of repose of 1 in 1. A cover crop was planted; however, this did not take. Global Soil Systems Pty Ltd has been engaged to hand seed approximately 2 hectares of the bund with native tree seed in September 2014.  Pine Dale Mine has an extensive system of bunds for noise and water management, these include the Site perimeter bund, main amenity bund and workshop bund. The bunds were not fully rehabilitated and bare areas of soil were observed by the auditors at the time of the Site inspection.  A grass cover crop was planted on shaped landform in the north-west corner of the Yarraboldy extension to reduce windblown dust. The reshaping is not considered permanent and may be removed should mining operations recommence. The remainder of the pit area had been compacted and prepared for topsoil (Photo 4-1).  Implementation of the AQGHGMP has generally been carried out by Pine Dale in compliance with this co	Compliant – Preparation (2012/2013) Implementation – Compliant (2014)				



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Project A	Project Approval 10_0041								
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations				
PA 10_0041	3.22	METEOROLOGICAL MONITORING  During the life of the project, the Proponent shall ensure that there is a suitable meteorological station operating in the vicinity of the site that:  complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline; and  (b) is capable of continuously recording wind speed and direction, temperature and rainfall.	Site observations     Pine Dale Weather     November 2013.xlsx     RCA Surface Water,     Depositional Dust,     HVAs and     Meteorological     Monitoring, Community     Consultative Committee     Reports – January 2013     to June 2014	The auditors observed the meteorological station located in front of the Site office.  As noted in the previous IEA (URS, 2013, p.A-10) 'the meteorological station was reportedly installed around 2006 by RCA, which was remotely monitored by Magpie Remote Software. Installation has not been assessed during this audit against the guidelines as original construction documentation could not be supplied'.  Refer to the EPL condition L2.	Compliant				
PA 10_0041	3.23	Water Discharges The Proponent shall ensure that all surface water discharges from the site comply with the discharge limits (both volume and quality) set for the project in any EPL.	<ul> <li>EPA (2013), Notice of Variation of Licence No. 4911, 25 August 2013, Notice # 1516560</li> <li>Annual Return – 24 November 2012 / 23 November 2013</li> <li>Pine Dale Mine Surface Waters.xls</li> <li>Pine Dale Mine EPA Compliance Data January, February, April, May 2014</li> <li>Pine Dale Mine EPA Compliance Data June, July, August, September, October, November, December 2013</li> </ul>	Licence discharge points four and five (LDP4 and LDP5) were removed from the EPL including related monitoring requirements and water quality limits during the audit period (August 2013). From the data reviewed between February 2013 and August 2014 no exceedances of EPL monitoring criteria were recorded during the audit period for LDP13 as no discharges occurred from this location.  As no discharges occurred from the Site during the audit period at LDP4, LDP5 (prior to removal from the EPL) and LDP13, this condition was found to be compliant.	Compliant				



Append	Appendix A Pine Dale Mine Independent Environmental Audit							
Project A	Approval 10_0	041						
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
PA 10_0041	3.24	Baseflow Offsets  The Proponent shall offset the loss of any baseflow to the surrounding watercourses and/or associated creeks caused by the project to the satisfaction of the Director-General.  Notes:  This condition does not apply if the baseflow losses are negligible. Offsets should be provided via the retirement of adequate water entitlements to account for the loss attributable to the project.	<ul> <li>Site observations</li> <li>Enhance Place (2011), Baseline Water Monitoring Plan, July 2011, Ref: 613/24 (RPS Aquaterra &amp; R.W Corkery &amp; Co Pty Ltd)</li> <li>URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00</li> <li>Enhance Place Pty Ltd (2014), AEMR 2013, March 2014</li> <li>Pine Dale Mine Surface Waters.xlsx</li> <li>Pine Dale Baseline Water Data-modified for AEMR.xlsx</li> </ul>	<ul> <li>The previous IEA (URS, 2013) identified that the preparation of the Water Management Plan (WMP) was bound to be compliant. The MMP has not been updated since the previous IEA in 2013. Since there has been no update to the WMP the "preparation" process for the development of the document has not been reviewed as part of this IEA.</li> <li>Pine Dale management reported that due to the Yarraboldy Stage 2 Development application being put on hold the WMP and associated trigger levels were not updated or reviewed. It was also reported that where trigger levels are exceeded the water quality improves; however, this was not confirmed during the audit. Site management reported that there has been 18 months of baseline data recorded for Nubecks Creek; however, a review has not been conducted to determine if there has been a reduction of surface flows. The PH range was reported by Pine Dale management to be an issue and Electrical Conductivity (EC) was reported to be reducing.</li> <li>The following is noted concerning baseflow offsets:</li> <li>Pine Dale management reported that no water was extracted from Neubecks Creek during the audit period. Pine Dale hold a licence to discharge water to Neubecks Creek under EPL 4911; however, the discharge point (LDP13) has not been used during the audit period.</li> <li>Water is captured on-site for dust suppression purposes in the water storage dam. Overflows from the water storage dam (Photo4-4) are directed to underground workings (via the 'bong') maintaining zero discharge off-site (to the surface) during the audit period.</li> <li>The previous IEA (URS, 2013, p.A-11) noted that 'a reported in the Baseline Water Monitoring Report (Aquaterra, 2011) groundwater, surface water monitoring and a 70 day pumping test was undertaken downstream of the Yarraboldy Extension. The monitoring indicated that the dewatering of the Lithgow Seam does not affect the water levels in Neubecks Creek. Based on this test Pine Dale considered that there is negligible impact to the basellow o</li></ul>	Repeat Recommendations 2013/IEA/031  1. The impact of the reduction in surface flows to Neubecks Creek be considered in the assessment of loss of baseflow and the EA statement verified that reduction of surface flows has not occurred.  2. The WMP (Section 5.4.2) be updated to reflect the findings of the Hydrogeological Investigation Report for Water Licence Application and Baseline Water Monitoring Report prepared by Aquaterra in 2011 to reflect that groundwater impacts on the baseflow of Neubecks is negligible and that Section 5.4.2 is updated to reflect that monitoring bore EP PDH8/GW has been removed.  3. Groundwater level data be interpreted by a suitably qualified person to ensure that no reduction in baseflow has occurred since July 2011.			



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Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations				
PA 10_0041	3.25	Compensatory Water Supply  The Proponent shall provide a compensatory water supply to any owner of privately-owned land whose water entitlements are adversely impacted (other than an impact that is negligible) as a result of the project, in consultation with NOW, and to the satisfaction of the Director-General.  The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent to the loss attributed to the project. Equivalent water supply must be provided (at least on an interim basis) within 24 hours of the loss being identified. If the Proponent and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.  If the Proponent is unable to provide an alternative long-term supply of water, then the Proponent shall provide alternative compensation to the satisfaction of the Director-General.	-	Pine Dale management reported that no requests had been made by landholders for compensatory water supply. In addition Pine Dale had reportedly not received any indication that a landholder's water supply has been adversely affected by mining operations therefore this condition has been assessed as not applicable.	Not Applicable (Not triggered)				
PA 10_0041	3.26	Baseline Water Monitoring Plan  The Proponent shall prepare and implement a Baseline Water Monitoring Plan for the project to the satisfaction of the Director-General. This plan must:  a) be prepared in consultation with OEH and NOW by suitably qualified and experienced persons whose appointment has been approved by the Director-General;  b) be submitted to the Director-General for approval by the end of February 2011; and  c) include programs for: consultation with other industries in the vicinity of the mine to gather existing surface water data; intensive baseline monitoring to be conducted for the first 6 months of site establishment to provide detailed data on surface water flows/levels and quality in creeks and other waterbodies that could be affected by the project (including the Neubecks Creek, the Blue Lake and the Coxs River).	Enhance Place (2011),     Baseline Water     Monitoring Plan, July     2011, Ref: 613/24 (RPS     Aquaterra & R.W     Corkery & Co Pty Ltd)     Pine Dale Mine Surface     Waters.xlsx     Pine Dale Baseline     Water Data-modified for     AEMR.xlsx	Preparation: The previous IEA (URS, 2013) identified that the preparation of the Baseline Water Monitoring Plan (BWMP) was found to be compliant. The BWMP has not been updated since the previous IEA in 2013. Since there has been no update to the BWMP the "preparation" process for the development of the document has not been reviewed as part of this IEA.  Implementation: Greater than six months of baseline data has been collected by the Site (30 months). As noted in URS 2013 (p.A-12) 'the Baseline Water Monitoring Report (BWMR) was finalised on the 4 October 2011 by RPS Aquaterra. The report included intensive baseline monitoring of surface water and groundwater conducted from January 2011 to July 2011. The report found that "Overall groundwater and surface water quality results within this report have been compared to ANZECC (2000) guidelines for upland creeks at the 95% protection level. The data indicate that the surface water quality is historically poorer than the ANZECC (2000) guidelines and concentrations of all metals in general exceed the guidelines'.  Given over 100 years history of mining and its influence on the Neubecks Creek and the fact that the creek has been diverted from its original water course over time, it is recommended that more suitable trigger levels be defined. The recommended trigger levels should be set such that they reflect the long term water quality in the Neubecks Creek and Coxs River and are designed to prevent any further degradation in water quality. Table 5.1 of the BWMR identified long term trigger vales for surface water and groundwater.  Baseline data was obtained for 18 months for the period January 2011 July 2013; however, the data has not been analysed and comments made in a formal report with findings and recommendations. Therefore at the time of writing this report there is no useable output to this monitoring data that reflects surface water flows/levels and quality in creeks and other waterbodies (including the Neubecks Creek, the Blue Lake and the Coxs River).  Th	a) Preparation – Compliant (2012/2013) b) Preparation – Non-compliant (2012/2013) c) Preparation – Compliant (2012/2013) lmplementation - Compliant 2014/IEA/021 Recommendation Prepare a formal report that analyses baseline monitoring data. The report to provide findings and recommendations concerning surface water flows/levels and quality in creeks and other waterbodies (including the Neubecks Creek, the Blue Lake and the Coxs River).				



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Project A	Project Approval 10_0041								
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations				
PA 10_0041	3.27(a)	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 prepared in consultation with OEH and NOW by suitably qualified and experienced persons whose appointment has been approved by the Director-General, and submitted to the Director- General for approval by the end of April 2011.  In addition to the standard requirements for management plans (see Condition 2 of Schedule 5), this plan must include:  a) a Site Water Balance that:  • includes details of:  - sources and security of water supply;  - water use on site; and  - reporting procedures; and  - describes what measures would be implemented to minimise potable water use on site.	Enhance Place (2011)     Water Management     Plan, July 2011, Ref     No. 613/20      URS Australia Pty Ltd     (2013), Independent     Environmental Audit:     Pine Dale Mine -     Yarraboldy Extension,     June 2013,     43177857/KD/00	Preparation:  It is noted that the Water Management Plan has not been updated since July 2011. The previous IEA (URS, 2013, p.A-12) identified that the preparation of the WMP was found to be compliant. Since there has been no update to the BMP the preparation process has not been reviewed as part of this IEA.  Implementation  The WMP includes the Surface Water Management Plan (SWMP) and Groundwater Management Plan (GMP). Preparation and implementation of these plans have been assessed separately in CoA 3.27(b) and 3.27(c).	Compliant				



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Project A	Approval 10_0	0041							
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations				
PA 10_0041	3.27 (b)	<ul> <li>b) a Surface Water Management Plan, that includes: <ol> <li>a detailed description of the water management system on site, including the:</li> <li>clean water diversion systems;</li> <li>erosion and sediment controls; and</li> <li>water storages;</li> <li>a plan for identifying, extracting, handling, and the long-term storage of potentially acid forming materials on site;</li> <li>detailed plans, including design objectives and performance criteria, for: <ol> <li>reinstatement of drainage lines on the rehabilitated areas of the site; and</li> <li>control of any potential water pollution from rehabilitated areas of the site;</li> <li>performance criteria for the following, including trigger levels for investigating any potentially adverse impacts on: <ol> <li>the water management system;</li> <li>surface water quality in creeks and other water bodies that could potentially affected by the project (including Neubecks Creek, the Blue Lake and Coxs River);</li> <li>the stream health, vegetation health and channel stability of water bodies that could potentially affected by the project</li> </ol> </li> <li>a program to monitor: <ol> <li>the effectiveness of the water management system;</li> <li>surface water flows and quality in creeks and other water bodies that could potentially affected by the project;</li> <li>the stream health, riparian vegetation health and channel stability of creeks and other water bodies that could potentially affected by the project;</li> <li>the stream health, riparian vegetation health and channel stability of creeks and other water bodies that could potentially affected by the project;</li> </ol> </li> <li>ta plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project;</li> </ol></li></ol></li></ul>	<ul> <li>RCA (2014), Channel Stability &amp; Stream Health Monitoring, February 2014, RCA ref 6880-849/0</li> <li>Enhance Place Pty Ltd (2014), AEMR 2013, March 2014</li> <li>Enhance Place (2011) Water Management Plan, July 2011, Ref No. 613/20</li> <li>Summary reports – Erosion &amp; Sediment Controls – 29/08/2013, 27/09/2013, 31/10/2013, 22/11/2013, 20,12/2013, 30/01/2014, 13/02/2014, 03/03/2014, 01/05/2014, 29/05/2014, 25/06/2014, 16/07/2014</li> <li>URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00</li> <li>Pine Dale Mine Surface Waters.xlsx</li> <li>Pine Dale Baseline Water Data-modified for AEMR.xlsx</li> </ul>	It is noted that the Water Management Plan has not been updated since July 2011. The previous IEA (URS, 2013, p.A-13) identified that the preparation of the WMP was found to be compliant. Since there has been no update to the WMP the preparation process has not been reviewed as part of this IEA. Implementation  The auditors sighted a 2014 Channel Stability and Stream Health Monitoring report prepared by RCA Laboratories. The report concluded that 'the Baseline Assessment of channel stability, stream health and vegetation health of the Neubecks Creek undertaken in August and October 2013 at monitoring locations SH1, SH2, SH3 and SH3A indicated the drainage line was classified as Potentially Stabilising. A follow-up (six-monthly) assessment was conducted at the same monitoring locations in February 2014. Results of the follow-up assessment indicate there has been no major change to the drainage line, with each monitoring location again classified as Potentially Stabilizing. It should also be noted that the drainage line was found to be dry at each monitoring location visited during this follow-up round of monitoring (RCA, 2014, p.20). The report included photographic evidence of inspections and monthly stream health monitoring field sheets. dated 28/08/2013, 25/09/2013, 30/10/2013, 18/12/2013, 21/11/2013, 20/01/2014, 06/2014 (Appendix 3, RCA, 2014). The 2013 AEMR (Enhance Place, 2013, p.55) noted that 'the CSIRO Ephemeral Streama assessment protocol indicates ongoing monitoring of both Neubecks Creek and Cox's River drainage line is required; however, rehabilitation works are not required in the immediate future'. During the Site inspection the following implemented management measures were observed:  • Use of bunds for directing water;  • Dirty water storage dam used for storing water for use in dust suppression;  • Contour drainage lines on rehabilitated areas (i.e. Area C), using rock armouring on steeper sections.  • Progressive rehabilitation works have been carried out during the audit period including seed	Preparation – Compliant (2013) Implementation – Compliant				



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Project A	pproval 10_0	0041							
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations				
PA 10_0041	3.27 (c)	c) a Groundwater Management Plan, which includes: i. groundwater assessment criteria, including trigger levels for investigating and potentially adverse groundwater impacts; ii. a program to monitor:  - groundwater inflows to the open cut mining operation - the impacts of the project on;  • baseflows to Neubecks Creek; • any groundwater bores on privately owned land; and  iii. a program to validate the groundwater model for the project, and calibrate it to site specific conditions; and iv. a plan to respond to any exceedances of the performance criteria, and offset the loss of any baseflow to Neubecks Creek caused by the project.	<ul> <li>Enhance Place (2011), Baseline Water Monitoring Plan, July 2011, Ref: 613/24 (RPS Aquaterra &amp; R.W Corkery &amp; Co Pty Ltd)</li> <li>Pine Dale Mine Surface Waters.xlsx</li> <li>Pine Dale Baseline Water Data-modified for AEMR.xlsx</li> <li>URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00</li> <li>Enhance Place Pty Ltd (2014), AEMR 2013, March 2014</li> </ul>	Preparation  It is noted that the Water Management Plan that incorporates the Groundwater Management Plan (GWMP) has not been updated since July 2011. The previous IEA (URS, 2013, p.A-14) identified that the "preparation" of the Groundwater Management Plan was found to be compliant. Since there has been no update to the GWMP the preparation process has not been reviewed as part of this IEA.  Implementation  The GWMP states that an exceedance of the 80 <sup>th</sup> percentile data will be used to initiate a review of monitoring trends whilst further investigations would not be triggered unless an exceedance of the maximum reported groundwater levels and quality is recorded.  Pine Dale reported in the 2013 AEMR (RCA Laboratories citied in Enhance Place, 2014-A, Appendix B, p.13) that "the site specific Trigger Values developed for the Pine Dale Mine, as stipulated in the sites' Water Management Plan in accordance with Schedule 3, Condition 27(c) of the Project Approval (PA 10, 0041) are currently under review, therefore the Trigger Level values presented in the previous version of the sites' Groundwater Monitoring Program (Dec 2005) have been adopted for the purpose of compliance assessment in this report. Groundwater monitoring was not undertaken until the commencement of construction and mining operations, therefore a true baseline level is not available. In the absence of baseline values, average values have been calculated based on results from monitoring undertaken during the period October 2005 to December 2006. A subsequent round of baseline monitoring has been undertaken during the period Danuary 2011 to July 2013, from which updated trigger levels are currently being developed.  It is noted that pH levels for groundwater do not exceed the trigger level for pH (8.5) or EC (2000 μS/cm) required for Pine Dale Mine prior to the preparation of the Yarraboldy Extension WMP. Pine Dale reported that they consider the current trigger values to be overly conservative and not practical (e.g. some trigger levels for pH are	Preparation – Compliant (2013)  Implementation – Non-compliant  Repeat Recommendation 2013/IEA/009  Consult with NOW, OEH and DPE to review water quality trigger values and based on the consultation update and implement the WMP (incorporating the GWMP).				



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Project A	pproval 10_0	0041							
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations				
PA 10_0041	3.28	Biodiversity Offset  By the end of May 2012, the Proponent shall prepare a Biodiversity Offset Strategy for the project to the satisfaction of the Director- General. This strategy must:  (a) be prepared in consultation with OEH; and (b) provide for the long term conservation of at least 30 hectares of native vegetation in the region to offset the vegetation clearing associated with the project.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	Closed out in previous audit period. Refer to previous Independent Audit Report (URS, 2013, p.A-14) for previous finding and comments.	Compliant				
PA 10_0041	3.29	Within 6 months of the approval of the Biodiversity Offset Strategy (referred to in Condition 28 above), the Proponent shall make suitable arrangements to provide appropriate long-term security for the offset area in the strategy to the satisfaction of the Director-General.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	Closed out in previous audit period. Refer to previous Independent Audit Report (URS, 2013, p.A-15) for previous finding and comments.	Not Applicable (Not triggered)				
PA 10_0041	3.30	Biodiversity Management Plan  The Proponent shall prepare and implement a Biodiversity  Management Plan for the project to the satisfaction of the Director- General. This plan must:  a) be prepared in consultation with OEH, and submitted to the Director-General for approval by the end of May 2012;  b) include:  - detailed performance and completion criteria for the implementation of the biodiversity offset strategy;  - a detailed description of the measures that would be implemented to manage the remnant vegetation and habitat within the offset area, and ensure the biodiversity offset strategy is suitably implemented, including the procedures for:  • revegetating or regenerating parts of the offset area, if required; • managing or improving the quality of existing vegetation in the offset area; • controlling weeds, feral pests and access; and • managing bushfires; - details of who would be responsible for monitoring, reviewing and implementing the plan.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	Closed out in previous audit period. Refer to previous Independent Audit Report (URS, 2013, p.A-15) for previous finding and comments.	Not Applicable (Not triggered)				



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Project A	pproval 10_0	0041						
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
PA 10_0041	3.31	Conservation Bond Within 3 months of the approval of the Biodiversity Management Plan, the Proponent shall lodge a conservation bond with the Department to ensure that the Biodiversity Offset Strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan. The sum of the bond shall cover the full cost of implementing the Biodiversity Offset Strategy and be verified by a suitably qualified rehabilitation expert or quantity surveyor.  If the Biodiversity Offset Strategy is implemented to the satisfaction of the Director-General, the Director- General will release the conservation bond.  If the offset strategy is not implemented to the satisfaction of the Director-General, the Director- general will call in all or part of the conservation bond, and arrange for the satisfactory implementation of the Biodiversity Offset Strategy.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	Closed out in previous audit period. Refer to previous Independent Audit Report (URS, 2013, p.A-15) for previous finding and comments.	Not Applicable (Not triggered)			
PA 10_0041	3.32	Aboriginal Heritage Management Plan  The Proponent shall prepare and implement an Aboriginal Heritage Management Plan for the project to the satisfaction of the Director-General. The Plan must:  a) be prepared in consultation with OEH and the Aboriginal community; b) be submitted to the Director-General for approval prior to carrying out any open cut mining operations under this approval; and c) include a:  - program for the recording, salvage and surface collection of any Aboriginal objects/sites that may be encountered within the project area;  - description of the measures that would be implemented if any Aboriginal skeletal remains are discovered during the project; and  - protocol for the ongoing consultation and involvement of the Aboriginal community in the conservation and management of the Aboriginal heritage of the objects/sites.	Enhance Place (2011),     Aboriginal Heritage     Management Plan,     March 2011, Ref:     613/25     URS Australia Pty Ltd     (2013), Independent     Environmental Audit:     Pine Dale Mine -     Yarraboldy Extension,     June 2013,     43177857/KD/00	Preparation It is noted that the Aboriginal Heritage Management Plan (AHMP) has not been updated since March 2011. The previous IEA (URS, 2013, p.A-15) identified that the "preparation" of the AHMP was found to be compliant. Since there has been no update to the AHMP the preparation process has not been reviewed as part of this IEA.  Implementation Pine Dale management reported that during the audit period no Aboriginal artefacts have been found and/or reported.  Pine Dale as part of induction training for staff and contractors receive awareness training on the presence of artefacts located outside of the Yarraboldy extension area. No training presentation was made available by Pine Dale that identified, as required under Section 6 of the Plan, the requirements to cease work immediately and follow the Find Protocol and Salvage Methodology in the event an object of Aboriginal heritage significance is identified.  Pine Dale has been assessed as compliant with this condition on the basis that no incidents of aboriginal heritage have been reported during the audit period.	Preparation – Compliant (2013) Implementation – Compliant (2014)			
PA 10_0041	3.33	Monitoring of Coal Transport  The Proponent shall:  a) keep accurate records of the:  - amount of coal transported from the site (on a monthly basis); and  - the date and time of loaded truck movements from the site; and  b) provide the Director-General with a summary of these truck movements on a quarterly basis.	Quarterly Coal     Deliveries January –     March 2013, April –     June 2013, July –     September 2013 and     October - December     2013 and January -     March and April 2014     Enhance Place (2013),     Monitoring of Coal     Transport [Letter] 2     September 2013	Coal operations commenced at Pine Dale in January 2012. Quarterly coal delivery reports from January to 2013 to April 2014 were available for review. The excel spreadsheet recorded:  - Incoming and outgoing dates;  - Transaction ID;  - Truck registration;  - Incoming weight (tonnes) and outgoing weight (tonnes); and  - Net weight (tonnes).  A letter from Pine Dale to DPE dated 2 September 2013 was available for review. Pine Dale has been assessed as compliant with this condition on the basis that records of coal transport were maintained and the Director-General has been provided with a summary of truck movements on a quarterly basis.	Compliant			



<u> </u>	pendix A Pine Dale Mine Independent Environmental Audit							
Project A	pproval 10_0	0041						
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
PA 0_0041	3.34	Operating Conditions The Proponent shall only dispatch coal from the site by road between the hours of 7:00am to 8:00pm Monday to Saturday, excluding public holidays.	Quarterly Coal     Deliveries January –     March 2013, April –     June 2013, July –     September 2013 and     October - December     2013 and January -     March and April 2014	Given the care and maintenance status of the site no coal trucks were operational at the time of the Site inspection. Pine Dale management reported that coal was transported to Mt Pipe Power Station via the haul road. A review of quarterly coal delivery reports from January to 2013 to April 2014 indicated that coal was transported between the required hours of this condition.  No complaints were received during the audit period concerning haulage trucks on public roads.	Compliant			
PA 10_0041	3.35	Transport Route  The Proponent shall ensure that:  a) all product coal is transported to the Mt Piper Power Station and the Wallerawang Power Station via the Private Haul Road (ie. Coal Link Road), except in an emergency situation and with the prior written approval of the Director-General;  b) a maximum of 100 000 tonnes of coal product is transported on Castlereagh Highway (SH18) in a calendar year, including a maximum of 30 000 tonnes transported to the east of the site on Castlereagh Highway (SH18) in a calendar year;  c) no transportation of coal via the Castlereagh Highway (SH18) is to occur past school bus stops during times when school buses are operating in the vicinity of the site;  d) no more than 10 coal product trucks per hour (20 movements) enter/exit the site via the Castlereagh Highway (SH18) during the day-time period;  e) no more than 4 coal product trucks per hour (8 movements) enter/exit the site via the Castlereagh Highway (SH18) during the evening period; and  f) no coal product trucks enter/exit the site during the night- time period.	Complaints Register 2012- 2014	Coal was reportedly transported via the private Haul Road to Mt Piper Power Station only. During the audit period Pine Dale reported that no coal was transported via Castlereagh Highway and no emergencies occurred which required use of Castlereagh Highway.  No complaints were received during the audit period concerning haulage trucks on public roads.	Not Applicable (Not triggered)			
PA 10_0041	3.36	Visual Amenity and Lighting 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,  to the satisfaction of the Director-General.	Site observations	Minimal lighting is provided at the Site. Lights at the office compound are on timers.  No permanent lighting infrastructure is operational on site. Vehicles have individual lighting to assist in operations that operated during the evening. No evening works have been conducted at the site since April 2014.  No requests have reportedly been made by the Director-General concerning visual amenity or lighting onsite. Therefore this condition has been considered not applicable during the audit period.	Not Applicable (Not triggered)			
PA 10_0041	3.37	Additional Visual Mitigation Measures The Proponent shall construct the amenity bund as described in the EA and rehabilitate all amenity bunds on-site in accordance with Condition 53 below.	Site observations	The current elevation of the amenity bund is approximately 935m ADH with batters of 1:3 V:H. The auditors inspected the bund during the Site inspection.  The amenity bund was reshaped during the audit period to a 1 in 3 slope from the former angle of repose (approximately 1 in 1). A cover crop was planted; however, this did not have very successful germination. Global Soil Systems Pty Ltd has been engaged to hand seed approximately 2 hectares of the bund with native tree seed in September 2014.  At the completion of the Yarraboldy Extension the amenity bund and other site bunds are planned to be pushed out to blend into and create the final landform (Section 2.12.5 of the EA). Final rehabilitation of the amenity bunds had not been triggered during the audit period. Pine Dale management reported that there is an internal EnergyAustralia monetary provision to move the amenity bund into the Yarraboldy void if approval is not granted for Stage 2 Development.	Compliant			



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Project A	pproval 10_0	0041						
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
PA 10_0041	3.38	Upon receiving a written request from the owner of any residence on privately-owned land which has, or would have, significant direct views of the mining operations on site, the Proponent shall implement visual mitigation measures (such as landscaping treatments or vegetation screens) on the land in consultation with the landowner. These measures must be reasonable and feasible, and directed toward minimising the visibility of the mining operations from the residence.  If within 3 months of receiving this request from the owner, the Proponent and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.	<ul> <li>Site observations</li> <li>DTRIS-DRE (2014-B), Pine Dale Complaint Received by DTIRIS – DRE, Please respond [E-mail] Message to Enhance Place Pty Ltd. Sent Monday 3 March 2014, 4:36pm.</li> <li>Enhance Place Pty Ltd (2014-A), Pine Dale Mine – Complaint Received by DTRIS- DRE [Letter] 5 March 2014.</li> </ul>	A review of the complaints register identified that no complaints concerning visual amenity were received by Pine Dale during the audit period. The angle of the bund was changed during the audit period.  It is noted that DTRIS-DRE received a compliant via email on 28 February 2014 from a community member concerning the following issues:  • 'The visual Impact of earth mound adjacent to Castlereagh Highway is unacceptable, particularly to residents of Blackmans Flat.  • The lack of rehabilitation of previous mining areas to natural forest vegetation (dominance of pasture)  • The excessive amount of industry in the area (cumulative impacts)  • Impacted residents should be relocated at no cost to them' (DTRIS-DRE, 2014-B).  The Department notified Pine Dale of the complaint via email on 3 March 2014 and requested the Site provide a response to the above items. The complaint was not noted in the 2014 Complaints Register. As noted above Pine Dale has recently reshaped the amenity bund at the request of the Department. The reshaped bund was observed by the auditors. Enhance Place responded to DTRIS-DRE via letter (Enhance Place, 2014) on 5 March 2014 indicating that Site was due to enter care and maintenance and the issue of the bund and rehabilitation would be addressed in the draft care and maintenance MOP. The auditors observed progressive rehabilitation including planting of screening trees for short-term amenity value adjacent to Castlereagh Highway and on top of bunds as well as planting of native species to achieve longer-term rehabilitation requirements.	Compliant			
PA 10_0041	3.39	The Proponent shall:  a) minimise the waste generated by the project; and b) ensure that the waste generated by the project is appropriately stored, handled and disposed of, to the satisfaction of the Director-General.	Site observations	Pine Dale management reported that waste volumes during care and maintenance are small and consist of general waste. SITA is the waste contractor.  Observations made during the Site inspection noted open drip trays (half a 200 Litre (L)) steel drum and redundant equipment such as used vehicle batteries at the workshop. Small areas of localised staining were also observed on the gravel hardstand around the fuel tank and where plant had been serviced. It is noted that a fabric membrane was observed under the gravel hardstand at the diesel tank (Photos 4-5).  On-site waste during operational activities was managed by contractors - Dukes Mining that was sorted and stored at the workshop. It was reported by Site management that there was no waste from the crushing of coal as the crushing facility did not produce any course rejects or fine tailings.  Section 4 of the Waste Management Plan (WaMP) describes the waste streams on site including the type, source and management/ disposal options.  Management of hydrocarbons and spills has not been covered in detail in any of the Pine Dale management plans, however may be most appropriately addressed in the WaMP.  Diesel on site is stored with a double skinned above ground tank that was empty at the time of the Site inspection.  Sewerage is collected in septic tanks located at the Site office and taken off-site by a licenced contractor.  No requests from DPE had reportedly been received during the audit period concerning waste management.  Pine Dale was assessed as generally compliant with this condition based on the observations made during the Site inspection.	Compliant 2014/IEA/001 Recommendation It is recommended that the workshop area be tidied and that redundant items be removed from Site. Localised oil spills should be cleaned up and waste material disposed of at an appropriately licenced facility. Equipment to remain on-site should be stored securely in the on-site containers.			



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Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
PA 10_0041	3.40	The Proponent shall prepare and implement a <b>Waste Management Plan</b> for the project to the satisfaction of the Director-General. This plan must be submitted to the Director-General by the end of April 2011.	Enhance Place (2011), Waste Management Plan, June 2011, Ref: 613/26	Preparation It is noted that the Waste Management Plan has not been updated since June 2011. The previous IEA (URS, 2013, p.A-17) identified that the "preparation" of the Waste Management Plan was found to be compliant. Since there has been no update to the Waste Management Plan the preparation process has not been reviewed as part of this IEA.  For an assessment of implementation of the plan refer to PA 10_0041 Condition 3.39.	Compliant (2013)			
PA 10_0041	3.51	The Proponent shall: a) ensure that the development is suitably equipped to respond to any fires on-site; and b) assist the emergency services as much as possible if there is a fire on-site during the development.	Site observations     Enhance Place (2011),     Bushfire management     Plan, June 2011, Ref:     613/23	<ul> <li>The Bushfire Management Plan (BFMP) includes the following:</li> <li>Bushfire hazard identification including hazard categories provided by Forests NSW, sources including lightening, arcing from powerlines, arson and accidental ignition (i.e. smoking and hot work);</li> <li>Bushfire controls adopted for equipment operation, clearing operations, blasting operations, welding operations, fixed plant and building and flammable liquids. In addition fire fighting equipment and protection, training external notification procedures are identified.</li> <li>Mining personnel receive basic fire training at the commencement of employment and refresher training at regular intervals. During the audit period no fire training sessions had been carried out.</li> <li>Fire trail entrances are maintained on-site.</li> <li>Pine Dale management reported that during a blast that requires road closures the blast will be postponed in the event that emergency services require access to roads.</li> <li>No fires were reported by Pine Dale management during the audit period.</li> <li>It was reported by Pine Dale management that there had been no recent visits by the NSW Rural Fire Service.</li> <li>Auditors sighted the following measures implemented:</li> <li>On site fire truck (sighted by auditors). It was noted that the truck was old and may not be fully operational.</li> <li>Fire hose at main gate supplied by the municipal water supply.</li> <li>OCE mobile phone alerts identifying fire warnings each day – provided by Forest Corporation NSW.</li> <li>'No Entry' warnings (areas where fire is a risk) issued by Forest Corporation of NSW.</li> <li>Internal roads were clear and tidy.</li> <li>Pine Dale has been assessed as compliant with this condition on the basis that the above measures were implemented to assist in the response to a fire emergency as described in the BMP. URS note that the above does not comprise a detailed assessment of the adequacy of bushfire management at Pine Dale and that the auditors are not experts in bush</li></ul>	Compliant 2014/IEA/009 Recommendation Review the suitability of the on-site fire truck and confirm if it is fit for purpose. It is recommended that Pine Dale invite NSW Rural Fire Services to inspect the Site and discuss fire management in the Blackmans Flat area.			
PA 10_0041	3.52	By the end of April 2011, the Proponent shall prepare and implement a <b>Bushfire Management Plan</b> for the site, to the satisfaction of the State Forest in consultation with the local Rural Fire Service.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	The previous IEA (URS, 2013, p.A-18) identified that this condition was non-compliant on the basis that the Bushfire Management Plan was not approved by State Forests by the end of April 2011.  The Bushfire Management Plan has not been developed to the satisfaction of State Forests and has not been updated to reflect the Site response for a care and maintenance situation, as opposed to a mining operation.	Non-compliant  2014IEA/022 Recommendation Update the Bushfire Management Plan with respect to the Site being on care and maintenance. Ensure State Forests and the local RFS have involvement in the update of the Plan and confirm satisfaction of the plan from State Forests.			



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Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations				
PA 10_0041	3.53	Rehabilitation Objectives  The Proponent shall rehabilitate the site to the satisfaction of the Executive Director, Mineral Resources in DRE. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the EA, however the area to be returned to native woodland and forests vegetation (i.e. Class VII land which is consistent with surrounding State Forest lands) must be increased to cover the area marked with cross-hatching on the figure in Appendix 3, to the satisfaction of the Executive Director, Mineral Resources in DRE.	<ul> <li>Site observations</li> <li>Enhance Place (2011), Mining Operations Plan, February 2011, Ref: 613/15</li> <li>Enhance Place (2014) Draft Care and Maintenance Mining Operations Plan, March 2014</li> <li>Enhance Place (2014), Care and Maintenance [Letter] Mining Operations Plan, 11 March to EPA, NOW, DTRIS-DRE and CCC</li> <li>DTRIS-DRE (2014-D), Pine Dale Draft MOP [E-mail] Message to Enhance Place Pty Ltd. Sent Monday 19 May 2014, 4:14pm.</li> <li>DTRIS-DRE (2014-E), Pine Dale Draft MOP [E-mail] Message to Enhance Place Pty Ltd. Sent Wednesday 9 July 2014, 4:56pm.</li> </ul>	The Pine Dale Rehabilitation Plan forms part of the Mine Operations Plan (MOP) signed off by DITRIS-DRE on the 21 March 2011.  The Site was in the process of revising a draft MOP to cover for the care and maintenance status of the mine in accordance with new MOP guidelines (ESG3: Mining Operations Plan (MOP) Guidelines, September 2013) at the time of the audit that is due to be provided to DTRIS-DRE for approval prior to the end of December 2014. A Draft of the Plan had been provided to DTRIS-DRE for approval prior to the end of December 2014. A Draft of the Plan had been provided to DTRIS-DRE with feedback provided on 19 May 2014 and 9 July 2014. The draft care and maintenance MOP was noted to be consistent with the cross-hatching on the figure in Appendix 3 of the EA.  In their feedback on the Draft Plan (see condition 3.55), DTRIS-DRE requested that Pine Dale review the rehabilitation performance criteria for the Site and include detail of, , but not limited to, primary domains, measurable targets against related performance criteria, slope angles, water management, physical and chemical characteristics of soil(s) and a set of practical vegetation indicators for assessment. In response to these requests Pine Dale has recently engaged an agronomist from SLR Consulting Pty Ltd (SLR) to provide pasture management advice for the short, medium and long-term as well as rehabilitation criteria that will feed into the draft MOP. The agronomist was due to visit the Site in September 2014. SLR will provide advice for Areas A, B and C.  Progressive rehabilitation was observed in some areas of the western pit with a grass cover crop to a reshaped area against the northern highwall and to the reshaped amenity bund. The bund was partially seeded with cover crop in April 2014 and is due to be seeded again in September 2014.  Annual AEMR Site plans specific to the audit period correlate with Appendix 3 of the Project Approval. This was evident following the Site inspection that the AEMR Site plans are progressing towards th	Indeterminate				



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Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations		
PA 10_0041	3.54	Progressive Rehabilitation The Proponent shall carry out the rehabilitation of the site progressively, that is, as soon as reasonably practicable following disturbance.	<ul> <li>Site observations</li> <li>Enhance Place (2011),         Mining Operations Plan,         February 2011, Ref:         613/15</li> <li>Enhance Place (2014)         Draft Care and         Maintenance Mining         Operations Plan, March         2014</li> <li>Global Soil Systems         Proposal (2013)</li> <li>Brackenrig Soil         Conservation Services         Tax Invoice, 9         September 2013.</li> <li>First Field         Environmental Pty Ltd         (2014), Pine Dale Mine,         Rehabilitation         Monitoring Report,         2014</li> </ul>	The Site was in the process of revising a draft MOP to cover Care and Maintenance status of operations in accordance with new MOP guidelines (ESG3: Mining Operations Plan (MOP) Guidelines, September 2013). At the time of the audit Pine Dale anticipated submission of the MOP to DTRIS-DRE for approval prior to the end of December 2014 (the end date of the approval for the mine). The MOP (2011) expired in February 2014 during which time there has been no formally approved MOP for the Site. Pine Dale has continued to apply the principals of the MOP (2011) since February 2014 while the Site has been in care and maintenance during the drafting and consultation process of the draft MOP (2014) covering Care and Maintenance mine status.  Progressive rehabilitation was observed in the western pit with a grass cover crop and to the reshaped amenity bund. The bund was partially seeded with cover crop in April 2014 and is due to be seeded again in September 2014. Progressive rehabilitation of Area A with agricultural lime and gypsum and a charcoal and mushroom compost mix was observed and maintenance of Area C continued with an application of agricultural lime and gypsum. The auditors also observed progressive rehabilitation including planting of screening trees for short-term amenity value adjacent to Castlereagh Highway and on top of bunds as well as planting of native species to achieve longer-term rehabilitation requirements. It is noted that controls will need to be developed and implemented to minimise the propagation of seeds from recently planted exotics used for their fast growth in providing a visual screen.  Pine Dale management considered that it was not practicable to fill in and then uncover the Yarraboldy extension and that it was reasonable that the high wall had been left exposed for future mining should this be approved.  FirstField (consultants to Pine Dale 2014, p.17) recommended that Pine Dale continue to implement integrated weed management control methods for noxious weeds in pasture and treed rehabil	Indeterminate 2014/IEA/010 Recommendation Develop and implement control measures for maintenance and removal of planted exotics and propagation of seeds as the trees mature.  As proposed by Pine Dale; commission a rehabilitation expert to assess existing rehabilitation status in detail; define rehabilitation criteria; and develop long term approaches to ensure the whole Site meets the agreed rehabilitation criteria.		



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Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
PA 10_0041	4.1	Rehabilitation Management Plan The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the Executive Director, Mineral Resources in DRE. This plan must:  a) be prepared in consultation with the Department, OEH, NOW, and the CCC; b) be prepared in accordance with any relevant DRE guideline; c) build, to the maximum extent practicable, on the other management plans required under this approval; and d) be submitted to the Executive Director, Mineral Resources in DRE for approval by the end of July 2011.	<ul> <li>Enhance Place (2011), Mining Operations Plan, February 2011, Ref: 613/15</li> <li>Enhance Place (2014) Draft Care and Maintenance Mining Operations Plan, March 2014</li> <li>Enhance Place (2014), Care and Maintenance [Letter] Mining Operations Plan, 11 March to EPA, NOW, DTRIS-DRE and CCC</li> <li>URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00</li> <li>DTRIS-DRE (2014-D), Pine Dale Draft MOP [E-mail] Message to Enhance Place Pty Ltd. Sent Monday 19 May 2014, 4:14pm.</li> <li>DTRIS-DRE (2014-E), Pine Dale Draft MOP [E-mail] Message to Enhance Place Pty Ltd. Sent Wednesday 9 July 2014, 4:56pm.</li> <li>URS Australia Pty Ltd</li> </ul>	The previous IEA (URS, 2013, p.A-18) noted that 'following approval of the MOP (including the Rehabilitation Plan) Pine Dale sought comments from NOW, DP8I and OEH in letters dated 21.07.11. The letter identified that the Plan had been prepared in accordance with the draft Rehabilitation and Environmental Management Guidelines'. The MOP was not resubmitted following initial approval in March 2011 and expired in February 2014.  Four letters addressed to EPA, NOW, DTRIS-DRE and the CCC were sighted by the auditors concerning the submission for review and comment of the MOP to cover the Care and Maintenance status of the mine (2014). Feedback was requested by late March 2014.  The draft MOP/Rehabilitation Management Plan for Care and Maintenance has been reviewed by the Department and comments have been provided to Pine Dale who are in the process of following up on the changes requested by DTRIS-DRE. An email (DTRIS-DRE, 2014-D) from the Department to Pine Dale was sighted that detailed required changes to the Draft MOP/Rehabilitation Management Plan. The Department followed the email with a second email on 9 July 2014 (DTRIS-DRE, 2014-E) concerning rehabilitation success criteria indicating the criteria needed to be measurable targets. Pine Dale is in the process of revising the Draft Care and Maintenance MOP to address the comments raised by DTRIS-DRE. Rehabilitation is discussed in Section 8 of the main report.  It is noted that a Site Closure Plan has been prepared.  A full review of the Plan against DRE guidelines has not been conducted as part of this audit. The previous IEA (URS, 2013, p.A-18) identified this condition as compliant; however, given the draft MOP/Rehabilitation Management Plan for Care and Maintenance was in the process of being revised and updated following comments from DTRIS-DRE and that outstanding actions had still to be addressed this condition was found to be indeterminate.  As there was no current approved MOP, URS was not able to completely assess compliance with the implementation	Indeterminate			
10_0041	4.1	By the end of April 2011, the Proponent shall notify in writing the owners of:  a) any residence on the land listed in Table 3 of Schedule 3 that they are entitled to ask for additional noise mitigation measures to be implemented at their residence at any stage during the project; and  b) any privately-owned land within 2 kilometres of the approved open cut mining pit on site that they are entitled to ask for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated.	(2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	previous finding and comments.				



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Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
PA 10_0041	4.2	<ul> <li>Within 2 weeks of obtaining monitoring results showing:</li> <li>a) exceedances of the relevant criteria in Schedule 3, the Proponent shall notify the affected landowners and/or tenants in writing of the exceedance, and provide regular monitoring results to each of these parties until the project is complying with the relevant criteria again;</li> <li>b) exceedances of the relevant criteria in Table 3 of Schedule 3, the Proponent shall notify in writing the applicable owner that they are entitled to ask for additional noise mitigation measures to be installed at their residence; and</li> <li>c) exceedances of the relevant air quality criteria in Schedule 3, send the affected landowners and tenants (including the tenants of any mine-owned land) a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time).</li> </ul>	<ul> <li>Annual Return – 24         November 2012 / 23     </li> <li>Pine Dale Mine Surface         Waters.xls     </li> <li>Pine Dale Mine EPA         Compliance Data         January, February,         April, May 2014     </li> <li>Pine Dale Mine EPA         Compliance Data June,         July, August,         September, October,         November, December     </li> </ul>	No exceedances of noise, dust or surface water discharge criteria were reported during the audit period therefore this condition is not applicable.	Not Applicable (Not triggered)
PA 10_0041	4.3	Independent Review  If an owner of privately-owned land considers the project to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Director-General in writing for an independent review of the impacts of the project on his/her land.  If the Director-General is satisfied that an independent review is warranted, then within 2 months of the Director-General's decision the Proponent shall:  a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to:  - consult with the landowner to determine his/her concerns;  - conduct monitoring to determine whether the project is complying with the relevant criteria in Schedule 3; and  - if the project is not complying with these criteria then:  • determine if more than one mine is responsible for the exceedance, and if so the relative share of each mine towards the impact on the land;  • identify the measures that could be implemented to ensure compliance with the relevant criteria; and  b) give the Director-General and landowner a copy of the independent review.	-	Pine Dale management reported that no requests were made by landholders regarding exceedances of the relevant criteria in Schedule 3 during the audit period therefore this condition has been assessed as not applicable.	Not Applicable (Not triggered)



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Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
PA 10_0041	4.4	If the independent review determines that the project is complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General.  If the independent review determines that the project is not complying with the relevant impact assessment criteria in Schedule 3, and that the project is primarily responsible for this non-compliance, then the Proponent shall:  a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent person, and conduct further monitoring until the project complies with the relevant criteria; or  b) secure a written agreement with the landowner to allow exceedances of the relevant criteria, to the satisfaction of the Director-General.  If the independent review determines that the project is not complying with the relevant acquisition criteria in Schedule 3, and that the project is primarily responsible for this non-compliance, then upon receiving a written request from the landowner, the Proponent shall acquire all or part of the landowner's land in accordance with the procedures in Conditions 6-7 below.	-	Pine Dale management reported that no requests were made by landholders regarding exceedances of the relevant criteria in Schedule 3 during the audit period therefore this condition has been assessed as not applicable.	Not Applicable (Not triggered)
PA 10_0041	4.5	If the independent review determines that the relevant criteria in Schedule 3 are being exceeded, but that more than one mine is responsible for this exceedance, then together with the relevant mine/s the Proponent shall:  a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent person, and conduct further monitoring until there is compliance with the relevant criteria; or  b) secure a written agreement with the landowner and other relevant mines to allow exceedances of the relevant criteria, to the satisfaction of the Director-General.  If the independent review determines that the relevant acquisition criteria in Schedule 3 are being exceeded, but that more than one mine is responsible for this exceedance, then upon receiving a written request from the landowner, the Proponent shall acquire all or part of the landowner's land on as equitable a basis as possible with the relevant mine/s in accordance with the procedures in Conditions 6-7 below.	-	Pine Dale management reported that no requests were made by landholders concerning exceedances of the relevant criteria in Schedule 3 during the audit period therefore this condition has been assessed as not applicable.	Not Applicable (Not triggered)



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Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
PA 10_0041	4.6	LAND ACQUISITION  Within 3 months of receiving a written request from a landowner with acquisition rights, the Proponent shall make a binding written offer to the landowner based on:  a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the project, having regard to the:  - existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and  - presence of improvements on the land and/or any approved building or structure which has been physically commenced on the land at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of any additional noise mitigation measures under Condition 6 of Schedule 3;  b) the reasonable costs associated with:  - relocating within the Mid-Western Regional local government area, or to any other local government area determined by the Director-General; and  - obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and  c) reasonable compensation for any disturbance caused by the land acquisition process.  However, if at the end of this period, the Proponent and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Director-General for resolution.  Upon receiving such a request, the Director-General will request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:  • consider submissions from both parties;  • determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above;  • prepare a detailed report setting out the reasons for any determination		Pine Dale management reported that no requests were made by landholders regarding acquisition rights during the audit period therefore this condition has been assessed as not applicable.	Not Applicable (Not triggered)			



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Project Approval 10_0041								
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
PA 10_0041	4.6 Cont.	However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Director-General for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Director-General will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report, the detailed report disputing the independent valuer's determination, and any other relevant submissions.  Within 14 days of this determination, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the Director-General's determination.  If the landowner refuses to accept the Proponent's binding written offer under this condition within 6 months of the offer being made, then the Proponent's obligations to acquire the land shall cease, unless the Director-General determines otherwise.	-	Pine Dale management reported that no requests were made by landholders regarding acquisition rights during the audit period therefore this condition has been assessed as not applicable.	Not Applicable (Not triggered)			
PA 10_0041	4.7	The Proponent shall pay all reasonable costs associated with the land acquisition process described in Condition 6 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.	-	Pine Dale management reported that no requests were made by landholders regarding acquisition rights during the audit period therefore this condition has been assessed as not applicable.	Not Applicable (Not triggered)			



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Project A	pproval 10_(	0041			
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
PA 10_0041	5.1	Environmental Management Strategy  1. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy must:  a) be submitted to the Director-General for approval by the end of April 2011;  b) provide the strategic framework for environmental management of the project;  c) identify the statutory approvals that apply to the project;  d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;  e) 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;  - receive, handle, respond to, and record complaints;  - resolve any disputes that may arise during the course of the project;  - respond to any non-compliance;  - respond to any non-compliance;  - respond to emergencies; and  f) include:  - copies of any strategies, plans and programs approved under the conditions of this approval; and  - a clear plan depicting all the monitoring required to be carried out under the conditions of this approval.	<ul> <li>Enhance Place (2011), Environmental Strategy, June 2011, Ref: 613/27</li> <li>URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00</li> <li>Toolbox talk Folder</li> </ul>	Preparation The previous IEA (URS, 2013, p.A-21) identified that the preparation of the Environmental Management Strategy (Strategy) was found to be compliant. The Strategy has not been updated since June 2011. Since there has been no update to the Strategy the "preparation" process for the development of the document has not been reviewed as part of this IEA.  Implementation Staff and contractor responsibilities are communicated through toolbox talks that include environmental awareness. A selection of toolbox talks were sighted during the audit.  The following was noted concerning the Environmental Management Strategy at the time of the audit:  • Appropriate management of chemicals and hydrocarbons to ensure that groundwater is not contaminated by spills of these substances (p.13) was not observed at the workshop. Refer to Condition 3.39 (Waste) for recommendation.  • A Water Management Plan and Baseline Water Monitoring Plan will be prepared in accordance with Schedule 3 Conditions 26 and 27 of PA 10_0041 to ensure the implementation of appropriate management measures for surface water and groundwater together with ongoing monitoring to demonstrate compliance (p.13). It is noted this has been conducted. The Strategy needs to be updated to reflect the Water Management Plan and Baseline Water Monitoring Plan.  • The Environmental Management Strategy does not refer to Thesium Australe (Austral Toadflax) in Section 5.3 (Ecology).  • The Strategy states (p.16) that 'a maximum of 100 000 tonnes of coal will be transported on Castlereagh Highway in a calendar year, including a maximum of 30 000 tonnes transported to the east of the site via the Castlereagh Highway in a calendar year. Pine Dale management reported that no coal was transported via Castlereagh Highway in a calendar year. Pine Dale management reported that no coal was transported via Castlereagh Highway in a calendar year.  • The mine will be progressively rehabilitated, where possible, so that non-vegetated areas will be minimised (p.22). Progressive	Preparation – Compliant (2013) Implementation – Non-compliant  2014/IEA/011 Recommendation Update the Environmental Management Strategy and relevant figures and plans to reflect current monitoring programs and reports as well as explain and reflect that the Site has moved from operational activities to a care and maintenance status and that controls as detailed in the strategy and plans will remain relevant.



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Project A	oject Approval 10_0041						
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations		
PA 10_0041	5.2	Management Plan Requirements  The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:  a) detailed baseline data; b) a description of:  - the relevant statutory requirements (including any relevant approval, licence or lease conditions);  - any relevant limits or performance measures/criteria;  - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures; c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria; d) a program to monitor and report on the:  - impacts and environmental performance of the project; - effectiveness of any management measures (see c above); e) a contingency plan to manage any unpredicted impacts and their consequences; f) a program to investigate and implement ways to improve the environmental performance of the project over time; g) a protocol for managing and reporting any:  - incidents; - complaints; - non-compliances with statutory requirements; and - exceedances of the impact assessment criteria and/or performance criteria; and - a protocol for periodic review of the plan.  Note: The Director-General may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	It is noted that the management plans have not been updated during the audit period as recommended in the previous IEA (URS, 2013). Since there has been no updates to the management plans a brief review of against the requirements of PA 10_0041 Condition 5.2 was conducted and the previous IEA recommendations (URS, 2013, p.22) are considered valid.	Repeat Recommendation 2013/IEA/037 The Bushfire Management Plan, Water Management Plan, Waste Management Plan and the Baseline Water Monitoring Plan should be updated to include a procedure for handling complaints and incidents as appropriate or reference other documents such as the Strategy where such processes are described.		



Append	pendix A Pine Dale Mine Independent Environmental Audit ject Approval 10_0041						
Project A							
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations		
PA 10_0041	5.3	Annual Review  By the end of December 2012, and annually thereafter, the Proponent shall review the environmental performance of the project to the satisfaction of the Director-General. This review must:  a) describe the development (including any rehabilitation) that was carried out in the past year, and the development that is proposed to be carried out over the next year;  b) include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the  - the relevant statutory requirements, limits or performance measures/criteria;  - the monitoring results of previous years; and  - the relevant predictions in the EA;  c) identify any non-compliance over the past year, and describe what actions were (or are being) taken to ensure compliance;  d) identify any trends in the monitoring data over the life of the project;  e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and  f) describe what measures will be implemented over the next year to improve the environmental performance of the project.	Enhance Place Pty Ltd (2014), AEMR 2013, March 2014     Enhance Place (2014), Annual Environmental Management report 2013, 5 March 2014 [Letter] to DTRIS-DRE	Pine Dale use the Annual Environmental Management Report (AEMR) as the Annual Review. An AEMR Site meeting and Site inspection was conducted on 29 April 2014. Section 1.2 of the 2013 AEMR summarised the actions required following the 2012 AEMR.  a) The 2013 AEMR included descriptions of the development during the reporting period (Section 2). Section 5.5 addressed any development of the rehabilitation plan.  b) Monitoring results for the calendar year that provided a comparison against statutory requirements were provided in Section 3.  c) Non-compliances were addressed throughout Section 3 of the AEMR and included what details concerning the actions that were (or are being) taken to ensure compliance. No non-compliances were reported in the 2013 AEMR.  d) Trending data was provided in the 2013 AEMRs. Appendix B prepared by RCA laboratories provided detailed monitoring data and trending including, but not limited to groundwater monitoring, dust and surface water monitoring.  e) No discrepancies were noted in the AEMR for the reporting period.  f) Activities proposed in the next AEMR period were included in Section 6 of the AEMR. These included, but were not limited to:  - It was anticipated that coal resources within the Yarraboldy Extension will be exhausted by the second quarter of 2014, this was realised.  - A draft Care and Maintenance Plan was reported to have been submitted with DTRIS-DRE, this was realised.  - Rehabilitation activities will be undertaken during the 2014 period on areas that will not be directly impacted by a future mining operation at the Pine Dale Mine. The auditors observed progressive rehabilitation during the Site visit.  Further comments concerning the AEMR are provided in Section 3 of the Report.	Compliant		
PA 10_0041	5.4	Revision of Strategies, Plans and Programs  Within 3 months of:  a) the submission of an annual review under Condition 3 above; b) the submission of an incident report under Condition 6 below; c) the submission of an audit report under Condition 8 below; and d) any modification to 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.  Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.	-	<ul> <li>Letters concerning submission of the 2013 AEMR were sighted by the auditors.</li> <li>The following is noted: <ul> <li>a) Submission of the 2013 AEMR did not identify a requirement to update management plans under this PA 10_0041 therefore (a) has not been triggered.</li> <li>b) Pine Dale reported that no incidents were recorded on-site under PA 10_0041, EPL 4911, ML 1664 and ML 1569 from January 2013 to 29 August 2014 therefore (b) has not been triggered (based on no incidents having reportedly occurred under PA 10_0041, EPL 4911, ML 1664 and ML 1569). It is noted that the encroachment into the <i>Thesium Australe</i> (Austral Toadflax) buffer zone was reported in accordance with the Environment Protection and Biodiversity Conservation (EPBC) Approval 2011-6016.</li> <li>c) Strategies, plans, and programs were noted not to have been updated since submission of the previous IEA report in June 2013. Pine Dale management reported that the strategies, plans, and programs were due to be updated following approval of the Yarraboldy Stage 2 Development application; however, this application did not proceed.</li> <li>d) Mod 1 was approved in March 2012. Mod 1 did not require any changes to management plans therefore (d) has not been triggered.</li> <li>The Pollution Incident Response Plan (PIRMP) and the <i>Thesium Australe</i> (Austral Toadflax) management plan were implemented during the audit period.</li> <li>This Condition was found non-compliant in accordance with Condition 5.4(c) as strategies, plans and programs were not updated following submission of the previous IEA (URS, 2013).</li> </ul> </li> </ul>	Non-compliant  2014/IEA/012 Recommendation Strategies, plans, and programs should be reviewed and revised to reflect recommendations provided in the previous Independent Environmental Audit report and to reflect the care and maintenance status of the Site.		



Append	pendix A Pine Dale Mine Independent Environmental Audit							
Project A	ject Approval 10_0041							
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
PA 10_0041	5.5	Community Consultative Committee  The Proponent shall establish and operate a new Community Consultative Committee (CCC) for the project generally accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects (Department of Planning, 2007, or its latest version), and to the satisfaction of the Director-General. This CCC must be operating by the end of April 2011.  Notes:  The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval; and In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Proponent, Council, recognised environmental groups and the local community.	<ul> <li>Pine Dale website:         Accessed 3 September         2013 at 16:27hrs.</li> <li>URS Australia Pty Ltd         (2013), Independent         Environmental Audit:         Pine Dale Mine -         Yarraboldy Extension,         June 2013,         43177857/KD/00</li> </ul>	The CCC was made up of the following people at the time of the Site inspection:  - Mr H. Fisher (Chairman)  - Mr P. Barnes - Local Community Representative  - Mr B. Taylor - Local Community Representative  - Mr S. Brown - Aboriginal Community Representative (GTC)  - Miss S. Ellacott - Lithgow Council Representative (Operations Manager)  - Mr G. Goodwin – Company Representative (Operations Manager)  - Mr Mark Frewin – CCC Secretary  - Ms K. Tripp – RCA Laboratories (on behalf of Enhance Place).  The CCC meeting are also attended by additional LCC, GTC and Enhance Place representatives. CCC minutes and agendas were available on the Pine Dale website ( <a href="http://www.energyaustralia.com.au/about-us/what-we-do/power-generation/pine-dale-mine/community">http://www.energyaustralia.com.au/about-us/what-we-do/power-generation/pine-dale-mine/community</a> ).  Pine Dale requested approval of the CCC members on the 20 and 22 June 2011. DPE approved the CCC members on the 11 July 2011 in accordance with this condition.  The previous IEA (URS, 2013, p.23) noted that 'operations at the Mine did not commence until January 2012 therefore the CCC was not established until 2012. Approval from the DPE was not sighted approving this delay' and that 'the delay is CCC operation was attributed to mining operations being postponed until January 2012.  This condition has been considered compliant despite the CCC not being operational until January 2012.	Compliant			
PA 10_0041	5.6	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 7 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.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	Pine Dale reported that no environmental incidents had occurred during the audit period therefore this condition has not been triggered.  The <i>Thesium Australe</i> (Austral Toadflax) encroachment incident was reported to DOE not Director-General. The incident was reported in the AEMR for the audit period and it is noted this was an incident under the EPBC referral system.  The previous IEA (URS, 2013) recommendation that 'training on the use of the incident reporting systems for incidents, near misses and observations should be undertaken'.	Not Applicable (Not triggered)  Repeat Recommendation 2013/IEA//039  Training on the use of the incident reporting systems for incidents, near misses and observations should be undertaken.			
PA 10_0041	5.7	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 plans or programs approved under the conditions of this approval.  (http://www.energyaustralia.com.au/about-us/what-we-do/powergeneration/pine-dale-mine/community).	Pine Dale website:     Accessed 3 September 2013 at 16:27hrs.	Documents including, but not limited to the following were available on the Pine Dale website (http://www.energyaustralia.com.au/about-us/what-we-do/power-generation/pine-dale-mine/yarraboldy)  a) Development and environment approvals; b) Environmental assessment; c) 2011 MOP; d) Environment management plans; e) Independent environmental audit; f) AEMR reports; g) EPL summary reports 2014 (i.e. monitoring data); and h) EPL summary reports 2013 (i.e. monitoring data).	Compliant 2014/IEA/013 Recommendation It is recommended that Pine Dale include an upload date next to each environmental monitoring document on the website so it is clear that they were uploaded within specified timeframe.			



Append	lix A Pine l	Dale Mine Independent Environmental Audit			
Project A	pproval 10_0	0041			
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
PA 10_0041	5.8	INDEPENDENT ENVIRONMENTAL AUDIT  By the end of December 2012 and June 2014, 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 a 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 assess whether it is complying with the requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals); d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and e) recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under the abovementioned approvals.  Note: This audit team must be led by a suitably qualified auditor and include experts in any field specified by the Director-General.	DPE (2014),     Independent     Environmental Audit     [Letter], 11 August 2014     URS Australia Pty Ltd     (2013), Independent     Environmental Audit:     Pine Dale Mine -     Yarraboldy Extension,     June 2013,     43177857/KD/00     Enhance Place (2014),     Independent     Environmental Audit     [Letter], 15 June 2013     to DPE	URS was commissioned by Enhance Place to conduct an independent environmental audit in December 2012. The 2013 IEA was submitted to DPE on 15 June 2013.  2014  URS was approached by Pine Dale to conduct the 2014 IEA in July 2014. URS auditors were approved by DPE to conduct the independent environmental audit on 11 August 2014.  The audit inspection was carried out on the 28 and 29 August 2014. The audit included an assessment of compliance with PA 10_0041, EPL 4911, ML 1664, the EA and plans, strategies identified under these approvals/ licences.  This audit has been undertaken in consultation with the DPE, EPA and DTRIS-DRE. A summary of the consultation undertaken is provided in Section 3 of the main report.  Pine Dale was found non-compliant with this Condition due to timing of the 2014 independent environmental audit as the audit was not commenced until August 2014 as compared to the condition requirement of June 2014.	Non-compliant (due to timing)
PA 10_0041	5.9	Within 6 weeks of the completion 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.	Enhance Place (2014), Independent Environmental Audit [Letter], 15 June 2013 to DPE	The 2013 IEA was submitted to DPE on 15 June 2013. It is noted that the submission did not include all recommendations provided in the IEA report, only those that were related to conditions identified as non-compliant or indeterminate. The IEA also contained recommendations for continuous improvement, some of which were not addressed by Pine Dale during the audit period.	Compliant 2014/IEA/014 Recommendation Ensure all recommendations provided in the audit report are included in the response to any recommendations
PA 10_0041	5.10	ACCESS TO INFORMATION  From the end of February 2011, the Proponent shall:  a) make copies of the following publicly available on its website:  - the documents referred to in Condition 2 of Schedule 2;  - all current statutory approvals for the project;  - all approved strategies, plans and programs required under the conditions of this approval;  - the monitoring results of the project, reported in accordance with the specifications in any conditions of this approval, or any approved plans and programs;  - a complaints register, updated on a monthly basis;  - minutes of CCC meetings;  - the annual reviews of the project;  - any independent environmental audit of the project, and the Proponent's response to the recommendations in any audit;  - any other matter required by the Director-General; and b) keep this information up-to-date, to the satisfaction of the Director-General.	<ul> <li>Pine Dale website:         Accessed 3 September         2013 at 16:46hrs.</li> <li>Pine Dale Mine EPA         Compliance Data         January, February,         April, May, June, July         2014</li> <li>Pine Dale Mine EPA         Compliance Data June,         July, August,         September, October,         November, December         2013</li> </ul>	a) Access to information appears to be in compliance with the requirements of this condition. The Pine Dale website: <a href="http://www.energyaustralia.com.au/about-us/what-we-do/power-generation/pine-dale-mine/yarraboldy">http://www.energyaustralia.com.au/about-us/what-we-do/power-generation/pine-dale-mine/yarraboldy</a> [Accessed 3 September @16:46hrs] was reviewed and observed to contain the following information:  - Development and Environment Approvals - Environment Management Plans - Environmental Assessment - Community Consultation documents including minutes and agendas for meetings as well as a complaints register - Environmental Monitoring Data  CCC meeting minutes were available online for the audit period as well as the Complaints Register.  Environment Protection Licence Monitoring Data was available on the Pine Dale website for the period June 2013 through to July 2014.	Compliant



## **Green Text = Variation to EPL 4911, August 2014**

		ale Mine Independent Environmental Audit			
Environ	nental Protect	ion Licence 4911			
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
EPL 4911	A1.1	This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, feebased activity classification and the scale of the operation.  Unless otherwise further restricted by a condition of this licence, the scale at which the activities carried out must not exceed the maximum scale specified in this condition.  Scheduled Fee Based Scale	Enhance Place Pty Ltd (2014), AEMR 2013, March 2014	Operation of the Mine under PA 10_0041 began in January 2012. Coal extracted from Pine Dale is sent to Mt Piper Power Station for processing.  Pine Dale production figures for the audit period were available to URS to review on-site. The following ROM coal production was reported:  e) 2013: 291,166 tonnes of ROM coal was extracted. f) 2014: 56,211 tonnes of ROM coal was delivered to Mt Piper Power Station.  Pine Dale has been assessed as compliant with this condition as total coal produced did not exceed the limits within this condition.	Compliant
		Activity Activity  Coal works Coal works > 0 - 2,000,000 T handled			
		Mining for coal Mining for coal > 0 - 5,000,000 T produced			
EPL 4911	A2.1	The licence applies to the following premises:  Premises Details Pine Dale Mine Castlereagh Highway	-	EPL 4911 has been reviewed as it applies to the Yarraboldy Extension Area and associated Rehabilitation only. No other Scheduled Activities were observed by URS being undertaken on the site.	Noted
		Lisdale  NSW 2790  Lot 29 DP 751636, Lot 30 DP 827626, Lot 31 DP 827626  Consolidated Coal Leas 770 (Act 1973) , LM 1569, ML1578, ML375			
EPL 4911	A3.1	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.  In this condition the reference to "the licence application" includes a reference to:  a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings andTransitional) Regulation 1998; and  b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.	-	The licence application has not been reviewed as part of the audit.	Noted



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Environ	mental Protect	on Licence 4911			
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
EPL 4911	A3.2	<ul> <li>Except as expressly provided by this licence, works and activities must be carried out in accordance with the proposal contained in:</li> <li>a) The conditions of Project Approval 10_0041 as approved by the Department of Planning on 20 February 2011.</li> <li>b) Any Environmental Assessment (EA) in support of Application 10_0041, and</li> <li>c) All additional documents supplied to the EPA in relation to Application 10_0041, including Enhance Place Pty Limited's Specialist Consultant Studies Compendium (accompanying the EA) for the Pine Dale Coal Mine Yarraboldy Extension, July 2010.</li> </ul>	-	As per the 2013 IEA finding (URS, 2013) refer to Project Approval 10_0041 Compliance Register for assessment of compliance.  The EA has been reviewed under the Project Approval and has been discussed in the report.	Refer to PA Compliance Register
EPL 4911	P1.1	Location of monitoring/discharge points and areas  The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.  EPA Identi- fleation no.  Dust Monitoring  Type of Discharge Point  Dust Monitoring  Type of Discharge Point  Dust Monitoring  DDG1 at western end of Blackmans Flat residential area as per Figure A01 in Pine Dale's Air Quality Monitoring Program (DCC06/99402)  DDG3. Eastern end of Blackmans flat residential area as per Figure A01 in Pine Dale's Air Quality Monitoring Program (DCC06/99402)  DDG3. Eastern end of Blackmans flat residential area as per Figure A01 in Pine Dale's Air Quality Monitoring Program (DCC06/99402)  PM 10 and TSP Monitoring  PM 10 and TSP Monitoring  DDG3. Eastern end of Blackmans flat residential area as per Figure A01 in Pine Dale's Air Quality Monitoring Program (DCC06/99402)  DDG3. Eastern end of Blackmans flat area ser Figure A01 in Pine Dale's Air Quality Monitoring Program (DCC06/99402)  DDG4 at the northern boundary of Ressens property (Vey St. Lidsdale) as per Figure A01 in Pine Dale's Air Quality Monitoring Program (DCC06/99402)  DDG5 is to the north of Fraser's residence (Wolgan Rd, Lidsdale) as per Figure A01 in Pine Dale's Air Quality Monitoring Program (DCC06/99402)  DDG6 is to the north of Turek's residence (Wolgan Rd, Lidsdale) as per Figure A01 in Pine Dale's Air Quality Monitoring Program (DCC06/99402)  DDG6 is to the north of Turek's residence (Wolgan Rd, Lidsdale) as per Figure A01 in Pine Dale's Air Quality Monitoring Program (DCC06/99402)  Weather station located adjacent to Pine Dale Mine site offices	<ul> <li>Pine Dale Mine EPA         Compliance Data         January, February,         April, May 2014</li> <li>Pine Dale Mine EPA         Compliance Data         June, July, August,         September, October,         November, December         2013</li> <li>Pine Dale Dusts &amp;         HVAS - Cumulative         Data 2013-14.xls</li> <li>Enhance Place Pty Ltd         (2014), AEMR 2013,         March 2014</li> </ul>	Monitoring of EPA points 6, 7, 8, 9, 10, 11 and 12 and 15 had been carried out during the audit period as identified by monitoring data provided by RCA Laboratories Pty Ltd (RCA). EPA Compliance Data reports were available for 2013 and 2014 that contained results for the EPA points noted with the exception of EPA 15 that is a meteorological monitoring station. Refer to Condition L4.5 below.	Compliant
EPL 4911	P1.2	The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.	-	Noted.	Noted



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Environn	nental Protect	on Licence 4911			
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
EPL 4911	P1.3	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.  Up to August 2014  Water and land  EPA Identi-Type of Monitoring Point flication no.  Ambient water monitoring  Ambient water monitoring  Ambient water monitoring  Ambient water monitoring within Neubeck's Creek approximately 100 metres downstream of Internal bridge near site offices.  Discharge & Monitoring  Discharge to waters Discharge quality monitoring Volume monitoring  Water and land  EPA Identi-Type of Monitoring Point flication no.  Water and land  Water and land  EPA Identi-Type of Monitoring Point Type of Discharge Point  Discharge to waters Discharge quality monitoring Volume monitoring  Discharge to water monitoring Point Type of Discharge Point  Discharge to water monitoring Point Type of Discharge Point  Discharge to water monitoring Point Type of Discharge Point  Discharge to water monitoring Point Type of Discharge Point  Discharge to water monitoring Point Type of Discharge Point  Discharge to water monitoring Point Type of Discharge Point  Discharge to water monitoring Point Type of Discharge Point  Discharge to water monitoring within Neubeck's Creek upstream of the Deta Electricity flow gauging station.  Ambient water monitoring within Neubeck's Creek upstream of the Deta Electricity flow gauging station.  Discharge to water monitoring Volume monitoring Volume monitoring Point Type of Discharge quality monitoring Volume monitoring Point Type of Discharge power and the Deta Electricity flow gauging station.  Discharge to water Discharge quality monitoring Volume monitoring Point Type	Annual Return – 24     November 2012 / 23     November 2013     Pine Dale Mine     Surface Waters.xls	Water monitoring had been carried out at LDP2, LDP3 and LDP14 during the audit period as observed in the Prine Dale Mine Surface Waters Excel spread sheet.  Prior to their removal from the EPL, monitoring of LDP4, LDP5 was not triggered as discharge was not reported during the quarterly monitoring events (refer to condition M2.3 for further discuss on monitoring frequency). Discharge from LDP13 also did not occur during the audit period.  At the time of the audit water run-off was directed to drains that initially report to a small dam used for filling the water cart. Excess water from this dam drains via a surface drain to the haul road and then to a sump that flows to the underground workings. While no water was actively pumped underground water, runoff does discharge to this location.  Run off from the open cut void is assumed to be directed to the underground mine workings within the open cut pit, although the direct link to the workings was not clear and could not be located during the Site inspection. Inspections of the operations in the previous audit by URS noted mine workings widespread within the coal seam being open cut mined.	Compliant



Append	Appendix A Pine Dale Mine Independent Environmental Audit							
Environn	nental Protecti	on Licence 4911						
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
EPL 4911	L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.	<ul> <li>EPA (2013), Notice of Variation of Licence No. 4911, 25 August 2013, Notice # 1516560</li> <li>Site Inspection Summary reports – Erosion &amp; Sediment Controls – 29/08/2013, 27/09/2013, 31/10/2013, 22/11/2013, 20,12/2014, 13/02/2014, 13/02/2014, 03/03/2014, 01/05/2014, 25/06/2014, 25/06/2014, 16/07/2014</li> <li>Annual Return – 24 November 2012 / 23 November 2013</li> <li>Pine Dale Mine Surface Waters.xls</li> <li>Pine Dale Mine EPA Compliance Data January, February, April, May 2014</li> <li>Pine Dale Mine EPA Compliance Data June, July, August, September, October, November, December 2013</li> </ul>	Licence discharge points four and five (LDP4 and LDP5) were removed from the EPL including related monitoring requirements and water quality limits during the audit period (August 2013). From the data reviewed between February 2013 and August 2014 no exceedances of EPL monitoring criteria were recorded during the audit period.  It is noted that potentially dirty water (containing sediment) directed to former locations LDP4 and LDP5 discharges to mine workings. Pine Dale explained that mine workings in the area dip to the north, hence mine water would drain in seam (and workings) to the north. There are significant workings and hence stored volumes of water underground. The stored water in the workings is available for pumping to the surface at the "bong". Pine Dale view the workings as an underground water storage. Pine Dale reported that government agencies were aware of this approach to water management on-site.  Pine Dale conduct regular monitoring of surface waters outside the mine boundary as required by the EPL and Water Management Plan (URS sighted monthly RCA monitoring reports).  Pine Dale management reported that no surface discharges occurred off site from the Yarraboldy Extension during the audit period.  No water pollution incidents were recorded or reported to have occurred at the Site during the audit period.  Surface water results are provided in monthly reports prepared by RCA. It is recommended that an interpretation of these results is included to identify trends in data against trigger values identified in Pine Dale's WMP.  h) Pine Dale water management system separates 'dirty' (onsite) and 'clean' (offsite) water. Pine Dale reported that no discharges of dirty water into Neubecks Creek occurred during the audit period.  i) LDP13 is a historical discharge point to Neubecks Creek used during former mining operations at Area C.  j) At the request of the Office of Water (NOW) during the previous audit period hay bales were placed at the Neubecks creeks edge to capture potential suspended solids	Compliant Repeat Recommendation 2013/IEA009 Refer to Condition 3.27 of the PA 10_0041			



Append	Appendix A Pine Dale Mine Independent Environmental Audit					
Environr	Environmental Protection Licence 4911					
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations	
EPL 4911	L2	Concentration limits  For each monitoring/discharge point or utilisation area specified in the table\s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.  Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.  To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\s.  Water and/or Land Concentration Limits  POINT 4.5  Pollutant Units of Measure 50 percentile concentration limit   30 percentile concentration limit   10 percentile concentration limit	<ul> <li>EPA (2013), Notice of Variation of Licence No. 4911, 25 August 2013, Notice # 1516560</li> <li>Annual Return – 24 November 2012 / 23 November 2013</li> <li>Pine Dale Mine Surface Waters.xls</li> <li>Pine Dale Mine EPA Compliance Data January, February, April, May 2014</li> <li>Pine Dale Mine EPA Compliance Data June, July, August, September, October, November, December 2013</li> </ul>	Licence discharge points four and five (LDP4 and LDP5) were removed from the EPL including related monitoring requirements and water quality limits during the audit period (August 2013). From the data reviewed between February 2013 and August 2014 no exceedances of EPL monitoring criteria were recorded for LDP13 as no discharges occurred from this location.	Compliant	



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Environr	nental Protecti	on Licence 4911			
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
EPL 4911	L3.1	The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred in the column titled "Waste" and meeting the definition, if any, the column titled "Description" in the table below.  Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column title "Activity" in the table below.  Any waste received at the premises is subject to those limits of conditions, if any, referred to in relation to that waste contained the column titled "Other Limits" in the table below.  This condition does not limit any other conditions in this licence.  Code Waste Description Activity Oth Limits Specific the conditions of a exempted resource recovery particular resource recovery exemption  Under Clause 51A of the POEO (Waste) Regulation	n d d in	Pine Dale management reported that no waste had been accepted on-site during the audit period therefore this condition has not been triggered.  No waste from off-site sources was observed during the site inspection on 28 and 29 August 2014.	Not Applicable (not triggered)
EPL 4911	L4.1	Noise limits  Noise generated from the premises must not exceed the noise limits in the table below. The locations referred to in the table below are indicated on Project Approval 10_0041, Pine Dale Common Mine - Yarraboldy Extension, Appendix 1 - Schedule of Land.  Location Day Evening  LAeq (15 min) LAeq (15 min)  Residence 18, 32 & 33	oal	Refer to PA 10_0041 Condition 3.1.	Compliant
EPL 4911	L4.2	Noise from the premises during construction and removal of the amenity bund must not exceed 46 dB(A) at all residential receivers.  Note: The above noise limits do not apply at properties where licensee has a written agreement with the landowner regarding the applicable noise limit.	Condition 3.1.	Refer to PA 10_0041 Condition 3.1.	Compliant
EPL 4911	L4.3	For the purposes of condition L4.1:  a) Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays;  b) Evening is defined as the period between 6pm and 10pm	and	Noted.	Noted



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Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
EPL 4911	L4.4	Noise limits set out in condition L4.1 and L4.2 apply under all meteorological conditions except for the following:  a) Wind speeds greater than 3 metres/second at 10 metres above ground level (magl); or  b) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or  c) Stability category G temperature inversion conditions.	<ul> <li>Environmental Noise         Survey Report, 14         November 2013, RCA-         LE ref 6880-N127</li> <li>Environmental Noise         Survey Report, 10         January 2014, RCA-LE         ref 6880-N128</li> <li>Noise Monitoring Field         Sheets dated         15/04/2014,         16/04/2014,         20/01/2014,         30/10/2013 &amp;         24/06/2013</li> <li>Annual Return – 24         November 2012 / 23         November 2013</li> <li>RCA Surface Water,         Depositional Dust,         HVAs and         Meteorological         Monitoring, Community         Consultative         Committee Reports –         January 2013 to June         2014</li> </ul>	RCA reported in quarterly monitoring reports dated 2013 to 2014 that noise criteria were not exceeded due to mine operations during the audit period.  Elevated readings, above those listed in L4.1 for day/night, were recorded at locations NM4 and NM5 on one occasion during the audit period. However, these levels are not considered as exceedances because the source to receiver winds speed at 10 metre height measured at the meteorological station were greater than 3m/s and therefore the noise limits do not apply.  Refer to PA Condition 3.1 for further detail on noise monitoring results.	Compliant
EPL 4911	L4.5	<ul> <li>For the purposes of condition L4.4:</li> <li>a) Data recorded by the meteorological station identified as EPA Licence Point 15 must be used to determine meteorological conditions; and</li> <li>b) Temperature inversion conditions (stability category) are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy.</li> </ul>	<ul> <li>Pine Dale Weather November 2013.xls</li> <li>EPL 4911 - Weather Station Data July 2013</li> <li>URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00</li> </ul>	Meteorological data for the site is recorded at EPA Licence Point 15. A summary of weather station for July 2013 was available for review that showed the average sigma-theta temperature. As noted in the 2013 IEA (URS, 2013) 'following submission of the draft audit report Pine Dale and adjacent Lamberts Gully mine (who share the cost of the weather station) upgraded the weather station. The upgrade, which includes the capability to monitor sigma theta was installed on 22.05.13. The determination of temperature inversions will be undertaken using the sigma-theta method as required, although the need for determination of temperature inversions has not been required in noise survey's conducted at this site to date'.  Temperature inversion conditions are now determined by the sigma-theta method and therefore this condition has been considered compliant.	Compliant



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Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
EPL 4911	L4.6	To determine compliance:  a) with the Leq (15 minute) noise limits in conditions L4.1 and L4.2, the noise measurement equipment must be located:  i. approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or  ii. within 30 metres of a dwelling facade, but not closer than 3 metres where any dwelling on the property is situated more than 30 metres from the property boundary closest to  iii. the premises; or, where applicable within approximately 50 metres of the boundary of a National Park or Nature Reserve.  b) with the noise limits in condition L4.1 and L4.2, the noise measurement equipment must be located:  i. at the most affected point at a location where there is no dwelling at the location; or  ii. at the most affected point within an area at a location prescribed by condition L4.6(a).	<ul> <li>Environmental Noise Survey Report, 14 November 2013, RCA- LE ref 6880-N127</li> <li>Environmental Noise Survey Report, 10 January 2014, RCA-LE ref 6880-N128</li> <li>Noise Monitoring Field Sheets dated 15/04/2014, 20/01/2014, 30/10/2013 &amp; 24/06/2013</li> <li>URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00</li> <li>Enhance Place (2011), Noise Management Plan, June 2011, Ref No. 613/18</li> </ul>	Noise monitoring locations are defined in the Noise Management Plan (NMP) (NM1, NM2, NM3, NM4, NM5 and NM6).  Attended noise monitoring is undertaken to record compliance with noise criteria in condition L4.1 by RCA Laboratories. URS was unable to verify during the Site inspection that monitoring was undertaken in accordance with the requirements of this condition.  It was noted that RCA quarterly noise monitoring reports now notes that monitoring is undertaken in accordance with the EPL requirements and PA 10_0041 and states the EPL requirements for monitoring. The NMP is also referenced as a source for noise monitoring requirements.	Compliant
EPL 4911	L4.7	A non-compliance of conditions L4.1 and L4.2 will still occur where noise generated from the premises in excess of the appropriate limit is measured:  a) at a location other than an area prescribed by condition L4.6(a); and/or  b) at a point other than the most affected point at a location.	<ul> <li>RCA Environmental Noise Survey Reports, January, April, July, October 2013</li> <li>RCA Environmental Noise Survey Reports, January and April 2014</li> <li>Noise Monitoring Field Sheets dated 15/04/2014, 16/04/2014, 20/01/2014, 30/10/2013 &amp; 24/06/2013</li> <li>Annual Return – 24 November 2012 / 23 November 2013</li> </ul>	No exceedences of EPL criteria were reported by RCA to have been caused by mine noise during the audit period.  Elevated readings were recorded at location NM1 on one occasion during the reporting period; at NM2 on two occasions and NM6 on two occasions (January 2013). The recorded noise levels were within the 2dB allowable threshold as described under the NSW Industrial Noise Policy (Environmental Protection Authority, 2000), and are therefore considered compliant with the PA 10_0041 and EPL 4911.  An elevated noise reading was recorded at NM4 during Q1. It is noted that this property is owned by another mining company and is not privately owned. Similar elevated readings were recorded at locations NM4 and NM5 during the reporting period, however, these levels are not regarded as exceedances as the source to receiver winds speed at 10 metre height measured at the meteorological station were greater than 3m/s and therefore the noise limits did not apply.  Based on this data Pine Dale has been assessed as compliant with this condition.	Compliant



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EPL 4911	L4.8	For the purposes of determining the noise generated at the premises the modification factors in Section 4 of the NSW Industrial Noise Policy must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.	<ul> <li>Environmental Noise Survey Report, 14 November 2013, RCA- LE ref 6880-N127</li> <li>Environmental Noise Survey Report, 10 January 2014, RCA-LE ref 6880-N128</li> <li>URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00</li> </ul>	A description of the measurement procedure, including source coding and any post-processing of the measurement data was not provided in the quarterly noise monitoring reports. RCA reported that noise data is processed to AS 1055:1-1997 as per section 7.2 (b) the NMP.  Clause 6.6 of AS 1055.1 addresses the observation and application of modifying factors as described in Section 4 of the NSW Industrial Noise Policy. Pine Dale management reported that on no occasions during the audit period did modifying factors need to be applied therefore this condition has been assessed as Compliant during the audit period.  The previous IEA (URS, 2013) recommendation was to 'identify in future noise reporting if modifying factors were / were not applicable (Clause 6.6 of AS 1055.1). Pine Dale management noted this will be addressed in the September 2014 noise report.	Compliant Repeat Recommendation 2013/IEA/041 Identify in future noise reporting if modifying factors were / were not applicable (Clause 6.6 of AS 1055.1).		
EPL 4911	L5.1	Blasting Blasting at the premises is limited to 1 blast on each day on which blasting is permitted, unless an additional blast is required following a blast misfire.	Refer to PA 10_0041 Condition 3.10.	Refer to PA 10_0041 Condition 3.10.	Compliant		
EPL 4911	L5.2	Blasting operations at the premises may only take place between 10:00am and 3:00pm Monday to Friday. (Where compelling safety reasons exist, the Authority may permit a blast to occur outside the above mentioned hours. Prior written (or facsimile) notification of any such blast must be made to the Authority).	Refer to PA 10_0041 Condition 3.9.	Refer to PA 10_0041 Condition 3.9.	Compliant		
EPL 4911	L5.3	The airblast overpressure level from blasting operations at the premises must not exceed115dB (Lin Peak) at any noise sensitive locations for more than 5% of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Refer to PA 10_0041 Condition 3.8.	Refer to PA 10_0041 Condition 3.8.	Compliant		
EPL 4911	L5.4	The airblast overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Blast Register 2013/2014 Annual Return – 24 November 2012 / 23 November 2013 RCA Surface Water, Depositional Dust, HVAs and Meteorological Monitoring, Community Consultative Committee Reports – January 2013 to June 2014	Pine Dale conducted 36 blasts from 10 January 2013 to 7 February 2014. During this period no exceedances were recorded.  Air blast overpressure and ground vibration results for 2013 were within the relevant criteria of the 95% limit of <115dB (Lin. Peak) and <5 mm/s and the 100% <115dB (Lin. Peak) <10 mm/s limit of at the monitoring sites. Blasts on site are carried out by Downer EDI Mining – Blasting Services Pty Ltd. No blasting has been undertaken at the Site since March 2014 when mining operations ceased.  Pine Dale is compliant with this condition as no exceedance of 120dB was reported during the audit period.	Compliant		



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Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations		
EPL 4911	L5.5	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/sec at any noise sensitive locations for more than 5% of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Refer to PA 10_0041 Condition 3.8.	Refer to PA 10_0041 Condition 3.8.	Compliant		
EPL 4911	L5.6	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/sec at any time at any sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.  Note: 1. The airblast overpressure and ground vibration levels in conditions L5.3 to L5.6 do not apply at noise sensitive locations that are owned by the licensee or that are subject to a private agreement, relating to airblast overpressure and ground vibration levels, between the licensee and the land owner.  2. "Noise sensitive locations" include buildings used as a residence, hospital, school, childcare centre, place of public worship and nursing home. A noise sensitive location includes the land within 30 metres of the building.	Refer to PA 10_0041 Condition 3.8.	Refer to PA 10_0041 Condition 3.8.	Compliant		
EPL 4911	L6.1	Hours of operation Activities at the premises may only be carried on between the hours of; Monday to Saturday 7:00am to 6:00pm for mining and all associated activities 7:00am to 8:00pm for haulage and transportation 7:00am to 10:00pm for equipment maintenance activities Sunday 9.00am to 4.00pm for equipment maintenance activities. And at no time on Public Holidays	<ul> <li>Enhance Place Pty Ltd (2014), AEMR 2013, March 2014</li> <li>Complaints Register 2012- 2014</li> <li>Environmental Noise Survey Report, 14 November 2013, RCA-LE ref 6880-N127</li> <li>Environmental Noise Survey Report, 10 January 2014, RCA-LE ref 6880-N128</li> </ul>	Pine Dale management reported that prior to the Site going under care and maintenance activities only operated during the hours prescribed in this condition.  One noise compliant was received concerning a reversing alarm from a security vehicle on Christmas Eve 2013; however, no time period was provided.  The Site was under care and maintenance at the time of the Site inspection and was operating within the hours stated in this condition.  As RCA reports identified that noise mining operations were not carried out prior to 7am and Site observations were consistent with the requirements of the condition Pine Dale have been considered to be compliant with this condition.	Compliant		
EPL 4911	L7.1	Potentially offensive odour  No condition of this licence identifies a potentially offensive odour for the purposes of section129 of the Protection of the Environment Operations Act 1997.  Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.	Site observations     Complaints Register     2012- 2014  Refer to PA 10_0041 Condition 3.16.	No potentially offensive odours were noted during the site inspection on 28 and 29 August 2014.  No complaints were recorded during the audit period concerning odour.  Refer to PA 10_0041 Condition 3.16.	Compliant		



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Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
EPL 4911	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.	<ul> <li>Site observations</li> <li>Annual Return – 24 November 2012 / 23 November 2013</li> <li>Site Inspection Summary reports – Erosion &amp; Sediment Controls – 29/08/2013, 27/09/2013, 31/10/2013, 22/11/2013, 20,12/2013, 30/01/2014, 13/02/2014, 03/03/2014, 01/05/2014, 29/05/2014, 25/06/2014, 25/06/2014</li> <li>URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00</li> </ul>	Dukes Mining were contracted to maintain and manage equipment and vehicles when the Site was operational.  Dukes Mining manage waste on-site through implementation of the Waste Management Plan, which has been reviewed in PA 10_0041 Conditions 3.39 and 3.40. Pine Dale management reported that waste is transported off-site by SITA during care and maintenance. A full assessment of transportation of waste has not been carried out.  Refer to PA CoA 3.39 and 3.40 for recommendations for waste management at Pine Dale.  A selection of sediment erosion control inspection records were reviewed for the audit period.  The Annual Return for the period November 2012 to November 2013 noted that there were no noncompliances with the EPL during the reporting period. Pine Dale management reported that no incidents occurred during the audit period. Pine Dale has been assessed as generally in compliance with this condition based on observations at the time of the Site inspection and Pine Dale's record of no incidents on-site.  The previous IEA (URS, 2013) recommended that Pine Dale 'update the induction and bi-annual refresher training to include training of the storage, handling and disposal of materials and waste'. This recommendation had not been completed at the time of the audit.	Compliant 2014/IEA/001 Recommendation Refer to PA 10_0041 Condition 3.39 Repeat Recommendation 2013/IEA/042 Update the induction and bi-annual refresher training to include training of the storage, handling and disposal of materials and waste.
EPL 4911	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.	-	Refer to PA 10_0041 Condition 2.11.	Compliant
EPL 4911	O3.1	Dust  The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	-	Refer to PA 10_0041Condition 3.18.	Compliant
EPL 4911	M1.1	Monitoring records  The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	-	Noted.	Noted



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Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations		
EPL 4911	M1.2	All records required to be kept by this licence must be:  a) in a legible form, or in a form that can readily be reduced to a legible form;  b) kept for at least 4 years after the monitoring or event to which they relate took place; and  c) produced in a legible form to any authorised officer of the EPA who asks to see them.	<ul> <li>Pine Dale Mine website.</li> <li>Pine Dale Dusts &amp; HVAS - Cumulative Data 2013-14</li> <li>Pine Dale Mine Surface Waters.xls</li> <li>Pine Dale Weather November 2013.xls</li> <li>Pine Dale Groundwaters - Cumulative Data.xls</li> <li>Noise Monitoring Field Sheets dated 15/04/2014, 16/04/2014, 20/01/2013 &amp; 24/06/2013</li> <li>RCA Surface Water, Depositional Dust, HVAs and Meteorological Monitoring, Community Consultative Committee Reports – January 2013 to June 2014</li> </ul>	Monitoring records for surface water, groundwater, noise and air quality for Pine Dale were sighted by the auditors dating back to January 2013. The previous IEA (URS, 2013) noted that data was reviewed from 20 February 2011 to 31 January 2012.  RCA reports included sampling field sheets as appendices that were legible.  Environmental monitoring data was available on the Pine Dale website dating back to June 2013.  Data was maintained in Microsoft Excel format.  Pine Dale management indicated that monitoring results would be made available through RCA if requested by the EPA; however, no such requests were made during the audit period.	Compliant		



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Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
EPL 4911	M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence:  a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	<ul> <li>Pine Dale Dusts &amp; HVAS - Cumulative Data 2013-14</li> <li>Pine Dale Mine Surface Waters</li> <li>Noise Monitoring Field Sheets dated 15/04/2014, 16/04/2014, 20/01/2013 &amp; 24/06/2013</li> <li>Pine Dale Weather November 2013</li> <li>Pine Dale Groundwaters - Cumulative Data</li> <li>RCA Surface Water, Depositional Dust, HVAs and Meteorological Monitoring, Community Consultative Committee Reports – January 2013 to June 2014</li> </ul>	Monitoring records for surface water, groundwater, noise and air quality for Pine Dale were sighted by the auditors. Monitoring data was maintained generally in accordance with this condition.  The name of the person who collected the sample was not stated on the monthly stream health monitoring forms dated November 2013 and noise samples. The name of the technician that took the sample was not evident on the surface water, groundwater Excel spread sheets. Water samples are collected by RCA.	Recommendation 2013/IEA044 Update the Excel monitoring data record sheet for surface water, groundwater and noise to include a column to record who took the sample.



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EPL 4911	M2.1 / M2.2	Requirement to monitor concentration of pollutants discharged  For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns.  Refer to Tables in EPL 4911.	<ul> <li>Pine Dale Dusts &amp; HVAS - Cumulative Data 2013-14.xls</li> <li>RCA (2014), Surface Water, Depositional Dust, HVAS &amp; Meteorological Monitoring, Prepared for Pine Dale Mine Community Consultative Committee – January, February, March, April, May, June</li> <li>RCA (2013), Surface Water, Depositional Dust, HVAS &amp; Meteorological Monitoring, Prepared for Pine Dale Mine Community Consultative Committee – January, through to December</li> </ul>	Dust and HVAS monitoring data was reviewed from January 2012 to 27 July 2014. TSP and PM10 was sampled weekly and depositional dust was sampled monthly.  On two occasions depositional dust was not recorded due to excess bird droppings (D5 in October 2013) and broken crucible/funnel (D6 in December 2013).  As reported in monthly RCA reports HVAS was carried out in conformance with AS/NZS 3580.9.3:2003 and AS/NZS 3580.1.1:2007. As reported in monthly RCA dust reports depositional dust sampling was carried out in conformance with AS/NZS 3580.10.1:2003 and AS/NZS 3580.1.1:2007.  Based on a review of air quality monitoring data provided above Pine Dale has been considered compliant with this condition.	Compliant			
EPL 4911	M2.3	Water and/ or Land Monitoring Requirements  Refer to Tables in EPL 4911.	<ul> <li>EPA (2013), Notice of Variation of Licence No. 4911, 25 August 2013, Notice # 1516560</li> <li>Pine Dale Mine Surface Waters.xls</li> <li>URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00</li> </ul>	The previous IEA (URS, 2013) noted that 'to clarify the intentions of this condition URS spoke with the EPA on the 13.02.13. URS identified that runoff from the site is directed via the water management system (sediment dam, surface drains and the haul road) to the underground workings. Therefore during most rainfall events a discharge to points 4 and 5 is likely to occur. The influence of this discharge to sampling frequency could not be clarified. Therefore URS recommends Pine Dale seek clarification, with the EPA, of their responsibility to monitor discharges to LDPs 4 and 5, which are not a direct result of pumping'.  Following the previous IEA, licence discharge points four and five (LDP4 and LDP5) were removed from the EPL including related monitoring requirements and water quality limits during the audit period (August 2013). No discharges were recorded from these LDPs during the audit period prior to removal from the EPL.  The frequency of monitoring at LDP13 (Neubecks Creek) is "quarterly during discharge". Site discharge has been interpreted by Pine Dale as active discharge i.e. pumping of water to the former discharge points. From the data reviewed between February 2013 and August 2014 no exceedances of EPL monitoring criteria were recorded during the audit period for LDP13 as no discharges occurred from this location.	Compliant			



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Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
EPL 4911	M2.4	For the purposes of the table(s) above Special Frequency 1 means the collection of samples from licence monitoring points 2, 3 and 14 daily during discharge events from licence discharge point 13.	<ul> <li>Pine Dale Mine EPA         Compliance Data         January, February,         April, May 2014</li> <li>Pine Dale Mine EPA         Compliance Data         June, July, August,         September, October,         November, December         2013</li> <li>Pine Dale Mine         Surface Waters.xls</li> </ul>	Pine Dale management reported that no discharges to LDP13 occurred during the audit period therefore monitoring of pollutants at Special Frequency 1 has not been triggered.	Not Applicable (Not triggered)			
EPL 4911	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.  Note: The Protection of the Environment Operations (Clean Air) Regulation 2010 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".	RCA (2014), Surface     Water, Depositional     Dust, HVAS &     Meteorological     Monitoring, Prepared     for Pine Dale Mine     Community     Consultative     Committee – January,     February, March, April,     May, June     RCA (2013), Surface     Water, Depositional     Dust, HVAS &     Meteorological     Monitoring, Prepared     for Pine Dale Mine     Community     Consultative     Committee – January,     through to December	As identified in monthly Groundwater, Surface water, Depositional Dust and Meteorological Monitoring Reports prepared by RCA depositional dust gauges at Pine Dale conform to AS/NZS 3580.9.3:2003 and AS/NZS 3580.1.1:2007.  A full assessment of requirements under the POEO (Clean Air) Regulation has not been undertaken.	Compliant			
EPL 4911	M3.2	Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.	Pine Dale Mine Surface Waters.xls Annual Return – 24 November 2012 / 23 November 2013  •	Pine Dale management reported that no discharges from Site occurred during the audit period therefore this condition has not been triggered.	Not Applicable (Not triggered)			
EPL 4911	M4.1	Weather monitoring For each monitoring point specified in the table below the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns.  Refer to Tables in EPL 4911.	Site observations     Pine Dale Weather     November 2013	During the Site inspection the weather station was sighted and observed to be operational. This included continuous recording of air temperature, wind speed and direction, sigma-theta, rainfall and relative humidity. Reports are recorded in 10 minute intervals. An example Excel spread sheet for November 2013 was provided to the auditors for review that contained the information required by this condition.	Compliant			



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Environm	nental Protecti	on Licence 4911					
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations		
EPL 4911	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.	<ul> <li>Complaints Register 2012- 2014</li> <li>Pine Dale Mine Complaints Records (21/02/2013, 11/04/2013, 16/05/2013, 21/06/2013)</li> <li>DTRIS-DRE (2014-B), Pine Dale Complaint Received by DTIRIS - Please respond [E-mail] Message to Enhance Place Pty Ltd. Sent Monday 3 March 2014, 4:36pm.</li> <li>Pine Dale website: Accessed 3 September 2013 at 18:06hrs.</li> <li>CCC, Draft Minutes, 27 June 2013.</li> </ul>	Complaints can be made via two phone numbers - 02 6355 1761 or 02 6355 7893. The 02 6355 7893 number is advertised on the Pine Dale website.  Complaints for the audit period were maintained in the complaints register that was available on the Pine Dale website: (http://www.energyaustralia.com.au/about-us/what-we-do/power-generation/pine-dale-mine/yarraboldy)  It is noted that DTRIS-DRE received a compliant via email on 28 February 2014 from a community member. The complaint was passed onto Pine Dale via email on 3 March 2014. A review of the complaints register for February/March 2014 did not include the DTRIS-DRE reported complaint or actions taken (refer to Section 6.2 of the main report). Draft minutes for the CCC meeting held on 27 June 2013 noted that a letter from was received by the Chairman on the morning of the meeting and that due to the late submission, the Committee was not in a position to consider the letter in detail at the meeting. It was determined that the Company would draft a response and liaise with the Chairman to ensure the queries where adequately dealt with following the meeting. A record of the letter did not appear in the 2013 Complaints Register.  A selection of complaint records for 2013 were available for review. The records correlated with the 2013 complaints register.  Given the register appeared to be up-to-date with the exception of the DTRIS-DRE complaint this condition was found to be compliant.	Compliant 2014/IEA/015 Recommendation Review complaints received from sources other than that the complaints records and ensure these are entered into the complaints register and that follow-up action is documented. Provide training on complaints procedures to ensure complaints are recorded and actioned.		
EPL 4911	M5.2	<ul> <li>The record must include details of the following:</li> <li>a) the date and time of the complaint;</li> <li>b) the method by which the complaint was made;</li> <li>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;</li> <li>d) the nature of the complaint;</li> <li>e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and</li> <li>f) if no action was taken by the licensee, the reasons why no action was taken.</li> </ul>	• Pine Dale Mine Complaints Records (21/02/2013, 11/04/2013, 16/05/2013, 21/06/2013)	The 'Pine Dale Coal Mine Complaint Record' sheet was reviewed by the auditors. The form requires Pine Dale to record the details of a complaint in accordance with this condition.  URS noted that for the four complaints reviewed (21/02/2013, 11/04/2013, 16/05/2013 and 21/06/2013) no details of corrective actions were recorded. Typically the 'No' corrective action required box had been ticked. In some instances no action was required or justified or a reactionary action such as placement of noise monitoring equipment was noted. The root cause of the complaint (i.e. why a noise, dust or blast complaint had been made) did not appear to be fully investigated and corrective actions applied.  In general records of complaints appear to have been recorded in compliance with this condition.	Compliant 2014/IEA/016 Recommendation Complaint records must be completed in their entirety. In particular corrective actions carried out and a root cause description to minimise further occurrences should be included.		
EPL 4911	M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Complaints Register 2012- 2014	Pine Dale management reported that complaint records are maintained for seven years. URS sighted records from 2008 prior to the PA 10_0041 (20.02.11) therefore Pine Dale is compliant with this condition. URS could not verify that 'all' records were kept.	Compliant		
EPL 4911	M5.4	The record must be produced to any authorised officer of the EPA who asks to see them.	<ul> <li>Complaints Register 2012- 2014</li> <li>Pine Dale Mine Complaints Records (21/02/2013, 11/04/2013, 16/05/2013, 21/06/2013)</li> </ul>	Complaints were received via the Site's telephone complaints line (02 6355 1761).  Complaints are maintained in the complaints register.  Pine Dale management reported that an authorised officer of the EPA has not requested to view the complaints records. The EPA conducted a Site visit on 7 August 2014.	Not Applicable (Not triggered)		



Append	dix A Pine D	ale Mine Independent Environmental Audit			
Environn	nental Protect	ion Licence 4911			
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
EPL 4911	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.	<ul> <li>Pine Dale website:     Accessed 3     September 2013 at     18:06hrs.Site</li> <li>Site observations</li> </ul>	Complaints can be made via two phone numbers - 02 6355 1761 or 02 6355 7893. The 02 6355 7893 number is advertised on the Pine Dale website. Both numbers report to the Site office and are forwarded to the Mine manger's mobile phone. URS consider that the two telephone numbers could make it confusing to the community as to which number to call.  The auditors noted that the complaints line was operational at the time of the Site inspection.  Refer to Section 6.2 of the Report for further information concerning complaints.	Compliant
EPL 4911	M6.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	<ul> <li>Pine Dale website:     Accessed 3     September 2013 at     18:06hrs.Site</li> <li>Site observations</li> </ul>	Complaints can be made via two phone numbers - 02 6355 1761 or 02 6355 7893. The 02 6355 7893 number is advertised on the Pine Dale website. Both numbers report to the Site office and are forwarded to the Mine manger's mobile phone. URS consider that the two telephone numbers could be confusing to the community and that a single number would be more effective.  The complaints register(s) were advertised on the Pine Dale website as required by the EMS.  The Pine Dale website states that 'Should you have an enquiry regarding the Pine Dale Mine'. URS consider that it is not clear that phone number can also be used to lodge a complaint with the Site.	Compliant 2014/IEA/017 Recommendation Consolidate the telephone complaints phone number into one number and change the descriptor on the website to 'environmental and complaints hotline'.
EPL 4911	M6.3	The preceding two conditions do not apply until 3 months after:  a) the date of the issue of this licence or  b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.	-	Noted.	Noted
EPL 4911	M7.1	Requirement to monitor volume or mass  For each discharge point or utilisation area specified below, the licensee must monitor:  a) the volume of liquids discharged to water or applied to the area;  b) the mass of solids applied to the area;  c) the mass of pollutants emitted to the air;  at the frequency and using the method and units of measure, specified below.  Frequency Unit of Measure Sampling Method  Daily during any Kilolitres per day discharge	Pine Dale Mine Surface Waters.xls Pine Dale Groundwaters - Cumulative Data.xls RCA Surface Water, Depositional Dust, HVAs and Meteorological Monitoring, Community Consultative Committee Reports – January 2013 to June 2014	From the data reviewed between February 2013 and August 2014 no discharges occurred from LDP13 and therefore the requirements of this condition have not been triggered.	Not Applicable (Not triggered)



Append	Appendix A Pine Dale Mine Independent Environmental Audit						
Environm	nental Protecti	ion Licence 4911					
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations		
EPL 4911	M8.1	Blasting To determine compliance with conditions L5.3 to L5.6:  a) Airblast overpressure and ground vibration levels must be measured and electronically recorded at the nearest or most affected residence or sensitive noise location such as a school or hospital that is most likely to be affected by the blast - for all blasts carried out in or on the premises; and Instrumentation used to measure the airblast overpressure and ground vibration levels must meet the requirements of Australian Standard AS 2187.2-2006.	RCA Surface Water,     Depositional Dust,     HVAs and     Meteorological     Monitoring, Community     Consultative     Committee Reports –     January 2013 to June     2014     Enhance Place (2011),     Blast management     Plan, February 2011,     Ref: 613/19	No blasting has been undertaken at the Site since March 2014 when mining operations ceased.  Pine Dale management reported that blast monitoring was carried out at Blackman's Flat opposite Pine Dale. Blackman's Flat is a residential area with no schools or hospitals.  Monitoring was carried out by Downer EDI Blasting at two locations in Blackmans Flat that were chosen on the basis of being representative of the most affected residences.  Section 5 (p.14) of the Blast Management Plan (BMP) states that 'airblast pressure measurements will be undertaken in accordance with AS 2187.2:2006'. URS has not completed a full assessment of compliance against this standard. Given the care and maintenance status of the Site no blast personnel were present onsite.  Based on the above discussion, and discussion supporting compliance to the PA 10_0041, Pine Dale is considered to be compliant with this condition.	Compliant		
EPL 4911	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.  At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.  An Annual Return must be prepared in respect of each reporting	Annual Return – 24     November 2012 / 23     November 2013      Annual Return – 24	The Annual Return for the reporting period 24 November 2012 / 23 November 2013 was submitted as required by this condition.  The document included a:  - Statement of Compliance;  - Complaints Summary; and  - Monitoring summary.  The Annual Return for the reporting period 24 November 2012 / 23 November 2013 was submitted as	Compliant		
4911		period, except as provided below.  Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.	November 2012 / 23 November 2013	required by this condition.	Compilation		
EPL 4911	R1.3	<ul> <li>Where this licence is transferred from the licensee to a new licensee:</li> <li>a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and</li> <li>b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.</li> <li>Note: An application to transfer a licence must be made in the approved form for this purpose.</li> </ul>	-	EPL 4911 was not transferred to a new licensee during the audit period; therefore this condition was not applicable.	Not Applicable (Not triggered)		
EPL 4911	R1.4	<ul> <li>Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:</li> <li>a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or</li> <li>b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.</li> </ul>	-	EPL 4911 was not surrendered during the audit period; therefore this condition was not applicable.	Not Applicable (Not triggered)		



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Environr	mental Protect	ion Licence 4911			
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
EPL 4911	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 or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	<ul> <li>Annual Return – 24 November 2012 / 23 November 2013</li> <li>EPA website: www.epa.nsw.gov.a u [Accessed 10/09/2014] at 10:05hrs.</li> </ul>	The Annual Return for the reporting period 24 November 2012 / 23 November 2013 was received by the EPA on the 20 January 2014. This was within the 60 days (57) required by this condition.	Compliant
EPL 4911	R1.6	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	<ul> <li>Annual Return – 24</li> <li>November 2011 / 23</li> <li>November 2012</li> </ul>	The Annual Return for 2012 /2013 was sighted as required under the reporting period as defined by EPL 4911.  Pine Dale management reported that Annual Returns were available for four years.	Compliant
EPL 4911	R1.7	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.	<ul> <li>Annual Return – 24</li> <li>November 2012 / 23</li> <li>November 2013</li> </ul>	The 2012 / 2013 Annual Return was signed by the licence holder (Director) therefore Pine Dale has been assessed as compliant with this condition.	Compliant
EPL 4911	R1.8	A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence.	-	Noted.	Noted
EPL 4911	R2.1	Notification of environmental harm  Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.  Notifications must be made by telephoning the Environment Line service on 131 555.	<ul> <li>Annual Return – 24         November 2012 / 23     </li> <li>RCA Surface Water,         Depositional Dust,         HVAs and         Meteorological         Monitoring, Community         Consultative         Committee Reports –         January 2013 to June         2014     </li> </ul>	No incidents of environmental harm were reported by Pine Dale during the audit period.  During the audit period no exceedences of EPL reporting criteria were exceeded therefore this condition has not been triggered during the audit period.	Not Applicable (Not triggered)
EPL 4911	R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.	-	Pine Dale reported that no incidents of environmental harm occurred during the audit period therefore this condition has not been triggered during the audit period.	Not Applicable (Not triggered)



Append	opendix A Pine Dale Mine Independent Environmental Audit					
Environr	nental Protect	ion Licence 4911				
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations	
EPL 4911	R3.1	Written report Where an authorised officer of the EPA suspects on reasonable grounds that: where this licence applies to premises, an event has occurred at the premises; or 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.	-	No requests were made by an EPA authorised officer during the audit period therefore this condition has not been triggered during the audit period.	Not Applicable (Not triggered)	
EPL 4911	R3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.	-	No requests were made by the EPA during the audit period therefore this this condition has not been triggered during the audit period.	Not Applicable (Not triggered)	
EPL 4911	R3.3	The request may require a report which includes any or all of the following information:  a) the cause, time and duration of the event; b) the type, volume and concentration of every pollutant discharged as a result of the event; c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable toobtain that information after making reasonable effort; e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants; f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and g) any other relevant matters.	-	No requests were made by the EPA during the audit period therefore this this condition has not been triggered during the audit period.	Not Applicable (Not triggered)	
EPL 4911	R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	-	No requests were made by the EPA during the audit period therefore this this condition has not been triggered during the audit period.	Not Applicable (Not triggered)	
EPL 4911	G1.1	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.	Site observation	A copy of the EPL was sighted by URS at Pine Dale during the Site inspection on the 28 and 29 August 2014.	Compliant	
EPL 4911	G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	-	Pine Dale reported that no requests were made by an EPA authorised officer during the audit period to view the EPL.  Pine Dale management reported that the EPL would be made available to an authorised officer of the EPA on request. As no requests were made this condition has been assessed as not applicable.	Not Applicable (Not triggered)	
EPL 4911	G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	-	The EPL is kept in the Site office for employees to view if requested.	Compliant	



Appen	dix A Pine C	Dale Mine Independent Environmental Audit					
Environi	vironmental Protection Licence 4911  Compliance Control Compliance Control Company Com						
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations		
EPL 4911	U1.1	Particulate Matter Control Best Practice Implementation – Wheel Generated The Licensee must achieve and maintain a dust control efficiency of 80% or more on all active haul roads. Control efficiency is calculated as: CE = E (uncontrolled) - E (controlled) x 100 E (uncontrolled) Where E = the emission rate of the activity	EPL 4911, Special     Condition 9, E1 Coal     Mine Particulate Matter     Control Pollution     Reduction Program	This requirement of this Condition is not trigged until six months post the commencement of activities within the Pine Dale Stage 2 Extension as detailed Condition E1.1 of EPL 4911.	Not Applicable (Not triggered)		
EPL 4911	U1.2	The Licensee must prepare a Monitoring Program to assess its compliance with Condition U1.1 under varying meteorological conditions. The Monitoring Program must detail the following:  - parameters to be monitored;  - methods to be used to monitor each parameter;  - locations where each parameter will be monitored;  - frequency at which each parameter will be monitored;  - Key Performance Indicators that will be used to determine compliance with Condition U1.1; and  - detailed justification for each parameter and Key Performance Indicator selected.  As a guide, the EPA anticipates that the following parameters will be monitored:  - moisture and silt contents of haul roads;  - frequency, duration, rate and quantity of water applied to haul roads;  - frequency, duration, rate and quantity of suppressant applied to haul roads in comparison to manufacturer's specifications;  - vehicle kilometres travelled;  - haul truck weight;  - haul truck weight;  - haul truck speed;  - number of vehicle movements;  - meteorological conditions; and  - dust levels on haul roads.  - The Monitoring Program must be submitted by the Licensee to the Environment Protection Authority Regional Manager Central West, at PO Box 1388, BATHURST NSW 2795.  - The EPA intends to require the licensee to implement the Monitoring Program once it is approved by the EPA.	EPL 4911, Special     Condition 9, E1 Coal     Mine Particulate Matter     Control Pollution     Reduction Program	This requirement of this Condition is not trigged until six months post the commencement of activities within the Pine Dale Stage 2 Extension as detailed Condition E1.1 of EPL 4911.	Not Applicable (Not triggered)		
EPL 4911	U1.3	The Licensee must submit a written report to the EPA providing the results of the Monitoring Program. The report must include an assessment of the dust control effectiveness, dust levels and the Licensee's compliance with Condition U1.1. The report must be submitted by the Licensee to the Environment Protection Authority Regional Manager Central West, at PO Box 1388 BATHURST NSW 2795.	EPL 4911, Special     Condition 9, E1 Coal     Mine Particulate Matter     Control Pollution     Reduction Program	This requirement of this Condition is not trigged until six months post the commencement of activities within the Pine Dale Stage 2 Extension as detailed Condition E1.1 of EPL 4911.	Not Applicable (Not triggered)		



Appen	dix A Pine C	Pale Mine Independent Environmental Audit			
Environi	nental Protect	ion Licence 4911			
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
EPL 4911	U2.1	Particulate Matter Control Best Practice Implementation – Disturbing and Handling Overburden under Adverse Weather Conditions  The licensee must alter or cease the use of equipment on overburden and the loading and dumping of overburden during adverse weather conditions to minimise the generation of particulate matter.	EPL 4911, Special     Condition 9, E1 Coal     Mine Particulate Matter     Control Pollution     Reduction Program	This requirement of this Condition is not trigged until six months post the commencement of activities within the Pine Dale Stage 2 Extension as detailed Condition E1.1 of EPL 4911.	Not Applicable (Not triggered)
EPL 4911	U2.2	The Licensee must prepare a Monitoring Program to assess its compliance with Condition U2.1. The Monitoring Program must detail the following:  - parameters to be monitored; - methods to be used to monitor each parameter; - locations where each parameter will be monitored; - frequency at which each parameter will be monitored; - way in which changes to operational activities will be documented; and - Key Performance Indicators that will be used to determine compliance with Condition U2.1.  As a guide, the EPA anticipates that the following parameters will be monitored: - wind speed and direction; - temperature; - rainfall/humidity; - evaporation rate; - solar radiation; - operational activities; and - dust levels.  The Monitoring Program must be submitted by the Licensee to the Environment Protection Authority Regional Manager Central West, at PO Box 1388 BATHURST NSW 2795.  The EPA intends to require the licensee to implement the Monitoring Program once it is approved by the EPA.	EPL 4911, Special     Condition 9, E1 Coal     Mine Particulate Matter     Control Pollution     Reduction Program	This requirement of this Condition is not trigged until six months post the commencement of activities within the Pine Dale Stage 2 Extension as detailed Condition E1.1 of EPL 4911.	Not Applicable (Not triggered)
EPL 4911	U2.3	The Licensee must submit a written report to the EPA providing the results of the Monitoring Program.  The report must detail the following:  - weather conditions during which activities were ceased or altered;  - changes made to operational activities as a result of adverse weather; and  - resultant dust levels when activities were altered or ceased.  The report must be submitted by the Licensee to the Environment Protection Authority Regional Manager Central West, at PO Box 1388 BATHURST NSW 2795.	EPL 4911, Special Condition 9, E1 Coal Mine Particulate Matter Control Pollution Reduction Program	This requirement of this Condition is not trigged until six months post the commencement of activities within the Pine Dale Stage 2 Extension as detailed Condition E1.1 of EPL 4911.	Not Applicable (Not triggered)



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Environm	ental Protecti	on Licence 4911						
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
EPL 4911	E1.1	Coal Mine Particulate Matter Control Pollution Reduction Program  The licensee is not required to comply with the requirements of conditions U1 and U2 until six (6) months post the commencement of activities within the Pine Dale Stage 2 Extension.	-	Noted	Noted			



Append	ix A Pine I	Dale Mine Independent Environmental Audit			
Mining Le	ease 1664 and	d Mining Lease 1569			
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
ML 1664 & 1569	1	<ul> <li>Notice to Landholders</li> <li>a) 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.</li> <li>b) 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.</li> </ul>	Mining Lease 1664	ML 1664 was granted on the 10 January 2012. ML 1569 was granted on 4 July 2007. It is interpreted that this condition applies to landholder on land to which ML 1664 and 1569 occupies. Enhance Place are the sole occupant of ML 1664 and ML 1569 therefore it is understood that Pine Dale have no requirement to notify landholders other than themselves, therefore Pine Dale is considered compliant with this condition.	Compliant
ML 1664	2(a)	Environmental Harm  The lease holder must implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or rehabilitation of any activities under this lease.	<ul> <li>Annual Return – 24         November 2012 / 23         November 2013</li> <li>Pine Dale Mine Surface         Waters.xls</li> <li>Pine Dale Mine EPA         Compliance Data         January, February,         April, May 2014</li> <li>Pine Dale Mine EPA         Compliance Data June,         July, August,         September, October,         November, December         2013</li> <li>Department of         Environment (2014),         Enhance Place Pty Ltd -         Pine Dale Coal Mine -         EPBC 2011-6016         Particular Matter [Email]         Message to Enhance         Place Pty Ltd. Sent         Wednesday 27 August         2014, 10:19am.</li> <li>Enhance Place Pty Itd         (2013-B), Enhance         Place Pty Itd; Pine Dale         Coal Mine EPBC 2011-         6016: Stage 1         Yarraboldy Extension –         particular manner         Decision [Letter], 6         December 2013.</li> </ul>	A review of environmental management at Pine Dale over the audit period has been conducted in the compliance assessment of the mine's PA 10_0041, EPL 4911, ML1664 and ML 1569 as reported in the attached compliance registers.  Pine Dale reported that no exceedences of air, noise, blasting and water quality criteria within the EPL were exceeded.  During the audit period Pine Dale encroached into a 50 m buffer zone for the <i>Thesium Australe</i> (Austral Toadflax) plant setup as a requirement of the Environment Protection and Biodiversity Conservation (EPBC) Approval 2011-6016 issued under the Environment Protection and Biodiversity Conservation Act 1999 (Cth). Pine Dale wrote to the NSW Department of Environment on 6 December 2013 (Enhance Place, 2013-B) summarising the situation and the mitigation measures it employed that included obtaining expert advice to identify any potential impacts to the plant population following the encroachment. DoE responded to Pine Dale on 27 August 2014 via email and noted that whilst a contravention of occurred as works were undertaken inside the 50 m buffer contrary EPBC Approval 2011-6016 the department would not be taking any further action concerning the encroachment (DoE, 2014). Refer to Section 8.8 of the report for further information concerning the Austral Toadflax incident.  Water quality data on identified isolated occasions where criteria defined in the WMP was exceeded. Actions taken to manage these exceedences were not carried out as described in the WMP but were reviewed in the 2011 AEMR in accordance with past trigger criteria. These exceedences are discussed in detail in PA CoA 3.27.  Other than this example, Pine Dale has been assessed as compliant with this condition. Overall, it is considered that the intent of this condition is met.	Compliant Recommendation: Refer to recommendations in PA CoA 3.27.



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Mining L	Mining Lease 1664 and Mining Lease 1569							
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
ML 1664	2(b)	i. environment means components of the earth, including:  a. land, air and water, and  b. any layer of the atmosphere, and  c. any organic or inorganic matter and any living organism, and  d. human-made or modified structures and areas, and includes interacting natural ecosystems that include components referred to in paragraphs (A-C).  ii. harm to the environment includes all direct or indirect alteration of the environment that has the effect of degrading the environment and, without limiting the generality of the above, includes any act or omission that results in pollution, contributes to the extinction or degradation of any threatened species, populations or ecological communities and their habitats and causes impacts to places, objects and features of significance to Aboriginal people.	-	Refer to ML 1664 and ML 1569 Condition 2(a).	-			



Appendix A Pine	Dale Mine Independent Environmental Audit			
Mining Lease 1664 a	nd Mining Lease 1569			
Title Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
ML 1569 2	Mining, Rehabilitation, Environmental Management Process (MREMP) - Mining Operations Plan (MOP)  1. Mining operations, including mining purposes, must be conducted in accordance with a Mining Operations Plan (the Plan) satisfactory to the Director-General. The Plan together with environmental conditions of development consent and other approvals will form the basis for:  a. ongoing mining operations and environmental management; and  b. ongoing monitoring of the project.  2. The Plan must be prepared in accordance with the Director-General's guidelines current at the time of lodgment.  3. A Plan must be lodged with the Director-General:  a. (i) prior to the commencement of rehabilitation or other works, with the exception of the continuing Yarraboldy Briquette Company Pty Ltd operations, or (ii) within sixty (60) days from the 'effective date' of the renewal of this authority, whichever date is the sooner.  b. subsequently as appropriate prior to the expiry of any current Plan; and  c. in accordance with any direction issued by the Director-General.  4. The Plan must present a schedule of proposed mine development for a period of up to seven (7) years and contain diagrams and documentation which identify:  a. area(s) proposed to be disturbed under the Plan;  b. mining and rehabilitation method(s) to be used and their sequence;  c. areas to be used for disposal of tailings/waste;  d. existing and proposed surface infrastructure;  e. progressive rehabilitation schedules;  f. areas of particular environmental sensitivity;  g. water management systems (including erosion and sediment controls);  h. proposed resource recovery; and  i. where the mine will cease extraction during the term of the Plan, a closure plan including final rehabilitation objectives/methods and post mining landuse/vegetation  5. The Plan when lodged will be reviewed by the Department of Mineral Resources.  6. The Director-General may within two (2) months of the lodgement of a Plan, require modification and relodgement.  7. If a requirement in		Refer to ML 1684, Condition 3(a).  URS has not conducted a detailed review against all requirements of the condition. It is noted that DTRIS-DRE are in the process of reviewing the Care and Maintenance MOP.  Notwithstanding this, an audit report by Enhance Place (Feb 2012) was prepared in accordance with Condition 2(9) of Mining Leases (ML) 1569 and 1578. The purpose of the audit was 'to assess compliance with Condition 2(9) of Mining Leases (ML) 1569 and 1578. The purpose of the audit was 'to assess compliance with Condition 2(9) of ML 1569 and ML 1578, present information on what works have been completed to address acid rock drainage issues and detail what rehabilitation works are outstanding providing recommendations on how these can be addressed. The audit identified that 'the Mining Operations Plan for the Wallerawang Colliery Pit Top Rehabilitation and subsequent documentation has adequately addressed the requirements of Condition 2(9). The Mining Operations Plan for the Wallerawang Colliery Pit Top Rehabilitation has generally been implemented although some works remain ongoing and some additional works have been recommended.  The draft MOP (2014) notes that there is no planned mining activity proposed to be undertaken during the care and maintenance period there is no material production schedule required or available during the care and maintenance period. However, mining machinery, infrastructure and ancillary equipment will remain in place at the Site. As there is no planned mining activity proposed to be undertaken during the C&M MOP period. Ongoing maintenance works of existing rehabilitated areas will continue to be undertaken during the C&M MOP period. Ongoing maintenance works of existing rehabilitated areas will continue to be undertaken during the C&M MOP period. Ongoing maintenance works of existing rehabilitated areas will continue to be undertaken during the C&M MOP period. Ongoing maintenance works of existing rehabilitated areas will continue to be undertaken during the C&M MOP period. O	Recommendation Prepare and implement a plan identifying detailed rehabilitation measures for the entire length of Neubecks Creek.



ing Lease 1664 and Mining Lease 1569						
e Cond	ndition Condition	Evidence Source	Comment	Compliance Status Recommendations		
	8. During the life of the Mining Operations Plan, proposed					
	modifications to the Plan must be lodged with the Director-					
	General and will be subject to the review process outlined in					
	clauses (5) - (7) above.					
	9. In addition to the content required by clauses (1) to (8) above,					
	the Mining Operation Plan must also include the following					
	information:					
	i. details and timeframes for any impacts on the					
	amenity of residents in the vicinity of the site.					
	ii. A Rehabilitation Plan for this authority must be included					
	as part of the Mining Operation Plan. This Rehabilitation					
	Plan must detail rehabilitation measures for areas of this					
	authority which have been degraded by mining activities.					
	iii. The Rehabilitation Plan must fully address the issue of					
	acid rock drainage [ARD] and provide means to					
	ameliorate its impact on this authority and Neubecks					
	Creek. This includes a detailed assessment of site					
	materials and the efficacy of any proposed					
	encapsulation strategies. Appropriate monitoring and					
	control mechanisms should be implemented to ensure					
	surficial caps are installed to a thickness of not less than					
	250 mm unless otherwise agreed to and are suitably					
	graded and compacted to maximise runoff and limit					
	erosion.					
	and groundwater management plan incorporating erosion and sediment control measures for the entire site. This					
	Rehabilitation Plan shall contain details on all surface					
	drainage controls and structures, their design, installation					
	and maintenance to effectively manage and minimise					
	erosion. This Rehabilitation Plan shall also include details					
		•				
	on water monitoring for key locations on the site.  v. The Rehabilitation Plan shall include a specific plan					
	v. The Rehabilitation Plan shall include a specific plan identifying detailed rehabilitation measures for the entire					
	length of Neubecks Creek where it passes through this					
	authority, excluding areas intended to be disturbed as					
	part of the Pine Dale operation. This plan must include a					
	detailed description of the methods and materials to be					
	used to enable the rehabilitation and maintenance of the					
	Creek (based on site-specific consideration of soil types,					
	•					
	landform, vegetation etc.). The planning and design of the watercourse should be, in both concept and design					
	,					
	detail, consistent with the River and Foreshores					
	Improvement Act 1948; NSW State Rivers and Estuaries					
	Policy; NSW Wetlands Management Policy; Australian					
	Stream Management Manual [LWRRDC]; and NSW					
	Biodiversity Strategy.					



Mining Lease	lining Lease 1664 and Mining Lease 1569							
Title Cor No.	ondition Condition o.	Evidence Source	Comment	Compliance Status & Recommendations				
No.	<ul> <li>vi. The Rehabilitation Plan should clearly identify the intended final land uses(s) for the rehabilitated areas this authority.</li> <li>vii. The Rehabilitation Plan shall include a detailed revegetation plan consistent with the final land use. Rehabilitation Plan should identify the type and locating grasses, ground covers, shrubs and trees to be plant where possible, preference should be given to local endemic species grown from seed. The Rehabilitation Plan should provide for progressive revegeta and for revegetation to occur promptly after completic earthworks. This Rehabilitation Plan shall also include proposed measures to control weeds and grazing.</li> <li>viii. The Rehabilitation Plan shall include a detailed costing and timetable for all works.</li> <li>10. Development of a site Post Rehabilitation Management and Maintenance Plan is required that details management strategies which ensure the site is managed and maintaine an appropriate condition consistent with rehabilitation aims This plan shall provide information on actions proposed to control weeds, ensure survival of vegetation, maintain drain and sediment control structures and minimise grazing impation that the provided to the Department within twelve (12) months from the 'effective date' of the renewal of this authority and will be considered to form an addendum to the Mining Operation Plan.</li> <li>11. Approval must be sought from the Director-General and otter relevant government agencies prior to the importation of significant quantities of rehabilitation materials (such as 'gr product', 'wood based soil conditioner', 'compost' or 'power station ash'). Materials sourced from within the site should used wherever possible.</li> <li>12. Community consultation in respect of the proposed rehabilitation works should be undertaken with landowners the Blackmans Flat area prior to the commencement of</li> </ul>	The on of ed.  In tion on of ed.  g d d in  nage acts. e e e e e e e e e e e e e e e e e e e		Recommendations				



Append	ppendix A Pine Dale Mine Independent Environmental Audit						
Mining Le	ining Lease 1664 and Mining Lease 1569						
Title	Condition No.	Condition	<b>Evidence Source</b>	Comment	Compliance Status & Recommendations		
ML 1664	3(a)	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.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00 Enhance Place (2011), Mining Operations Plan, February 2011, Ref: 613/15 Enhance Place (2014) Draft Care and Maintenance Mining Operations Plan, March 2014 Enhance Place (2014), Care and Maintenance [Letter] Mining Operations Plan, 11 March to EPA, NOW, DTRIS-DRE and CCC	The previous IEA (URS, 2013, p.A-45) identified this Condition as non-compliant due to timing. Mining operations ceased in April 2014 and the Site has since been operating on a care and maintenance status.  The Site was in the process of revising a draft care and maintenance MOP in accordance with new MOP guidelines (ESG3: Mining Operations Plan (MOP) Guidelines, September 2013) at the time of the audit that is due to be provided to DTRIS-DRE for approval prior to the end of December 2014. The MOP (2011) expired in February 2014 hence since time there has been no formally approved MOP for the Site. Pine Dale has continued to apply the principals of the MOP (2011) since February 2014 while the Site has been in care and maintenance during the drafting and consultation process of the draft care and maintenance MOP (2014).  The draft care and maintenance MOP/Rehabilitation Management Plan has been reviewed by the Department and comments have been provided to Pine Dale who are in the process of following up on the changes requested by DTRIS-DRE. An email (DTRIS-DRE, 2014-D) from the Department to Pine Dale was sighted that detailed required changes to the Draft MOP/Rehabilitation Management Plan. The Department followed the email with a second email on 9 July 2014 (DTRIS-DRE, 2014-E) concerning rehabilitation success criteria indicating the criteria needed to be measurable targets. Pine Dale is in the process of revising the Draft Care and Maintenance MOP to address the comments raised by DTRIS-DRE.  This condition was found to be non-compliant given the MOP expired on 28 February 2014 whilst mining operations were continuing (the Site went into care and maintenance in April 2014). Pine Dale has been consulting with DTRIS-DRE concerning the requirements for the draft Care and Maintenance Mining Operations Plan / Rehabilitation Management Plan since April 2014 and was in the process of actioning DTRIS-DRE requests for the draft MOP at the time of the audit with a view to approval by the end of 2014.	Non-compliant (due to expiration of previous MOP and no approval of draft C&M MOP)		
ML 1664	3(b)	<ul> <li>i. identify areas that will be disturbed by mining operations;</li> <li>ii. detail the staging of specific mining operations;</li> <li>iii. identify how the mine will be managed to allow mine closure;</li> <li>iv. identity how mining operations will be carried out in order to prevent and or minimise harm to the environment;</li> <li>v. reflect the conditions of approval under:  <ul> <li>the Environmental Planning and Assessment Act 1979</li> <li>the Protection of the Environment Operations Act 1997</li> <li>and any other approvals relevant to the development including the conditions of this lease; and</li> <li>have regard to any relevant guidelines adopted by the Director General.</li> </ul> </li> </ul>	<ul> <li>Enhance Place (2011), Mining Operations Plan, February 2011, Ref: 613/15</li> <li>Enhance Place (2014) Draft Care and Maintenance Mining Operations Plan, March 2014</li> </ul>	The MOP (2011) addresses the rehabilitation and environmental management pertaining to activities with the Pine Dale Mine, including the Yarraboldy Extension, including:  The original Pine Dale Coal Mine, approximately 83ha and incorporating ML 1578 and part of ML 1569.  The Yarraboldy Extension, approximately 27ha, now ML 1664.  Section 1.4.2 describes the mine closure objectives for the site.  Section 1.6.2 describes the stages of proposed operations at Pine Dale.  Consents, Leases and Licences operating at the site are listed in Section 1.7.  The draft care and maintenance MOP (2014) addresses the rehabilitation and environmental management pertaining to activities with the Pine Dale Mine, including the Yarraboldy Extension but has yet to be approved by DTRIS-DRE:  Areas that will be disturbed by future mining operations  Section 4 describes post mining land use.  Section 7.1 describes rehabilitation implementation.  Section 1.2 describes leases, licences and approvals for the Site.  A brief review of the MOPs identified that they were prepared generally in accordance with this condition therefore Pine Dale was assessed as compliant with this condition. URS has not completed a detailed assessment against all aspects of the conditions. The draft Care and Maintenance MOP (2014) appeared to be prepared in accordance with new MOP guidelines (ESG3: Mining Operations Plan (MOP) Guidelines, September 2013).	Compliant (pending formal approval from DTRIS-DRE)		
ML 1664	3(c)	The leaseholder may apply to the Director-General to amend an approved MOP at any time.	Enhance Place (2014)     Draft Care and     Maintenance Mining     Operations Plan, March     2014	Refer to Condition 3(b)	Compliant		



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Mining Lo	Mining Lease 1664 and Mining Lease 1569						
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations		
ML 1664	3(d)	<ul> <li>i. The operations constituting the breach were necessary to comply with a lawful order or direction given under the Mining Act 1992, the Environmental Planning and Assessment Act 1979. Protection of the Environment Operations Act 1997. Mine Health and Safety Act 2004 / Coal Mine Health and Safety Act 2002 and Mine Health and Safety Regulation 2007 / Coal Mine Health and Safety Regulation 2006 or the Occupational Health and Safety Act 2000; and</li> <li>i. the Director-General had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.</li> </ul>	-	No breaches of Condition 3 were reported during the audit period therefore this condition was not applicable.	Not Applicable (Not triggered)		
ML 1664	3(e)	A MOP ceases to have effect 7 years after date of approval or other such period as identified by the Director-General.	<ul> <li>Enhance Place (2011),         Mining Operations Plan,         February 2011, Ref:         613/15</li> <li>Enhance Place (2014)         Draft Care and         Maintenance Mining         Operations Plan, March         2014</li> <li>Enhance Place (2014),         Care and Maintenance         [Letter] Mining         Operations Plan, 11         March to EPA, NOW,         DTRIS-DRE and CCC</li> </ul>	The MOP (Enhance Place, 2011) states that the duration of this MOP is for approximately three years to 28 February 2014 which is equivalent to the expected project life.  The MOP expired during the audit period. A draft Care and Maintenance MOP (2014) was in the process of being revised having received comments from DTRIS-DRE. Four letters addressed to EPA, NOW, DTRIS-DRE and the CCC were sighted by the auditors concerning the submission for review and comment of the draft Care and Maintenance MOP (2014). Feedback was requested by late March 2014.  This condition was found to be non-compliant given the 2011 MOP expired in February 2014 and a replacement MOP was in the process of being prepared but had not formally been approved.	Non-compliant		



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Mining L	Mining Lease 1664 and Mining Lease 1569							
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
ML 1569	3	<ol> <li>Annual Environmental Management Report (AEMR)</li> <li>Within 12 months of the commencement of mining operations and thereafter annually or, at such other times as may be allowed by the Director-General, the lease holder must lodge an Annual Environmental Management Report (AEMR) with the Director-General.</li> <li>The AEMR must be prepared in accordance with the Director-General's guidelines current at the time of reporting and contain a review and forecast of performance for the preceding and ensuing twelve months in terms of:         <ol> <li>the accepted Mining Operations Plan;</li> <li>development consent requirements and conditions;</li> <li>Department of Environment and Conservation and Department of Infrastructure, Planning and Natural Resources licences and approvals;</li> <li>any other statutory environmental requirements;</li> <li>details of anyvariations to environmentalapprovals applicable to the lease area. and</li> <li>where relevant, progress towards final rehabilitation objectives.</li> </ol> </li> <li>After considering an AEMR the Director-General may, by notice in writing, direct the lease holder to undertake operations, remedial actions or supplementary studies in the manner and within the period specified in the notice to ensure that operations on the lease area are conducted in accordance with sound mining and environmental practice.</li> <li>The lease holder shall, as and when directed by the Minister, co-operate with the Director-General to conduct and facilitate review of the AEMR involving other government agencies.</li> </ol>	Enhance Place Pty Ltd (2014), AEMR 2013, March 2014     DTRIS-DRE (2014-A), Pine Dale Mine and Enhance Place Mine - Annual Environmental Management Report 2013 [Letter], 16 July 2014, Ref: OUT14/19819.	Refer to ML 1664, Condition 4(a) and 4(b).	Refer to ML 1664, Condition 4(a) and 4(b)			
ML 1664	4(a)	Environment Management Report  The lease holder must lodge Environmental Management Reports (EMR) with the Director-General annually or at dates otherwise directed by the Director-General.	<ul> <li>Enhance Place Pty Ltd (2014), AEMR 2013, March 2014</li> <li>DTRIS-DRE (2014-A), Pine Dale Mine and Enhance Place Mine - Annual Environmental Management Report 2013 [Letter], 16 July 2014, Ref: OUT14/19819.</li> </ul>	Pine Dale use the Annual Environmental Management Report (AEMR) as the Annual Review. An AEMR Site meeting and Site inspection was conducted on 29 April 2014. Section 1.2 of the 2013 AEMR summarised the actions required following the 2012 AEMR.  The 2013 AEMR was accepted in a letter by DTRIS-DRE to Pine Dale on 10 July 2012. The letter acknowledged that an AEMR Site meeting and Site inspection was conducted on 29 April 2014.	Compliant			



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Mining Le	ease 1664 an	d Mining Lease 1569						
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
ML 1664	4(b)	The EMR must:  i. report against compliance with the MOP;  ii. report on progress in respect of rehabilitation completion criteria;  iii. report on the extent of compliance with regulatory requirements; and  iv. have regard to any relevant guidelines adopted by the Director-General;	<ul> <li>Enhance Place Pty Ltd (2014), AEMR 2013, March 2014</li> <li>DTRIS-DRE (2014-A), Pine Dale Mine and Enhance Place Mine - Annual Environmental Management Report 2013 [Letter], 16 July 2014, Ref: OUT14/19819.</li> </ul>	The 2013 AEMR was reviewed for compliance with this condition.  The AEMR provided a summary of environmental monitoring carried out for water, noise, blasting and air were reported. The 2013 AEMR was accepted in a letter by DTRIS-DRE to Pine Dale on 16 July 2014; however DTRIS-DRE did note that the following needed to be addressed by Pine Dale and included in the 2014 AEMR:  No results provided of the Purple Copper Butterfly monitoring  Results of monitoring against the rehabilitation completion criteria.  Enhance Place treed area rehabilitation success.  Water management structures within Area C appear to be controlling erosion on the sloped sections. These structures are largely bare earth.  On the basis that the DRE approved the 2013 AEMR as satisfactory Pine Dale was considered compliant with this condition.	Compliant 2014/IEA/019 Recommendation Ensure actions in the Action Plan provided by DTRIS-DRE dated 16 July 2014 are incorporated in the 2014 AEMR.			
ML 1664	5	Environmental Incident Report  (a) The lease holder must report any environmental incidents. The report must:  i. be prepared according to any relevant Departmental guidelines;  ii. be submitted within 24 hours of the environmental incident occurring.  (b) For the purpose of this condition, environment incident Includes:  i. any incident causing or threatening material harm to the environment;  ii. any breach of Conditions 1 to 9 and 11 to 24;  iii. any breach of environment protection legislation; or iv. a serious complaint from landholders or the public.  (c) For the purposes of this condition, harm to the environment is material if:  i. it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or ii. it results in actual or potential loss or property damage of an amount, or amounts in aggregate. Exceeding \$10.000, where loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	Pine Dale reported that no environmental incidents had occurred during the audit period therefore this condition has not been triggered.  The previous IEA (URS, 2013, p.A-48) noted that 'Pine Dale mine does not have in place an incident management procedure. All incident reporting is described in the environmental management plans and the Pine Dale EMS, however this relates to the reporting of exceedences of regulatory monitoring criteria in most cases'.  The Thesium Australe (Austral Toadflax) encroachment incident was reported to DOE not Director-General. The incident was reported in the AEMR for the audit period and it is noted this was an incident under the EPBC referral system.	Not Applicable (Not triggered) Repeat Recommendation 2013/IEA/047 An incident management procedure should be developed for the site and all staff and contractors are inducted on their responsibility to report all observations, near misses and incidents.			



Append	Appendix A Pine Dale Mine Independent Environmental Audit							
Mining L	Mining Lease 1664 and Mining Lease 1569							
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
ML 1664	6	Additional Environmental Reports  Additional environmental reports may be required from time to time as directed in Writing by the Director-General and must be lodged as instructed.	Enhance Place (2012), Environmental Audit of Pine Dale Coal Mine Mining Leases 1569 and 1578, February 2012, Ref: 613/31	The EPL requires two reports to be prepared under conditions U1 and U2 six months post the commencement of activities within the Pine Dale Stage 2 Extension as detailed Condition E1.1 of EPL 4911 An audit report was prepared in accordance with Condition 2(9) of Mining Leases (ML) 1569 and 1578. The purpose of the audit was 'to assess compliance with Condition 2(9) of ML 1569 and ML 1578, present information on what works have been completed to address acid rock drainage issues and detail what rehabilitation works are outstanding providing recommendations on how these can be addressed'. The audit identified that 'the Mining Operations Plan for the Wallerawang Colliery Pit Top Rehabilitation and subsequent documentation has adequately addressed the requirements of Condition 2(9). The Mining Operations Plan for the Wallerawang Colliery Pit Top Rehabilitation has generally been implemented although some works remain ongoing and some additional works have been recommended. The recommended works included the following.  1) Removal of identified coal-bearing material near the concrete drain in Areas 2 and 3.  2) Updating the Water Management Plan to include an additional channel health and stability monitoring point for the bank area immediately west of the light vehicle bridge.  3) Stabilisation works of three washout areas identified in Area 8.  4) Progression of the rehabilitation works in the western parts of Area 9.  5) 5. Covering of the coal-bearing material identified on the south bank of Neubecks Creek in the vicinity of Sampling Point S3' (Enhance Place, 2012, p.vii).  It is noted that the Water Management Plan was not updated during the audit period. Progressive rehabilitation was observed at the Site by the auditors during the Site inspection. A review of management plans has been provided in PA 10_0041, Condition 5.4. This condition was found to be compliant due to the preparation of the report.	Compliant			
ML 1569	6	<ul> <li>Control of Operations</li> <li>a) If an Environmental Officer of the Department believes that the lease holder is not complying with any provision of the Act or any condition of this lease relating to the working of the lease, he may direct the lease holder to: <ul> <li>i. cease working the lease; or</li> <li>ii. cease that part of the operation not complying with the Act or conditions;</li> </ul> </li> <li>until in the opinion of the Environmental Officer the situation is rectified.</li> <li>b) The lease holder must comply with any direction given. The Director- General may confirm, vary or revoke any such direction.</li> <li>c) A direction referred to in this condition may be served on the Mine Manager.</li> </ul>	-	Pine Dale management reported that no direction from an Environmental Officer of the Department has been received during the audit period.	Not Applicable (Not triggered)			



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Mining Le	ining Lease 1664 and Mining Lease 1569							
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
ML 1569	7	Reports  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) Particulars of exploration proposed to be conducted in the next twelve months period;  e) All plans, maps, sections and other data necessary to satisfactorily interpret the report.	DTRIS-DRE (2013),     Group Exploration     Reporting – Pine Dale     Mine [Letter], 5     November 2013     Enhance Place (2013- A) Annual Report     Exploration Activities     Carried Out In EL 7621,     October 2013     Enhance Place (2013- B) Annual Report     Exploration Activities     Carried Out ML 1569     and ML 1578, October     2013     Enhance Place (2013- C) Annual Report     Exploration Activities     Carried Out in the ML     1664 Area, 5     September 2013	The Annual Report for ML 1569 indicated that there were no exploration activities conducted from 4 March 2011 to 14 March 2013. The report addressed the requirements of the condition given no exploration was conducted.  Exploration activities outside of ML 1569 included refinement of geological data using geological modelling software and desktop studies to improve knowledge of the resources.  No exploration activities were conducted ML 1664 during the audit period.	Compliant			
ML 1569	8	Licence to Use Reports     a) The lease holder grants to the Minister, by way of a non-exclusive licence, the right in copyright to publish, print, adapt and reproduce all exploration reports lodged in any form and for the full duration of copyright.     b) The non-exclusive licence will operate as a consent for the purposes of section 365 of the Mining Act 1992.	-	Noted	Noted			
ML 1569	9	Confidentiality  a) All exploration reports submitted in accordance with the conditions of this lease will be kept confidential while the lease is in force, except in cases where:  i. the lease holder has agreed that specified reports may be made non-confidential.  ii. reports deal with exploration conducted exclusively on areas that have ceased to be part of the lease.  b) Confidentiality will be continued beyond the termination of a lease where an application for a flow-on title was lodged during the currency of the lease. The confidentiality will last until that flow-on title or any subsequent flow-on title, has terminated.  c) The Director-General may extend the period of confidentiality.	-	Noted	Noted			



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Mining Lo	ining Lease 1664 and Mining Lease 1569							
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
ML 1569	10	<ul> <li>Terms of the non-exclusive licence</li> <li>The terms of the non-exclusive copyright licence granted under condition 8(a) are:</li> <li>a) the Minister may sub-licence others to publish, print, adapt and reproduce but not on-licence reports.</li> <li>b) the Minister and any sub-licensee will acknowledge the lease holder's and any identifiable consultant's ownership of copyright in any reproduction of the reports, including storage of reports onto an electronic database.</li> <li>c) the lease holder does not warrant ownership of all copyright works in any report and, the lease holder will use best endeavours to identify those parts of the report for which the lease holder owns the copyright.</li> <li>d) there is no royalty payable by the Minister for the licence.</li> <li>e) if the lease holder has reasonable grounds to believe that the Minister has exercised his rights under the non-exclusive copyright licence in a manner which adversely affects the operations of the lease holder, that licence is revocable on the giving of a period of not less than three months notice.</li> </ul>	-	Noted	Noted			
ML 1664	7	Rehabilitation Any disturbance as a result of activities under this lease must be rehabilitated to the satisfaction of the Director-General.	-	An assessment of rehabilitation undertaken at Pine Dale is provided in Section 8 of the main report and Appendix A, PA 10_0041, Condition 3.53 and 3.54.	Indeterminate See recommendations in the main report and PA 10_0041, Condition 3.53 and 3.54			
ML 1569	13	<ul> <li>Rehabilitation</li> <li>a) Land disturbed must be rehabilitated to a stable and permanent form suitable for a subsequent land use acceptable to the Director- General and in accordance with the Mining Operations Plan so that: <ul> <li>there is no adverse environmental effect outside the disturbed area and that the land is properly drained and protected from soil erosion.</li> <li>the state of the land is compatible with the surrounding land and land use requirements.</li> <li>the landforms, soils, hydrology and flora require no greater maintenance than that in the surrounding land.</li> <li>in cases where revegetation is required and native vegetation has been removed or damaged, the original species must be re-established with close reference to the flora survey included in the Mining Operations Plan. If the original vegetation was not native, any re-established vegetation must be appropriate to the area and at an acceptable density.</li> <li>the land does not pose a threat to public safety.</li> </ul> </li> <li>Any topsoil that is removed must be stored and maintained in a manner acceptable to the Director-General.</li> </ul>	-	An assessment of rehabilitation undertaken at Pine Dale is provided in Section 8 of the main report and Appendix A, PA 10_0041, Condition 3.53 and 3.54.	Indeterminate See recommendations in the main report and PA 10_0041, Condition 3.53 and 3.54			



Append	Appendix A Pine Dale Mine Independent Environmental Audit							
Mining Lo	ease 1664 an	d Mining Lease 1569						
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
ML 1569	14	The lease holder must comply with any direction given by the Director- General regarding the stabilisation and revegetation of any mine residues, tailings or overburden dumps situated on the lease area.	-	Pine Dale management reported that no such direction as been made during the audit period.  An assessment of rehabilitation undertaken at Pine Dale is provided in Section 8 of the main report and Appendix A, PA 10_0041, Condition 3.53 and 3.54.	Not Applicable (Not triggered)			
ML 1569	15	1) At least twenty eight days prior to commencement of drilling operations the lease holder must notify the relevant Department of Natural Resources regional hydrogeologist of the intention to drill exploratory drill holes together with information on the location of the proposed holes.  2) 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;  b. all holes cored or otherwise are sealed to prevent the collapse of the surrounding surface;  c. all drill holes are permanently sealed with cement plugs to prevent surface discharge of groundwaters;  d. if any drill hole meets natural or noxious gases it is plugged or sealed to prevent their escape;  e. if any drill hole meets an artesian or sub-artesian flow it is effectively sealed to prevent contamination of aquifers.  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.  g. once any drill hole ceases to be used the land and its immediate vicinity is left in a clean, tidy and stable condition.		Pine Dale management reported that no exploratory drilling was conducted during the audit period.	Not Applicable (Not triggered)			



Append	ppendix A Pine Dale Mine Independent Environmental Audit						
Mining L	ease 1664 an	d Mining Lease 1569					
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations		
ML 1664 & ML 1569	8 4	<ul> <li>Subsidence Management         <ul> <li>The lease holder shall prepare a Subsidence Management Plan prior to commencing any underground mining operations which will potentially lead to subsidence of the land surface.</li> <li>Underground mining operations which will potentially lead to subsidence include secondary extraction panels such as longwalls or miniwalls, associated first workings (gate roads, installation roads and associated main headings, etc), and pillar extractions, and are otherwise defined by the Applications for Subsidence Management Approvals guidelines (EDG17)</li> <li>The lease holder must not commence or undertake underground mining operations that will potentially lead to subsidence other than in accordance with a Subsidence Management Plan approved by t11e Director General, an approval under the Coal Mine Health &amp;Safety Act 2002, or the document New Subsidence Management Plan Approval Process - Transitional Provisions (EDP09).</li> </ul> </li> <li>d) Subsidence Management Plans are to be prepared in accordance with the Guideline for Applications for Subsidence Management Approvals.</li> <li>e) Subsidence Management Plans asapproved shall form part of the Mining Operations Plan required under Condition 3 and will be subject to the Environmental ManagementReport process as set out under Condition 4, The SMP is also subject to the requirements for subsidence monitoring and reporting set out in the document New Approval Process for Management of Coal Mining Subsidence – Policy.</li> </ul>	Complaints Register 2012- 2014	Pine Dale management reported that no subsidence impacts had been reported during the audit period; therefore this condition has not been triggered.  No complaints concerning subsidence were reported in the 2013/2014 complaints register.	Not Applicable (Not triggered)		
ML 1664	9	Working Requirement The lease holder must:  a) ensure that at least 1 competent person is efficiently employed in relation to the mining processor mining operations on the lease area  OR  b) expend on operations carried out in the course of prospecting or mining the lease area, an amount of not less than \$17,500 per annum whilst the lease is in force.  The Minister may at any time or times, by instrument in writing served on the lease holder, increase or decrease the expenditure required or the number of people tobe employed.	-	At the time of the audit Site inspection Pine Dale was functioning under care and maintenance conditions with very few people working at the mine. The mine is required under mining legislation to maintain systems as operable including systems for water management, electrical and plant. A skeleton crew is available to maintain these systems. The Mine Manager attends Site every other day to conduct inspections and check security. The Open Cut Examiner (OCE) attends Site once a week to conduct inspections and conduct maintenance activities.	Compliant		



Append	pendix A Pine Dale Mine Independent Environmental Audit							
Mining Lo	ease 1664 an	d Mining Lease 1569						
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
ML 1569	5	Working Requirement The lease holder must:  a) ensure that at least 7 competent people are efficiently employed on the lease area on each week day except Sunday or any week day that is a public holiday,  OR  b) expend on operations carried out in the course of prospecting or mining the lease area, an amount of not less than \$122,500.00 per annum whilst the lease is in force.  The Minister may at any time or times, by instrument in writing served on the lease holder, increase or decrease the expenditure required or the number of people to be employed.	-	Refer to ML 1664, Condition 9.	Refer to ML 1664, Condition 9.			
ML 1664 & ML 1569	10(a) 11(a)	Blasting Ground Vibration The lease holder must ensure that the ground vibration peak particle velocity generated by any blasting within the lease area does not exceed 10 mm/second and does not exceed 5 mm/second in more than 5% of the total number of blasts over a period of 12 months at any dwelling or occupied premises as the case maybe, unless determined otherwise by the Department of Environment, Climate Change and Water.	-	Refer to PA Condition 3.8 for a full review of compliance against this condition.	Compliant			
ML 1664 & ML 1569	10(b) 11(b)	Blast Overpressure  The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 120 dB (linear) and does not exceed 115 dB (linear) in more than 5% of the total number of blasts over a period of 12 months. At any dwelling or occupied premises, as the case may be, unless determined otherwise by the Department of Environment, Climate Change and Water.	-	Refer to PA Condition 3.8 for a full review of compliance against this condition.	Compliant			
ML 1664 & ML 1569	11 12	Safety  Operations must be carried out in a manner that ensures the safety of persons or stock in the vicinity of the operations. All drill holes shafts and excavations must be appropriately protected, to the satisfaction of the Director General, to ensure that access to them by persons and stock is restricted. Abandoned shafts and excavations opened up or used by the lease holder must be notified in writing to the Department and filled in or otherwise rendered safe to a standard acceptable to the Director-General.	Site observations	No shafts are reportedly present on-site or were sighted during the Site inspection on the 28 and 29 August 2014. Excavations to the underground workings are covered and restricted from access. The Mine Manager attends Site every other day to conduct inspections and check security. The Open Cut Examiner (OCE) attends Site once a week to conduct inspections and conduct maintenance activities. Mt Piper Power Station security services conduct 21 random inspections of the Site per week. Pine Dale management reported that there have bene no issues at the Site since the first week of care and maintenance. During the audit period management reported that pipes had been stolen and a motorbike accessed the Site. The site is secured with lockable gates and the administration compound is fenced and gated. Public access is possible to the south-east corner of the Site via Blue Lake that is a publically accessible body of water. Blue Lake is located at the confluence of the Coxs River and Neubecks Creek.  URS has not conducted a safety assessment as part of this audit. Based on the above observations, Pine Dale is considered compliant with the condition.	Compliant			



Append	ppendix A Pine Dale Mine Independent Environmental Audit							
Mining L	ining Lease 1664 and Mining Lease 1569							
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations			
ML 1664 & ML1569	12 16	Prevention of soil erosion and pollution  Prospecting operations must be carried out in a manner that does not cause or aggravate air pollution, water (including groundwater) pollution, soil contamination or erosion, unless otherwise authorised by a relevant approval and in accordance with an accepted Mining Operations Plan.	<ul> <li>Site observations</li> <li>Annual Return – 24 November 2012 / 23 November 2013</li> <li>Site Inspection Summary reports – Erosion &amp; Sediment Controls – 29/08/2013, 27/09/2013, 31/10/2013, 22/11/2013, 20,12/2013, 30/01/2014, 13/02/2014, 03/03/2014, 01/05/2014, 29/05/2014, 25/06/2014, 16/07/2014</li> </ul>	Erosion control structures implemented on site include bunds and rock armoured drainage lines installed through rehabilitated areas. A series of bunds around the Yarraboldy Extension divert dirty water to underground workings. No exceedances of dust criteria were reported during the audit period.  Pine Dale management reported that erosion and sediment control structure inspections are undertaken informally on a monthly basis by the OCE. A selection of inspection reports were sighted during the audit.  For care and maintenance the Site has grassed approximately six hectares of land to minimise windblown dust, vehicles use on-site is restricted and a water cart is available during dryer periods for roads and areas that have not been partially or fully rehabilitated. Wind breaks were observed to have been planted to screen the Site and the amenity bund was observed to have been partly rehabilitated and is due for further rehabilitation in September 2014 to minimise windblown dust.	Compliant			
ML 1664 & ML1569	13 17	Transmission lines, Communication tines and Pipelines  Operations must not interfere with or impair the stability or efficiency of any transmission line, communication line, pipe line or any other utility on the lease area without the prior written approval of the Director-General and subject to any conditions stipulated.	Site observations	No transmission, communication and/or pipelines were identified or reported on-site; therefore this condition has not been triggered.	Not Applicable 9Not triggered)			
ML 1569	18	<ul> <li>Fences, Gates</li> <li>a) Activities on the lease must not interfere with or damage fences without the prior written approval of the owner thereof or the Minister and subject to any conditions the Minister may stipulate.</li> <li>b) Gates within the lease area must be closed or left open in accordance with the requirements of the landholder.</li> </ul>	<ul> <li>Site observations</li> <li>Complaints Register 2012- 2014</li> </ul>	No complaints were received during the audit period concerning damage to fences or gates and none was observed during the Site inspection.  Gates were observed to be shut and locked during the Site inspection.	Compliant			
ML 1664 & ML 1569	14 19	Roads and Tracks     a) The lease holder must pay to the relevant roads authority in control of the road or track the reasonable costs incurred by the roads authority in making good any damage to roads or tracks caused by operations carried out under this lease less any amount paid or payable from the Mine Subsidence Compensation Fund.      b) During wet weather the use of any road or track must be restricted so as to prevent damage to the road or track.      c) Existing access tracks should be used for all operations where reasonably practicable. New access tracks must be kept to a minimum and be positioned in order to minimise damage to the land, water courses or vegetation.  d) Temporary access tracks must be rehabilitated and revegetated to the satisfaction of the Director-General as soon as reasonably practicable after they are no longer required under this lease.	<ul> <li>Site observations</li> <li>Complaints Register 2012- 2014</li> </ul>	Coal was reportedly transported via the private Haul Road to Mt Piper Power Station only. Pine Dale reported that no coal was transported via Castlereagh Highway during the audit period.  No damage to public roads was been reported during the audit period. No additional access tracks had reportedly been constructed during the audit period and none were observed. Based on the above information, Pine Dale was considered compliant with this condition.	Compliant			



Append	ppendix A Pine Dale Mine Independent Environmental Audit									
Mining Lo	ease 1664 and	d Mining Lease 1569								
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations					
ML 1569	20	Access tracks must be kept to a minimum and be positioned so that they do not cause any unnecessary damage to the land. Temporary access tracks must be ripped, topsoiled and revegetated as soon as possible after they are no longer required for mining operations. The design and construction of access tracks must be in accordance with specifications fixed by the Department of Natural Resources.	Site observations	Site management reported that no new access tracks had been installed during the audit period and none were observed. Existing tracks were observed to be clean and tidy.	Compliant					
ML 1664 & ML 1569	15 21	<ul> <li>Trees and Vegetation</li> <li>a) The lease holder must not fell trees, strip ban, or cut timber on any land subject of this lease without the consent of the land holder who is entitled to the use of the timber.</li> <li>b) The lease holder must contact Forests NSW and obtain any required permit, licence or approval before taking timber from any Crown land within the lease area.</li> <li>Note: Any clearing not authorised under the Act must comply with the requirements of the Native vegetation Act 2003. Any clearing or taking of timber on Crown land is subject to the requirements of the Forestry Act 1916.</li> </ul>	Site observations     URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	Tree felling was conducted in the previous audit period by EcoLogical Australia Pty Ltd in accordance with the protocol. Pine Dale management reported that no tree felling was conducted during the current audit period.  The previous IEA (URS, 2013, p.A-52) identified this condition as compliant as Pine Dale have an agreement to remove trees as required to allow operations to be conducted and no correspondence was sighted from Forests NSW concerning a breach of this agreement.	Compliant					
ML 1664	16	Deleted	-	-	-					
ML 1664 & ML 1569	17 23	Resource Recovery  Not applicable to Environmental Management	-	Not Applicable	Not Applicable					
ML 1664 & ML 1569	18 24	Indemnity  Not applicable to Environmental Management	-	Not Applicable	Not Applicable					
ML 1664	19	Deleted	-	-	-					
ML 1664	20	Deleted	-	-	-					



Append	dix A Pine	Dale Mine Independent Environmental Audit			
Mining L	ease 1664 an	d Mining Lease 1569			
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations
ML 1664 & ML 1569	21 26	<ul> <li>Single Security (Extended)</li> <li>a) The single security given and maintained with the Minister by the lease holder for the purpose of ensuring the fulfilment by the lease holder of obligations under Mining Lease1569/ Mining Lease No. 1578 (Act 1992) and Mining Lease 1578 (Act 1992) is extended to apply to this lease.</li> <li>b) If the lease holder fails to fulfil any one or more of the obligations under this lease, then the security held may be applied at the discretion of the Minister towards the cost of fulfilling such obligations. For the purpose of this clause the lease holder shall be deemed to have failed to fulfil the obligations of the lease if the lease holder fails to comply with any condition or provision hereof, any provision of the Act or regulations made thereunder or any condition or direction imposed or given pursuant to a condition or provision hereof or of any provision of the Act or regulations made thereunder.</li> </ul>	DTRIS-DRE (2014),     Notification Letter     Assessed Deposit for     Pine Dale Rehabilitation     Cost Estimate (RCE)     ML 1578, ML1569,     ML1664 and ML1637     [Letter] 15 July 2014     140508_Pine Dale Mine     Rehabilitation-Cost-Calculation-Rev     C.XLSM     Enhance Place (2011),     Mining Operations Plan,     February 2011, Ref:     613/15     Enhance Place (2014)     Draft Care and     Maintenance Mining     Operations Plan, March     2014	A letter from DTRIS-DRE to Pine Dale on 15 July 2014 notes that after an assessment that was triggered by a submission of the May 2014 Rehabilitation Cost Estimate (RCE) for Pine Dale the security deposit has been determined to be \$1,040,400 and that the current security deposit held is for \$817,755. DTRIS-DRE acknowledged the submitted 2013 RCE to be acceptable.  Based on this letter Pine Dale has been assessed as compliant with this condition.	Compliant
ML 1664	23	Suspension of Mining Operations  The holder of a mining lease may not suspend mining operations in the mining area other than in accordance with the consent of the Minister.	Enhance Place (2014),     Pine Dale Open Cut     Mines [Letter] 6 April     2014 to DTRIS-DRE	Pine Dale provided notice to DTRIS-DRE on 6 April 2014 concerning suspension of mining operations in areas of the mining leases held by Enhance Place. Enhance Place requested consent from the Minister to suspend labour/expenditure conditions under mining leases held by Enhance Place and LCC in accordance with Section 168(1) of the Mining Act.  Given notice of suspension of mining was provided Pine Dale has been assessed as compliant with this condition.	Compliant
ML 1664	24	Cooperation Agreement  The lease holder must make every reasonable attempt and be able to demonstrate their attempts to enter into a cooperation agreement with the holder(s) of any overlapping title(s). The cooperation agreement should address but not be limited to issues such as;  Access arrangements Operational interaction procedures Dispute resolution Information exchange Well location Timing of drilling Potential resource extraction conflicts and Rehabilitation issues.	-	A detailed review of overlapping titles was not conducted as part of this audit.  Pine Dale indicated that the only overlapping title related to the haul road. This was not verified by URS.  The intent of the condition appears to be to ensure cooperation between neighbouring parties. At the time of the Site inspection, other adjacent mines were limited in their activities that impacted on the activities of Pine Dale. Given this, Pine Dale was considered to be generally compliant with the intent of the condition.	Compliant



Append	ppendix A Pine Dale Mine Independent Environmental Audit									
Mining L	Mining Lease 1664 and Mining Lease 1569									
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations					
ML 1664 & ML 1569	ML The lease holder shall carry out operations in such a way as to November 2012 / 23		As discussed in detail in PA CoA 3.27 and EPL Condition L1.1, L.2 and M2.3 no exceedences of EPL or PA 10_0041 criteria were reported during the audit period for surface water.  No discharges to Neubecks Creek were reported into during the audit period.  A full assessment of the requirements under the Sydney Water Catchment Management Act 1998 and the regulations was not undertaken as part of this audit.  The PA Condition 3.27 also describes water related management.  On the basis that there were no reported discharges from the site, Pine Dale are considered compliant with this condition.	Compliant Refer to Recommendations in PA 10_0041 Condition 3.27.						
ML 1569	29	<ul> <li>Catchment Areas</li> <li>a) Operations shall be carried out in such a way as not to cause any pollution of the Hawkesbury River Catchment Area.</li> <li>b) If the lease 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 the said Catchment Area the lease holder shall refrain from using or cease using as the case may require such process within twenty four (24) hours of the receipt by the lease holder of a notice in writing under the hand of the Minister requiring the lease holder to do so.</li> <li>c) The lease 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.</li> </ul>	Annual Return – 24     November 2012 / 23     November 2013	As discussed in detail in PA CoA 3.27 and EPL Condition L1.1, L.2 and M2.3 no exceedences of EPL or PA 10_0041 criteria were reported during the audit period for surface water.  No discharges to Neubecks Creek were reported into during the audit period.  A full assessment of the requirements under the Sydney Water Catchment Management Act 1998 and the regulations was not undertaken as part of this audit.  The PA Condition 3.27 also describes water related management.  On the basis that there were no reported discharges from the site, Pine Dale are considered compliant with this condition.	Compliant Refer to Recommendations in PA 10_0041 Condition 3.27.					



Mining L	Mining Lease 1664 and Mining Lease 1569								
Γitle	Condition No.	Evidence Source	Comment	Compliance Status & Recommendations					
IL 1569	a) The lease holder shall carry out operations in such a way as to conform strictly to all provisions of the Sydney Water Catchment Management Act 1998 and the regulations thereunder applying to the prevention of pollution of the Warragamba Outer Catchment Area or the preservation of the purity of the water supply provided thereby or derived therefrom or for the protection of the property of Sydney Catchment Authority (hereinafter referred to as the 'the Authority'] on the Outer Catchment Area and also to all requirements of the Authority from time to time under the said Act or any of the regulations for the time being in force.  b) If the lease holder shall at any time be using or about to use any process which in the opinion of the Authority is likely to pollute the Outer Catchment Area or the water supply or to endanger any property of the Authority on the Outer Catchment Area the lease holder upon service of a notice in writing under the hand of the Minister to do so shall:  i. discontinue the use of such process immediately, or ii. thereafter refrain from adopting such process at any time, as the case may require.  c) The lease holder shall provide and maintain to the satisfaction of the Minister efficient means to prevent the contamination, pollution, erosion or siltation of any stream or watercourse or Outer Catchment Area and shall observe any instruction given or which may be given by the Minister with a view to preventing or minimising the contamination, pollution or siltation of any stream watercourse or Outer Catchment Area.  d) The lease holder hereby covenants with Us Ours Heirs and Successors and as a separate covenant the lease holder hereby covenants with the Authority and Successors that the lease holder shall at all times hereafter save harmless and keep Us and the said Authority and Our Heirs and Successors and the Successors of the said Authority indemnified from payment of compensation and from and against all actions proceedings claims and demands in respect of any injury loss of damage a		Noted State of the	Noted   Noted					



Append	ppendix A Pine Dale Mine Independent Environmental Audit								
Mining L	ease 1664 an	d Mining Lease 1569							
Title	Condition No.	Condition	Evidence Source	Comment	Compliance Status & Recommendations				
ML 1664	25(b)	If the lease holder shall at any time be using or about to use any process which in the opinion of the Authority is likely to pollute the Warragamba Outer Catchment Area or the water supply or to endanger any property of the Authority on the Warragamba Outer Catchment Area the leaseholder upon service of a notice in writing under the hand of the Minister to do so Shall:  i. discontinue the use of such process immediately, or ii. (ii) thereafter refrain from adopting such process at any time, as the case may require	-	Pine Dale management reported that no requests or complaints were received identifying processes or actions which may potentially pollute the Catchment Area during the reporting period therefore this condition is not applicable.	Not Applicable (Not triggered)				
ML 1664	25(c)	The lease holder shall provide and maintain to the satisfaction of the Minister efficient means to prevent the contamination, pollution, erosion or siltation of any stream or watercourse or Warragamba Outer Catchment Area and shall observe any instruction given or which may be given by the Minister with a view to preventing or minimising the contamination, pollution or situation of any stream watercourse or Warragamba Outer Catchment Area.	-	Refer to (a) and the assessment of compliance with the EPL.  No instructions were reported to have been made that are relevant to this condition.	Not Applicable (Not triggered)				
ML 1664	25(d)	The lease holder hereby covenants with Us Ours Heirs and Successors and as a separate covenant the lease holder hereby covenants with the Authority and its Successors that the lease holder shall at all times hereafter save harmless and keep us and the said Authority and Our Heirs and Successors and the Successors of the said Authority indemnified from payment of compensation and from and against all actions proceedings claims and demands in respect of any injury loss of damage arising out of or in any way connected with any interference with or deprivation or loss of access to the land and premises of this authority which may occur by reason of any works or operations undertaken or carried out by the said Authority or arising out of or in any way connected with any discontinuance or alteration of any process consequent upon the service of a notice in pursuance of the provisions of Condition 31 (b) or arising out of or in anyway connected with the operation of any regulations relating to Warragamba Outer Catchment Area in force at the date hereof or made by the said Authority at any time hereafter and the lease holder hereby agrees that for the purpose of this condition the said Authority shall be deemed to be a party to this authority.	-	Noted	Noted				



Append	lix A Pine I	Dale Mine Independent Environmental Audit							
Mining Lo	Mining Lease 1664 and Mining Lease 1569								
Title Condition No.		Condition	Evidence Source	Comment	Compliance Status & Recommendations				
ML 1664	25(e)	<ul> <li>i. Make such provisions for sanitation as may be directed by the Authority and shall at all times observe and perform any requirements of the said Authority respecting sanitation.</li> <li>ii. not establish any camps or habitations within any area under the control of the Authority unless with the consent of the Authority.</li> <li>iii. Not sink any drill hole within the stored waters on the subject area nor within 40 metres of the top water level thereof unless with the consent of the Authority.</li> <li>iv. Not sink any drill hole within any watercourse on the Warragamba Outer Catchment Area nor within 100 metres thereof unless with the consent of the Authority.</li> <li>v. Not interfere with or impede the use of the Authority tracks of endanger their stability in any way by reason of the operations unless with the consent of the Authority.</li> <li>vi. Not construct any road to the sites of any drill holes unless with the consent of the Authority to the proposed route and type of road construction.</li> <li>vii. Not interfere in any way with any fences on or adjacent to the Warragamba Outer Catchment Area unless with the consent in writing of the owner thereof or the Authority.</li> <li>viii. Give twenty eight days notice to the General Manager Catchment Operations, Sydney Catchment Authority, Penrith of its intention to commence drilling operations.</li> <li>ix. Not cut or remove any timber except such as directly obstructs or prevents the carrying on of operations and the lease holder shall obtain the consent in writing of the Authority before making use of the timber so cut for other than in connection with operations.</li> <li>x. Complete work in relation to rehabilitation within the Warragamba Outer Catchment Area before termination of the authority to the satisfaction of the Authority.</li> </ul>	Site observations	Noted The following is noted:  i. No directions from the Authority were received during the audit period.  ii. No camps or habitations were observed during the site inspection in January 2013.  iii. Bore licenses 10BL604438 and 10BL604437 were issued by NOW on the 12 April 2011. No other drill holes were reportedly made during the audit period that did not directly relate to coal extraction activities.  iv. As above.  v. No tracks outside of the Yarraboldy Extraction area were reportedly impacted during the audit period.  vii. No additional roads were constructed during the audit period.  viii. No fences outside of the Yarraboldy extension area were affected during the audit period.  viii. Bore licenses 10BL604438 and 10BL604437 were issued by NOW on the 12 April 2011. No other drill holes were reportedly made during the audit period which did not directly relate to coal extraction activities.  ix. Land clearing did occur during the audit period within the approved Yarraboldy Extension area. No clearing was carried out beyond this boundary. Fencing was observed during the Site inspection delineating vegetation beyond this boundary. Fencing was observed during the Site inspection delineating vegetation beyond this boundary.  x. PA 10_0041 approves mining operations until December 2014.  Pine Dale reported that no correspondence was received from Sydney Catchment Authority in relation to activities undertaken during the audit period. Based on the above Pine Dale has been assessed as compliant with this condition.	Noted				



Appendix A Pine Dale	Appendix A Pine Dale Mine Independent Environmental Audit								
Statement of Commitments									
<b>Desired Outcome</b>	Condition No.	Action	Evidence Source	Comment	Compliance Status & Recommendations				
Groundwater Reduction in the amount of drawdown on local groundwater.	1.1	Design the mine plan so that the interception of groundwater within the old Wallerawang Colliery underground workings is minimised.	Pine Dale Groundwaters - Cumulative Data.xls	Groundwater is not utilised by the mine unless required for dust suppression or other mine operational purposes. During the audit period it is understood that there was only minimal or limited use of groundwater in mine operations.  The mine is designed so that runoff water is directed to an above ground storage dam, and then by overland open drains to underground workings. The water directed to the workings would offset some of the water used for dust suppression.	Compliant				
Groundwater The need to discharge raw groundwater into the surrounding surface water environment is negated, thus avoiding the potential change in surface water quality.	1.2	Manage the small amount of groundwater intercepted on site for use in dust suppression or other internal uses e.g. wash down.	Pine Dale Groundwaters - Cumulative Data.xls	Pine Dale reported that no water was discharged from site to Neubecks Creek during the audit period. Surface run off is captured from site and used for dust suppression or is discharged to underground workings. The dirty water system at Pine Dale is designed so that water pumped out of the underground workings is stored in the main water storage dam and used for dust suppression. Therefore Pine Dale is considered compliant with this condition.	Compliant				
<b>Groundwater</b> Efficient dewatering of the pit.	1.3	Install sumps in strategic locations in the open cut pit as the pit develops.	Pine Dale Groundwaters - Cumulative Data.xls	Pine Dale did not report any issues with dewatering of the pit therefore this condition has been considered compliant. During the site visit there were no water pumps in the pit.  It was reported that sumps had been installed within the pit as it was developed. Sumps were sighted during the Site inspection.	Compliant				
Groundwater  Determine if there are any impacts to groundwater associated with the Project to allow potential impacts to be identified in a timely manner to allow appropriate mitigation.	1.4	Continue the existing groundwater monitoring regime but also include monitoring of the bore that has been installed within the Yarraboldy footprint and the old ventilation shaft next to the haul road.	Pine Dale Groundwaters - Cumulative Data.xls	Refer to PA CoA 3.27(c) for a detailed discussion of groundwater monitoring. EP PDH8/GW is located within the Yarraboldy Extension area and was monitored until the 16 April 2012. The bore was then removed, as identified in the raw surface water monitoring data provided by RCA. The Old Shaft was monitored during the audit period on 22/01/13, 20/02/13, 20/03/13, 22/04/13, 22/05/13, 24/06/13 and 25/07/13. The depth to the water table was recorded for the dates specified.	Compliant				
Groundwater  Minimisation of  Groundwater contamination.	1.5	Manage chemicals and hydrocarbons appropriately.	Site observations	Observations made during the Site inspection noted open drip trays (half a 200 Litre (L) steel drum and redundant equipment such as used vehicle batteries at the workshop. Localised staining was also observed on the gravel hardstand. Management of chemicals and hydrocarbons appeared adequate for the size of operations at Pine Dale. As discussed in PA CoA 3.39 further training in incident management will improve operations further.	Compliant Refer to PA 10_0041 Condition 3.39				
Groundwater Prevention of managing water with a low pH.	1.6	Manage any potentially acid-generating material by the selective placement of cover material.	<ul> <li>Pine Dale Mine Surface Waters.xls</li> <li>Pine Dale Groundwaters - Cumulative Data.xls</li> </ul>	Pine Dale reported that there were no issues with potentially acid generating materials at the mine.  There was no washery present on-site at the time of the Site inspection. Trees planted over six years ago were noted to be small in Area A indicating potential acid containing soil was moved to this area from the former washery area during shaping of Area A. Pine Dale reported that some soil samples form this area were noted to be acid, however this has not been confirmed in documents	Compliant				



Appendix A Pine Dale Mine Independent Environmental Audit							
Statement of Commitments							
Desired Outcome	Condition No.	Action	Evidence Source	Comment	Compliance Status & Recommendations		
Groundwater Timely mitigation of any impacts to groundwater.	1.7	If a non-conformance with a nominated trigger value is determined to be the result of activities associated with the Project, then the impacted landholder and DECCW - NOW will be notified and a remediation strategy will be proposed for discussion and implementation.	Pine Dale Mine Surface     Waters.xls     Pine Dale Groundwaters -     Cumulative Data.xls	Refer to PA 10_0041 Conditions 3.24 and 3.27 for a detailed discussion of surface water and groundwater monitoring.  Due to the inconsistencies within the monitoring requirements of surface water and groundwater detailed within the WMP this condition has not been able to be adequately assessed. It is noted that exceedences of groundwater trigger values defined with the WMP for pH and EC were recorded during the audit period.  As identified in PA 10_0041 a detailed review of groundwater and surface water monitoring requirements needs to be undertaken to ensure effective monitoring of water quality.	Indeterminate Refer to PA 10_0041 Conditions 3.24 and 3.27		
Surface Water Minimisation of changes to existing drainage patterns of the Project Site.	2.1	Retain, for as long as practicable, selected surface water structures such as the existing dams, sediment retention points and clean water diversion banks.	Site observations	At the time of the Site inspection (28 and 29 August 2014) the Clean Water Dam A and the Proposed Clean Water Dam (WMP) were no longer present on-site due to the progression of mining operations. The main dam within the Yarraboldy Extension is the dirty water dam located across the haul road for use as dust suppression.	Compliant		
Surface Water Prevention of sediment laden water discharge off site from the progressive disturbed areas of the Project Site.	2.2	Install temporary erosion and sediment control structures.	Site observations	A series of contour drains and rock lined drop structures have been installed around the rehabilitation completed at Pine Dale. Hay bales were observed to be installed around the Site as sediment control measures.	Compliant		
Surface Water Prevention of sediment laden water discharge off site from the progressive disturbed areas of the Project Site.	2.3	Construct diversion and sediment retention structures for the capture of sediment-laden water for treatment.	<ul> <li>Annual Return – 24         November 2012 / 23     </li> <li>November 2013</li> <li>Pine Dale Mine EPA         Compliance Data January,             February, April, May 2014     </li> <li>Pine Dale Mine EPA         Compliance Data June,         July, August, September,         October, November,         December 2013     </li> </ul>	Areas A, B and C were undergoing progressive rehabilitation at the time of the Site inspection and as such natural runoff to Neubecks Creek and Blue Lake was not restricted. Pine Dale reported that hay bales were placed on the banks of Neubecks Creek to minimise suspended sediment. LDP13 located to the south of Area C did not discharge during the audit period.  Pine Dale management reported that no water or sediment was discharged from the Yarraboldy Extension during the audit period therefore Pine Dale has been considered compliant with this condition.	Compliant		
Surface Water  Minimisation of erosion and sedimentation.	2.4	Prepare and implement a general Erosion and Sediment Control Plan (in accordance with the requirements of Landcom (2004)) to manage surface water flows within the Project Site.	<ul> <li>Enhance Place (2011) Water Management Plan, July 2011, Ref No. 613/20</li> <li>Site Inspection Summary reports – Erosion &amp; Sediment Controls – 29/08/2013, 27/09/2013, 31/10/2013, 22/11/2013, 20,12/2013, 30/01/2014, 13/02/2014, 03/03/2014, 01/05/2014, 29/05/2014, 25/06/2014, 16/07/2014</li> </ul>	The Erosion and Sediment Control Plan (ESCP) is located in Section 4.4 of the WMP. The ESCP identifies management measures for soil stockpiles and soil respreading. These measures were described generally in accordance with the requirements of Landcom,2004 (Blue Book).  A selection of sediment erosion control inspections records were reviewed for the audit period.  Top soil, sub soil and rock is used as part of the progressive rehabilitation process. Topsoil stockpiles were sighted during the Site inspection in the northeast corner of the Yarraboldy extension.  Pine Dale has been assessed as compliant with this condition as the ESCP has been prepared in accordance with the Blue Book; however, full implementation of stockpiling was not able to be reviewed.	Compliant		



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Statement of Commitments					
Desired Outcome	Condition No.	Action	Evidence Source	Comment	Compliance Status & Recommendations
Surface Water  Minimisation of erosion and sedimentation.	2.5	Establish and maintain groundcover at 70% or better over areas disturbed and no longer required by the Project and as site conditions provide for practicability.	Site observations	An assessment of rehabilitation undertaken at Pine Dale is provided in Section 8 of the main report and Appendix A, PA 10_0041, Condition 3.53 and 3.54. Rehabilitation of Area A, B and C was in the process of being review at the time of the Site inspection. A grass cover crop was planted on shaped landform in the north-west corner of the Yarraboldy extension to reduce windblown dust. The reshaping is not considered permanent and may be removed should mining operations recommence. The remainder of the pit area had been compacted and prepared for topsoil.  Groundcover across Area A, B and C is discussed in detail in Section 6 of the main report.	Compliant
Surface Water  Minimisation of erosion and sedimentation.	2.6	Progressively rehabilitate disturbed areas no longer required by the Project soon after the cessation of mining activities.	-	Refer to PA 10_0041 Condition 3.54 for comments concerning progressive rehabilitation.	Indeterminate
Surface Water Prevention of contamination of clean surface water on	2.7	Construct diversion bunds or utilise existing infrastructure to keep dirty water flow separate from clean water diversions bunds.	Site observations	A series of bunds and one on-site dam are used to prevent discharge of water and sediment off-site. Dirty water captured on-site is directed to a small dam from that overflows discharge into the underground workings via the 'bong'.	Compliant
Project Site.	2.8	Divert dirty water into sediment basin and Retention Dam A.	Site observations	The Sediment Basin (also referred to as the Sediment Trap in the WMP is still operational and supplies water for dust suppression purposes. The dam is relatively small. Overflows from the dam are directed to a surface drain that reports to the haul road and finally to a sump linked to the underground workings.	Compliant
Surface Water Prevention of contamination of clean surface water on Project Site.	2.9	Divert clean water along clean water diversion bunds for flow into Neubecks Creek.	Site observations	A series of bunds were located on the perimeter of the Yarraboldy Extension for separation of dirty and clean water. The clean water bund directs runoff to Neubecks Creek; therefore Pine Dale has been assessed as compliant with this condition.	Compliant
Surface Water Prevention of contamination of water in Neubecks Creek.	2.10	Divert dirty water into sediment controls or suitable structures for treatment.	<ul> <li>Site observations</li> <li>Pine Dale Mine Surface Waters.xlsx</li> <li>Pine Dale Baseline Water Data-modified for AEMR.xlsx</li> </ul>	Dirty water on site is directed, via a series of bunds, to underground workings for discharge. No dirty water from mining areas was reported to have been discharged off-site during the audit period. Surface water monitoring data confirms there were no discharges from LDP13 during the audit period.	Compliant
	2.11	Pump water from sediment basin into Retention Basin A for storage and use in dust-suppression activities on Project Site.	-	Refer to SoC 2.8.	Compliant
Surface Water Prevention of saline groundwater discharge off site.	2.12	Pump groundwater from in-pit sump into Retention Dam A for storage and use in mining operations and dust suppression.	Site observations	Refer to SoC 2.8. Groundwater that needs to be pumped from the pit is now pumped to the Sediment Basin for dust suppression.	Compliant
Surface Water Minimisation of	2.13	Install a sediment trap in the coal crushing/ stockpiling and maintenance area to remove coal fines from surface flows.	Site observations	The Site is in care and maintenance and the coal crushing machine was no longer in use at the time of the Site inspection	Not Applicable (Not triggered)
contamination of clean water on site with dirty water generated from mining operations.	2.14	Install an oil/water separating unit to receive potentially contaminated water from the maintenance and wash-down bay for further treatment in the sediment basin.	Site observations	Due to the size and nature of operations at Pine Dale, an oil/ water separator has not been installed. Therefore this condition has been considered Not Applicable during the audit period.	Not Applicable (Not triggered)



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Desired Outcome	Condition No.	Action	Evidence Source	Comment	Compliance Status & Recommendations		
Surface Water Implementation of a comprehensive and ongoing surface water monitoring program.	2.15	Monitor surface water quality for pH, EC, TSS, turbidity, oil and grease, filterable iron and sulphate ion concentrations.	Pine Dale Mine Surface Waters.xlsx  Pine Dale Baseline Water Data-modified for AEMR.xlsx	Refer to PA CoA 3.27 (b) for a detailed discussion of surface water monitoring. Surface water monitoring was carried out as identified in the WMP therefore Pine Dale has been assessed as compliant with this condition.	Compliant		
Surface Water Implementation of a comprehensive and ongoing surface water monitoring program.	2.16	Record the approximate volume and quality of water extracted from the in-pit sump for discharge off site.	Pine Dale Mine Surface     Waters.xlsx	No water was discharged off-site (at the surface) from Pine Dale during the audit period therefore this condition has been considered not applicable.	Not Applicable (Not triggered)		
Flora Minimisation of short and long-term impacts on flora within the Project Site	3.1	Define and clearly mark vegetation for retention prior to the commencement of site establishment to ensure that impact on native vegetation is confined to those areas required for mining operations.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	<ul> <li>The previous IEA (URS, 2013) identified that 'vegetation had been cleared during the audit period for the Yarraboldy Extension Area, in compliance with the Preclearance Tree Felling Procedure, including:</li> <li>Pre-clearance surveys had been undertaken by EcoLogical Pty Ltd (EcoLogical Pre-clearing and Clearing Surveys 13.4.12 and 21.8.12), prior to clearance to determine hollow bearing trees, large woody debris and bushrock.</li> <li>Delineation of vegetation to be protected, photographs taken during audit to show this has been undertaken.</li> <li>Presence during clearing and removal/translocation of fauna'.</li> <li>This condition is considered not applicable for the audit period as site establishment works were not conducted.</li> </ul>	Not Applicable (Not triggered)		
	3.2	Control noxious weeds on the Project Site.	Site observations	The OCE is licensed to spray noxious weeds. Evidence of weed spraying was observed during the Site inspection on 28 and 29 August 2014.  The control of noxious weeds on-site appeared to be adequate based on discussions with Mine Manager concerning control strategies.	Compliant 2014/IEA/023 Recommendation Pine Dale should consider control and management of the number of Pine Trees on site.		
Flora Establishment of native vegetation with ecological and conservation value.	3.3	Utilise local native plant species and shrubs for rehabilitation and landscaping.	Site observations	Progressive rehabilitation works have been carried out during the audit period including seeding of areas with cover crop and planting of exotic and native species.  The amenity bund was reshaped during the audit period to a 1 in 3 slope from the former angle of repose of 1 in 1. A cover crop was planted; however, this did not take. Global Soil Systems Pty Ltd has been engaged to hand seed approximately 2 hectares of the bund with native tree seed in September 2014.  Refer to Section 8 of the main report for further detail concerning rehabilitation. The auditors observed progressive rehabilitation including planting of screening trees for short-term amenity value adjacent to Castlereagh Highway and on top of bunds as well as planting of native species to achieve longer-term rehabilitation requirements.	Compliant		
Flora Establishment of native vegetation with ecological and conservation value.	3.4	Undertake replacement planting of some of the same tree species and shrubs within the Project Site upon cessation of mining activities.	Site observations	Sighted native species planted in some areas and Global Soil Systems Pty Ltd has been engaged to hand seed approximately 2 hectares of the amenity bund with native tree seed in September 2014.	Compliant		



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Desired Outcome	Condition No.	Action	Evidence Source	Comment	Compliance Status & Recommendations		
Flora Establishment of original groundcover.	3.5	Retain suitable bushrock with the topsoil and respread during the rehabilitation phase to return groundcover to near-original state.	Site observations	Bushrock was observed to be placed sparingly within Area A. Pine Dale management noted it had limited availability to topsoil and noted that the local area is not conducive to an abundance of bushrock. It was noted that placement of bushrock has been undertaken where resources were available and evidence of felled tree placement for habitat and stabilisation was observed.	Compliant		
Fauna  Management of disturbance within the Project Site to minimise impact on fauna of	4.1	Identify the boundaries of disturbance and progressive disturbance to avoid clearing outside these boundaries.	Site observations	Boundaries of disturbance were visited within the Yarraboldy Extension Area during the audit. Observations were made of adequate fencing to delineate vegetation boundaries and to ensure no mine related activities enter the non-disturbance area.	Compliant		
conservation value.	4.2	Retain substantial habitat trees wherever possible.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	The previous IEA (URS, 2013, p.A-61) noted that 'habitat trees identified through EcoLogical Australia Pty Ltd pre-clearance surveys were cleared in accordance with the Pine Dale Pre-clearing Procedure.  Trees that were retained were done so due to their locality on steep slopes making clearance not possible/safe (Ecological Pre-clearing and Clearing Survey 21.8.12)'.	Compliant		
	4.3	Undertake any tree-felling in accordance with a prepared Tree Felling Protocol.	Site observations	Tree felling was conducted in the audit period by EcoLogical Australia Pty Ltd in accordance with the protocol.	Compliant		
	4.4	Provide habitat for important target species such as the Purple copper butterfly through planting of appropriate flora species (eg. <i>Bursaria spinosa spp lasiophylla</i> ).	<ul> <li>Site observations</li> <li>Global Soil Systems         Proposal (2013)</li> <li>Global Soil Systems         Proposal, 15 August 2014         - Proposal</li> <li>Brackenrig Soil         Conservation Services         Tax Invoice, 9 September         2013.</li> </ul>	A proposal from Global Soil Services dated August 2014 was available for review that identified species including, but not limited to the following would be planted in Area A:  • Leptospermum polygalifolium  • Leptospermum flavescens  • Bursaria spinosa  • Dodonea cunnata  • Callistemon linearis  • Banksia spinulosa  It should be noted that Pine Dale have in place the Purple Copper Butterfly Monitoring Program since June 2011 which aims to identify potential sources of indirect impacts on the butterfly / butterfly lavae and identify relevant management measures.	Compliant		



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<b>Desired Outcome</b>	Condition No.	Action	Evidence Source	Comment	Compliance Status & Recommendations				
Fauna Maintenance and improvement of the biodiversity value of the Project Site and surrounding areas.	4.5	Progressively increase forest and woodland communities within the already disturbed areas, the coaly residue areas and the rehabilitated land, to provide foraging and sheltering habitat.	<ul> <li>Site observations</li> <li>Enhance Place (2011),         Mining Operations Plan,         February 2011, Ref:         613/15</li> <li>Enhance Place (2014)         Draft Care and         Maintenance Mining         Operations Plan, March         2014.</li> </ul>	The amenity bund is due to be seeded with a native seed mix in September 2014 and new native trees were observed at the front of the Site during the Site inspection. Area C is not required to be forested at the request of the landowner and planned end use is pasture.  The Site inspection on 28 and 29 August 2014 showed placement of felled trees for habitat and stabilisation, and native tree rehabilitation in Area A.  In response to requests from DTRIS-DRE concerning the draft Care and Maintenance MOP/Rehabilitation Plan Pine Dale has recently engaged an agronomist from SLR Consulting Pty Ltd (SLR) to provide pasture management advice for the short, medium and long-term as well as rehabilitation criteria that will feed into the draft MOP. The agronomist is due to visit the Site in September 2014. SLR will provide advice for Areas A, B and C.  It is acknowledged that Pine Dale has commenced progressive rehabilitation including planting of screening trees for short-term amenity value and planting of native species to achieve longer-term rehabilitation requirements as well as reshaping of the amenity bund angle of repose and progressive rehabilitation with a small cover crop of native grass; however, given the lack of progress concerning rehabilitation areas such as Areas A, B and C and the need for the engagement of an agronomist and rehabilitation expert (SLR Consulting Pty Ltd) to provide rehabilitation criteria and advice on how to achieve the criteria this condition is considered indeterminate.	Indeterminate Repeat Recommendation 2013/IEA/051 Further seeding of Area A to utilise grasses and understor species as well as a more diverse range of shrubs and canopy species, so to enhance foraging and sheltering habitat.				
	4.6	Use nesting boxes if required and salvage hollows to assist in maintaining the short and long term habitat value for hollow dependent species.	Site observations	Pine Dale management reported that nest boxes were not required for the salvage of hollows during the clearance of the Yarraboldy Extension Area.  During the removal of identified hollow bearing trees one sugar glider was reported to have been retrieved and translocated into Ben Bullen State Forest.	Not applicable (Not triggered)				
Heritage Site activities are undertaken without	5.1	Stop works at and in the immediate vicinity of any Aboriginal and European heritage sites or relics, if found.	-	Pine Dale management reported that no aboriginal or European heritage sites or relics were found during the audit period therefore this condition has not been triggered.	Not applicable (Not triggered)				
impacting upon any Aboriginal and European	5.2	Contact DECCW if any Aboriginal and European heritage sites or relics are found.	-	As above.	Not applicable (Not triggered)				
heritage items.	5.3	Receive authorisation from DECCW prior to proceeding with any works in the vicinity of any identified Aboriginal and European heritage sites or relics are found.	-	As above.	Not applicable (Not triggered)				
Transport Aspects Achieve safe and efficient transport operations.	6.1	Install "Truck Turning" signs in accordance with RTA requirements on the Castlereagh Highway.	-	Pine Dale management reported that they did not transport coal via Castlereagh Highway as had been planned in the EA.  The requirement to install truck turning signs had not been triggered during the audit period.	Not applicable (Not triggered)				
	6.2	Install guide posts at all site entrances.	-	This condition has not been reviewed under the scope of this audit as it is not considered an environmental management issue. Pine Dale reported that Site entrances had been fenced to the RMS satisfaction.	Not applicable (Not triggered)				
	6.3	Improve the sight distances at all entrances through removal of vegetation in RTA verges with RTA approval.	URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine - Yarraboldy Extension, June 2013, 43177857/KD/00	A full review of the RTA approval was not undertaken during this audit. The 2013 IEA (URS, 2013) noted that 'Pine Dale provided photographs of the site entrance that showed tree stumps where tree clearance had taken place'.	Not applicable (Not triggered)				



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<b>Desired Outcome</b>	Condition No.	Action	Evidence Source	Comment	Compliance Status & Recommendations
	6.4	Construct an appropriate intersection with the Private Coal Haul Road to provide safe ingress and egress.	Site observations	The intersection between the Site office across the Private Haul Road had stop signs and gates.  URS are not road and transport specialists and no Road traffic specialists were included with the audit team. An assessment of the adequacy of this condition against RMS criteria has not been performed by URS.	Compliant
	6.5	Implement a 'Surface Transport Management Plan' which incorporates safety and behaviour Protocols.	-	This condition has not been reviewed under the scope of this audit as this condition is not considered an environmental management issue.	Not applicable (Not triggered)
	6.6	Pay a financial contribution in accordance with the Lithgow Rural Roads Section 94  Contributions Plan - being 5 cents per tonne of coal transported per kilometre of Council road traversed.	-	Coal was transported from the Site via the private haul road therefore this condition has not been triggered.	Not applicable (Not triggered)
	6.7	Pay a financial contribution in accordance with the Lithgow Rural Roads Section 94  Contributions Plan - being 5 cents per tonne of coal transported per kilometre of Council road traversed.	-	Coal was transported from the Site via the private haul road therefore this condition has not been triggered.	Not applicable (Not triggered)
Noise All activities are undertaken in such a manner as to	7.1	Regularly service all equipment used on-site to ensure the sound power levels remain at or below the levels used in the modelling to assess generated noise levels and compliance with the criteria.	-	Refer to PA 10_0041, Condition 3.1. No exceedences of PA 10_041 or EPL criteria were reported during the audit period.	Compliant
reduce the noise level generated and minimise impacts on surrounding landholders and/or residents.	7.2	Attend to local community concerns over construction, operational or transport noise.	-	Refer to PA 10_0041, Condition 3.6 for further information concerning the implementation of best practice noise management measures.	Compliant
Noise Noise generated by	7.3	Construct the amenity bund on the southern side of the mine area.	Site observations	The main amenity bund was completed in late 2012 therefore Pine Dale is considered compliant with this condition.	Compliant
operational activities does not exceed DECCW nominated criteria nor significantly impacts on neighbouring landowners	7.4	Position the drilling rig so that at least 3m of topographic shielding is provided to the south, if required, (this may be achieved using temporary bunding).	-	During operation of the mine a drill rig was reported to have been located either in the pit of behind the amenity bund. This could not be verified by the auditors. The bund had been rehabilitated at the time of the Site inspection; however as noise complaints were predominately received during blasting activities Pine Dale were considered compliant with this condition.	Compliant
and/or residents.	7.5	Operate the pump behind at least a 1.5m noise barrier.	Site observations	A pump is located at the main water dam which is behind a perimeter bund.  The 'bong' pump is located adjacent the haul road with hay bales used as noise mitigation measures a perimeter bund.	Compliant
	7.6	Orientate the crusher with the open side facing northwards.	Site observations	The crusher was not in use at the time of the Site inspection and was located in the workshop compound. The auditors are unable to comment on the position of the crusher during operational activities during the audit period.	Compliant
	7.7	Operate the existing crushing plant only when new plant is not operating.	Site observations	The crusher was not in use at the time of the Site inspection and was located in the workshop compound. The auditors are unable to comment on the position of the crusher during operational activities during the audit period.	Compliant
Blasting Achieve compliance with all ANZECC Blasting	8.1	Utilise deck charges and/or other suitable techniques to minimise ground vibration, overpressure and fly-rock.	-	Refer to PA 10_0041, Condition 3.7, 3.9 and 3.10 for comments concerning blasting. Based on data from blasts and compliance with EPL and PA criteria, Pine Dale is assessed as compliant with this condition.	Compliant



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Guidelines.	8.2	Utilise appropriate detonators and firing sequences to minimise ground vibration.	-	Refer to PA 10_0041, Condition 3.7, 3.9 and 3.10 for comments concerning blasting. Based on data from blasts and compliance with EPL and PA criteria, Pine Dale is assessed as compliant with this condition.	Compliant
Air Quality Site activities are undertaken without exceeding DECCW air quality criteria or adversely	8.3	Optimise use of stemming materials and/or other suitable techniques to minimise overpressure.	-	Refer to PA 10_0041, Condition 3.7, 3.9 and 3.10 for comments concerning blasting. Based on data from blasts and compliance with EPL and PA criteria, Pine Dale is assessed as compliant with this condition.	Compliant
	8.4	Optimise initiation sequence to minimise airblast overpressure and ground vibration.	-	Refer to PA 10_0041, Condition 3.7, 3.9 and 3.10 for comments concerning blasting. Based on data from blasts and compliance with EPL and PA criteria, Pine Dale is assessed as compliant with this condition.	Compliant
	8.5	Carry out all blasts strictly in accordance with the Blast Management Plan.	-	Refer to PA 10_0041, Condition 3.7, 3.9 and 3.10 for comments concerning blasting. This has not been assessed in full. Based on meeting compliance requirements for over-pressure, Pine Dale are considered to be compliant with the condition.	Compliant
Site activities are undertaken without	9.1	Continue monitoring of PM10 at the existing monitoring site, this being representative PM10 level at the potentially worst affected receptor.	Site observations	Refer to PA 10_0041, Condition 3.18 for further information concerning air quality monitoring undertaken on-site.  Monitoring of PM10 was undertaken next to the Site office during the audit period therefore Pine Dale has been assessed as being compliant with this condition.	Compliant
quality criteria or adversely impacting upon surrounding receivers.	9.2	Increase frequency of PM10 sampling from once per six days to once per three days in the event that elevated PM10 levels are recorded.	<ul> <li>Annual Return – 24         November 2012 / 23     </li> <li>November 2013</li> <li>RCA Surface Water,         Depositional Dust, HVAs and Meteorological         Monitoring, Community         Consultative Committee         Reports – January 2013 to June 2014     </li> </ul>	No exceedences of PM10 criteria, as defined the PA, were noted during the audit period therefore this condition has not been triggered.	Not Applicable (Not triggered)
	9.3	Continue with implementation of dust mitigation practices associated with Pine Dale Coal Mine, including watering of disturbed areas and haul roads, and covering of product truck loads.	<ul> <li>Annual Return – 24         November 2012 / 23     </li> <li>November 2013</li> <li>RCA Surface Water,         Depositional Dust, HVAs and Meteorological Monitoring, Community Consultative Committee Reports – January 2013 to June 2014     </li> </ul>	Refer to PA 10_0041, Condition 3.18 for further information concerning air quality mitigation measures implemented on-site.	Compliant



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Desired Outcome	Condition No.	Action	<b>Evidence Source</b>	Comment	Compliance Status & Recommendations
	9.4	Implement extra mitigation measures such as more watering, and modification of site activities.	Site observations	Progressive rehabilitation and dust suppression through use of the water cart are the main mitigation measures undertaken on-site. Progressive rehabilitation was observed during the Site inspection on 28 and 29 August 2014.  For care and maintenance the Site has grassed approximately six hectares of land to minimise windblown dust, vehicles use on-site is restricted and a water cart is available during dryer periods for roads and areas that have not been partially or fully rehabilitated. Wind breaks were observed to have been planted to screen the Site and the amenity bund was observed to have been partly rehabilitated and is due for further rehabilitation in September 2014 to minimise windblown dust.	Compliant
	9.5	Partially enclose the crusher and conveyors to minimise dust during processing.	Site observations	The crusher was not in use at the time of the Site inspection and Pine Dale management reported it would not be used again on-site.	Not Applicable (Not triggered)
Air Quality  mplementation of an  ppropriate air quality  nonitoring program for  ontinued compliance with  DECCW guideline levels.	9.6	Monitor deposited dust levels at six existing deposition gauges (D1-D6).	Pine Dale Dusts & HVAS - Cumulative Data 2013-14 RCA Surface Water, Depositional Dust, HVAs and Meteorological Monitoring, Community Consultative Committee Reports – January 2013 to June 2014	Refer to PA 10_0041, Condition 3.21 for further details concerning dust monitoring undertaken on-site. Monitoring of depositional dust was undertaken at six locations described in the AQGHGMP therefore Pine Dale are compliant with this condition.	Compliant
	9.7	Review and submit dust monitoring results to DECCW as part of the Annual Environmental Management Report.	<ul> <li>Enhance Place Pty Ltd         (2014), AEMR 2013,         March 2014</li> <li>RCA (2014), AEMR         Summary Report         Compiled for Pine Dale,         Environmental         Performance Monitoring         January – December         2013, 24 February 2014,         Ref: 6880-840/0</li> </ul>	Dust monitoring results were included in the AEMR Summary Report Compiled for Pine Dale, Environmental Performance Monitoring January – December 2013, prepared by RCA Laboratories and included as Appendix B of the 2013 AEMR.	Compliant
Air Quality  Minimisation of greenhouse gas, other gases, and odour emissions through reductions in diesel consumption.	9.8	Optimise and schedule vehicle operations to minimise vehicle movements.	Site observations     Enhance Place (2011), Air Quality and Greenhouse Gas Management Plan, June 2011, Ref No. 613/22	The AQGHGMP discusses mitigation measures to reduce greenhouse gas emissions on-site.  Given the care and maintenance status of the Site there was limited plant and vehicle movement at the time of the Site inspection. Pine Dale management reported that personnel car share where safe and practicable to do so when driving around Site.  Pine Dale management reported that idling times and scheduling of vehicle operations were minimised and controlled when the Site was operational. Pine Dale has been assessed as compliant with these conditions.  URS did not complete a full review against this condition.	Compliant
	9.9	Maintain engines according to manufacturers' guidelines and keep tyres at optimum pressure.	-	This condition was not assessed.	Not Assessed
	9.10	Minimise as far as operationally practicable vehicle idling time.	-	See above. URS did not complete a full assessment against this condition.	Compliant



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Desired Outcome	Condition No.	Action	Ev	vidence Source	Comment	Compliance Status & Recommendations
Visibility Limit the visibility of	10.1	Construct the amenity bund on the southern side of the mine area.	•	Site observations	The amenity bund was completed in late 2012 therefore Pine Dale is compliant with this condition.	Compliant
Operational areas from nearby residences and Castlereagh Highway.	10.2	Position / direct lighting so as to minimise offsite light emissions. Do not operate lighting when not required.	•	Site observations Complaints Register 2012- 2014	No permanent lighting infrastructure is operational on-site.  Minimal light is located on-site for security and safety.  Trucks and vehicles when operating had individual lighting to assist in operations that operate during the evening. No requests have reportedly been made by the Director-General or complaints received from community concerning lighting onsite.	Compliant
	10.3	Maintain the mine in a tidy condition.	•	Site observations	At the time of the Site inspection on 28 and 29 August 2014 the Site was maintained in a generally tidy condition.  It is noted that some improvements could be made with regard to hydrocarbon management. Refer to PA 10_0041, Condition 3.39 for comments concerning tidiness at the workshop area.	Compliant Refer to PA 10_0041, Condition 3.39
Soils, Land Capability and Agricultural Suitability	11.1	Retain soils stripped from undisturbed areas of the Project Site for rehabilitation works.	-		Refer to SoC 2.4.	Compliant
Maintenance of soil value for rehabilitation and	11.2	Develop appropriate soil management procedures for handling and stockpiling soils of the types found at the Project Site.	-		Refer to SoC 2.4.	Compliant
minimisation of soil loss through erosion.	11.3	Develop appropriate soil and erosion management procedures to minimise soil erosion from stockpiles and stripped areas.	•	Site observations	Topsoil stockpiles were observed in the Yarraboldy extension area. The stockpiles were observed to be bare and may be susceptible to erosion from wind and/or rain.	Compliant 2014/IEA/020 Recommendation Grass soil stockpiles to minimise soil erosion.
Soils, Land Capability and Agricultural Suitability Remediation of	11.4	Excavate and remove soils contaminated with Hydrocarbons.	•	Site observations	Refer to PA 10_0041, Condition 3.39 for comments concerning potentially contaminated soils at the workshop.	Compliant Refer to PA 10_0041, Condition 3.39
contaminated soils.	11.5	Remove contaminated soil (if the contamination is limited in area) to a designated location at the site (away from natural drainage) for the bioremediation of the contaminated material.	-		Refer to SoC 11.4.	Not Applicable
	11.6	Remove contaminated soil (if the contamination is widespread) and transport to a facility licensed to accept the specific type of contaminated material.	-		Refer to SoC 11.4.	Not Applicable

### APPENDIX B 2013 INDEPENDENT ENVIRONMENTAL AUDIT ACTION TABLE PROGRESS

Table-B-1 Action Table Summary of Planning Approval, EPL and Statement of Commitments – Non-compliant / Indeterminate

	Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at November 2013)	Timeframe for Compliance at November 2013	2014 Update – Assessment by URS	Status 2014
2013/IEA/ 001	PA 10_0041 3.16	Non-compliant  Prior to further rehabilitation works which require the spreading fertiliser it is recommended that Pine Dale notify nearby residences of the activity.	It should be noted that the use of this type of fertiliser is common practice on grazing properties in the district. PDM is not aware of any potential infringement of the offensive odours as described under the POEO Act as referred to by the auditor and has received no correspondence with the EPA in this regard. Despite the above PDM will review alternative fertilizer treatments for its rehabilitation strategy and will continue to work with the community to ensure any potential adverse impacts are minimised.	Ongoing	Sighted invoice from Brackenrig Soil Conservation Soils Pty Ltd that listed agricultural lime and gypsum as well as mushroom compost. Pine Dale management reported that chicken manure was used during the audit period, Pine Dale management reported that they did not consider that nearby residencies require notification concerning the new fertiliser. No complaints were received during the audit period for odour. URS consider this finding closed.	Closed
2013/IEA/ 002	PA 10_0041 3.23	Indeterminate  The site reported that no offsite surface discharges have occurred during the audit period. Runoff on site is directed to LDP4 and LDP5 as identified in section 4B.2.3 of the EA "all surface water including dirty water runoff from disturbed areas and all clean water inflow from the adjacent Ben Bullen State Forest in theory reports to the old Wallerawang Colliery underground workings via LDP5". Pine Dale do not consider surface runoff to LDP4 or LDP5 as offsite discharge but as a storage point, if required, and therefore do not consider it an offsite discharge point. Pine Dale reportedly had not pumped any waters into the underground workings during the audit period therefore this condition has been considered indeterminate and further clarification from the EPA is recommended to identify the monitoring requirements as discussed in EPL condition L2.	It should be noted that Licenced discharge points LDP4 and LDP5 are old entrances to underground mine workings  PDM have sought further clarification from the EPA regarding the discharge of water from points LDP4 & LDP5 and associated monitoring requirements. Following the advice of Andrew Helms (EPA) a letter will be drafted and sent to the EPA requesting the removal of LDP4 and LDP5 from the current EPL.	Complete	Licence discharge points four and five (LDP4 and LDP5) were removed from the EPL including related monitoring requirements and water quality limits during the audit period (August 2013). Sighted EPA (2013), Notice of Variation of Licence No. 4911, 25 August 2013, Notice # 1516560. URS consider this finding closed.	Closed
2013/IEA/ 003	PA 10_0041 3.26	Non-compliant  Recommendations for the incorporation of recommended trigger values provided in the BWMR have been discussed in CoA 3.27.	PDM acknowledge the non-compliance.  The BWMP was submitted to NOW on 14 April and DECCW & DoP on 15 April 2011 (2 weeks beyond extended submission date). No further action required.	Complete	Sighted Pine Dale and Enhance Place 'Key Dates and Tasks' an Excel based spread sheet that the Mine Manager uses to track deadlines and submissions dates. Deadlines and submissions were also reported to be inputted in to Microsoft Outlook Calendar (not sighted). EnergyAustralia have a timeline planner (not sighted by the auditors).	Closed

	Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at November 2013)	Timeframe for Compliance at November 2013	2014 Update – Assessment by URS	Status 2014
2013/IEA/ 004	PA10_0041 3.27 (b)	Non-compliant (Implementation)  Section 4.6.4 states that regular (monthly and following rainfall events >25mm/hr) will be undertaken of all erosion and sediment control structures on site and along Neubecks Creek. Pine Dale reported that these inspections are undertaken in an informal capacity. To comply with the requirements of the WMP it is recommended that the formal inspection is carried out and a Site Inspection Summary Report (Appendix 1, WMP) completed which includes in the information required under Section 4.6.4 of the WMP.	PDM acknowledge the non-compliance. A system for monthly inspection and documentation has been developed and implemented.	Complete	Evidence of monthly Erosion & Sediment Control Structure Inspections was sighted.	Closed
2013/IEA/ 005		Non-compliant (Implementation)  Section 4.6.2 states that following the completion of the BWMP Pine Dale intend to review water quality trigger values. It is recommended that consultation with undertaken with NOW, OEH and DP&I to review water quality trigger values and where required additional monitoring be undertaken to determine appropriate trigger values. Following identification of revised trigger levels, the WMP should be updated to reflect the required monitoring program.	Background monitoring ceased as of 1 August 2013. A review of the trigger levels will be undertaken in consultation with NOW and EPA.	Completed – Trigger level review ongoing	The trigger level review has been placed on hold pending approval of Yarraboldy Stage 2 Development application. Enhance Place had planned to conduct the review when the Stage 2 application was approved; however, this was put on hold. It is recommended that consultation with NOW, OEH and DPE be undertaken to review water quality trigger values and where required additional monitoring be undertaken to determine appropriate trigger values. Following identification of revised trigger levels, the WMP should be updated to reflect the required monitoring program.	Ongoing
2013/IEA/ 006		Non-compliant (Implementation)  Section 4.6.4 and 4.6.5 of the Baseline Water Monitoring Plan state channel stability and stream health monitoring will be carried out at three points along Neubecks Creek every six months. This was to be recorded as a photographic log to indemnify channel stability and health. This monitoring has not been carried out during the audit period and URS therefore recommends that monitoring begin immediately so that the effectiveness of the water management system can be more accurately assessed.	A system for monthly inspection and documentation has been developed and implemented. This will be incorporated into Monthly environmental monitoring reports.	Completed – inspections ongoing	Six monthly stream health assessments have been completed with monthly stream health monitoring ongoing. Sighted Channel Stability and Stream Health Monitoring, February 2014 (RCA Laboratories, Ref: 6880-849/0).	Closed
2013/IEA/ 2007		Non-compliant (Implementation)  Identify EPL discharge points 4 and 5 (underground workings) in the SWMP plan as a key management technique for management of dirty water on site. In addition include LDP 5 in Table WM7 and identify sampling requirements.	n/a	Complete	LDP4 and LDP5 have been removed from EPL. Sighted EPL Variation Notice no. 1516560 dated 29 August 2013).	Closed
2013/IEA/ 008		Non-compliant (Implementation)  Update the excel spreadsheet of surface water monitoring results with the	The data will be recorded in a separate database as recommended. Trends in groundwater and surface water data has previously been presented in an	Complete	Surface water data is recorded in a separate database as recommended.	Closed

Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at November 2013)	Timeframe for Compliance at November 2013	2014 Update – Assessment by URS	Status 2014
	time series datasets as described in the Section 6 of the WMP.	annual environmental monitoring report submitted to PDM by RCA which forms an Appendix of the AEMR.		Trends are plotted graphically and are presented in the spread sheet and the annual AEMR reports (sighted Appendix B, p.13). Sighted Channel Stability and Stream Health Monitoring, February 2014 (RCA Laboratories, Ref: 6880-849/0) and AEMR for 2013.	
2013/IEA/ 2009 PA 10_0041 3.27 (c)	Non-compliant (Implementation)  It is recommended that an investigation of groundwater quality and levels is undertaken as triggered during the audit period by exceedances of GWP trigger criteria (Table WM11). This includes a review of groundwater levels from July 2011 to present to determine if operations have impacted groundwater levels.  As provided in CoA 3.27(b) it is recommended that consultation with NOW, OEH and DP&I is undertaken to review water quality trigger values and based on the outcomes, the WMP be updated to reflect the required monitoring program.  Remove EP PDH3/GW and EP PDH4/GW water quality analyses from Table WM11 as identified in the GWP.	PDM acknowledge the non-compliance.  Due to the inconsistencies in trigger values noted in documented reports as noted in the audit PDM will conduct a review of groundwater monitoring data and previous assessment reports, in consultation with NOW and EPA, to determine appropriate trigger values for the site. The WMP will be updated to reflect the any revised trigger values.  The groundwater data will be recorded in a separate database as recommended. Trends in groundwater and surface water data has previously been presented in an annual environmental monitoring report submitted to PDM by RCA which forms an Appendix of the AEMR.	Completed – Trigger level review ongoing	The trigger level review has been placed on hold by Enhance Place pending approval of the Yarraboldy Stage 2 Development application. Pine Dale reported in the AEMR (2013, p.23) that 'the site specific Trigger Values developed for the Pine Dale Mine, as stipulated in the sites' Water Management Plan in accordance with Schedule 3, Condition 27(c) of the Project Approval (PA 10_0041) are currently under review, therefore the Trigger Level values presented in the previous version of the sites' Groundwater Monitoring Program (Dec 2005) have been adopted for the purpose of compliance assessment in this report'. Given the time period since the previous IEA it is recommended that consultation with NOW, OEH and DPE be undertaken to review water quality trigger values and based on the outcomes, the WMP be updated to reflect the required monitoring program.  Pine Dale management reported that a review of the groundwater levels was completed via analysis of data from bores outlined in Table WM11 and that no mine impact was observed.  The groundwater data is now recorded in a separate database as recommended and that trends are plotted graphically. Trends are presented in the spreadsheet and the AEMR reports (sighted Appendix B, p.13 – Groundwater Assessment Criteria and Pine Dale Cumulative Data Excel spread sheet).	Ongoing

	Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at November 2013)	Timeframe for Compliance at November 2013	2014 Update – Assessment by URS	Status 2014
					PDH3/GW and EP PDH4/GW water quality analyses will be removed from Table WM11 when Trigger Values and WMP is updated for Stage 2.	
2013/IEA/ 010	PA 10_0041 3.52	Non-compliant (Due to timing of submission)  The contact number for Fire and Rescue NSW is no longer '000'. The BFMP should be updated to include the updated Fire and Rescue contact Number '1300 729 579'.	PDM acknowledge the non-compliance due to timing of the BMP submission. No further action required.	Completed	Pine Dale management reported that the Bush Fire Management Plan was not updated as the contact number for NSW Fire and Rescue remains as '000'. URS consider this finding closed.	Closed
2013/IEA/ 011	PA 10_0041 5.1	Non-compliant (Implementation – publishing of complaints and community complaints hotline)  The community complaints line / environmental hotline had not been implemented as described in the EMS. Therefore it is recommended that the complaints line number is added to the Pine Dale website and the EMS is updated to identify that the line is only operational during operational hours (7am to 6pm). This should be undertaken with consultation and approval of the DP&I.  Review new starter induction and bi-annual induction to ensure that all staff and contractors are appropriately trained in the EMS and environmental management responsibilities of all staff and contractors at Pine Dale.  Update the Pine Dale website each month with complaints as identified in the EMS.	PDM acknowledge the non-compliance.  The community hotline line message will be updated to include the mobile number of the Manager of Mining Engineering who is available to respond to an concerns raised by the community outside office hours.  PDM has new procedures in place to ensure the complaints data is updated on the PDM website on a monthly basis.  The community hotline line message will be updated to include the mobile number of the Manager of Mining Engineering who is available to respond to an concerns raised by the community outside office hours.  PDM has new procedures in place to ensure the complaints data is updated on the PDM website on a monthly basis.	Completed	Sighted the Pine Dale website (http://www.energyaustralia.com.au/about-us/what-we-do/power-generation/pine-dale-mine/community). The telephone number was evident on the Pine Dale Mine homepage. Refer to Appendix A, EPL, Condition M5 for recommendations concerning the telephone complaints hotline.  The management and documenting of complaints appeared to have improved since the previous IEA, however one complaint emailed to DTIRIS-DRE was not included on the complaints register. Refer to Section 6.2 for further details.	Closed
013/IEA/ 112	PA 10_0041 5.7	Non-compliant  Upload the 2011 AEMR and all future AEMRs, including monitoring data to the Pine Dale website.  Under the POEO Act, clause 66 (6) the holder of an EPL must within 14 days of obtaining monitoring data make the monitoring data publically available via the company website (including all data after 31 March 2012). The EPA Requirements for publishing pollution monitoring data can be found here <a href="http://www.environment.nsw.gov.au/legislation/20120263reqpubpmdata.htm">http://www.environment.nsw.gov.au/legislation/20120263reqpubpmdata.htm</a>	PDM acknowledge non-compliance.  AEMR's have been uploaded to the PDM website. PDM now has procedures in place to ensure that AEMR reports are published on the PDM website on an annual basis.  Updated complaints database has been uploaded to the PDM website.  PDM now has procedures in place to ensure the complaints register is updated and displayed on the website on a monthly basis.  A link on the website has now been established to allow the Rehabilitation Management Plan to be viewed.	Complete Complete Complete	Sighted the Pine Dale website (http://www.energyaustralia.com.au/about-us/what-we-do/power-generation/pine-dale-mine/community). Environmental data as well as the 2013 AEMR and CCC minutes and agendas were available on the website. EPL data was available from June to December 2013 and January to July 2014.	Closed
2013/IEA/ 013	EPL 4911 P1.3	Indeterminate  Pine Dale seeks clarification, with the EPA, of their responsibility for monitoring all discharges to point 4 and 5, which are not a direct result of pumping.	Pine Dale Mine will seek to clarify with the EPA regarding any additional monitoring and reporting requirements for LDP4 and LDP5.	Complete	Licence discharge points four and five (LDP4 and LDP5) were removed from the EPL including related monitoring requirements and water quality limits during the audit period (August 2013). Sighted EPA (2013), Notice of Variation of Licence No. 4911, 25 August 2013, Notice # 1516560. URS consider this finding	Closed

Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at November 2013)	Timeframe for Compliance at November 2013	2014 Update – Assessment by URS	Status 2014
				closed.	
2013/IEA/ EPL 4911 L1.1 014	Indeterminate  It is recommended that an investigation of groundwater quality and levels is undertaken as triggered during the audit period by exceedances of GWP	Hay bales have been installed as requested by NOW.  New reporting procedures are in place to provided interpretive comments on water quality trends and compliance with relevant trigger values	Complete	Evidence of monthly Erosion & Sediment Control Structure Inspections was sighted.  Monthly reports include comment on water	Closed
	trigger criteria (Table WM11). This includes a review of groundwater levels from July 2011 to present to determine if operations have impacted groundwater levels.	presented in the WMP.  Pine Dale Mine will seek to clarify with the EPA regarding any additional	Complete	quality trends and compliance with relevant trigger values. Sighted monthly reports from RCA to Pine Dale that	Closed
	As provided in CoA 3.27(b) it is recommended that consultation with NOW, OEH and DP&I is undertaken to review water quality trigger values and		Complete	included comments concerning water quality trends.	
	based on the outcomes, the WMP be updated to reflect the required monitoring program.  Remove EP PDH3/GW and EP PDH4/GW water quality analyses from Table WM11 as identified in the GWP.  Pine Dale seeks clarification, with the EPA, of their responsibility for monitoring all discharges to point 4 and 5, which are not a direct result of pumping.			Licence discharge points four and five (LDP4 and LDP5) were removed from the EPL including related monitoring requirements and water quality limits during the audit period (August 2013). Sighted EPA (2013), Notice of Variation of Licence No. 4911, 25 August 2013, Notice # 1516560. URS consider this finding closed.	Closed
2013/IEA/ EPL 4911 L2 015	Indeterminate  Pine Dale seeks clarification, with the EPA, of their responsibility for monitoring all discharges to point 4 and 5, which are not a direct result of pumping.	Pine Dale Mine will seek to clarify with the EPA regarding any additional monitoring and reporting requirements for LDP4 and LDP5.	Complete	Licence discharge points four and five (LDP4 and LDP5) were removed from the EPL including related monitoring requirements and water quality limits during the audit period (August 2013). Sighted EPA (2013), Notice of Variation of Licence No. 4911, 25 August 2013, Notice # 1516560. URS consider this finding closed.	Closed
2013/IEA/ EPL 4911 L4.5	Non-compliant	PDM acknowledge the non-compliance.	Complete	The auditors sighted raw weather data	Closed
016	Meteorological data for the site is recorded at EPA Licence Point 15.  As reported by Pine Dale temperature inversion conditions are not determined by the sigma-theta method therefore this condition has been considered not compliant.	The PDM weather station was upgraded on the 22/05/13. The new station has the capability to record sigma-theta as required.		(including sigma theta) for July 2013. URS consider this finding closed.	
	Following submission of the draft audit report Pine Dale and adjacent Lamberts Gully mine (who share the cost of the weather station) upgraded the weather station. The upgrade, which includes the capability to monitor sigma theta was installed on 22.05.13. The determination of temperature inversions will be undertaken using the sigma-theta method as required, although the need for determination of temperature inversions has not been required in noise survey's conducted at this site to date.				
2013/IEA/ EPL 4911 M2.3 017	Indeterminate  Pine Dale seeks clarification, with the EPA, of their responsibility for	Pine Dale Mine will seek to clarify with the EPA regarding any additional monitoring and reporting requirements for LDP4 and LDP5.	Complete	Licence discharge points four and five (LDP4 and LDP5) were removed from the	Closed

	Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at November 2013)	Timeframe for Compliance at November 2013	2014 Update – Assessment by URS	Status 2014
		monitoring all discharges to point 4 and 5, which are not a direct result of pumping.			EPL including related monitoring requirements and water quality limits during the audit period (August 2013). Sighted EPA (2013), Notice of Variation of Licence No. 4911, 25 August 2013, Notice # 1516560. URS consider this finding closed.	
2013/IEA/ 018	EPL 4911 M4.1	Non-compliant (During audit period)  Commence monitoring of stigma theta at Pine Dale meteorological station.  If Pine Dale determine that sigma theta is not required for operations at Pine Dale consultation with EPA should be undertaken to remove it from the EPL.	PDM acknowledge the non-compliance.  The PDM weather station was upgraded on the 22/05/13. The new station has the capability to record sigma-theta as required.	Complete	The auditors sighted raw weather data (including sigma theta) for July 2013. URS consider this finding closed.	Closed
2013/IEA/ 019	EPL 4911 M5.1	Non-compliant  Review all complaints made during the monthly update of the Complaints Register as required for publication of the Pine Dale website.  Provide training on complaints procedures to ensure all complaints are recorded and responded to.  Review the recording of complaints for adequacy in the future to demonstrate compliance with his condition.	PDM acknowledge the non-compliance.  PDM has revised its procedures to ensure all details of the complaint are recorded at the time of the complaint via completion of the Pine Dale Coal Mine Complaint Record form. The hand written complaint is then tabulated in an excel spread sheet and displayed on the website on a monthly basis.	Complete	The auditors sighted evidence of a selection of hand written complaint register forms and the 2013/2014 Complaints Register. URS consider this finding closed. It is noted that Centennial Coal Pty Ltd purchased a number of residential properties in the Blackman's Flat area in April 2014 and that the number of complaints in the community has reduced during the audit period.	Closed
2013/IEA/ 020	EPL 4911 M5.2	Non-compliant  All complaint records must be completed in their entirety. In particular actions carried out and/or no actions taken should be documented correctly.	PDM acknowledge the non-compliance.  PDM has revised its procedures to ensure all details of the complaint are recorded at the time of the complaint via completion of the Pine Dale Coal Mine Complaint Record form. The hand written complaint is then tabulated in an excel spread sheet and displayed on the website on a monthly basis.	Complete	The auditors sighted evidence of a selection of hand written complaint register forms and the 2013/2014 Complaints Register. URS consider this finding closed.  It is noted that the complaint supplied by DTRIS-DRE on 28 February 2014 was not included on the complaints register. Refer to EPL 4911, Condition M5.1 and M5.2 for recommendations. URS consider the recording and closeout of complaints is ongoing.	Ongoing
2013/IEA/ 021	EPL 4911 R1.5	Non-compliant  Ensure all future Annual Returns are submitted to OEH in sufficient time so that they are received within 60 days of the reporting period	PDM acknowledge the non-compliance due to the late submission of the Annual Returns.  PDM has now implemented a Compliance Calendar to facilitate the timely management and submission of regulatory and other reports.	Complete	Dates and Tasks' an Excel based spread sheet that the Mine Manager uses to track deadlines and submissions dates.  Deadlines and submissions were also reported to be inputted in to Microsoft Outlook Calendar (not sighted).  EnergyAustralia have a timeline planner (not sighted by the auditors).	Closed

	Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at November 2013)	Timeframe for Compliance at November 2013	2014 Update – Assessment by URS	Status 2014
2013/IEA/ 022	ML 1664 3 (a)	Non-compliant (Due to timing)  ML 1664 was granted on 10.01.12 and has been reviewed under the scope of this audit.  The MOP was prepared in February 2011 under the requirements of ML 1569 and 1578. The MOP was approved subject to the conditions provided by DRE in a letter dated 21.03.11. These conditions stated:  1. The activity must be carried out generally in accordance with the MOP	PDM acknowledge the non-compliance due to timing of the MOP submission. No further action required.	Complete	Dates and Tasks' an Excel based spread sheet that the Mine Manager uses to track deadlines and submissions dates.  Deadlines and submissions were also reported to be inputted in to Microsoft Outlook Calendar (not sighted).  EnergyAustralia have a timeline planner (not sighted by the auditors).	Closed
		<ol> <li>dated 25.02.11 and conditions of this approval; and</li> <li>A MOP amendment must be submitted to the Department for the purpose of addressing Condition 2 (9) (i)-(viii) of ML 1569 and ML 1578. Alternatively, if these conditions have been addressed, a report providing detailed evidence of compliance can be submitted in place of the MOP amendment. The MOP amendment or compliance report must be submitted by 29 April 2011.</li> </ol>				
		Item number 2 was carried out as identified in a letter dated 10.08.11 which provides a response to each section of condition 2 (9) (i)-(viii). No return correspondence from the DRE was sighted by URS. As the letter was not submitted by the 29.04.11 Pine Dale have been assessed as not compliant with this condition with respect to meeting the timeframes defined.				
013/IEA/ 23	ML 1664 7	Non-compliant (For Area A)  As identified in the 2011 AEMR site inspection by DRE, letter dated 22.06.11, rehabilitation monitoring results must be provided in the 2012 AEMR and additional rehabilitation of Area A undertaken to reduce erosion and increase vegetation abundance. The 2012 AEMR was not available for review during this audit.	PDM have continued to address the issue of revegetation in Area A. A site visit was made on 19/06/13 by Global Soils consultants to review the rehabilitation progress and suggest measures to aid soil improvement and vegetation growth.	Ongoing	Sighted recommendations provided by Global Soil Systems Pty Ltd dated 9 July 2013 Pine Dale Rehabilitation Recommendations for Pit A, B and C rehabilitation.  Sighted proposal from Global Soil Systems Pty Ltd dated 12 July 2013 to conduct the	Ongoing
		No further correspondence from the department was reportedly received by Pine Dale during the audit period.  Pine Dale have been assessed as Not Compliant due to the letter from DRE and required actions to address rehabilitation in Area A however it is noted that rehabilitation was in progress (some trees had been planted and some drainage lines constructed) and additional works are scheduled for 2013.			recommendations provided in their report dated 9 July 2013.  Sighted Proposal for a revised direct seeding of Area A dated 15 August 2014.  Sighted two Rehabilitation Monitoring Reports prepared by FirstField Environmental Pty Ltd dated June and July 2014.	
					2014.  The auditors observed that Area A had been mulched with a charcoal and mushroom compost and had been fertilised with gypsum and agricultural lime during the audit period. SLR Consulting Pty Ltd has been engaged to assess Areas A, C and 8 and provide	

Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at November 2013)	Timeframe for Compliance at November 2013	2014 Update – Assessment by URS	Status 2014
				recommendation for improvement and developing closure criteria for the care and maintenance MOP. An SLR Site visit is planned for September 2014. URS consider the issue of rehabilitation across the Site to be ongoing, and support the approach of a detailed assessment of the status of rehabilitation; identification and agreement of closure criteria; and defining and implementing actions to meet the closure criteria.	
2013/IEA/ SoC 1.7 024	Indeterminate  Refer to PA CoA 3.24 and 3.27 for a detailed discussion of surface water and groundwater monitoring.  Due to the inconsistencies within the monitoring requirements of surface water and groundwater detailed within the WMP this condition has not been able to be adequately assessed. It is noted that exceedences of groundwater trigger values defined with the WMP for pH and EC were recorded during the audit period. These levels were not followed up as Pine Dale reported that the trigger values previously used for Pine Dale were reported against within the 2011 AEMR, and no exceedances against these criteria were recorded.  As identified in the CoC a detailed review of groundwater and surface water monitoring requirements needs to be undertaken to ensure effective monitoring of water quality.	Due to the inconsistencies in trigger values noted in documented reports as noted in the audit PDM will conduct a review of groundwater monitoring data and previous assessment reports, in consultation with NOW and EPA, to determine appropriate trigger values for the site. The WMP will be updated to reflect any revised trigger values.	Completed – Trigger level review ongoing	Refer to Table B-2, PA 10_0041 3.27 (c).	Ongoing
2013/IEA/ SoC 4.4 025	Indeterminate  Bursaria spinosa spp lasiophylla had not been planted as required in Area A as identified in the MOP at the time of the audit, however was planned to be planted in 2013 to coincide with the lifecycle periods of the Purple Copper Butterfly. As no timing restriction has been applied to this condition and Pine Dale have expressed plans to begin planting in 2013 this condition has been assessed as Indeterminate during the audit period.  It should be noted that Pine Dale have in place the Purple Copper Butterfly Monitoring Program since June 2011 which aims to identify potential sources of indirect impacts on the butterfly / butterfly lavae and identify relevant management measures.	Rehabilitation is ongoing and still in the early developmental phase of establishing (5 years old). PDM is committed to establishing <i>Bursaria spinosa spp lasiophylla</i> within its rehabilitation through either the inclusion of seeds in the rehabilitation seed mix or direct planting. The programed timing of seeding shall correspond with the seasonal requirements for plant growth.	Reviewed annually	Area A was covered with cover crop in April 2014 (sighted during the audit) and with a second stage of Direct Seeding of native species scheduled for Spring 2014. Proposed native species in direct seeding includes <i>Bursaria spinosa spp.</i> Refer to Appendix, SoC, 4.4 for further details.	Ongoing
2013/IEA/ SoC 9.5 026	Non-compliant  The crusher and conveyors were not partially enclosed.  The crusher and conveyors were sighted briefly in operation during the site inspection. Dust being generated was not considered to be excessive.	PDM acknowledge the non-compliance.  It is anticipated that PDM will be placed under a care and maintenance arrangement in December 2013 pending further mining approvals. As such the use of existing conveyors will cease and obviate the need for any further dust mitigation measures. As noted by the audit report dust was not considered to be excessive. As such PDM is not proposing to install	Complete	The Site was under care and maintenance at the time of the Site inspection and the crusher and conveyors were not in use.  Pine Dale management reported the crusher would not be used again should the Site come out of care and	Closed

Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at November 2013)	Timeframe for Compliance at November 2013	2014 Update – Assessment by URS	Status 2014
		additional covers on the conveyors at this time. No further action is proposed.		maintenance.	

Table- B-2 Action Table Summary of Planning Approval, EPL and Statement of Commitments – Continuous Improvement

	Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at September 2014)	Timeframe for Compliance at August 2014	2014 Update – Assessment by URS	Status 2014
2013/IEA/ 027	PA 10_0041 / 3.1	Ensure all noise monitoring is carried out during operational hours defined in CoA 3.5 (i.e. from 7am to 6pm).	-	Complete	The auditors sighted evidence of noise monitoring for the audit period. 2013/2014 monitoring events were carried out in accordance with the Noise Management Plan.	Closed
2013/IEA/ 028	PA 10_0041 / 3.7	Update the NMP to clearly identify which noise monitoring points (NM1, NM2, NM3, NM4, NM5 and NM 6) correspond to which residence was identified in the EPL (L4.1). This would allow a more transparent assessment of compliance against the EPL noise criteria.	Environmental Management Plans  Pine Dale Mine has been progressing the Yarraboldy Stage 2  Extension Project (Stage 2 Project) and anticipated that this would be determined prior to coal being exhausted in the currently approved mining area. This would enable the orderly progression of mining to continue. It was expected that updated Environmental Management Plans would be implemented following the determination of the Stage 2 project in Q2 2014. Due to delays in the assessments and progression of the Stage 2 Project Pine Dale mine has been placed in care and maintenance from April 2014. As such the Environmental Management Plans for the Stage 2 Project have not been developed.  Pine Dale Mine has prepared a draft Care and Maintenance Mining Operations Plan including the Rehabilitation Management Plan which addresses the proposed environmental management procedures during this period.  There is uncertainty regarding the future operations of Pine Dale Mine and the timing of the recommencement of any future mining operations. Depending on outcomes of further assessments, likely to be finalised by Q4 2014, it is possible that Pine Dale Mine may remain in care and maintenance for some time.  In the event that Pine Dale mine continues in care and maintenance for greater than 12 months and is unable to recommence mining activities then relevant Environmental Management Plans will be updated to more accurately reflect the environmental management of the site.		URS consider that Environmental Management Plans should be updated as soon as practicable rather than in 12 months' time as stated by Pine Dale. The majority of the plans have not been updated since 2011. A further 12 month delay would extend the unreviewed status of the plans to four years. Plans do not currently reflect roles, responsibilities, mitigation measures and monitoring requirements during care and maintenance that has been in place since April 2014.	Ongoing
2013/IEA/ 029		Identify the reporting requirements within the NMP with the RCA (reporting contractor) to ensure that the following information is described in all of the quarterly noise survey reports:  A statement that the measurements were carried out in accordance with AS 1055-1997 (as required by Section 7.2.1 of the NMP).  Results of before and after calibration checks (Section 7.2.1 of the NMP).  A description of the measurement procedure, including source coding and any post-processing of the measurement data (Section 7.2 (b) of AS 1055:1-1997).	Noted. Pine Dale Mine will adopt this recommendation.	-	Refer to comments provided in Appendix A, PA 10_0041, C3.7.	Ongoing

	Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at September 2014)	Timeframe for Compliance at August 2014	2014 Update – Assessment by URS	Status 2014
2013/IEA/ 030	PA 10_0041 / 3.21	<ol> <li>Section 8.2 of the AQGHGMP states that notification of DP&amp;I and OEH will be given 'as soon as practicable'. To comply with the POEO Act in the event that an exceedance is causing or threatening material harm the relevant authorities must be notified 'immediately' hence the Plan would need to be updated with this notification to meet the requirement of the POEO Act.</li> <li>To reduce dust as per the AQGHGMP additional seeding of the main amenity bund, perimeter bund and workshop bund is recommended to minimise potential dust emissions from site.</li> </ol>	<ol> <li>Environmental Management Plans. Refer response to PA 10_0041 / 3.7 (Section 1).</li> <li>Complete.</li> </ol>	Complete	<ol> <li>Refer to Table B-2, PA 10_0041 / 3.7.</li> <li>Sighted evidence of seeding of the amenity bund with further seeding planned for September 2014. Refer to comments provided in Appendix A, PA 10_0041, C3.21 for comments concerning other bunds at the Site.</li> </ol>	<ol> <li>Ongoing</li> <li>Ongoing</li> </ol>
2013/IEA/ 031	PA 10_0041 / 3.24	<ol> <li>That the impact of the reduction in surface flows to Neubecks Creek due to the mine be considered in the assessment of loss of baseflow and the EA statement verified that reduction of surface flows has not occurred.</li> <li>URS recommend that the WMP (Section 5.4.2) is updated to reflect the findings of the Hydrogeological Investigation Report for Water Licence Application and Baseline Water Monitoring Report prepared by Aquaterra in 2011 to reflect that groundwater impacts on the baseflow of Neubecks is negligible and that Section 5.4.2 is updated to reflect that monitoring bore EP PDH8/GW has been removed.</li> <li>Prior to the WMP being updated it is recommended that Groundwater level data is interpreted by a suitably qualified person to ensure that no reduction in baseflow has occurred since July 2011.</li> <li>Surface water raw monitoring data provided by RCA did not include records of sampling at The Bong as required under Table WM10 in the GWP. The Baseline Water Monitoring Report indicates that monitoring is still being undertaken, therefore URS recommends that these monitoring records are updated to include all relevant data.</li> <li>Reflect updates to the WMP in the next AEMR with an interpretation of groundwater levels.</li> </ol>	<ol> <li>Existing water monitoring has not indicated any adverse impacts in this regard, a more detailed review of collected data could be undertaken.</li> <li>Environmental Management Plans. Refer response to PA 10_0041 / 3.7 (section 1).</li> <li>Environmental Management Plans. Refer response to PA 10_0041 / 3.7 (section 1).</li> <li>Complete.</li> <li>Noted &amp; completed.</li> </ol>	-	<ol> <li>Refer to comments provided in Appendix A, PA 10_0041, C3.24.</li> <li>Refer to Table B-2, PA 10_0041 / 3.7.</li> <li>Refer to Table B-2, PA 10_0041 / 3.7.</li> <li>Sighted evidence of raw water monitoring data.</li> <li>Refer to Table B-2, PA 10_0041 / 3.7.</li> </ol>	<ol> <li>Ongoing</li> <li>Ongoing</li> <li>Ongoing</li> <li>Complete</li> <li>Ongoing</li> </ol>
2013/IEA/ 032	3.32	Review and update the Pine Dale staff and contractor induction documentation to include training on the response and reporting procedures required under Section 6 of the AHMP.	Any specific matters of this nature are provided in toolbox talks. The small number of staff and small size of the mining operation suggests there is a very low likelihood of finding new aboriginal archaeological sites.	-	Sighted evidence of toolbox talks. Assessments as part of the Yarraboldy Stage 2 Extension Project (Stage 2 Project) is/are likely highlight any new aboriginal archaeological sites.	Closed
2013/IEA/ 033	PA 10_0041 / 3.37	Conduct additional temporary rehabilitation of the main amenity bund and other bunds located on site so as to improve the stability and visual amenity of the bund.	Complete.	-	Refer to comments provided in Appendix A, PA 10_0041, C3.37.	Ongoing
2013/IEA/ 034	PA 10_0041 / 3.39	<ol> <li>Signage should be installed on site to assist in the management of waste in the Workshop area, as per the WaMP.</li> <li>Implementation of regular inspections of the workshop area should be undertaken and recorded, in accordance with the WaMP. A record of the inspection and remediation actions identified should be maintained.</li> <li>Pine Dale recorded zero incidents from February 2011 to January 2013. Training on the</li> </ol>	Noted, agree. These items should be implemented following the recommencement of mining activities.	-	Refer to comments provided in Appendix A, PA 10_0041, C3.39.	Ongoing

	Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at September 2014)	Timeframe for Compliance at August 2014	2014 Update – Assessment by URS	Status 2014
		use of the incident reporting systems for incidents, near misses and observations may in the future pick up observations such as leaking equipment so that corrective actions can be implemented as appropriate.				
2013/IEA/ 035	PA 10_0041 / 3.51	Basic fire control training should be carried out regularly. As reported during the site inspection no training sessions have been carried out during the audit period. A training session is therefore recommended to be carried as soon as practicable.	Fire control training is not considered necessary as Rural Bush Fire Brigade would be consulted regarding bush fire response. Fire response training regarding the use of equipment and machine fires is undertaken as part of the competency assessment for operators.	-	Refer to comments provided in Appendix A, PA 10_0041, C3.51.	Closed
2013/IEA/ 036	PA 10_0041 / 3.53	<ol> <li>To assist with the rehabilitation of Area A it is recommended that Pine Dale purchase more endemic seed mix with a high ratio of appropriate native shrubs, grasses, forbs and herbs to develop rapid vegetative cover and assist with the soil composition.</li> <li>Mulch and felled trees from future Yarraboldy Extension Area vegetation clearing works to be located with Area A to improve native regeneration and general rehabilitation.</li> <li>As per DRE letter dated 22.06.12 and associated actions Pine Dale must provide the rehabilitation monitoring results, reports and locations in all future AEMR's.</li> </ol>	<ol> <li>Rehabilitation Strategy</li> <li>Enhance Place has undertaken a number of rehabilitation activities since the previous audit including:         <ul> <li>Reshaping and seeding the amenity bund;</li> <li>Temporary revegetation works in the main mining area;</li> <li>Application of mulch, fertilizer and lime to area A;</li> <li>Application of fertilizer and area C;</li> <li>Weed control including Black berry and S. African love grass;</li> <li>Comprehensive annual biodiversity monitoring surveys.</li> </ul> </li> <li>Enhance Place has also engaged SLR Consulting to assist in the development of a Rehabilitation Completion Criteria for inclusion in the draft Care and Maintenance Mining Operations Plan to the satisfaction of DRE and DP&amp;E.</li> <li>Further to this, Enhance Place has engaged a suitably qualified agronomist from SLR to provide advice on an integrated pasture management strategy for the short, medium and long term management of rehabilitated pasture and native vegetation areas such as area C and area 8 and area A.</li> <li>The purpose of the above advice will provide Enhance Place with a sound strategy on which to base future management practices and decisions in regards to rehabilitation at Pine Dale Mine.</li> <li>Complete.</li> <li>Complete.</li> </ol>		<ol> <li>Refer to comments provided in Appendix A, PA 10_0041, C3.53.</li> <li>Refer to comments provided in Appendix A, PA 10_0041, C3.53.</li> <li>Refer to comments provided in Appendix A, PA 10_0041, C3.53.</li> </ol>	<ol> <li>Ongoing</li> <li>Complete</li> <li>Complete</li> </ol>
2013/IEA/ 037	PA 10_0041 / 5.2	The BFMP, WMP, WaMP, BWMP should be updated to include a procedure for handling complaints and incidents as appropriate or reference other documents such as the EMS where such processes are described.	Environmental Management Plans. Refer response to PA 10_0041 / 3.7 (section 1).		Refer to Table B-2, PA 10_0041 / 3.7 and Appendix A, PA 10_0041, Condition 5.2.	Ongoing
2013/IEA/ 038	PA 10_0041 / 5.3	Include all surface water and Groundwater monitoring results in future AEMRs to comply with the WMP and CoC 5.3 (b).	Complete.	-	The auditors sighted evidence of surface and groundwater monitoring results in the AEMR for 2013.	Complete

	Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	t Environmental Audit Recommendation / Comment Auditors Pine Dale Mine Comments / Status (at September 2014) Tit for Commental Audit Recommendation / Comment Auditors at 20		2014 Update – Assessment by URS	Status 2014
2013/IEA/ 039	PA 10_0041 / 5.6	Training on the use of the incident reporting systems for incidents, near misses and observations should be undertaken.	Noted.	-	This task had yet to be completed at the time of the Site inspection.	Ongoing
2013/IEA/ 040	EPL 4910 / L4.6	Ensure the condition requirements are met. Confirm in noise monitoring reports that EPL conditions have been complied with.	Complete.	-	The auditors sighted noise monitoring reports and data. Refer to Appendix A, EPL Condition L4.6.	Closed
2013/IEA/ 041	EPL 4910 / L4.8	Identify in future noise reporting if modifying factors were / were not applicable (Clause 6.6 of AS 1055.1).	Noted. This information will be displayed in the September 2014 noise report.	-	-	Ongoing
2013/IEA/ 042	EPL 4910 / O1.1	Update the induction and bi-annual refresher training to include training of the storage, handling and disposal of materials and waste.	Environmental Management Plans. Refer response to PA 10_0041 / 3.7 (section 1).	-	Refer to Table B-2, PA 10_0041 / 3.7	Ongoing
2013/IEA/ 043	EPL 4910 / M1.2	Groundwater data is moved and maintained in the correct file and records are maintained in the correct units.	Complete.	-	Refer to Appendix A, EPL Condition M1.2.	Closed
2013/IEA/ 044	EPL 4910 / M1.3	Update the excel monitoring data record sheet for surface water, groundwater and noise to include a column to record who took the sample.	Currently being completed, complete.	-	Refer to Appendix A, EPL Condition M1.3.	Ongoing
2013/IEA/ 045	EPL 4910 / U1.5	The report is not prominently displayed on the Pine Dale website. URS recommends that the Report is displayed on the website as an individual attachment not as an attachment to the EPL.	Complete.	-	It is noted that Condition U1.5 has changed since the previous audit. The Coal Mine Particulate Matter Control Best Practice could not be located on the Pine Dale website [Accessed 05/09/2014 @13:30hrs].	Ongoing
2013/IEA/ 046	ML 1664 / 4(b)	Ensure all actions provided in the Action Plan provided by DRE dated 22.06.12 are incorporated in the 2012 AEMR.	Complete.	-	The 2013 AEMR was sighted by the auditors and included actions requested by DTRIS-DRE.	Closed
2013/IEA/ 047	ML 1664 / 5	Pine Dale mine does not have in place an incident management procedure. All incident reporting is described in the environmental management plans and the Pine Dale EMS, however this relates to the reporting of exceedences of regulatory monitoring criteria in most cases. URS recommend that an incident management procedure is developed for the site and all staff and contractors are inducted on their responsibility to report all observations, near misses and incidents.	Repeated recommendation, addressed above.	-	This task had yet to be completed at the time of the Site inspection.	Ongoing

	Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at September 2014)	Timeframe for Compliance at August 2014	2014 Update – Assessment by URS	Status 2014
2013/IEA/ 048	ML 1664 / 15	Maintain a register of all approvals and/or permits required from NSW Forest prior to any tree felling/clearance activities being carried out at Pine Dale.	Complete.	-	Pine Dale has an expired Occupation Permit (No: 5411) with NSW Forests for the Yarraboldy Extension Project. NSW Forest will not extend the permit on the basis that Pine Dale is on care and maintenance and the existing mining leases provide access to the area for rehabilitation works (Forestry Corporation NSW, 2014). The Occupation Permit was granted under the Forestry Act 2012 for occupying NSW State Forest land. Pine Dale was in discussion with NSW Forest Corporation at the time of the audit to clarify this situation and put in place documentation (i.e. a compensation agreement) to reflect the current arrangements.	Ongoing
2013/IEA/ 049	SoC / 3.3	<ol> <li>Further seeding of Area A to utilise grasses and understory species as well as a more diverse range of shrubs and canopy species, so to gain soil cover, aid erosion and enhance diversity and structure.</li> <li>Bursaria spinosa spp lasiophylla to be planted as one of the key Table 7.1 (MOP) required species.</li> <li>Seed collection records including details of specific species and collection location detail within Ben Bullen State Forest to be recorded for future audits/compliance.</li> </ol>	<ol> <li>Rehabilitation Strategy. Complete. Refer response to PA 10_0041 / 3.53 (section 1).</li> <li>Complete.</li> <li>Noted.</li> </ol>	-	<ol> <li>Refer to comments provided in Appendix A, PA 10_0041, C3.53.</li> <li>Refer to Appendix A, SoC, C4.4.</li> <li>No evidence of seed collection records were provided by the Site.</li> </ol>	<ol> <li>Ongoing</li> <li>Complete</li> <li>Ongoing</li> </ol>
2013/IEA/ 050	SoC / 3.5	Given the lack of topsoil and bushrock availability Pine Dale Mine to continue to place felled trees as habitat and for slope stability.  In addition Area A would benefit from broadscale placement of mulch, when available from native trees being cleared, so to provide organic matter for the soil, seed placement and habitat for insects, reptiles and invertebrates.	Rehabilitation Strategy. Complete. Refer response to PA 10_0041 / 3.53 (section 1).	-	Refer to comments provided in Appendix A, PA 10_0041, C3.53.	Ongoing
2013/IEA/ 051	SoC / 4.5	Further seeding of Area A to utilise grasses and understory species as well as a more diverse range of shrubs and canopy species, so to enhance foraging and sheltering habitat.	Rehabilitation Strategy. Refer response to PA 10_0041 / 3.53 (section 1).	-	Refer to comments provided in Appendix A, PA 10_0041, C3.53.	Ongoing
2013/IEA/ 052	SoC / 9.4	<ol> <li>Regularly monitoring for raised dust on Haul Roads and increase water cart runs to greater than five times per day along haul roads when needed to control dust.</li> <li>In addition temporary vegetation of the amenity bund and bunds for water management may also decrease dust emissions from bare surfaces.</li> </ol>	<ol> <li>Noted.</li> <li>Rehabilitation Strategy. Complete. Refer response to PA 10_0041 / 3.53 (section 1).</li> </ol>	-	<ol> <li>This recommendation was not applicable at the time of the Site inspection given the care and maintenance status of the Site.</li> <li>Refer to comments provided in Appendix A, PA 10_0041,</li> </ol>	Not applicable at the time of the audit      Ongoing

	Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at September 2014)	Timeframe for Compliance at August 2014	2014 Update – Assessment by URS	Status 2014
					C3.53.	
	Summary of A	 Additional Recommendations from 2013 Independent Environmental Audit Not Linked to Spe	ecific Conditions			
2013/IEA/ 053	Hydrocarbon Management	Prepare and implement an Incident Management Procedure which trains all employees and contractors to report incidents of hydrocarbon leaks and spills and observations.  Address the source of the spills/leaks so as to prevent continued leaks and spills.	Repeated recommendation. Noted. Refer response to PA 10_0041 / 3.7 (section 1).	-	Similar issues concerning hydrocarbon management were noted during the audit, therefore this recommendation is considered ongoing. Refer to comments provided in Appendix A, PA 10_0041, C3.39.	Ongoing
2013/IEA/ 054	Complaints Management	URS recommends that a column for 'date closed out' be added to demonstrate that complaints have been appropriately managed and resolved.	Complaints are signed off by MME – which indicates the date the complaint was closed out.	-	A review of the 2013/2014 Complaints Register indicated that a closure column was not evident. URS consider this recommendation to be ongoing.	Ongoing
2013/IEA/ 055	Complaints Management	In addition, a continuous improvement opportunity exists to better document (for recording purposes) the nature of the complaint and final resolution or action taken to close out a complaint to the satisfaction of the complainant. Additional training may also be useful in defining the nature of a complaint and ensuring that all complaints are recorded.  In addition the EMS states that the complaints register will be updated monthly on the Pine Dale website which had not been undertaken since July 2012. It is recommended that Pine Dale ensure that the website is updated as defined in the EMS.	Noted.  Complete.	-	The Complaints Register was observed on the Pine Dale website.	Ongoing
2013/IEA/ 056	EMS	Ensure regular audits of the site EMS and Plans are conducted.	Noted.	-	No evidence of EMS audits was available for the audit period.	Ongoing
2013/IEA/ 057	EMS	The EMS should be revised to incorporate the recent changes to the POEO Act relating to pollution incident response management. The EMS presently identifies that all incidents that cause or may cause material harm to the environment will be notified to the relevant authorities. The EMS however should be revised to reflect the new pollution incident response requirements including regulatory and community notification.	Complete. Pollution Incident Response Management Plan developed Sept 2013.	-	The Pollution Incident Response Plan was sighted by the auditors; however, the Environmental Strategy (EMS) has not been updated since the previous audit.	Ongoing
2013/IEA/ 058	EMS	Section 5 (Management and Monitoring) of the EMS should include a description of Pine Dale's requirement, under the POEO Act (s.66(6)), to publish, on its website, all monitoring data undertaken as a result of a licence condition within 14 days of obtaining the data.	Noted. Environmental management Plans. Refer response to PA 10_0041 / 3.7 (section 1).		Refer to Table B-2, PA 10_0041 / 3.7.	Ongoing
2013/IEA/ 059	EMS	Section 7 of the EMS states that a review of compliance with all conditions of PA 10_0041 will be undertaken during the preparation of each AEMR. To effectively document this review it is recommended that Appendix 2 is revised to include a 'date completed/closed out' column to allow tracking of compliance against the PA for the life of the project. Documents which demonstrate compliance should also be documented and stored for future reference in a compliance directory.	Noted. Environmental Management Plans. Refer response to PA 10_0041 / 3.7 (section 1).  However, it is not part of the AEMR scope to audit all approval conditions. This self-imposed requirement will be removed from the EMS		Refer to Table B-2, PA 10_0041 / 3.7.	Ongoing

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2013/IEA/ 060	EMS	Pine Dale's incident reporting requirements (as outlined in the EMS) should be updated to include reporting of all environmental incidents in a site incident register which includes observations, near misses and reportable incidents.	Noted. Environmental Management Plans. Refer response to PA 10_0041 / 3.7 (section 1).		Refer to Table B-2, PA 10_0041 / 3.7.	Ongoing
2013/IEA/ 061	АНМР	Under section 6 (Heritage Management Measures) the Plan identifies that "all employees will be informed of their obligations under the National Parks and Wildlife Act 1974 and need to cease work immediately and follow the Find Protocol and Salvage Methodology in the event an object of Aboriginal heritage significance is identified". As this has not been identified during the audit as having been carried out it is recommended that the AHMP is updated to include requirements to record all training carried out, including the date and the name of the person/s inducted.	Noted. Environmental Management Plans. Refer response to PA 10_0041 / 3.7 (section 1).		Refer to Table B-2, PA 10_0041 / 3.7.	Ongoing
2013/IEA/ 062	AQGHGMP	<ol> <li>Include temporary rehabilitation of the main amenity bund and other bunds on site as a mitigation measure to reduce dust emissions. This will also decrease the visual impact of the amenity bund from the highway.</li> <li>Review the location of the PM10 and TSP HVAS and determine if an alternate location can be utilised on private residence or privately owned land, or update the plan to reflect that an exceedance of air quality criteria at the HVAS would be modelled to determine if an exceedance would also be recorded at a residence or on 25% of privately owned land.</li> <li>Implement the findings of the Coal Mine Particulate Matter Control Best Practice Report as relevant for Pine Dale, such as increased water cart spraying.</li> </ol>	<ol> <li>Complete.</li> <li>Not required. (note the HVAS were previously located at the Cherry residence but were relocated to the mine site due to power supply problems which resulted in a continuing loss of data).</li> <li>Not required while mine is under Care &amp; Maintenance as described under EPL.</li> </ol>	-	<ol> <li>Sighted progressive rehabilitation of the amenity bund during the site inspection.</li> <li>URS concur with Pine Dale's approach.</li> <li>The Coal Mine Particulate Matter Control Best Practice Report was not reviewed as part of this audit. Elements of the report may be applicable during care and maintenance and where practicable should be implemented.</li> </ol>	<ol> <li>Ongoing</li> <li>Closed</li> <li>Ongoing</li> </ol>
2013/IEA/ 063	BWMP	<ol> <li>Review water quality trigger levels and water flow triggers with the DP&amp;I, NOW and OEH.</li> <li>Commission Aquaterra to review groundwater trigger levels, including data collect since the July 2011 to identify if triggers in Table WM12 are appropriate for the site.</li> <li>Consider whether the BWMP needs to consider the monitoring of losses of surface flow that has been redirected from the disturbed area of the mine operational areas to the underground workings.</li> </ol>	<ol> <li>Agree, Environmental Management Plans. Refer response to PA 10_0041 / 3.7 (section 1).</li> <li>Refer above</li> <li>No it does not, mine disturbance are is an 'excluded work' under the Water Management Act 2000.</li> </ol>	-	<ol> <li>Refer to Appendix A, PA         10_0041, C3.27(c).</li> <li>Refer to Appendix A, PA         10_0041, C3.27(c).</li> <li>-</li> </ol>	Ongoing     Ongoing
2013/IEA/ 064	NMP	<ol> <li>Provide a table within the NMP which identifies which monitoring point (NM1, NM2, NM3, NM4, NM5 and NM6) corresponds to which residences identified in the CoA 3.2 and 3.2 and EPL Condition L4.1.</li> <li>Under the POEO Act (c.6) the holder of an EPL must within 14 days of obtaining monitoring data make publically available (company website) all monitoring data required under the EPL. Noise monitoring data is not currently required by the NMP to be published on the website. URS recommends Pine Dale update the NMP to include a requirement to publish all EPL environmental monitoring data in accordance with the POEO Act. Refer to the link below for the EPA guidelines:     http://www.environment.nsw.gov.au/resources/legislation/20120263reqpubpmdata.pdf</li> </ol>	<ol> <li>Repeat recommendation already addressed above. Refer response to PA 10_0041 / 3.7 (section 1).</li> <li>Complete. Noise Monitoring data is published on PDM website. Refer response to PA 10_0041 / 3.7 (section 1) with regard to updating of NMP.</li> </ol>	-	<ol> <li>Refer to Table B-2, PA 10_0041 / 3.7.</li> <li>Sighted the Pine Dale website that included EPL monitoring data. Refer to Table B-2, PA 10_0041 / 3.7.</li> </ol>	Ongoing     Closed

	Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at September 2014)	Timeframe for Compliance at August 2014	2014 Update – Assessment by URS	Status 2014
2013/IEA/ 065	WaMP	1. Management of hydrocarbons and spills has not been covered in detail in any environmental management plan for Pine Dale, however may be most appropriate in the WaMP. Therefore it is recommended that during the bi-annual review of the WaMP the plan is updated to include a section on the management of spills and loss of containment of hydrocarbons. This section should include location of spill kits and PPE, incident reporting procedures and training.	1. Refer response to PA 10_0041 / 3.7 (section 1).	-	Refer to Table B-2, PA 10_0041 / 3.7.	Ongoing
2013/IEA/ 066	WMP	<ol> <li>Review surface water and groundwater quality and level data historically and during operation of the Yarraboldy Extension to determine if more appropriate water quality and level data should be incorporated into section 4.6.2 and 5.3.1 of the WMP. This review should include recommendations provided by Aquaterra in July 2011 in the BWMR. As part of this review consultation with NOW, OEH and DP&amp;I.</li> <li>Groundwater monitoring bore RP PDH8/GW was removed in April 2012, as reflected in the surface water monitoring data. The WMP should be updated to reflect the removal of this bore.</li> <li>Identify if the WMP adequately identifies when monitoring is to be undertaken at LDP 4 and 5 Pine Dale should seek clarification from the EPA on the requirement to monitoring LDP 4 and 5 "quarterly during discharge".</li> <li>Update Table WM7 to include EPL LDP 5.</li> <li>Update Section 5.4.2 of the WMP to reflect that the BWMR conducted a review of the impact of groundwater on baseflow in Neubecks Creek and identified that effects are negligible.</li> </ol>	<ol> <li>TBC</li> <li>Refer response to PA 10_0041 / 3.7 (section 1).</li> <li>Not required. LDP4 &amp; LDP5 removed from licence.</li> <li>Not required. LDP4 &amp; LDP5 removed from licence.</li> <li>TBC.</li> </ol>	-	<ol> <li>Refer to Table B-2, PA 10_0041 / 3.7.</li> <li>Refer to Table B-2, PA 10_0041 / 3.7.</li> <li>LDP4 and LDP5 were removed from the EPL during the audit period.</li> <li>LDP4 and LDP5 were removed from the EPL during the audit period.</li> <li>Refer to Table B-2, PA 10_0041 / 3.7.</li> </ol>	<ol> <li>Ongoing</li> <li>Ongoing</li> <li>Closed</li> <li>Closed</li> <li>Ongoing</li> </ol>
2013/IEA/ 067	Section 6	The personnel as defined in the accountabilities section of the Management Plans is often different from the terms used on site. For example, the Plans generally do not refer to the Operations Manager. It is recommended that the Plans are reviewed to ensure the correct titles are used to define accountabilities to the correct position.	Refer response to PA 10_0041 / 3.7 (section 1).	-	Refer to Table B-2, PA 10_0041 / 3.7.	Ongoing
2013/IEA/ 068	General	Review the site's documentation management system so that documents can be located easily by relevant parties at the mine.	Refer response to PA 10_0041 / 3.7 (section 1).	-	Refer to Table B-2, PA 10_0041 / 3.7.	Ongoing
2013/IEA/ 069	General	Consider the allocation of further resources to support environmental management at the site, in particular resources to support the Operations Manager carry out his environmental responsibilities.	Underway.	-	It was noted during the Site inspection that the Mine Manger was supported by the Environment Manager from CoalPac as well as the OCE. Resources were also available from EnergyAustralia based in Melbourne.	Ongoing
2013/IEA/ 070	Rehabilitation General	Neubecks Creek will require management of Blackberry as soon as chemical application equipment (reportedly being sourced) is acquired so to allow safe effective treatment.	Ongoing.	-	Weed management was observed at the Site. Exotic species (i.e. pines) were observed along the bank to Nuebecks Creek. Refer to Appendix A, ML 1569, Condition 2.	Ongoing

	Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at September 2014)	Timeframe for Compliance at August 2014	2014 Update – Assessment by URS	Status 2014
2013/IEA/ 071	Rehabilitation Management Plan / Section 7.3.1	<ol> <li>The rehabilitation implementation section (methodology) is very brief in nature. This implementation section should reflect the range of current activities that have occurred to achieve the present site.</li> <li>Rehabilitation monitoring requirements are very brief in nature and seem to focus on the pasture areas. The monitoring section would be better split to discuss monitoring applicable for the pasture and then for the native woodland, referring to Areas, A, B, C and 8 as per the AEMR plans (Figure 1).</li> <li>The Rehabilitation Trigger Action Response Plan (Table 8.2 of the MOP) is key component and should be reported on in the AEMR to report on how Pine Dale are responding to potential triggers.</li> </ol>	<ol> <li>Noted.</li> <li>Complete.</li> <li>MOP currently under review.</li> </ol>	-	A draft Care and Maintenance MOP was in the process of being prepared at the time of the Site inspection. The new MOP will address rehabilitation during the care and maintenance status of the Site. Refer to Section 8 for further comments concerning rehabilitation.	Ongoing
2013/IEA/ 072	Rehabilitation Flora and Fauna Management Plan / Section 7.3.2	Update the MOP to identify that a detailed Flora and Fauna Management Plan (FFMP) has not been prepared as the requirement to prepare a FFMP was removed from the PA and is therefore no longer required.	Complete.	-	A draft Care and Maintenance MOP was in the process of being prepared at the time of the Site inspection. The new MOP will address rehabilitation during the care and maintenance status of the Site. Refer to Section 8 for further comments concerning rehabilitation.	Ongoing
2013/IEA/ 073	AEMR / Rehabilitation / Section 7.3.4	<ol> <li>Future AEMRs to detail what activities for rehabilitation have been undertaken for Area A as well as B, C and 8.</li> <li>Future AEMR to outline the specific weed control efforts undertaken for each of the main noxious weeds in each of the rehabilitation areas.</li> <li>As per NSW Trade &amp; Investment Resources and Energy (22.6.12) letter and associated actions, rehabilitation monitoring results, reports and locations to be to be provided in future AEMR's.</li> </ol>	<ol> <li>Complete.</li> <li>Complete.</li> <li>Complete.</li> </ol>	-	The auditors sighted the 2013 AEMR. The requirements appeared to have been included in the AEMR.	Closed
2013/IEA/ 074	Rehabilitation Monitoring / Section 7.4.2	<ol> <li>Flora monitoring to focus on Area A (Native Woodland), now that Area B, C and 8 (Pasture) are largely completed.</li> <li>The flora and fauna monitoring report could provide more performance and time oriented recommendations or actions for improvement.</li> </ol>	<ol> <li>Complete.</li> <li>Noted.</li> </ol>	-	Evidence of flora monitoring indicated that Area A had been assessed (First Field, 2014). URS considers that this recommendation is ongoing.	Ongoing
2013/IEA/ 075	Rehabilitation	<ol> <li>Area A, bank stabilisation and drainage methods (rock, felled tree and mulch placement) needs to be further implemented on slopes and bare earth to improve soil substrate and provide habitat. Mulch and felled trees to be sourced from planned tree removal projects at Pine Dale Coal Mine and for only native trees to be mulched to encourage seed dispersal and rehabilitation.</li> <li>Bare patches within Area B, C and 8 to be ripped, chicken manure added and seeded with pasture mix.</li> </ol>	<ol> <li>Refer response to PA 10_0041 / 3.53 (section 1).</li> <li>Noted. Refer response to PA 10_0041 / 3.53 (section 1).</li> </ol>	-	Refer to Table B-2, PA 10_0041 / 3.7.	Ongoing
2013/IEA/ 076	Rehabilitation	To assist with the rehabilitation of Area A it is recommended that Pine Dale purchase more endemic seed mix with a high ratio of appropriate native shrubs, grasses, forbs and herbs to develop rapid cover and assist with the soil composition. Table 7 3 provides a suggested list of species susceptible for rapid germination and are all species present in Ben Bullen State	Noted. Refer response to PA 10_0041 / 3.53 (section 1).	-	Refer to Table B-2, PA 10_0041 / 3.7.	Ongoing

	Condition	2013 Independent Environmental Audit Recommendation / Comment Auditors Comments	Pine Dale Mine Comments / Status (at September 2014)	Timeframe for Compliance at August 2014	2014 Update – Assessment by URS	Status 2014
		Forest.				
2013/IEA/ 077	Rehabilitation	Pasture areas not to be grazed by cattle until the pasture cover is 90-100% which should be achievable following the spring season of 2013, should rehabilitation efforts continue.	Complete.	-	No cattle were observed on pastures during the Site inspection. Pine Dale management reported that the landowner attempted to graze cattle in Area C during the audit period; however this was stopped by the mine to prevent damage to the pasture. This recommendation will be ongoing during the course of rehabilitation.	Ongoing
2013/IEA/ 078	Rehabilitation	That Rhodes Grass (Chloris gayana) not be included in any further pasture seed purchase for Pine Dale Mine.	Complete. See revised seed mix.	-	A proposal from Global Soil Systems Pty Ltd, dated 15 August 2014 included a list of species of trees, shrubs and groundcover that would be used for direct seeding. Rhodes Grass (Chloris gayana) was not included.	Closed
2013/IEA/ 079	Rehabilitation	Bursaria spinosa spp lasiophylla to be planted as required through the Project Approval, conditions of consent (No. 4.4), as discussed with the Operations Manager, in Area A and potentially the eastern part of stage 1, following the close of the Purple Copper Butterfly flying period.	Ongoing – species included in direct seeding of native species Spring 2014.		A proposal from Global Soil Systems Pty Ltd, dated 15 August 2014 included a list of species of trees, shrubs and groundcover that would be used for direct seeding. R Bursaria spinosa spp lasiophylla was included.	Ongoing



#### APPENDIX C REFERENCES

- 1. Department of Environment (2014), Enhance Place Pty Ltd Pine Dale Coal Mine EPBC 2011-6016 Particular Matter [Email] Message to Enhance Place Pty Ltd. Sent Wednesday 27 August 2014, 10:19am.
- 2. DTRIS-DRE (2014-A), Pine Dale Mine and Enhance Place Mine Annual Environmental Management Report 2013 [Letter], 16 July 2014, Ref: OUT14/19819.
- 3. DTRIS-DRE (2014-B), Pine Dale Complaint Received by DTIRIS Please respond [E-mail] Message to Enhance Place Pty Ltd. Sent Monday 3 March 2014, 4:36pm.
- 4. DTRIS-DRE (2014-C), Pine Dale Mine Independent Environmental Audit: Consultation [E-mail] Message to URS Australia Pty Ltd. Sent Friday 15 March 2014, 4:05pm.
- 5. DTRIS-DRE (2014-D), Pine Dale Draft MOP [E-mail] Message to Enhance Place Pty Ltd. Sent Monday 19 May 2014, 4:14pm.
- 6. DTRIS-DRE (2014-E), Pine Dale Draft MOP [E-mail] Message to Enhance Place Pty Ltd. Sent Wednesday 9 July 2014, 4:56pm.
- 7. DTRIS-DRE (2014-F), Notification Letter Assessed Deposit for Pine Dale 2014 Rehabilitation Cost Estimate (RCE) ML1578, ML1569, ML1664 and ML1637 [Letter], 15 July 2014, Ref: OUT14/15392.
- 8. DTRIS-DRE (2013), Flora Monitoring Report, Enhance Place Coal Mine, November 2012 [Letter], 8 January 2013, Ref: OUT13/275.
- 9. Ecological Australia Pty Ltd (2013), Purple Copper Butterfly *Paralucia spinifera* Activity Monitoring Survey Findings Report, 30 August 2013, Ref: 12MUDECO-0015
- 10. Enhance Place Pty Ltd (2014-A), Pine Dale Mine Complaint Received by DTRIS [Letter] 5 March 2014.
- 11. Enhance Place Pty Ltd (2014-B), Pine Dale Mine Annual Environmental Management Report 2013, March 2014.
- 12. Enhance Place (2014-C) Draft Care and Maintenance Mining Operations Plan, March 2014
- 13. Enhance Place Pty Ltd (2013), Pollution Incident Response Management Plan, Full Version, September 2013, V1.
- 14. Enhance Place Pty Itd (2013-B), Enhance Place Pty Itd; Pine Dale Coal Mine EPBC 2011-6016: Stage 1 Yarraboldy Extension particular manner Decision [Letter], 6 December 2013.
- 15. Enhance Place Pty Ltd 2011-2014 Complaints Register Excel.
- 16.Enhance Place (2013-B), Request for Variation of Licence No. 4911 [Letter], 9 August 2013.
- 17. Forestry Corporation NSW (2014), Pine Dale Mine [Email] Message to Enhance Place Pty Ltd. Sent Tuesday 23 September 2014, 12:31pm
- 18. First Field Environmental Pty Ltd (2014), Pine Dale Rehabilitation Monitoring Report 2014.
- 19. Global Soil Systems Pty Ltd (2014), Pine Dale Mine Land Rehabilitation, 15 August 2014.
- 20.New South Wales Forests (2011), Occupation Permit 6 December 2011 to 31 December 2012, Ref 5411
- 21.RCA Australia Pty Ltd (2014), Channel Stability and Stream Health Monitoring, February 2014, Ref: 6880-832/1.
- 22.RCA Australia Pty Ltd (2013), Channel Stability and Stream Health Monitoring, October 2013, Ref: 6880-849/0.
- 23.RCA Australia Pty Ltd (2013-2014), Stream Health Monitoring Field Sheets.
- 24.URS Australia Pty Ltd (2013), Independent Environmental Audit: Pine Dale Mine Yarraboldy Extension, June 2013, 43177857/KD/00.

References to documents reviewed for the compliance against PA 10\_0041, EPL 4911, ML 1664, ML 1569 and the SoC are provided in **Appendix A**.



#### APPENDIX D ATTENDANCE SHEETS



## Agenda

Meeti	ing ription	Opening Meeting Independent Environmental Au	ıdit				6
C B		Pine Dale Mine, 1570 Castlereagh Highway, Blackmans Flat, New South Wales (NSW) 2790	Time:	09:30am-	Date:	28 Augus	2014
Agen	da:						Discussed
1	Welc	ome and introductions					1
2	Audit	background and scope					
3	Audit	schedule		>4			/
4	Form	at of interviews and scheduling					/
5	4.07	issions of information requireme		-			/
6	Site i	nspection - Safety and PPE / ph	otos				_
7	Desc	ription of operations by Pine Dal	е				
8	Key environmental issues for Pine Dale						
9	Questions and discussions						
10	Next	step and close					

### **Attendees**

Name	Company	Position	Signature
HICK BALLARD	uns	Anditar	Xids Au.
Michael Woolley	VIS mes	Auditor	All leboth
Gridan Goodwin	Pinbale	UNCE	Lood
BON CASTWOOD	Enhance Place	ENVIRO	Blathope
Koren Trip	RCA.	ENV. SCIENTIST	Ase



# Agenda

Mee	ting cription	Closing Meeting Independent Environmental Audit						
Loca	ation:	Pine Dale Mine, 1570 Castlereagh Highway, Blackmans Flat, New South Wales (NSW) 2790	15.40 =		st 2014			
Age	nda:						Discussed	
1	Ackn	Acknowledgements						
2	Sumr	Summary of audit methodology						
3	Major	Najor findings - discussion					/	
4		Flow of information for any outstanding issues – Angus Place to URS (main point of contacts)						
5	Report Schedule							
6	Report content and delivery					/		
7	Any difficulties encountered during the audit							
8	Questions and feedback					/		

### **Attendees**

Name	Company	Position	Signature
Hick Ballerd	ung	Andikar	X ust suit
Graham Groodwin	Pine Dole	WWE	Hood
BEN EASTWOOD	ENHANCE PLACE	EMIRO MUR	bent hood I
Michael Woolles	DES/Mew	Lead Andritan	Melabelley
Mark Frewin	Energy Australia	Senior commercia Manager.	By Phone.



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