

Independent Environmental Audit (IEA) Newstan Colliery



For Centennial Newstan Pty Limited


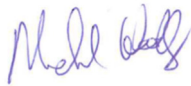
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Abbreviations

Abbreviation	Description
ACHMP	Archaeological Cultural Heritage Management Plan
AEMR	Annual Environmental Management Report
AQ&GHG MP	Air Quality and Greenhouse Gas Management Plan
CCC	Community Consultation Committee
CCL	Consolidated Coal Lease
CHP	Coal Handling Plant
Council	Lake Macquarie City Council
CPP	Coal Preparation Plant
CoC	Conditions of Consent
CWD	Clean Water Dam
CWP	Clean Water Plant
OEH	Office of Environment and Heritage
Secretary	Secretary of Department of Planning and Infrastructure, or delegate
DP&E	Department of Planning and Environment
DRE	NSW Department of Trade and Investment– Division of Resources and Energy
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EMS	Environmental Management System
EP&A Act	<i>Environmental Planning and Assessment Act 1979 (NSW)</i>
EPA	Environment Protection Authority
EPL	Environment Protection Licence
ESCP	Erosion and Sediment Control Plan
FPCD	Final Pollution Control Dam
IEA	Independent Environmental Audit
INP	Industrial Noise Policy
LDP	Licensed Discharge Point
LMCC	Lake Macquarie City Council
LW	Longwall
MCW Environmental	MCW Environmental Consulting Pty Ltd
mm	Millimetre
ML	Mining Lease or Megalitre
MOP	Mining Operations Plan
Mtpa	Million tonnes per annum
Newstan	Centennial Newstan Pty Limited
NIA	Noise Impact Assessment
NMP	Noise Management Plan
NOW	NSW Office of Water
NREA	Northern Reject Emplacement Area
NSW	New South Wales
PN	Penalty Notice
PIRMP	Pollution Incident Response Management Plan
POEO Act	<i>Protection of the Environment Operations Act 1997 (NSW)</i>
PRP	Pollution Reduction Program
ROM	Run of Mine
RWMP	Revised Water Management Plan
SREA	Southern Reject Emplacement Area
SSMP	Soil Stripping Management Plan
Tpa	Tonnes Per Annum
TSF	Tailings Storage Facility
TSP	Total Suspended Particles

Abbreviation

TSS
WLMP

Description

Total Suspended Solids
Wetland Management Plan

Executive Summary

MCW Environmental Pty Ltd (MCW Environmental) was engaged by Centennial Newstan Pty Ltd (Newstan) to carry out an Independent Environmental Audit (IEA) of the Newstan Colliery located at Fassifern, in the Newcastle Coalfield of New South Wales (NSW).

Schedule 2, Condition 8.9 of the Newstan Development Consent (DA 73-11-98) dated 6 January 2014 requires Newstan to commission an Independent Environmental Audit (IEA) prior to 14 May 2009, and every 3 years thereafter. To this end, MCW Environmental were commissioned prior to 14 May 2015 to carry out an independent audit of the Newstan Development Consent.

The audit period has been defined as from the 21 April 2012 (date of last audit conducted) to 18 May 2015 (date of second site visit conducted as part of this audit).

The audit was completed in accordance with Modification 6 to DA 73-11-98, Schedule 2, Condition 8.9, and MCW Environmental proposal to conduct the work dated 4 April 2015. The audit methodology comprised the following activities:

- Initial discussions with Newstan to organise the audit, including the provision of documentation, the site visit and timing;
- Discussions with NSW Department of Planning and Environment (DP&E) to discuss any concerns and areas for particular focus during the audit;
- Review of site compliance checklists and other documentation provided by Newstan;
- A three-day site inspection and interviews with key site personnel, on 11 and 12 May 2015 and the 18 May 2015;
- Consultation with key government agencies as presented in this report;
- Review of additional documentation provided by Newstan after the site inspection;
- Submission of a Draft Report to Newstan outlining the audit findings; and
- Finalisation of the report based on comments from Newstan.

The IEA assessed compliance with relevant approvals, licences and management plans applicable to Newstan. Detailed compliance registers identifying audit findings, comments and recommendations are presented in **Appendix A**. Non-compliances identified against relevant approvals are identified and discussed in Section 10. Newstan's overall compliance status is summarised in **Table ES-1**.

Table ES-1 Overall Compliance Assessment and Audit Score

Relevant Approval	Percent Compliant (%)	Number of Conditions Non Compliant	Number of Indeterminate conditions
Consent DA 73-11-98	76%	13	3
Environmental Protection Licence No.395*	96%	5	-
Mining Lease No. 1452	96%	1	-
Consolidated Coal Lease 764	94%	2	-

- At the time of the audit Newstan were in arbitration with the EPA over some conditions in the EPL. A total of five EPL conditions were considered as "not to have effect" as agreed between both parties and were not included in the above calculations.

It is noted that in determining the overall audit score, where a condition has multiple parts, if one part has been assessed as non-compliant or indeterminate then the whole condition has been counted as non-compliant or indeterminate. In cases where a condition has parts assessed as non-compliant and parts as indeterminate, this condition has been included in the count for both non-compliant and

indeterminate. The full assessment provided in Appendix A presents the assessment of compliance for each part for those conditions with multiple parts.

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

A summary of recommended actions to improve environmental performance and compliance status are presented in Section 10.

1 Introduction

1.1 Background

MCW Environmental Pty Ltd (MCW Environmental) was engaged by Centennial Newstan Pty Ltd to carry out an Independent Environmental Audit (IEA) of the Newstan Colliery (Newstan) located at Fassifern near Newcastle in New South Wales. Centennial Newstan Pty Ltd is the operator of Newstan Colliery and is a wholly owned subsidiary of Centennial Coal Company Pty Limited.

Schedule 2, Condition 8.9 of the Newstan Development Consent (DA 73_11_98) dated 6 January 2014 requires Newstan to commission an Independent Environmental Audit (IEA) prior to 14 May 2009, and every 3 years thereafter. To this end, MCW Environmental was commissioned prior to 14 May 2015 to carry out an independent audit of the Newstan Development Consent.

The audit period has been defined as from the 21 April 2012 (date of last audit conducted) to 18 May 2015 (date of second site visit conducted as part of this audit).

The audit was completed in accordance with Modification 6 to DA 73-11-98, Schedule 2, Condition 8.9, and the MCW Environmental proposal to conduct the work dated 4 April 2015.

The audit team was approved by DP&E in a letter dated 1 May 2015.

This report presents the findings of this audit.

1.2 Audit Scope

The audit was conducted in accordance with the requirements set out in the Development Consent DA 73-11-98, Schedule 2, Condition 8.9 and Condition 6.4B (v) as detailed in **Table 1-1**.

Table 1-1 Scope of Work

Condition	Requirement	Where Addressed in this Report
8.9	<i>Prior to 14 May 2009, and every 3 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:</i>	This Report
(a)	<i>be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;</i>	Appendix C
(b)	<i>include consultation with the relevant agencies;</i>	Section 3
(c)	<i>assess the environmental performance of the project and assess whether it is complying with the relevant requirements of this approval and any relevant mining lease or EPL (including any strategy, plan or program required under these approvals);</i>	Section 5 & Appendix A
(d)	<i>review the adequacy of strategies, plans or programs required under these approvals, and, if appropriate,</i>	Section 6.4
(e)	<i>recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals.</i>	Sections 4, 6.4 & 10 of this report
	<i>Note: This audit team must be led by a suitably qualified auditor</i>	Section 1.4

Condition	Requirement	Where Addressed in this Report
6.4B	<i>The Applicant shall:</i> <i>(v) Carry out a comprehensive noise audit of the development in conjunction with each independent environmental audit, to the satisfaction of the Director-General</i>	Section 8

1.2.1 Audit Methodology

The purpose of this Independent Environmental Audit was to assess compliance with the Conditions of the Development Consent (CoC), licences and approvals that apply to the project and review the adequacy of strategies, plans or programs required under the Development Consent. It was undertaken in accordance with MCW Environmental's Proposal (dated 4 April 2015).

Compliance checklists were developed by MCW Environmental that included a list of conditions and commitments to be assessed for compliance, including Development Consent (DA 73_11_98), Environment Protection Licence (EPL) No. 395, Consolidated Coal Lease (CCL) No. 764 and Mining Lease (ML) No. 1452.

The auditors assessed compliance by viewing evidence of documents associated with each aspect of the various approvals and associated plans, programs and strategies.

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

The audit methodology comprised the following activities:

- Initial discussions with Newstan to organise the audit, including the provision of documentation, the site visit and timing;
- Discussions with NSW Department of Planning and Environment (DP&E) to discuss any concerns and areas for particular focus during the audit;
- Review of site compliance checklists and other documentation provided by Newstan;
- A three-day site inspection and interviews with key site personnel, on 11 and 12 May 2015 and 18 May 2015;
- Consultation with key government agencies as presented in this report;
- Review of additional documentation provided by Newstan after the site inspection;
- Submission of a Draft Report to Newstan outlining the audit findings; and
- Finalisation of the report based on comments from Newstan.

This report provides a summary of findings including details of non-compliances identified in the audit, an audit score (percentage compliant), and recommended actions to improve compliance status.

1.3 Documents Reviewed

The following information was reviewed during the audit process:

- Development Application (DA) Consent 73_11_98 (MOD 1, MOD 2, MOD 3, MOD 4, MOD 5 and MOD 6);
- Environment Protection Licence (EPL) No. 395;
- Consolidated Coal Lease (CCL) No. 764
- Mining Lease (ML) No. 1452
- Management Plans as provided by Newstan;
- Site environmental plans, procedures and checklists;
- Selected records of competency, induction and training;

- Selected meeting minutes;
- Selected reports; and
- Evidence of selected monitoring and review.

Documents used as part of the audit are referenced as part of the text discussing compliance status in **Appendix A**.

1.4 Personnel and Timing

In accordance with DA 73_11_98, Schedule 2, Condition 8.9 the audit was to be 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 personnel, as approved by the Director-General by letter dated 1 May 2015.

- Michael Woolley, Lead Auditor (MCW Environmental); and
- Helen Onus, Auditor (URS Australia Pty Ltd).

Michael Woolley is registered by Exemplar Global (formerly RABQSA) as a Certified Lead Auditor for Environmental Management, Site Contamination Assessment and Compliance Auditing. The site visit for the audit was conducted on 11, 12 and 18 May 2015.

Personnel interviewed during the site visit included the following:

- Veronica Howat, Environment and Community Coordinator;
- Nerida Manley, Environment and Community Coordinator;
- Neil Drakeford, Northern Coal Services Manager;
- Chris Somner, East Coast Manager for QUBE (haulage contractors);
- Robert Upsall, HSE Advisor, QUBE; and
- Scott Dilege, Maintenance Supervisor, QUBE.

1.5 Sensitive Information

It is understood that information collected during the audit may be sensitive. All documents used during the audit to verify compliance were kept secure and not distributed outside the relevant personnel involved in the audit.

1.6 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 Newstan's operations as observed during the site inspection.
- Section 3 summarises the consultation with key regulatory agencies.
- Section 4 provides a summary of site observations made during the site visit.
- Section 5 describes the approach to the assessment against the relevant standard. performance measures and statutory requirements
- 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 Newstan's approach to water management and reviews the performance of its water management system.
- Section 9 provides the findings of the noise audit

- Section 10 summarises the non-compliances and recommendations made throughout the report.

Appendix A is a tabulated review of the results of the assessment against the commitments of DA 73_11_98, EPL No. 395, CCL No.764 and ML1452.

Appendix B assesses the close out of the findings of the previous 2012 IEA.

Appendix C provides the consultation with the DRE.

2 Newstan Colliery Operations

2.1 Site Description and History

Newstan Colliery is an underground coal mine located approximately 25 kilometres southwest of Newcastle and 140 kilometres north of Sydney within the Lake Macquarie Local Government Area (LGA). The Newstan Colliery pit top and surface facilities area is located approximately four kilometres north of the township of Toronto (refer **Figure 2-1**).

Newstan is bordered to the north by the West Wallsend and Westside mines, to the east by the Teralba mine and to the west by West Wallsend Number 2 mine, all owned by Oceanic Coal. The southern boundary of Newstan is bordered by the Eraring Power Station.

Newstan began mining operations in 1887 and has since undertaken extensive mining within the Young Wallsend, Great Northern, Fassifern, Borehole and West Borehole coal seams. The mine produces both a semi soft coking coal and thermal coal for the domestic and export markets. The total mineral area within the Newstan Colliery Holding is 6,831.6 hectares. Surface leasehold and freehold land has an area of 2,608.93 hectares.

Newstan operates under Development Consent (DA 73-11-98) granted by the Minister for Planning on 14 May 1999. This approval includes the pit top area, Coal Preparation Plant (CPP), Coal Handling Plant (CHP), stockpile areas, the rail loop, haulage roads, Northern Reject Emplacement Area (NREA) including the tailings dam and water management dams, Southern Reject Emplacement Area (SREA) and longwalls (LW) 21 to 24.

The development approval has undergone the following modifications:

- MOD 1 on 23 September 2007 to allow the mining of LW24 and the construction of a ventilation shaft at Awaba
- MOD 2 on 1 December 2009 to allow for the Washing of Mandalong Coal
- MOD 3 on 26 November 2010 to allow for the Washing of Awaba Coal
- MOD 4 on 16 March 2012 for the Main West mining project. This project involved the recommencement of first workings bord and pillar mining following a period of “care and maintenance” in an area located beyond the previously approved Development Consent boundary and an extension to the Final Pollution Control Dam (FPCD) from 16 ML to 50 ML.
- MOD 5 on the 19 November 2012 to receive coal from the Mandalong Mine and excavated material produced from the shaft at Awaba Colliery.
- MOD 6 on the 6 January 2014 for a minor adjustment to the development consent boundary in the Main West Mining Area to include four previously excluded areas for administrative reasons.

Newstan mining authorisations comprises of several exploration licences, authorisations, consolidated mining leases, private land leases, mining purpose leases and subleases of mining leases. Consolidated Coal Leases 727, 746, 763 and 764, Mining Leases 1380, 1452 1586, 1587 and 1480 and Private Lands Lease 497 held by Centennial Newstan Pty Ltd collectively provide rights to mine for Newstan.

Newstan operates under EPL No. 395 administered by the Environment Protection Authority (EPA). Since the previous IEA (April 2012) two variations have occurred to the EPL. These are discussed further in Section 8.5.

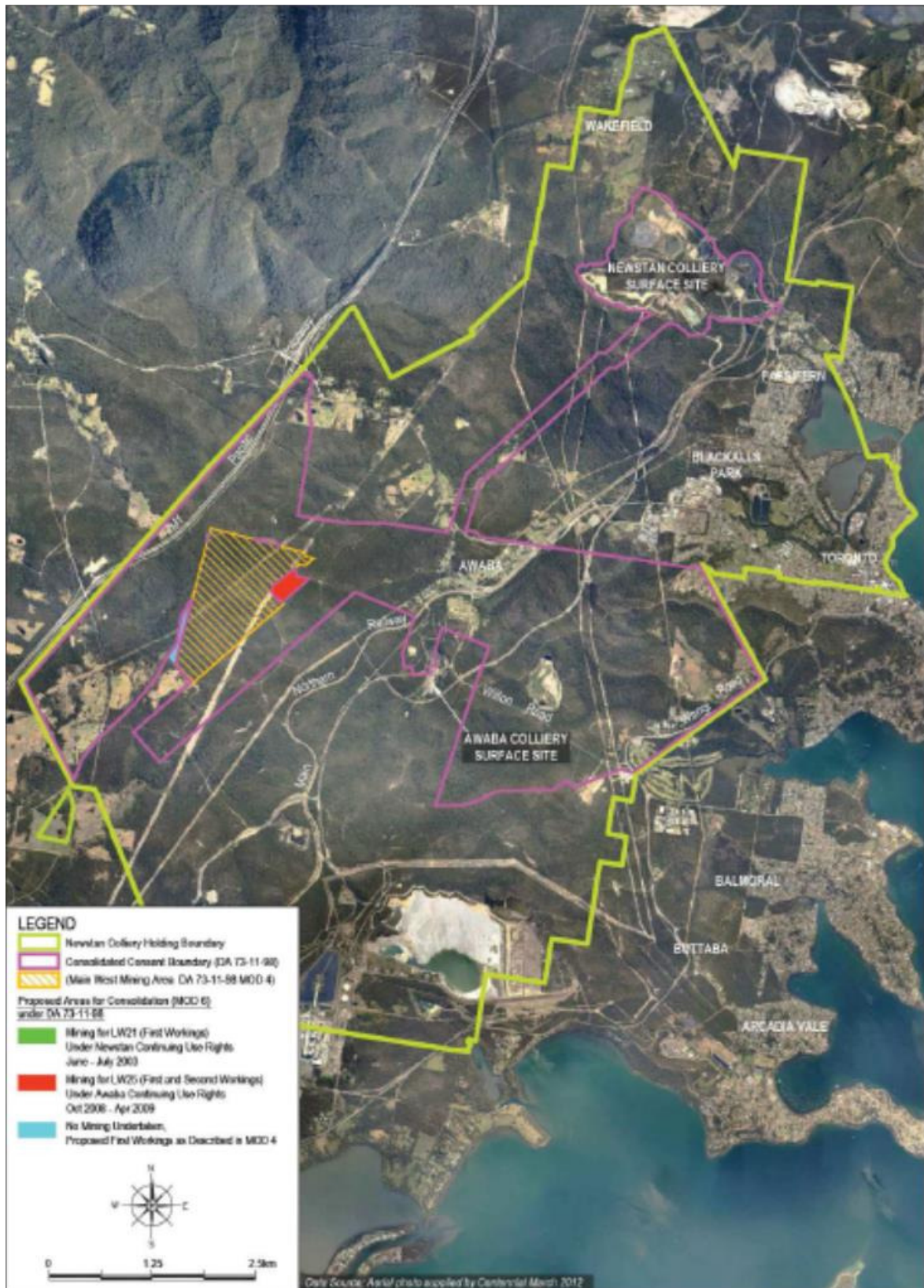


Figure 2-1 Location of Newstan Colliery, NSW
 (Source: Appendix 1 DA Area, Consolidated Consent DA 73-11-98 MOD 6)

2.2 Activities Occurring During Site Audit Inspection

Newstan has been in a “care and maintenance” phase since August 2014 during which underground mining production has ceased, however underground operations are being maintained. During the care and maintenance phase Newstan continues to operate the Surface Facilities Area for the handling and processing of coal from other Centennial Coal Company operations. There is no ROM Production planned during 2015.

Prior to going to a care and maintenance status, mining activities at Newstan comprised first workings only. Newstan Colliery Run of Mine (ROM) production during 2014 was 530,845 tonnes. There were three development units operating within the 2014 AEMR reporting period within the Young Wallsend / West Borehole Seam.

The coal handling and preparation plant (CHPP) processes coal from other Centennial operations for the export market. Newstan has approval to process up to 4 million tonnes per annum of ROM coal through the Newstan CHPP.

At the time of the audit site visit, a number of activities were observed, as outlined below:

- Newstan was receiving coal via trucks from Mandalong / Cooranbong
- The washery was in operation for the washing of Mandalong coal
- Coal was being loaded onto trains and trucks and transported to Eraring / Cooranbong and the Port of Newcastle for export
- Equipment from underground was being recovered on an as needs basis for other Centennial Operations
- The water management system continued to be used and operated
- The NREA was being progressively capped and revegetated
- The Stage two Tailings Storage Facility (TSF) in the SREA was being progressively constructed and used to store tailings.

Photos of environmentally significant aspects of the operation, taken during the site inspection in May 2015, are provided throughout the report.

3 Consultation with Key Government Agencies

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

3.1 NSW Department of Planning and Environment (DP&E)

Feedback was sought on 13 May 2015 from the NSW DP&E officer responsible for Newstan. DP&E stated that it had a strong interest in the performance of the site's water management system and asked that the audit team give this matter particular attention.

Section 8 of this report discusses water management in detail, as do compliance requirements detailed in **Appendix A**.

3.1.1 2014 DP&E AEMR Review

Feedback for the 2014 AEMR from DP&E was received by Newstan on 24 March 2015 requesting further details of flora and fauna monitoring undertaken. The letter noted that the AEMR reports on monitoring of *Tetratheca juncea* only and does not include monitoring results for any other threatened flora or fauna as per the commitments in the Flora and Fauna Management Plan. Newstan provided the DP&E with a revised AEMR on the 22 April 2015. The revised AEMR reported that additional monitoring as outlined within the Flora and Fauna Management Plan was scheduled to commence in April 2015 and results would be discussed in the 2015 AEMR. No further feedback was reported to have been received by the DP&E at the time of writing.

3.1.2 2013 DP&E AEMR Review

Feedback for the 2013 AEMR from DP&E was received by Newstan on 27 May 2014. The letter acknowledged that the AEMR had been updated to address the requirements of the DP&E's 2012 AEMR review. The letter requested that the 2014 AEMR include an update on the effectiveness of the measures introduced to reduce noise and improve water quality, in particular the newly installed water treatment plant as well as provide an update on the rehabilitation of a previously identified crack. Table 6 of the 2014 AEMR notes the DP&E's requests and provides a comment on how / where in the AEMR they have been addressed.

3.1.3 2012 DP&E AEMR Review

Feedback for the 2012 AEMR from DP&E was received by Newstan 19 June 2013. The letter stated that the department was generally satisfied with the AEMR but requested future AEMRs to include a comparison of monitoring results over the past calendar year with the relevant predictions in the SIS and SEE and the identification of trends in the monitoring results over the life of the mine. As stated in Section 3.1.2 above, the review of the 2013 AEMR acknowledged this had been addressed.

3.2 NSW Trade and Investment, Division of Resources and Energy (DRE)

A response was provided by DRE on 27 August 2015. A copy of the response is provided in **Appendix C** and is copied below.

DRE comments on environmental performance are limited to matters relating to rehabilitation and mine closure. DRE encourage Newstan Mine to:

- *Continue to improve rehabilitation standards.*
- *Complete a topsoil and subsoil material balance to verify availability of material for rehabilitation. Evaluate soil and growth medium requirements for the site and develop a soil amelioration methodology.*
- *Review and modify rehabilitation methodologies based on performance of existing rehabilitation.*
- *Continue to develop and refine performance indicators and quantifiable completion criteria in the Mining Operation Plan.*

DRE have undertaken extensive consultation with Centennial Newstan Pty Limited throughout the development of a Mining Operations Plan which includes detailed performance indicators and quantifiable completion criteria. The current MOP was approved by DRE on 5 August 2015.

With regards to rehabilitation across the site in general refer to the relevant conditions in the Compliance Register in **Appendix A**.

3.2.1 2014 DRE AEMR Review

An initial version of the AEMR was submitted to DRE on 27 February 2015. A revised version to address DP&E comments was provided to the DRE in April 2015 and included a table (Table 6) which presented the actions required and comments on how / where in the AEMR they were addressed.

DRE conducted an inspection review on 12 July 2015, the purpose of which was to review compliance with environmental requirements of relevant approval instruments including the Mining Lease, MOP and AEMR. In their AEMR approval letter dated 25 June 2015, DRE noted general compliance with the relevant statutory approvals as administered by DRE and noted 2013 AEMR actions had been addressed. Two actions were detailed in an Action Plan which comprised:

- 1) Monitor and assess rehabilitation against the relevant criteria for each rehabilitation phase;
- 2) Continue to monitor and rationalise surplus/redundant equipment/materials on an annual basis and to encourage ongoing recycling/disposal of equipment and materials.

3.2.2 2013 DRE AEMR Review

The 2013 AEMR was accepted in a letter from DRE to Newstan on 25 September 2014. The letter acknowledged that an AEMR site meeting and site inspection that was conducted on 11 September 2014 the purpose of which was to review compliance with environmental requirements of relevant approval instruments including the Mining Lease, MOP and AEMR.

The letter stated that during the inspection, there was general compliance with the relevant statutory approval instruments administered by the DRE. The DRE acknowledged close out of the issues identified by its 2012 inspection and AEMR review. Some issues were identified that either required comment or continued management and were tabled in an action plan which Newstan was required to implement and report against in the 2014 AEMR.

3.2.3 2012 DRE AEMR Review

The 2012 AEMR was accepted in a letter from by DRE to Newstan on 21 October 2014. The letter acknowledged that an AEMR site meeting and site inspection that was conducted on 24 September 2013.

The letter noted that during the inspection, there was general compliance with the relevant statutory approval instruments administered by the DRE. Some issues were identified that either required comment or continued management and were tabled in an action plan which Newstan was required to implement and report against in the 2014 AEMR.

The 2013 AEMR was noted to include a table (Table 6) which presented the actions required and comments on how / where in the AEMR they were addressed. As stated in Section 3.2.1, the letter from the DRE regarding the 2014 AEMR dated 25 September 2014, acknowledged that the actions from the 2013 AEMR review and inspection had all been addressed.

3.3 NSW Environment Protection Authority (EPA)

Feedback was sought by MCW Environmental on 12 and 17 June 2015 from the EPA officer responsible for Newstan. The EPA declined to make any comment. It is noted that at the time of the audit the EPA and Newstan were in arbitration over Newstan's EPL and related matters.

4 Site Inspection Observations

Observations from the site inspection conducted at the time of the site audit are provided in **Table 4-1**.

Table 4-1 Site Inspection Photographs




Photo #	Comment	Photo
4-1.	Southern Reject Emplacement Area - Tailings Storage Facility. Decant Facilities in the foreground and the Main Tailings Dam in the background	
4-2.	Capping of the NREA area	
4-3.	Rehabilitated area in NREA	





Photo #	Comment	Photo
4-4.	NREA Rehabilitated area. No monitoring results assessing the diversity of the revegetation was available for review. Some areas recently rehabilitated observed appeared to be dominated by acacia species. It is noted acacia species often thrive initially, to be replaced by other species over time.	
4-5.	Water cart in use for dust suppression	
4-6.	Train load out in rail loop area	
4-7.	Surface facility area	

Photo #	Comment	Photo
4-8.	Surface facility area	
4-9.	Collection point and oil water separator adjacent to maintenance bay	
4-10.	2 X 20,000 L diesel tanks stored in concrete bunded area	

Sections of the mine not visited by the audit team included the Newstan Ventilation shaft (no access was available on the haul road at the time of the site inspection); some historic rehabilitation areas within the northern areas of the NREA; subsidence monitoring locations of longwall mining conducted in previous audit periods and the site of a subsidence crack from former longwall mining at LW 22 where rehabilitation was planned in 2015. The inability to visit these locations is not considered to have a material impact on the audit findings.

5 Compliance with Statutory Requirements

This Section fulfils the requirement to assess whether the project is complying with the relevant requirements in its Development Consent and any relevant Mining Lease and EPL.

5.1 Key statutory approvals

Table 5-1 identifies the major approvals, licences and leases in place for the Newstan Colliery and provides relevant information where applicable.

Table 5-1 List of Approvals, Licences and Leases

Issuing / Responsible Authority	Type of Lease, Licence, Approval	Date Granted / Varied / Modified	Expiry
DP&E	Development Consent DA 73_11_98	14 May 1999	2020
	DA 73_11_98 MOD 1	23 September 2007	
	DA 73_11_98 MOD 2	1 December 2009	
	DA 73_11_98 MOD 3	26 November 2010	
	DA 73_11_98 MOD 4	16 March 2012	
	DA 73_11_98 MOD 5	19 November 2012	
	DA 73_11_98 MOD 6	6 January 2014	
EPA	Environment Protection Licence No. 395	15 October 2012	
		17 December 2014	
DRE	Mining Lease (ML) 1452		2020
DRE	ML 1380		2016
DRE	ML 1480		2023
DRE	ML 1586		2022
DRE	ML 1587		2027
DRE	Consolidated Coal Lease (CCL) 764		2021
DRE	CCL 727		2027
DRE	CCL 764		2021
DRE	CCL 763		2022
DRE	CCL 746		2028
DRE	MPL304		2035
DRE	MPL 305		2035
DRE	MPL 327		2015
DRE	MPL 328		2015
DRE	PLL 497		2017
DRE	Mining Operations Plan (MOP) 2014 – 2020 (at time of site inspection)	10 June 2014	2020
	MOP (approved post audit period)	5 August 2015	
NSW Office of Water (NOW)	Bore Licences Various	-	-

It is noted that not all Approvals were considered in the audit. The audit assessed compliance with the following approvals:

- Development Consent DA 73_11_98
- Environmental Protection Licence (EPL) 395
- Mining Lease (ML) 1452
- Consolidated Coal Lease (CCL) 764

5.2 Performance categories

The status of Newstan's performance during the audit, in respect of each condition of the Development Consent, EPL, CCL and ML is presented in **Appendix A**. Conditions considered to be not complied with, or indeterminate, have been listed in Section 10 of this report.

Performance categories in respect of compliance are defined as follows.

Table 5-1 Performance Category

Performance Category	Definition
Compliant	currently in compliance
Non-compliant	currently not in compliance
Not applicable	condition not applicable at time of audit
Not triggered	condition had not been triggered at the time of the audit
Completed	condition assessed and completed in previous IEAs
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
Not to have Effect	Conditions E1 and U2 in the EPL were subject to arbitration with the EPA and agreed between the parties as "Not to have effect". Compliance for these conditions was not assessed as part of the audit.

Auditor's comments are provided next to each condition to explain evidence sighted relevant to each condition. Where considered relevant, observations have been made regarding specific compliance issues.

Conditions considered Non-compliant are presented in **Table 10-1**. The table includes a discussion of the compliance status and recommendations for improvement where appropriate.

As discussed above, Newstan is in arbitration with the EPA regarding specific conditions of the EPL. Conditions E1 and U2 are considered "Not to have effect" and are also presented in **Table 10-1**. The category of "Not to have effect" was defined in a letter dated 18 May 2015 by Centennial Newstan lawyers – Ashurst.

Where conditions are considered compliant; however it is considered there is an opportunity to improve the compliance status of the condition, a recommendation has been made in the **Table 10-2**.

5.3 Strategies, Plans and Programs reviewed for adequacy

A summary of the strategies, plans and programs that were reviewed for adequacy is provided in **Table 5-2**.

Table 5-2 List of Strategies, Plans and Programs Reviewed for Adequacy

Strategy / Plan / Program	Date Prepared / Revised	Approval Date
Environmental Management Strategy	August 2014	Not approved
Aboriginal Cultural Heritage Management Plan (ACHMP)	November 2012	26.11.12

Strategy / Plan / Program	Date Prepared / Revised	Approval Date
Revised Water Management Plan (RWMP)	December 2009	Not approved
Flora and Fauna Management Plan	August 2014	25.08.14
Air Quality and Greenhouse Gas Management Plan (AQ&GHG MP)	December 2012	30.01.13
Noise Management Plan (NMP)	December 2012	30.01.13
Erosion and Sediment Control Plan (ESCP)	December 2012	Not approved
Soil Stripping Management Plan (SSMP)	March 2010	16.03.10
Landscape Management Plan	April 2011	April 2011
Land Management Plan	May 2010	27.06.10
Wetland Management Plan	January 2012	April 2012
Groundwater Monitoring Program	August 2012	Not approved
Fine Rejects Management Plan	March 2011	05.05.12

The auditors have not undertaken a rigorous or technical assessment of the documents required by the Development Consent, EPL, CCL or ML, particularly where these documents have been signed off and/or approved by relevant regulatory authorities (for example, DP&E). A high level review of the adequacy of selected documents is provided in Section 6.4 of this report.

Where opportunity for improvements were identified within management plans, and OFI was recorded and presented in **Table 10-3**.

6 Environmental Performance

This Section addresses the requirement of the scope of the audit to “*assess the environmental performance of the Project*”.

Newstan has developed an Environmental Management Strategy and a number of management plans to monitor the environmental performance of the Project and mitigate its effects on the surrounding environment. These are discussed further in Section 7.3. 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 CoC, EPL, ML and CCL. The findings of this assessment are provided in **Appendix A** with the identified non-compliances and associated recommendations summarised in Section 10. **Appendix B** presents an update of the status of close out of the findings of the previous IEA. 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

Centennial Management Standard 012 – External Environmental Reporting (EER Standard) provides standardised procedures to follow in the event of an environmental incident. The EER Standard states that Centennial sites, including Newstan, are to follow the environmental incident reporting procedures provided in the EER. Environmental incidents are categorised according to the severity of the incident, the remediation actions required, and the extent of regulatory action (if any). Categories are numbered from 1 to 5, as shown in Figure 6-1 below:

Figure 6-1 Categories of Environmental Incidents

Category and Definition		
1	Prosecution (Major)	<ul style="list-style-type: none"> major actual or potential material harm to the environment; and major remediation required; or the company has been convicted of the offence in a court of law
2	Offence (Significant)	<ul style="list-style-type: none"> significant potential or actual material harm to the environment; and significant remediation required; or a penalty notice has been received
3	Reportable (Moderate)	<ul style="list-style-type: none"> reportable incident to government agency as a condition of approval/licence or as required by legislation; and environmental harm has occurred (either on or off site) or is likely to occur (either on or off site) (using process described in Attachment 2); or incident outside predictions; or incident or complaint exceeds controls identified in management systems (including management plans, procedures and monitoring programs)
4	Technical (Minor)	<ul style="list-style-type: none"> licence/approval/standard exceedance or non-compliance; and no environmental harm (using process described in Attachment 2); and incident or complaint that exceeds controls identified in management systems (including management plans, procedures and monitoring programs) that is not a Category 3 incident, ie has not caused harm or is not outside predictions.
5	Incident (Low)	<ul style="list-style-type: none"> Incident or complaint – on site only within limits of the approved management plan or monitoring program; and No environmental harm with no need for remediation

The EER identifies the recent amendment to the *Protection of the Environment Operations Act 1997*, (POEO Act) requiring the EPA to be notified immediately after a person carrying out an activity

becomes aware of a pollution incident that causes or threatens material harm to the environment. Once immediately reported to the EPA (and/or other relevant authorities, as required), the site must undertake an internal investigation to assess whether environmental harm has occurred or is likely to occur and the materiality of such harm. The EER provides guidance in the identification of environmental harm and materiality. Also included in the EER is a document to guide reporting of an environmental incident to the EPA Environment Information Line, and a template written report, to provide the EPA (and/or relevant authority) written notification of the incident, in accordance with Part 5.7 of the POEO Act and condition R2.2 of the site's EPL.

The Environment and Community Co-ordinator is responsible for reviewing the outcomes of the environmental incident investigation process, closing out the incident once the investigation has been completed, reporting the incident to appropriate regulatory authorities as per the EER and coordinating any corrective or preventative actions to be instigated. Newstan logs the incident in its ECD system which includes details of the environmental incident, investigations and any corrective or preventative actions.

The site's Pollution Incident Response Management Plan (PIRMP) contains details of how staff should respond to an environmental incident. The PIRMP refers to the following internal procedures for actions following a pollution incident:

- Newstan Incident Report Form
- EWP001 Emergency Procedure – Spill Response
- EWP010 Environmental Incident Reporting

Table 6-1 summarises the number of incidents recorded during the audit period by category, as categorised by Newstan.

Table 6-1 Summary of Incidents Recorded by Category for the Period 21 April 2012 – 18 May 2015

Category	No. of Incidents
1: Prosecution (Major)	0
2. Offence (Significant)	0
3. Reportable (Moderate)	0
4. Technical (Minor)	40 ^{Note 1}
5. Incident (Low)	7

^{Note 1} Includes ten complaints (discussed in Section 6.2).

Whilst **Table 6-1** shows that Newstan has not recorded any major (Category 1 - Prosecution), significant (Category 2 – Offence) or moderate (Category 3 – Reportable) incidents during the audit period, there were a number of Category 4 incidents which were reported to the EPA and relevant agencies. These are discussed further in Section 6.1.1

6.1.1 Reported Incidents

During the audit period Newstan notified the EPA's Environment Line of incidents causing or threatening material harm to the environment on ten occasions. A summary of these incidents including the response taken following the incident and to prevent re-occurrence is provided in **Table 6-2**.

Table 6-2 Summary of Reportable Incidents

Date	Incident details	Response taken following incident	Response taken to prevent re-occurrence and follow up
2.03.13	Overflow of Graunch's Dam through LDP001 exceeding TSS and titanium limits and volume limits	One of the Fassifern pumps was turned off to allow the pumping to be reversed from Graunch's Dam to lower the water level within the Dam. The other pump was turned off when water in Fassifern Seam reached a level that would provide a 3 ML discharge buffer solely for the Graunch Dam overflow.	The Clean Water Plant (CWP) was installed and commissioned in December 2013 allowing for greater control over the water level within the Fassifern Seam and better management of surface water during rainfall events.
1.03.13	Overflow of Final Pollution Control Dam through LDP002 exceeding TSS limits	Water from Connolly's Dam was pumped by a diesel pump to the Stage 1 Dam and Main Tailings Dam at the SREA. Water was pumped from the FPCD to Connolly's Dam until Connolly's Dam was full and was overflowing back to the FPCD.	Completion of works on the expansion of the FPCD (from 18 ML to 50 ML) in late 2013. Upgrades to the FPCD pipeline system and Connolly's Dam pumping system.
23.03.13, 24.03.13 26.03.13 2.04.13*	Exceedances of several parameters at EPL Point 17 (Stony Creek pipeline)	The maximum of 11 ML was pumped through LDP001 to reduce the level in the Fassifern Seam. Monitoring was undertaken in accordance with the EPL. This exceedance was reported to the EPA on the 8.04.13 and a written report provided on 15.04.13. In its written report Newstan sought clarification on whether all the relevant agencies are required to be notified of such an exceedance. Clarification was not provided.	The CWP was installed and commissioned in December 2013 allowing for greater control over the water level within the Fassifern Seam and better management of surface water during rainfall events.
9.04.13 and 16.04.13*	Exceedance of criteria for several parameters at EPL Point 17	The maximum of 11 ML was pumped through LDP001 to reduce the level in the Fassifern Seam. Monitoring was undertaken in accordance with the EPL.	Newstan engaged GHD to conduct an investigation into the exceedances and provided the report to the EPA in July 2013. GHD reported the following recommendations in its report dated 20 June 2013 (<i>Analyte Exceedances at EPL Point 1 and EPL Point 17 Source Investigation</i> , GHD June 2013): <i>"Concentration limits for major ions at LDP001 should be revised to reflect actual toxicity risk to the receiving waterway. The current limits are based on maximum concentrations reported between January 2011 and July 2012. This investigation demonstrates that major ion concentrations vary at LDP001 due to changes in underground water management and the period January 2011 to July 2012 does not necessarily represent typical underground water management at Newstan.</i> <i>Concentration limits for major ions at EPL Point 17 are currently based on reported concentrations at LDP001. This investigation</i>

Date	Incident details	Response taken following incident	Response taken to prevent re-occurrence and follow up
			<p><i>demonstrates that the water discharged at EPL Point 17 has a different major ion composition to the underground water discharged at LDP001. Therefore, concentrations for calcium, magnesium, potassium and sulfate in discharge at Point 17 will continue to exceed the existing EPL concentrations limits unless they are modified to reflect the different underground water source and / or the actual toxicity risk to the receiving waterway.</i></p> <p><i>The concentration limits for dissolved titanium, total nitrogen, TKN and total phosphorous should be modified to reflect environmental impact levels. The current limits are well below background concentrations in Stony Creek."</i></p> <p>At the time of writing Newstan and the EPA were in arbitration regarding pollutant concentration limits in the EPL.</p>
10.04.13 and 17.04.13*	Exceedance of criteria for several parameters at LDP001	<p>As per incident dated 9.04.13 above.</p> <p>This incident was reported to the EPA in combination with the above incident. In its written report dated 26.04.13, Newstan sought clarification from the EPA on whether an exceedance of EPL parameters instigates the requirement to report under the POEO Act to all of the relevant authorities. Clarification was not provided.</p>	As per incident dated 9.04.13 above.
5.11.13	Exceedance of lithium and bicarbonate alkalinity criteria at LDP001	<p>Newstan requested that the lab retest the samples. The results of the retested samples and the duplicate samples were within the licence limits. Newstan believed the initial result was an outlier and a fault with the testing at the laboratory.</p> <p>The EPA were notified on the 13.11.13 however this exceedance was not reported in the 2013 Annual Return on the basis that the retested and duplicate samples were within licence limits.</p>	Not required
18.11.13	Overflow of water from Graunch's Dam through LDP001 exceeding TSS and titanium limits	<p>Water within Graunch's Dam Cell 2 was flocculated prior and during the rain event and pumped to Connolly's Dam. Water from Graunch's Dam Cell 1 was pumped to Stage 1 Dam.</p> <p>An additional emergency diesel pump was installed to pump water from Graunch's Dam Cell 2 to Connolly's Dam.</p>	The CWP was installed and commissioned in December 2013 allowing for greater control over the water level within the Fassifern Seam and better management of surface water during rainfall events
25.04.14	Overflow of turbid water from Graunch's dam through LDP001 due to large storm event and	<p>Repairs were undertaken on the drainage contour.</p> <p>Graunch's Dam Cells 1 and 2 were kept low prior to the event. Water from Graunch's Dam Cell 1 was pumped to</p>	Alterations were made to the clean and dirty water diversion drains to increase the clean water being diverted from the Graunch's Dam (including installation of two clean water diversion pipes.

Date	Incident details	Response taken following incident	Response taken to prevent re-occurrence and follow up
	failure of a contour bank in the upper reaches of the NREA	Fassifern Seam. Water from Graunch's Dam Cell 2 was pumped to Connolly's Dam.	The EPA requested additional report under R3 of the EPL. This was provided on the 19.03.15. At the time of writing no further correspondence had been received by Newstan.
26.11.14 and 2.12.14*	Exceedance of Lithium at LDP001	Laboratory asked to re-test the sample and a duplicate taken on the 2.12.14. On identification that result was correct, Newstan notified required government departments in accordance with Condition R2 of EPL 395 and the Newstan PIRMP (2.12.14). A written report was provided to EPA dated 9.12.14. LDP001 discharge was stopped on 4 December 2014. GHD was commissioned to investigate and report on the lithium exceedances (Letter report dated 12.02.15 <i>Lithium - Environmental Impacts</i>). The report found that lithium toxicity poses no risk to freshwater species at the concentrations detected in LDP001	Subsequent exceedances of lithium limits have been recorded but not reported to the EPA's Environment Line as causing or threatening material harm based on the findings of the GHD letter report dated 12.02.15. At the time of writing Newstan and the EPA were in arbitration regarding pollutant concentration limits in the EPL
9.04.15	Turbid water discharge into LT Creek as a result of seepage of water into an electrical pit and discharge through the cable conduits into LT Creek	An additional diesel pump was installed in the Rail Loop Dam to lower the water level. The electrical pipe leak access was blocked using clay materials onsite and an air pump was installed in the depression to pump the ponded water into the dirty water system.	A clay bund was formed around the electrical pits to prevent water ponding. Entry and exit points to the pits were sealed using an electrical type sealer. Additional work was done to contour the area so that surface flows are directed into the dirty water system. This included installing an earthen bund and poly pipe on the surface from this area to the dirty water system. Upon notification of the incident via the EPA's Environment Line, the EPA undertook a site inspection and requested that Newstan provide an incident report under R3 of the EPL. This was provided to the EPA on the 17.04.15. At the time of writing no further correspondence had been received by Newstan.
21.04.15	Discharge from FPCD through LDP002 during storm event	Water from FPCD was dewatered at a rate of 160 L/s. Water from the Weighbridge Dam which flows to the FPCD was dewatered at a rate of 40 L/s. Newstan staff worked continuously resetting power to the pumps due to power outages. Newstan notified the EPA Environment Line on the 21.04.15. The written report (provided on the 5.05.15) also included details of the overflow of Graunch's Dam on the 21.04.15 and the overflow of the CWD on the 23.04.15 (discussed below).	An east coast low system resulted in heavy rainfall and strong winds. This event was classed as a natural disaster for the region by the NSW Government.
21.04.15	Overflow of Graunch's Dam	Water from Graunch's Dam cell 1 was dewatered at a	An east coast low system resulted in heavy rainfall and strong winds.

Date	Incident details	Response taken following incident	Response taken to prevent re-occurrence and follow up
	through LDP001 exceeding volume limit and TSS, aluminium, and zinc limits during storm event	<p>rate of 80 L/s. Water from Graunch's dam cell 2 was dewatered with two pumps at a rate of 80 L/s and 40 L/s. Newstan staff worked continuously resetting power to the pumps due to power outages.</p> <p>Monitoring was undertaken in accordance with the EPL. Monitoring at MP1 (upstream of LDP001) also recorded exceedances of TSS and aluminium.</p> <p>Monitoring at EPL Point 19 (downstream of LDP001) recorded an exceedance of aluminium but TSS and zinc were within the limits.</p> <p>TSS, zinc and aluminium levels were back within licence limits at LDP001 on the 22.04.15.</p>	This event was classed as a natural disaster for the region by the NSW Government.
23.04.15	Overflow of Clean Water Dam during storm event	<p>Water from the CWD was dewatered at a rate of 80 L/s. Water from the Seepage Dam (which overflows into the CWD) was dewatered at a rate of 80 L/s. Newstan staff worked continuously resetting power to the pumps due to power outages.</p> <p>Monitoring was undertaken in accordance with the EPL. Sampling at EPL Point 6 (downstream) was not undertaken until the 24.04.15 as it was deemed unsafe to access the monitoring location during the night when the discharge commenced.</p>	An east coast low system resulted in heavy rainfall and strong winds. This event was classed as a natural disaster for the region by the NSW Government.

* These were reported as separate incidents in Newstan's Incident Database but were reported to the EPA in one incident report.

6.1.2 Minor incidents

A breakdown of the Category 4 incidents (not including reportable incidents or complaints) by nature of the incident is provided in **Table 6-3**.

Table 6-3 Number and nature of Category 4 (minor) incidents for the audit period

Nature of incident	No. of incidents
Water (exceedance of licence limits)	15
Water (unlicensed discharge)	1
Dust (failure to monitor)	2
Noise exceedance	2
Subsidence (sinkhole identified)	1
Total	21

As can be seen from **Table 6-3** the majority of minor incidents related to exceedances of licence limits for water. These are discussed in Section 8.7.

The table details 2 noise exceedances (as were logged in 2012 in Centennial's internal incident reporting system ECD). There were a number of other noise exceedances during the period which are discussed in detail in Section 9.6 and have been reported in AEMRs and in the monthly Environmental Monitoring Data reports available on Centennial's website. Since 2012, these noise exceedances have not been logged in the ECD system.

The Noise Management Plan does not require reporting exceedances in ECD, however, in order to maintain internal systems and comply with Corporate Standards (Section 9.3) it is considered Newstan should consider reporting noise exceedances in ECD.

The Level 5 incidents primarily related to monthly dust exceedances, high water quality monitoring results and a minor spill of dust suppressant.

6.2 Complaint Management

Newstan operates a dedicated community information and complaints telephone line (1800 247 662). The telephone line is publicly advertised on Centennial Coal's website.

At the time of the audit the complaints telephone line was directed to Veronica Howat; the Environment and Community Coordinator. If the call is not answered an option is provided to contact the Coordinator on her mobile phone or to leave a message. It was reported that if the Environmental Coordinator is on leave the complaints line diverts to Nerida Manley (Environment and Community Officer). Complaints can also be lodged via the Newstan website. The Environment and Community Co-ordinator or nominated person investigates the complaint and provides a response to the complainant within 24 hours.

Complaints are logged by the Environment and Community Coordinator within Lotus Notes (using the ECD system). The log includes the following information: reference number, incident type (of which community complaint is an option), complainant details, date and time of occurrence, complaint details, investigation / cause, remediation details, implementation process, implementation date and details of consultation.

The Environment and Community Coordinator discusses any complaints received at the CCC meetings. A summary of complaints is also provided in the AEMRs. The 2012, 2013 and 2014 AEMRs were reviewed and noted to include a summary and discussion of the complaints received during the year. The auditors also reviewed the All Incidents Report January 2015 to May 2015 (developed from ECD). A summary of the complaints received by type and year is presented in **Table 6-4**.

Table 6-4 Summary of complaints received during the audit period by type and year

Nature of complaint	No. of Complaints			
	2012	2013	2014	2015
Noise	2	5		
Dust	2			1
Other	1	1		
Total	5	6	0	1
	12			

As shown by **Table 6-4**, the majority of complaints related to noise which were mostly received in 2013 and were related to noise impacts from the construction of the ventilation shaft at Awaba. This construction was completed by 2014 which coincided with a dramatic decline in the number of complaints to zero in 2014 and no noise complaints in 2015.

A review of the complaint details indicate that the complaints were investigated and measures implemented where possible and a response provided to the complainant. In general the complaint handling process was observed to be transparent. A factual record of complaints received and responses provided was maintained.

It is noted that the total number of complaints received for the audit period (12) has significantly decreased since the 2012 IEA where 41 complaints had been recorded for that audit period.

6.3 Compliance Management

Centennial has developed a compliance database to assist sites meet requirements of Project Approvals and associated plans, programs and strategies. The database allows conditions to be entered and actions to be automatically generated when a trigger is met. The full capability of the database was not observed during the audit; however, the database was used to demonstrate how compliance with the Development Consent, EPL and Mining Lease is managed by viewing evidence of documents attached to the relevant section of each condition.

6.4 Close out of recommended actions from previous IEA

As required by Development Consent Condition 8.9, Independent Audit, within six weeks of the completion of the 2012 IEA, Newstan submitted a copy of the audit report to the DP&E together with its response to the recommendations. The auditors obtained a copy of Newstan's Action Plan for the 2012 IEA and reviewed the status of the findings and recommendations. This is presented in **Appendix B**.

It is noted the Action Plan provided to the DP&E included Newstan's response to the conditions assessed as non-compliant and indeterminate and accompanying recommendations, however did not include the recommendations made throughout the report, in particular those relating to the adequacy of management plans. Where the auditors have assessed that the recommendations made during the previous IEA were not addressed and are still relevant, they have been included again in this IEA. For improved tracking of recommendations made throughout the audit report, all recommendations have been given a unique reference number and are summarised in Section 10.

Other than the provision of the Audit Plan to DP&E six weeks after completing the audit, there appeared to be no mechanism for tracking the close out of the actions from IEA's.

REC 01 NEWSTAN IEA 2015

Develop a process for managing non-compliances identified from audits (internal and external), and closing out recommendations.

7 Review of Environmental Management System

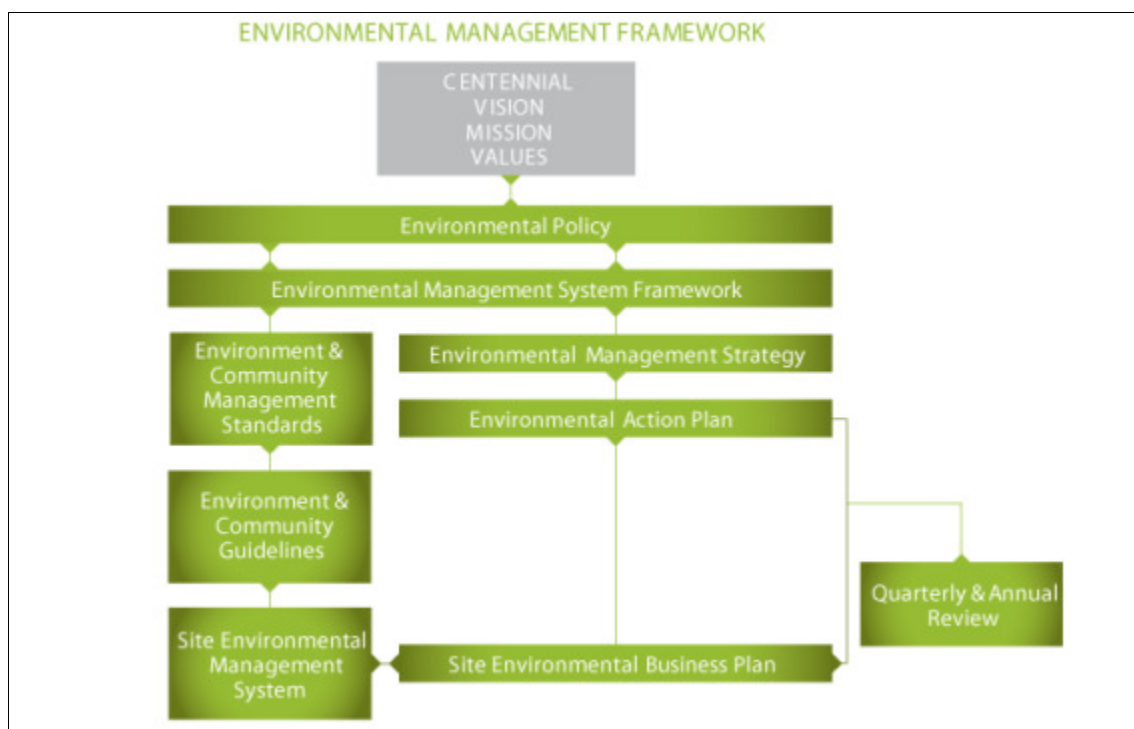
This Section fulfils the requirement to assess the adequacy of strategies, plans or programs required under the Project Approval. The implementation of the management plans / programs is discussed in **Appendix A**.

7.1 Environmental Management Overview

Centennial Coal has established an Environmental Policy and Environmental Management System (EMS) Framework, as well as a number of Environment and Community Standards. The policy, EMS framework and associated procedure provide guidance to Centennial's sites, such as Newstan, on the development of their own Environmental Management plans.

Newstan has developed an Environmental Management Strategy and a number of supporting environmental management plans to manage environmental aspects and impacts of operational activities. Newstan's Environmental Strategy (the Strategy) operates under the overarching Centennial Coal Environmental Policy and EMS Framework. Centennial's Environmental Management Framework is depicted in **Figure 7-1** below.

Figure 7-1 Centennial Environmental Management Framework



Centennial Coal has developed an Environmental Management System Framework Document (EMS Framework) incorporating the following four components:

- EMS Framework Document (Volume 1)
- EMS Procedures (Volume 2)
- Environment and Community Management Standards (Volume 3)
- Environment and Community Management Plans (Volume 4)

The EMS Framework has been developed to be consistent with the International Standard for Environmental Management Systems ISO 14001. The EMS Framework outlines the following elements:

- Commitment and policy;
- Identification of aspects and impacts;
- Legal and other requirements;
- Objectives and targets;
- Management plans;
- Responsibility for implementing the EMS;
- Training, awareness and competence;
- Communication;
- Documentation and document control;
- Operational control;
- Emergency preparedness and response;
- Measurement and evaluation; and
- Management review.

The EMS Framework is applicable to all activities and areas managed by Centennial. The purpose of the EMS Framework is to provide an effective management tool, which will foster sound environmental management of all EMS Framework that each Business Unit, such as Newstan, develop an Environmental Management Strategy, consistent with the EMS Framework objectives.

The detail of the Centennial Coal EMS Framework and the site implementation of these documents were not assessed in detail during the audit.

Newstan has developed an Environmental Management Strategy and a number of environmental management plans and monitoring programs. These are discussed in more detail in Sections 7.2, 7.3 and 7.4 below.

7.2 Environmental Management Strategy

Development Consent Condition 3.2 states that:

“a) The Applicant shall prepare an Environmental Management Strategy as a continuation of the existing Newstan Colliery Environmental Management System for the DA area including within the LEA and all proposed surface facilities. The Environmental Management Strategy shall be prepared in consultation with the relevant authorities and the Community Consultative Committee and to the satisfaction of the Director-General, prior to commencement of construction of surface facilities or secondary workings, whichever is the sooner.

(b) The Environmental Management Strategy shall include:

- (i) statutory and other obligations which the Applicant is required to fulfil during construction and mining, including all approvals and consultations and agreements required from authorities and other stakeholders, and key legislation and policies;*
- (ii) definition of the role, responsibility, authority, accountability and reporting of personnel relevant to environmental management, including the Environmental Officer;*
- (iii) overall environmental management objectives and performance outcomes, during construction, mining and decommissioning of the mine, for each of the key environmental elements for which management plans are required under this consent;*
- (iv) overall ecological and community objectives for the water catchment, and a strategy for the restoration and management of the areas of the catchment affected by mining operations, including elements such as wetlands and other habitat areas, creek lines and drainage channels, within the context of those objectives;*
- (v) identification of cumulative environmental impacts and procedures for dealing with these at each stage of the development;*
- (vi) overall objectives and strategies to protect existing economic productivity within the area affected by mining, including agricultural productivity and other businesses;*
- (vii) steps to be taken to ensure that all approvals, plans, and procedures are being complied with;*
- (viii) processes for conflict resolution in relation to the environmental management of the project; and*
- (ix) documentation of the results of consultations undertaken in the development of the Environmental Management Strategy.*

An Environmental Management Strategy was originally prepared by Powercoal and approved in 2000. Newstan revised the Strategy in July 2014 and provided it to the relevant agencies (as specified by the Development Consent) for consultation. Minor comments were received from the DRE and NOW (discussed below). The Strategy was submitted to the DP&E for approval on the 25 August 2014. At the time of reporting, DP&E had yet to approve the revised Strategy.

A review of the 2014 Strategy indicated the above requirements had been generally addressed.

(i) statutory obligations are outlined in Section 1.6 including Development Consent, EPL, MOP, Mining Leases, sub leases and authorisations. Water licences and approvals issued by NOW are referred to however details of the individual licences are not provided (as is done with the other licences and approvals). In addition the WorkCover notification for the storage and handling of dangerous goods at quantities that exceed the Manifest quantity in Schedule 5 of the OHS Regulation (due to chemicals required for the CWP) is not referenced.

(ii) roles and responsibilities are included in Section 7.1 including those of the Environment and Community Coordinator. These generally align with the responsibilities outlined by CoC 3.1 (Appointment of an Environmental Officer)

(iii) objectives and performance outcomes are included in Table 1. The NOW in its response to Draft Strategy stated that it considered that objectives and performance outcomes should be also developed in relation to extraction of water from surface and ground water sources. This was not addressed in the revised Strategy provided to the DP&E.

(iv) ecological and community objectives for the water catchment a restoration strategy are addressed in Section 6.1. This Section provides some overarching objectives and strategies and then refers to the EIS for analysis of the ecological and community objectives and the individual management plans for mitigation measures.

(v) cumulative environmental impacts and procedures are discussed in Section 6.2. This Section refers to the EIS for analysis of the cumulative impacts and the individual management plans for mitigation measures. It is considered that reference to the EIS which was produced in 1998 and is not easily accessible is not practical or user friendly. Without reviewing the EIS (which is not on Newstan's or the DP&E website) it is not easy to determine whether this requirement has been addressed.

(vi) objectives and strategies to protect existing economic productivity is addressed in Section 6.3. This section includes objectives and strategies and then also refers to the EIS and individual management plans.

(vii) steps to ensure compliance with approvals, plans and procedures are included in Section 6.4 which discusses measures to assess compliance such as audits and reviews. It is also addressed in Section 8 which discusses monitoring and inspections. The Strategy does not discuss in detail how actions raised in internal or external audits would be recorded and tracked to ensure close out (such as logging them in ECD). The Strategy discusses recording and investigating non-compliances using the Accident / Incident Investigation procedure in the HSMS and also states that compliance with EPL limits and the Development Consent will be checked monthly and entered into ECD.

(viii) process for conflict resolution is included in Section 5.4.2.

(ix) the document details table on the cover page includes the dates circulated to the relevant agencies.

In addition to the above comments, the following continuous improvement opportunities were identified relating to the Environmental Management Strategy. These changes could be completed as part of the next planned update of the Strategy or in addition to any further DP&E comments received as part of approval of the Strategy:

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- Update the Legal and Other Section to include reference to the WorkCover notification for the storage and handling of dangerous goods at quantities that exceed the Manifest quantity in Schedule 5 of the OHS Regulation (due to chemicals required for the CWP). Also add further details of the Water Licences (extraction and monitoring) issued by NOW.
- Some Sections of the Strategy (e.g. cumulative impacts, ecological and community objectives for water catchment and objectives and strategies to protect existing economic productivity areas) are brief and refer back to original 1998 EIS. The EIS may not represent current day standards or community expectations. It is suggested that Newstan consider current standards in any future update of the Strategy, particularly if mining was to recommence.
- Better outline the links between the Strategy, Management Plans and EMS including Centennial Coal Standards and Procedures. This could be in the form of a framework diagram.
- Address the comments of NOW to include objectives and performance outcomes relating to the extraction of water from surface and groundwater sources and to reference the most recent water management plan (i.e. the RWMP).
- Include reference to the Groundwater Monitoring Program in the Risk Management Section.

7.3 Management Programs and Plans

The following documents were reviewed by the auditors:

- Aboriginal Cultural Heritage Management Plan (ACHMP) (2012)
- Revised Water Management Plan (RWMP) (2009)
- Flora and Fauna Management Plan (2014)
- Air Quality and Greenhouse Gas Management Plan (AQ&GHG MP) (2012)
- Noise Management Plan (2012)
- Erosion and Sediment Control Plan (ESC) (2012)
- Soil Stripping Management Plan (SSMP) (2010)
- Landscape Management Plan (2011)
- Land Management Plan (2010)
- Wetland Management Plan (2012)
- Groundwater Monitoring Program (2012)
- Fine Rejects Management Plan (2011)

A number of management plans had not been revised since the previous IEA in April 2012. For these plans, a detailed adequacy review has not been undertaken as part of this audit. Where still relevant, the findings of the review of the previous IEA have been included.

7.3.1 General Summary of Management Plan Adequacy Review

The following general comments are made regarding the adequacy of the management plans and monitoring programs:

- The Plans were developed by various authors (e.g. different specialist consultants or internally by Newstan) and this is evident by the lack of consistency between plans in terms of structure and integration with the Centennial EMS as well as level of detail.
- There is limited integration between the management plans and the Centennial EMS. The EMS and management plans do not reinforce the link to one another.
- The structure of current plans and programs are not very user friendly. The requirements and mitigation measures are often embedded or lost in text making the plans difficult to implement and audit. The usability of the plans and programs could be greatly enhanced by having a table listing required management/mitigation measures. This could then be the basis of site's internal and external audit/review process for implementation of the plans/programs.

7.3.2 Overarching Continuous Improvement Opportunities Relating to Management Plans

The following provides a summary of overarching opportunities for improvements relating to Management Plans in general at Newstan:

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- An opportunity exists to improve the consistency and links between management plans in terms of structure, integration with Centennial EMS and Standards, and level of detail including highlighting management actions and mitigation measures. This could be achieved through the development of a management plan template.

7.3.3 Detailed Management Plan adequacy review

The findings of the review of the adequacy of the management plans/monitoring programs and subsequent recommendations or opportunities for improvement are provided in **Table 7-1**. It is noted many of the comments are made on the basis of identifying continuous improvement opportunities within the Plans. These vary in their level of risk and significance. Many continuous improvement opportunities are not at a level of risk or significance that warrant an immediate review of the Plan; however could be made during the next update of the Plan.

Table 7-1 Adequacy Review of Management Plans / Monitoring Programs

Adequacy Review	Recommendation / Opportunities for Improvement
Flora and Fauna Management Plan (2014)	OFI 03 NEWSTAN IEA 2015 :
<p>The Flora and Fauna Management Plan was revised and approved by the DP&E in 2014. Table 1 of the Plan lists where in the document the requirements of CoC 3.4 (a) and 8.5 have been addressed. In summary, Section 2 of the Plan describes the site ecology including threatened species, endangered ecological communities and riparian communities. Section 3 provides general strategies / measures to minimise impacts on threatened flora, threatened fauna and habitat security. Section 4 discusses management and provides protocols for pit top surface works, surface works associated with underground mining and existing surface facilities. Section 6 and 7 discuss reporting and review respectively.</p>	
<p>Section 5 outlines the monitoring program. This states that the monitoring program will include flora and fauna monitoring across the site, within any wetland and aquatic habitat as well as within rehabilitation areas. Section 5.3.4 Impact Amelioration Monitoring discusses monitoring of corridor restoration areas however doesn't specifically discuss SREA and NREA rehabilitation monitoring. It is understood through review of the proposal from RPS for undertaking the annual monitoring that the intention is to establish three rehabilitation monitoring sites and three analogue monitoring sites. This is not reflected in the Plan.</p> <p>Whilst the type of monitoring, methodology, frequency and general site selection is discussed, the specific monitoring locations are not provided. This Section would be improved by the inclusion of a figure showing the specific monitoring sites. It is understood the first round of monitoring was recently undertaken (report not finalised at the time of writing) and therefore the exact monitoring sites may have been established during this monitoring round.</p>	<p>Include further details of the proposed monitoring of rehabilitation areas in Section 5.3.4. Also include a Figure showing the specific monitoring locations.</p> <p>If this monitoring is highlighted in another document, then this document could be referenced.</p>

Adequacy Review	Recommendation / Opportunities for Improvement
<p>A number of other management plans include aspects of flora and fauna management (e.g. Wetland Management Plan and Landscape Management Plan). Newstan should ensure consistency and cross referencing between these management plans to achieve overall ecological objectives.</p> <p>There is limited cross referencing between the Flora and Fauna Management Plan and the Environmental Strategy and other elements of Newstan's system. For example the Plan states that pre-clearing surveys will be undertaken as a contingency measure if significant impacts are noted to occur to native vegetation or fauna which was not addressed during the EIS process, however the plan does not discuss Newstan's Permit to Clear process (using Form N122109) for the removal of trees and vegetation.</p>	<p>Improve the consistency and cross referencing between the Flora and Fauna Management Plan and other relevant plans such as the Wetland Management Plan and Landscape Management Plan to define ecological objectives.</p> <p>Also improve the cross referencing with the Environmental Management Strategy and other elements of Newstan's environmental management system such as the Permit to Clear process (using Form N122109) for the removal of trees and vegetation.</p>
<p>The monitoring outlined in the Flora and Fauna Management Plan in particular for rehabilitation areas is an important component of assessing performance and determining the achievement of the completion criteria outlined in the MOP. There is little discussion of this and how the objectives and management approaches defined in the Flora and Fauna Management Plan are aligned with those defined in the MOP.</p>	<p>Cross referencing the Fauna Management Plan and the MOP has the potential to align both approaches, reduce duplication and lead to consistent outcomes.</p>
Wetland Management Plan (2012)	OFI 04 NEWSTAN IEA 2015
<p>The Wetland Management Plan was last revised and submitted to the relevant agencies and the LMCC for consultation in 2012. The Plan has not been updated during the audit period. The 2012 IEA reviewed the adequacy of the Plan and noted the following:</p> <p>The Wetland Management Plan includes discussion of wetland systems in both the SREA (Causeway Dam, Seepage Dam and the Clean Water Dam) and the NREA (Main By-wash Dam).</p> <p>Section 4.3 of the WLMP (Options for Creation of Additional Artificial Wetlands) states that other than cleaning of the Seepage Dam on a regular basis, the Clean Water Dam should not require additional disturbance and therefore would be expected to self-colonise with wetland species.</p> <p>Section 5.0 (Decommissioning) states that Newstan's intention is that the Main By-wash Dam and associated artificial wetlands will remain in place following decommissioning of the mine. It also states that the Seepage Dam, Clean Water Dam and Causeway Dam will remain after the decommissioning and rehabilitation of the SREA.</p>	
<p>Other than flow and water quality monitoring, the Plan does not include any requirements for monitoring wetland health through flora and fauna monitoring, weed control etc. CoC 8.5 requires that a detailed flora and fauna monitoring program be prepared for habitat areas including any wetlands and aquatic habitats.</p> <p>Since the last review Newstan has revised its Flora and Fauna Management Plan to include aquatic and riparian monitoring sites. This should be cross-referenced within the Wetland Management Plan.</p>	<p>Ensure the Wetland Management Plan is consistent with and cross-references the Flora and Fauna Management Plan.</p>

Adequacy Review	Recommendation / Opportunities for Improvement
<p>Newstan constructed and commissioned a CWP in 2013 / 2014 which significantly upgraded its surface water management capabilities. The changes to the surface water management system as a result of the operation of the CWP with impacts on the wetlands need to be included within the Wetland Management Plan.</p> <p>Section 1.3 refers to the relevant Development Consent Conditions. These have not been updated to reflect the changes that came into effect with MOD4 which also requires that the plan is prepared in consultation with NOW (in addition to the</p>	<p>Update the Wetland Management Plan to reflect changes to the surface water management system with potential impacts to the wetlands as a result of the operation of the CWP, if any.</p>
<p>OEH and DRE).</p> <p>Section 6.2 commits to reporting on environmental performance on an annual basis in the AEMR. It does not discuss how environmental performance will be measured and what exactly will be reported on.</p>	<p>Include discussion of how environmental performance will be measured and reporting requirements in the AEMR.</p>
Revised Water Management Plan (2009)	
Refer Section 8.8	
Erosion and Sediment Control Plan (2012)	OFI 05 NEWSTAN IEA 2015
<p>The Erosion and Sediment Control Plan (ESCP) was revised in 2012 by Environmental Consultants GHD and a Draft submitted to LMCC for consultation. The LMCC conducted a site visit to assist in assessing the Plan and provided the following comments:</p> <ul style="list-style-type: none"> the plan generally complies with the requirements of the "Blue Book" however Council requests the minimum design criteria for the sediment basins is changed from the 90th percentile to the 95th percentile to reflect the sensitivity of the receiving environment. include more recent figures at a scale showing finer detail (1:2000 – 1:5000 was recommended). <p>At the time of the audit site inspection the Plan had not been revised to incorporate the LMCC comments.</p> <p>In addition, the following changes to the water management system have occurred since the plan was last revised in 2012:</p> <ul style="list-style-type: none"> construction and operation of the CWP upgrades to the pipeline and pumping system completion of the SREA clean water diversion drains Stony Creek pipeline is now a licensed discharge point (Point 7) <p>The ESCP does not reference the relevant Conditions of Consent, in particular Condition 3.5 Prevention of Soil Erosion which requires the preparation of Erosion and Sediment Control Plans.</p> <p>Section 2.7 Assessment Criteria for Surface Water Quality states that exceedance of the water quality concentration limits (oil and grease, pH and TSS) at LDP002 is allowable in wet weather conditions of rainfall events greater than a one hour 10 year ARI over any consecutive three day period. The condition which provided this allowance (L2.5) has been removed from the EPL.</p>	<p>Update the ESCP to incorporate LMCC comments and reflect changes that have occurred on site since 2012 including variations to the EPL. Also include reference to the relevant Conditions of Consent (in particular Condition 3.5).</p>
Groundwater Monitoring Program (2012)	
OFI 06 NEWSTAN IEA 2015	

Adequacy Review	Recommendation / Opportunities for Improvement
<p>The Main West Groundwater Monitoring Program (GWMP) was prepared by Environmental Consultants GHD in 2012 and submitted to NOW for consultation and the DP&E for approval. The requirements for the content of the GWMP are specified by Consent Condition 4.3. Table 1 within the GWMP details where in the document the requirements have been addressed.</p> <p>Baseline data is included in Section 3. Groundwater impact assessment criteria and trigger values are included in Section 4. Groundwater monitoring and reporting is included in Section 5.</p>	
<p>The RWMP also includes a Section on underground water monitoring (Section 8.3). The two Plans have different commitments relating to monitoring. The GWMP commits to quarterly monitoring of pH, EC and standing water level at MB10, MB11, MB12, MB13 and MB15, whereas the RWMP includes monitoring bores MB1-MB6 and MB9-MB19. It is unclear whether the GWMP supersedes the groundwater sections of the RWMP.</p>	<p>Clarify the relationship between the GWMP and the RWMP and whether the monitoring of bores MB1-MB6 and MB9-MB19 will continue to be undertaken.</p>
<p>The GWMP states that all existing monitoring bores have been licensed or are in the process of being licensed. A list of all the groundwater bores and their licence status would be a useful addition to the GWMP. It is noted that a list is included in Appendix N of the RWMP. A figure of all the monitoring bores would also be useful. It is noted Figure 2-1 of the GWMP shows the locations of MB10-MB13 and MB15.</p>	<p>Include a list (and Figure) of all groundwater monitoring bores and their licence status.</p>
<p>Table 4-1 Proposed Trigger Values and Table 4-2 Proposed Response Plan lists the following "trigger values":</p> <ul style="list-style-type: none"> pH: 6.1-8.0 EC: <3,800 µS/cm (MB11) EC <2,200 µS/cm (down gradient of unnamed creek) <p>This is confusing as the "trigger value" should be the value which if exceeded triggers a response. The way it is worded it can be interpreted that for example an EC value <i>less than</i> 3,800 µS/cm at MB11 requires response rather than an exceedance of 3,800 µS/cm. The values provided in the table are actually the acceptable values rather than the "trigger" values.</p>	<p>Reword Tables 4-1 and 4-2 to make it clear that the trigger values are the values which if exceeded trigger a management response.</p>
Soil Stripping Management Plan (March 2010)	OFI 07 NEWSTAN IEA 2015
<p>The Soil Stripping Management Plan was last approved in 2010 and has not been revised during the audit period. The 2012 IEA reviewed the adequacy of the Plan and noted the following:</p> <p>To address the requirement of CoC 3.5 (c) which requires that the SSMP includes management of stockpiles, soil stripping techniques and scheduling; and a program for reporting the soil stripping methods, Parsons Brinckerhoff (PB) conducted an assessment to determine topsoil depth at SREA. This report formed the basis of the Plan and was referred to throughout the Soil Stripping Management Plan.</p> <ul style="list-style-type: none"> Section 4.1 identifies soil stripping and stockpiling requirements as identified by PB. A schedule of works is presented in section 4.4 based on the PB report, however the timeframe over which soil stripping will take place or the actual stockpiling time implemented on site is not clear (the schedule indicates a stockpiling time of 20- 	<p>Review and where relevant update the Soil Stripping Management Plan (as required of Condition 3.2(e)).</p>

Adequacy Review	Recommendation / Opportunities for Improvement
<p>30 years).</p> <ul style="list-style-type: none"> Section 5.2 of the Plan identifies reporting requirements including, provision of a monthly report by the SREA Project Engineer and provision of an annual summary of soil stripping activities in the AEMR. <p>The Soil Stripping Management Plan was due for revision in March 2015 in accordance with 3.2(e) which requires plans to be updated every 5 years.</p>	
Air Quality and Greenhouse Gas Management Plan (2012)	OFI 08 NEWSTAN IEA 2015
<p>The Air Quality and Greenhouse Gas Management Plan (AQ&GHG MP) was approved by the DP&E in 2012.</p> <p>Table 1 outlines where in the Plan the requirements of the relevant consent conditions have been addressed, however this is done at a very high level with multiple sections referred to for multiple requirements. Also the numbering starts at Section 2 causing the Table of Contents and cross referencing within Table 1 to be incorrect.</p>	<p>During the next scheduled review of the Plan revise Table 1 so that the Table of Contents and cross-referencing within Table 1 is correct.</p>
<p>The Plan includes an air monitoring program which includes: one real time monitor (TEOM) for the measurement of PM₁₀, two HVAS for Total Suspended Particles (TSP), PM₁₀ and PM_{2.5} monitoring and eight depositional dust gauges.</p> <p>There is limited discussion of how the real time PM₁₀ monitoring data would be used as a dust management tool. For example it was reported that as the criteria are approached a text message is sent to the Environment and Community Coordinator who can investigate what activities are occurring on site, analyse wind conditions and decide whether additional mitigation measures are required. This protocol is not discussed in the Plan.</p>	<p>Include discussion of how the real time monitor is used as a dust management tool e.g. through the use of alarms and alerts</p>
<p>Section 9 of the AQ&GHG MP discusses reactive response procedures and includes mitigation measures for excessive dust events. This Section does not specifically discuss extraordinary events such as bushfires, prescribed burns, dust storms etc. but the measures proposed are considered appropriate for these events.</p>	
<p>Section 6.1 Odour discusses odour impact assessment criteria. Whilst this was relevant during the impact assessment phase, it is not relevant for on-going management as no odour criteria have been specified in the Development Consent or the EPL. It is more important to reflect the requirements of the CoC and EPL relating to odour i.e. that no offensive odours are emitted from the site and to implement best management practice to minimise off-site odour. How these requirements would be achieved is not discussed in the Plan.</p>	<p>Remove reference to odour impact assessment criteria (not relevant as no criteria set by CoC or EPL) and instead include discussion of how off-site odour will be minimised and how the site will ensure no offensive odours are emitted</p>
<p>Section 7.2 refers to the Colliery's Greenhouse Gas Management Plan. Newstan has not developed a separate Greenhouse Gas Management Plan. The scope of the AQ&GHG MP is to include management of greenhouse gas emissions.</p>	<p>Remove reference to Greenhouse Gas Management Plan in Section 7.2</p>
<p>The Development Consent is included as Appendix A. This is considered unnecessary as the relevant conditions are already reproduced within the Plan.</p> <p>The structure of the Plan is not very user friendly. Refer to general recommendations regarding a more standardised structure for management plans.</p>	<p>Remove Appendix A, Development Consent as it is not required and unnecessarily bulks up the Plan.</p>

Adequacy Review	Recommendation / Opportunities for Improvement
<p>Aboriginal Cultural Heritage Management Plan (November 2012) and Archaeology and Cultural Management Plan (2006)</p> <p>The Northern Holdings Aboriginal Cultural Heritage Management Plan dated November 2012 was prepared to address Condition 3.3, of DA 73-11-98. The Plan was prepared by RPS (East Australia) Pty Ltd on behalf of Centennial and was approved by the DP&E on 26 November 2012. The Plan addresses management of Aboriginal Cultural Heritage at Centennial's northern operations facilities including:</p> <ul style="list-style-type: none"> • Newstan Colliery • Awaba Colliery • Myuna Colliery • Mannering Colliery • Mandalong Mine <p>The Plan was developed in consultation with the various Aboriginal parties who had registered an interest to participate in the consultation processes for projects across Centennial's northern operations as well as OEH, LMCC and the CCC. A summary of the consultation process is presented in the ACHMP Aboriginal Consultation Log dated November 2012. The previous IEA reviewed the adequacy of the 2012 ACHMP (which at the time had not been approved) and noted the following:</p> <ul style="list-style-type: none"> • The Plan discusses identified Aboriginal Archaeological sites in the project area and provides an aboriginal heritage management strategy based on a defined Heritage Management Zones. These are defined based on level of assessment (surveyed, unsurveyed) and the location and nature of identified sites. It is noted that non Aboriginal heritage and archaeological items are not identified. • Lords Creek is defined as Zone A in the Plan which states that no surface facilities works are to be carried out and prior to mining activities a baseline for monitoring the site must be arranged with a Heritage Consultant. • The Plan contains a flow chart of Protocols and detailed mitigation measures for Newstan Heritage Management Zones for the following stages of activity, Before Mining, During Mining (predicted subsidence ≤200mm), During Mining (unexpected subsidence >200mm, extensive cracking or erosion), and Surface Activities. • The Plan outlines the requirement for Aboriginal consultation at planning and activity stages of work. <p>The ACHMP does not include discussion of non-Aboriginal heritage management. Prior to the preparation of the ACHMP, Newstan had prepared an Archaeology and Cultural Management Plan which was last approved in 2006. This Plan has been superseded by the ACHMP with regards to Aboriginal heritage management however is still relevant for non-Aboriginal heritage management as this is not addressed in the ACHMP. It was reported that Newstan was in the process of revising the Archaeology and Cultural Management Plan for DP&E approval.</p>	<p>REC 02 NEWSTAN IEA 2015</p> <p>Update the 2006 Archaeology and Cultural Management Plan to address the requirements of CoC 3.3A for non-Aboriginal heritage and cultural management.</p> <p>OFI 09 NEWSTAN IEA</p> <p>The revised Plan could be improved by clearly stating the scope of the Plan and describing the relationship between the two heritage management plans.</p>
<p>Land Management Plan (2010)</p>	<p>OFI 10 NEWSTAN IEA 2015</p>

Adequacy Review	Recommendation / Opportunities for Improvement
<p>The Land Management Plan was last approved in 2010 and has not been revised during the audit period. The 2012 IEA reviewed the adequacy of the Plan and noted the following:</p> <p>The Land Management Plan generally addresses the requirement of CoC 3.9 (a). Areas where the Plan could be improved include:</p>	<p>Review and update the Land Management Plan to ensure compliance with the requirement to update plans every 5 years.</p> <p>The Plan should align with or reference the MOP where it covers rehabilitation to avoid inconsistency between documents.</p>
<ul style="list-style-type: none"> The Plan does not include any criteria with which to assess the success of rehabilitation activities. It is noted closure criteria are included within the Rehabilitation Strategy, the relevant criteria should be reproduced or referenced within the Land Management Plan. 	<p>Include a reference to criteria with which to assess the success of rehabilitation activities as may have been developed in other plans such as the Flora and Fauna Management Plan or the MOP.</p>
<ul style="list-style-type: none"> Section 7.0 (Monitoring) states that inspections of the sites rehabilitation areas will be conducted on a quarterly basis. It is recommended that monitoring is expanded beyond inspection to include ecological monitoring to assess the success of rehabilitation as per defined rehabilitation criteria. This would typically include species diversity, cover, soil structure and microbiological activity. <p>It is noted that the MOP has requirements related to monitoring which are not referenced in the Plan.</p>	<p>Reference the MOP where monitoring of rehabilitation is described and ensure consistency between the Plan and the MOP.</p>
<ul style="list-style-type: none"> The Plan does not have a section covering Reporting nor include the CCL requirement to report on progress with respect to rehabilitation criteria within the AEMR. 	<p>Reference reporting requirements in the MOP, or alternatively include a section on Reporting to cover the CCL requirement to report on progress with respect to rehabilitation criteria within the AEMR.</p>
<p>The Land Management Plan is due for revision in 2015 in accordance with 3.2(e) which requires plans to be updated every 5 years. The recommendations for improvement made in the 2012 IEA are still considered relevant and should be taken into consideration in the next review of the Plan.</p>	
Landscape Management Plan (2011)	OFI 11 NEWSTAN IEA 2015
<p>The Landscape Management Plan was last approved in 2011 and has not been revised during the audit period. The 2012 IEA reviewed the adequacy of the Plan and noted the following:</p> <p>The Landscape Management Plan generally addresses the requirements of CoC 3.7 (a). Areas where the Plan could be improved include:</p>	<p>The Landscape Management Plan should be updated as required to reflect or reference the requirements of the recently approved MOP.</p>
<ul style="list-style-type: none"> The monitoring section states that quarterly inspections of the SREA and NREA are undertaken to monitor rehabilitation success and aspects such as erosion and drainage. The Plan does not include detail of what parameters will be used to judge rehabilitation success. The Plan should include further details of what exactly is to be monitored / inspected and by whom. 	<p>Either refer to the MOP or expand the Monitoring Section to outline what parameters will be used to judge rehabilitation success and include further details of what exactly is to be monitored / inspected during the quarterly SREA and NREA inspections and by whom.</p>
<ul style="list-style-type: none"> Sections 5.5 and 12.7 are both titled Maintenance Program. These should be consolidated and revised to include further detail of the specifications and staged work programs to be undertaken. 	<p>Consolidate Sections 5.5 and 12.7 (Maintenance Program) and revise to include further detail of the specifications and staged work programs to be undertaken.</p>

Adequacy Review	Recommendation / Opportunities for Improvement
<ul style="list-style-type: none"> Section 12.2.4 (Fertiliser) states that the type and rate of fertiliser application will be dependent on the result of soil testing for the area to be rehabilitated. This section could be expanded to provide further details of the process e.g. who does the testing, who determines types and rates etc. 	<p>Expand Section 12.2.4 to provide further details of the soil testing and fertiliser application process e.g. who does the testing, who determines types and rates of fertiliser etc.</p>
<ul style="list-style-type: none"> Section 12.3.2 (Topsoiling) states that topsoil will be spread to achieve a minimum thickness of 50mm. It was reported that this was not being implemented on site as there was limited topsoil available and that VENM was being sourced for use instead. The process of importing VENM (including the screening process to ensure that the material is VENM should be detailed within the Plan. <p>The recommendations for improvement made in the 2012 IEA are still considered relevant and should be taken into consideration in the next review of the Plan.</p>	<p>Update Section 12.3.2 (Topsoiling) to reflect practice of using VENM /ENM instead of 50 mm of topsoil. Include details of the process of importing VENM /ENM (including the screening process to ensure that the material is VENM / ENM).</p>
Noise Management Plan (2012)	
Refer to Section 9.3	

8 Water management system performance

During the agency consultation process (Section 3) MCW Environmental was requested by DP&E to give particular attention to the performance of the site's water management system. This section of the report details the findings of the review of water management at Newstan as assessed by MCW Environmental. It is noted that MCW Environmental are not water specialists and none were requested to attend the audit by DP&E.

8.1 Water Management overview

Mining within the Newstan Colliery lease area commenced in 1887 and has primarily consisted of underground operations, using both bord and pillar and Longwall techniques. Water management practices have evolved over this time to arrive at a complex system that enables bi-directional transfer between surface and underground water storages. These are discussed further below.

The main plan outlining how water will be managed on site is the Revised Water Management Plan (RWMP) (Revision 9 December 2009). The RWMP describes Newstan's water management objectives as:

- Maximise the separation of clean and dirty water systems;
- Manage water discharges from site, in terms of volume and quality, to a level that is acceptable for environmental management and community expectations;
- Minimise water discharges from the premises by maximising, where practicable, opportunities for the reuse and recycling of water on site
- Minimise discharges of dirty water from the premises; and
- Manage discharge to natural waterways in accordance with the EPL 395 conditions or as agreed with the EPA.

The RWMP was prepared to meet the requirement of CoC 4.1 (preparation of water management plans) and to satisfy a Pollution Reduction Program (PRP) which was added to Newstan's EPL in 2008. The RWMP was submitted to the DP&E during the previous audit period but was not approved and has not been updated since this time.

In addition to the RWMP, other management tools with a water component include:

- An Environmental Management System for the site
- CWP CITECT system for remote monitoring of water levels in dams and storages across the site
- Documented weekly and monthly internal inspections of operational areas
- Non-documented inspections
- Non-conformance documentation
- Community complaints handling
- Erosion and Sediment Control Plan
- Lords Creek Management Plan
- Wetlands Management Plan

8.2 Surface water system

Newstan is located in the upper catchments of the northern and southern arms of LT Creek. The northern arm catchment includes the main surface facilities (administration buildings, CPP, washdown bays, Run of Mine (ROM) stockpiles and the rail loading facilities). The southern arm of LT Creek catchment includes the SREA, tailings storage facilities and a number of surface water collection dams.

The water management system focus is on the separation of clean and dirty water such that clean water is directed around the coal handling areas whilst dirty water is directed to surface storage dams for treatment. Newstan has installed the following clean water diversions:

- NREA: along the western and northern edges, clean water is diverted to the By-wash Dam;
- Rail Loop Stockpile: upstream of the rail loop, clean catchment run off directed through an underground pipe to the northern arm of LT Creek;
- SREA: diversion channels located to the south of the Seepage and Clean Water Dams, along the SREA access road from the Haul Road
- SREA: construction was completed in 2013 of additional contour drains and within the catchment of the TSF, Seepage and Clean Water Dam that direct catchment runoff away from these structures and into the southern arm of LT Creek.

Newstan has approximately 13 surface storage dams which are connected by a system of pipelines and pumps allowing for transfer between them and the underground storage formed by old workings in the Fassifern and Great Northern Seams (known as the Fassifern Underground Storage). The Fassifern Underground Storage provides a source of water for the site during periods of low rainfall and serves as storage during periods of high rainfall.

Newstan has three licensed discharge points (licensed by EPL 395):

- LDP001: discharges into the Main By-wash Dam and then LT Creek (not to exceed 11 ML/day).
- LDP002: overflow from the Final Pollution Control Dam
- LDP017: Stony Creek Pipeline outlet

Other locations where it is possible for discharges to occur (un-licensed) include:

- Great Northern Seam No.2 workings: The water-filled underground workings discharge from the seam through surface cracks. This seepage pond has resulted in the formation of a wetland which in turn discharges into LT creek; and
- Clean Water Dam SREA: In the event that the capacity of the dam is exceeded, discharges will occur from the spillway.

In addition to the above discharge points, the EPL also includes a number of ambient water quality monitoring points (refer **Figure 8-1**).

Following a number of incidents of unlicensed discharges (discussed further below), Newstan in consultation with the EPA committed to the construction of a Clean Water Treatment Plant (CWP) in accordance with a Pollution Reduction Program placed in its EPL (Condition U1). The CWP is capable of treating a maximum of 14 ML /day prior to discharge from LDP001. The CWP uses coagulation, flocculation, sedimentation and filtration to reduce turbidity and concentration of total suspended solids (TSS) as well as ultra-violet treatment to disinfect water that is transferred underground and has the potential for human contact.

Water that was previously transferred directly from the Fassifern Underground Storage to LDP001 is now directed to McKendry's Dam and treated by the CWP. Water treated by the CWP may also be used to supply mining processes and the CPP.

Figure 8-2 provides a schematic of the water management cycle at Newstan.



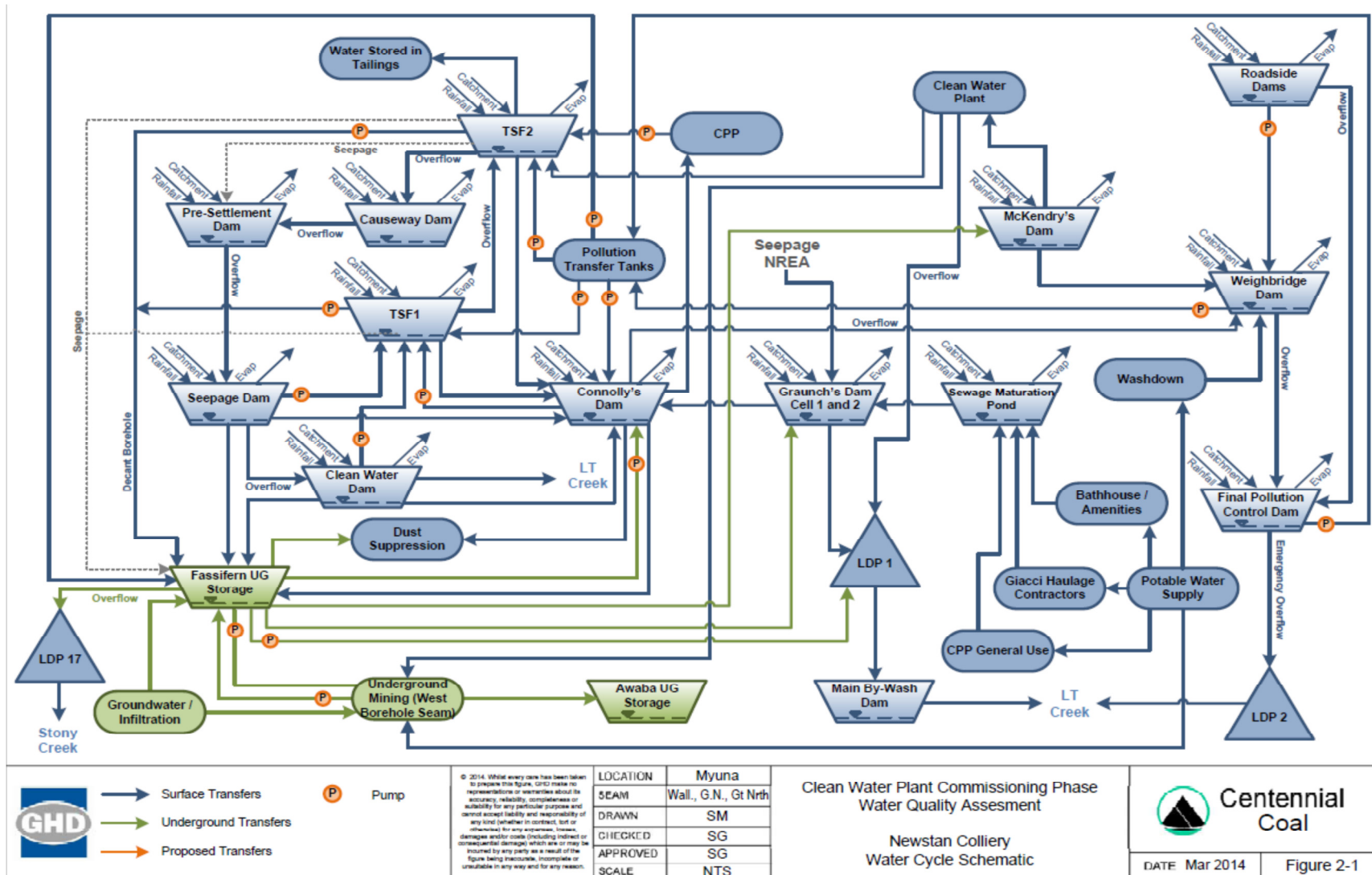


Figure 8-2 Water cycle schematic (source: *Clean Water Plant Commissioning Phase Water Quality Assessment* (GHD) March 2014)

8.3 Improvements to water management system

During the audit period Newstan implemented a number of improvements to its water management system, including:

- construction and commissioning of the CWP and upgrading of the pipeline and pumping system (2014). The CWP uses coagulation, flocculation, sedimentation and filtration to reduce turbidity and concentration of TSS prior to discharge from LDP001. The CWP allows for greater control of the water level within the Fassifern Seam and better management of surface water across the site using the CWP CITECT system. The CWP was designed to be largely self-operating. The CWP CITECT system incorporates alarms and alerts if dam levels reach critical levels and allows for remote access to start / stop pumps etc. Newstan submitted the CWP project for the Engineers Australia Excellence Awards and the Australian Water Association Industry Awards in 2014 for leading practice incorporating extremely efficient design, full automation and low maintenance operation.
- construction of the new discharge and monitoring infrastructure at LDP01.
- the capacity of the FPCD was expanded from 18 ML to 50 ML in October 2012.
- completion of the SREA clean water diversion drains in September 2013.

8.4 Site inspection

Observations from the site inspection conducted at the time of the audit directly relating to water management are detailed within **Table 8-1**. The auditors were escorted around the site on two separate occasions on consecutive days by mine personnel who made themselves available for this purpose.

Table 8-1 Summary of observations relating to water management



Photo #	Description /Comment	Photo
8-1.	<p>Seepage Dam</p> <p>Collects seepage from Stage 2 Tailings Storage Facility, overflows from the Pre-settlement Dam and some surface runoff from the SREA. Overflows to Clean Water Dam. Water levels maintained low by automatic electric pump which transfers excess water back to Stage 2 Tailings Storage Facility, to Fassifern Underground Storage or Connolly's Dam.</p>	
8-2.	<p>LDP01 discharge to Main By-Wash Dam. Main By-Wash dam is a wetland system that also collects water from a natural catchment</p>	





Photo #	Description /Comment	Photo
8-3.	LDP01 V-notch weir. Discharging during audit site inspection (max 11 ML/day).	
8-4.	LDP01 Control Panel	
8-5.	Pipeline farm at LDP01.	
8-6.	<p>Graunch's Dam (cells 1 & 2 working capacity 9 ML). Receives surface runoff and seepage from NREA and seepage from sewerage maturation pond. Can also receive underground transfers from Fassifern Underground Storage or the CWP.</p> <p>Water is pumped from Graunch's Dam to Connollys Dam, SREA or McKendry's Dam for treatment in CWP.</p> <p>Overflows from Cell 2 pass through LDP01 into the Main By-Wash Dam.</p>	





Photo #	Description /Comment	Photo
8-7.	Outlet of Main By-Wash Dam into northern arm of LT Creek. Location of EPA Point 19 – ambient water monitoring (WMP3 on Figure 8-1).	
8-8.	Composite sampler located at EPA Point 19). EPL requires weekly composite samples to be taken at tested for copper, lead, selenium and zinc.	
8-9.	McKendry's Dam (capacity 9.16 ML). Supply point for CWP.	
8-10.	Recently installed pipe networks near Connolly's Dam	





Photo #	Description /Comment	Photo
8-11.	Final Pollution Control Dam. Capacity increased to 50 ML in October 2012. Receives runoff from surface facilities area and overflows from Weighbridge Dam and Roadside Dam. Water can be pumped to the Pollution Transfer Tanks.	
8-12.	LDP02. Overflow of Final Pollution Control Dam.	
8-13.	Outlet of LDP02 to Northern Arm of LT Creek	
8-14.	LDP17 (Stony Creek Pipeline) monitoring location. Pit installed in 2013 for installation of continuous monitoring equipment during discharge from pipeline.	




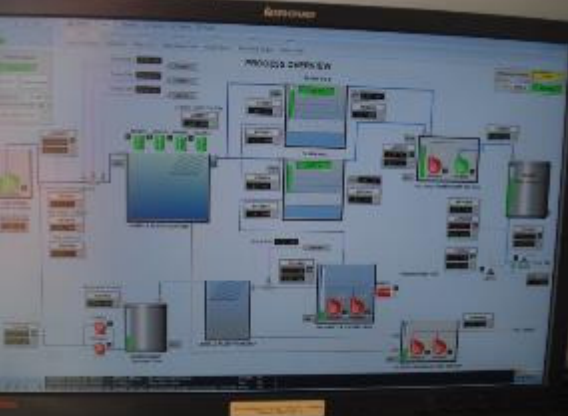



Photo #	Description /Comment	Photo
8-15.	Location of pipeline discharge into Stony Creek at LDP17.	
8-16.	Stony Creek – clean water diversion drain to allow works to be completed for LDP17 monitoring location.	
8-17.	Clean Water Treatment Plant	
8-18.	CWP Citect system. The CWP was designed to be self-operating.	

Photo #	Description /Comment	Photo
8-19.	Clean water diversion drain around SREA. Completed in September 2013	
8-20.	Banks of clean water diversion drain – some minor erosion evident.	
8-21.	The previous IEA (2012) identified that the clean water diversion drain diverted water into an undefined drainage line which resulted in some erosion and deposition observed downstream.	 <p><i>Photo from 2012 IEA</i></p>

Photo #	Description /Comment	Photo
		 <p><i>Photo from 2012 IEA</i></p>
8-22.	<p>During this audit site inspection, the auditors observed that the point where the clean water diversion drain exited Newstan's boundary had been stabilised with rocks and gravel. The actual outlet point to LT Creek was not able to be inspected as access to the creek was via property not owned by Newstan.</p>	
8-23.	<p>While not sighted during inspections due to accessibility issues during the inspections, photos of the site were provided for review by the auditors. It is noted that the area drains to a sediment basin built during construction of the area. Newstan explained that the area has been left as is for several purposes such as crane access; vehicle turn around; and bush fire protection zone.</p>	

Key Observations made during the site audit inspections comprised:

- Works undertaken during the audit period (described above in Section 8.3) have improved water management across the site in terms of treatment capacity; potential to discharge more clean water to reduce mine water level increases; to have more flexibility of control over water systems through the improved CITECT system; and increased holding capacity to reduce off site discharges;
- A highly integrated water management system allowed for movement of water across the site to meet EPL requirements. Sediment basins and water storages were generally managed to provide storage capacity for rain fall events.
- No areas of significant erosion were observed;

- The drainage line at the end of the clean water diversion was not able to be observed and hence was not assessed. The previous IEA (2012) identified erosion to have occurred in this location from increased flow at the discharge point.

8.5 History of EPA Notices and Variations

During the previous IEA period on the 9 March 2012, Newstan was issued with a Notice of Clean Up Action (Notice No. 1504801) by the EPA. This related to the unlicensed discharge from the Stony Creek pipeline into the un-named tributary of Stony Creek which commenced on the 6 March 2012. This discharge was occurring at the time of the previous IEA and was discussed in detail in the 2012 IEA. During this audit period, on the 16 May 2012, the EPA issued a Variation (No. 1505675) to the Notice of Clean Up Action (No. 1504801) to require further daily monitoring for total metals and dissolved metals. A further Variation to Clean Up Action Notice 1504801 was issued on the 24 August 2012 (No.1508332) to reduce the monitoring frequency at the Stony Creek pipeline but include monitoring of alkalinity.

Newstan lodged two applications seeking variations to its EPL on the 24 February 2012 and the 8 May 2012 which were subject to matters lodged in the Land and Environment Court (Centennial Newstan Pty Ltd vs the Environmental Protection Authority). One variation application sought an increase of mine water discharged to LT Creek from 7 ML/day to 11 ML/day. The other application requested the licensing of an emergency discharge point into Stony Creek. The EPA considered these applications and based on agreements reached between Centennial's expert and the EPA's expert agreed to the variations. The variation notice issued on the 15 October 2012 stated that it reflects the agreement reached between the parties in the matter of Centennial Newstan Pty Ltd vs the Environmental Protection Authority. The variation included the following amendments:

- Increase in LDP01 discharge limits from 7 ML/day to 11 ML/day
- Amendments to concentration limits at LDP01 as agreed by each party's experts on 26 September 2012.
- Addition of EPA Point 17 - Discharge to waters at the Stony Creek Pipeline and associated concentration limits and monitoring requirements.
- Addition of EPA Point 18 - Monitoring point upstream of EPA Point 17 and associated monitoring requirements.
- Addition of EPA Point 19 - An ambient water quality monitoring point at the discharge from the Main By-Wash Dam.
- Revision of Special frequencies 1 and 2 to conduct sampling within the first 6 hours of any discharge event.
- Addition of Pollution Reduction Program (PRP) requiring Centennial to construct, commission and operate a wastewater treatment plant by 31 March 2014.

Two Penalty Notices (PNs) (No.1519046 and No. 1519047) and one Official Caution were issued by the EPA for contravening licence conditions (issued on the 20 December 2013). These PNs related to the incidents reported on the 1-3 March 2013 involving exceedances of the TSS concentration limit at Point 1 and Point 2. The Official Caution related to exceedance of the volume limit at Point 1 for the same event. Newstan requested that the EPA review the PNs by letter dated 13 January 2014 and the PNs were subsequently revoked by the EPA.

Newstan submitted a licence variation application on the 2 April 2014 which included an update on the completion of the CWP, provision of the *Clean Water Plant Commissioning Phase Water Quality Assessment* report in accordance with condition U3.4c (now U1.4c) and provision of the results of the ecotoxicological monitoring program in accordance with condition U4.1c (now U2.1). The variation application sought changes to the concentration limits and monitoring requirements at LDP01 based on the review by its consultants (GHD) taking into consideration the commissioning phase water quality at LDP001, the results of the Ecotoxicological Monitoring Program and toxicity testing.

Newstan was issued with a licence variation on the 17 December 2014 which it believed did not incorporate many of the changes requested in its application and included additional requirements not in the original licence which were effective immediately.

The Variation included an updated premises description, relocation of water monitoring point 5, a Special Condition (E1) requiring a water treatment plant commissioning study, a PRP formalising ecotoxicological and macroinvertebrate monitoring (U2) and updates to the licence with contemporary conditions for waste, bunding, after hours contacts, requirements for a (PIRMP and records of PRPs completed.

Newstan sought clarification of several points by letter dated 7 January 2015 specifically relating to the ecotoxicological and macroinvertebrate monitoring and the water treatment plant commissioning study. At the time of the audit, Newstan were appealing the EPL issued on the 17 December 2014 in the Land and Environment Court. As advised by letter from Newstan's lawyers Ashurst Australia dated 18.05.15, it was agreed by both parties that Conditions U2 and E1 are not to have effect until the Court finally resolves the proceedings. This IEA has not considered these or related matters.

8.6 Compliance with EPL concentration limits

Newstan's EPL provides concentration limits for a number of pollutants that must not be exceeded at LDP01, LDP02 and LDP17. These include TSS, pH, oil and grease, conductivity as well as metals, and other pollutants. Compliance with the EPL's water related conditions is assessed in detail in **Appendix A** and related non-compliances are detailed in Section 10.

During the audit period Newstan recorded exceedances of the concentration limits stipulated by its EPL on a number of occasions as outlined in **Table 8-2**.

Table 8-2 Summary of exceedances of EPL concentration limits

Pollutant	Date	Point	Note
TSS	05.02.12 22.02.12	1	Reported in 2012 Annual Return
Sulfate	25.09.12 10.10.12 16.10.12 23.10.12 30.10.12 6.11.12 13.11.12 20.11.12 27.11.12 4.12.12	1	Reported in 2012 Annual Return
TSS & Titanium	2.03.13	1	Reported in 2013 Annual Return
Potassium (total)	23.03.13	17	Reported in 2013 Annual Return
Magnesium (total)	26.03.13	17	Reported in 2013 Annual Return
Magnesium (total)	02.04.13	17	Reported in 2013 Annual Return
Potassium (total)			
Sulfate			
TKN			
Nitrogen (total)			
Phosphorus (total)			
Calcium (total)	09.04.13	17	Reported in 2013 Annual Return
Magnesium (total)	16.04.13		
Potassium (total)	23.04.13		
Sulfate (total)			
Sulfate	24.01.13	1	Reported in 2013 Annual Return
Sulfate	30.01.13	1	Reported in 2013 Annual Return
Sodium			

Pollutant	Date	Point	Note
Sodium	10.04.13	1	Reported in 2013 Annual Return
Calcium (total)			
Magnesium (total)			
Potassium (total)			
Calcium (total)	17.04.13 23.04.13	1	Reported in 2013 Annual Return
TSS	25.04.14	1	Reported in 2014 Annual Return
Potassium (dissolved)			
Titanium (total)			
Vanadium (total)			
Lithium (dissolved)	26.11.14 to 07.12.14	1	Reported in 2014 Annual Return
Sodium (total)			
Lithium (dissolved)	31.12.14	1	Reported in 2014 Annual Return
Bicarbonate alkalinity	6.01.15	1	Auditor review of 2015 monthly monitoring reports
Calcium			
Chloride			
Lithium (dissolved)			
Sodium			
TSS	21.04.15	1	Auditor review of 2015 monthly monitoring reports
Aluminium			
Zinc (dissolved)			
TSS	21.04.15	2	Auditor review of 2015 monthly monitoring reports

Since the commissioning of the CWP in early 2014 the number of recorded water exceedances has decreased to five. Two of these related to overflows during an east coast storm event which resulted in rainfall in excess of 300mm. This event was classed as a natural disaster for the region by the NSW Government. The others related to exceedances of licence criteria, in particular, lithium, calcium, chloride, sodium and bicarbonate alkalinity.

GHD was commissioned to investigate and report on the lithium exceedances. The letter report dated 12 February 2015 (*Lithium – Environmental Impacts*) found that lithium toxicity poses no risk to freshwater species at the concentrations detected in LDP001.

As previously stated, at the time of the audit site inspection Newstan and the EPA were in arbitration over the pollutant concentration limits in its EPL.

8.7 Water management incidents

Newstan recorded a number of incidents relating to water discharges and exceedances of water quality / volume limits during the audit period. These are discussed in Section 6.1. Newstan notified the EPA's Environment Line of incidents causing or threatening material harm to the environment on ten occasions (refer to **Table 6-2** for a summary of the incident and response undertaken).

In addition to the reportable incidents, Newstan recorded 15 minor incidents where licence limits were exceeded and one incident relating to an unlicensed discharge (**Table 6-3**). The recorded exceedances correlate with the exceedances summarised in **Table 8-2** and discussed in Section 8.6.

8.8 RWMP adequacy assessment and recommendations

The Revised Water Management Plan (RWMP) was prepared in 2009 and has not been updated since this time.

The 2012 IEA reviewed the RWMP and found it to generally include the matters outlined in CoC 4.1 with the following exceptions:

(xi) Plan states that monitoring in the vicinity of natural watercourses and longwall mining areas is undertaken on a continual basis. During mining operations, it is considered the Plan should be more specific about what type of monitoring is undertaken and at what frequency.

(xiii) The Plan refers to Centennial's EMS as a means for reporting and recording against environmental performance. The Plan should include a program for specifically assessing and

reporting against the effectiveness of the water management system and performance against RWMP objectives and EIS.

Since the above review, a number of changes have occurred on site relating to water management as outlined in Section 8.3. The RWMP does not reflect the above changes as well as the recommendations from the previous IEA.

Recommendation / Opportunities for Improvement

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Revise the RWMP to reflect the changes that have occurred on site since 2009 and obtain relevant approvals of the document.

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- Include a program for specifically assessing and reporting against the effectiveness of the water management system and performance against RWMP objectives.
- With regards to monitoring in the vicinity of natural watercourses and longwall mining areas, the RWMP should be updated to include monitoring of water courses at the time of recommencement of mining; or be specific about what type of monitoring is undertaken and at what frequency will be undertaken when mining recommences.

8.9 Summary of Water Management at Newstan

The following points summarise the compliance status of water management at Newstan:

- In the audit period Newstan has implemented a number of initiatives to improve water management including: construction and operation of the water treatment plant and new pipe network; upgrade of LDP01; increase of capacity of the FPCD from 18 ML to 50 ML; and completion of the SREA clean water diversion drain;
- Various exceedences of the EPL have been reported in the period and are discussed in Table 8-2 and in **Appendix A**. Recommendations in relation to the findings are made in the tables;
- A Revised Water Management Plan was developed in 2009 and has not been approved by DP&E. This document does not reflect recent changes to the site and was in the process of being updated at the time of the audit;
- Various water related incidents have occurred and are listed in Table 6-2;
- There has been significant communication on water related issues between Newstan and the EPA. At the time of this audit Newstan and the EPA were in arbitration over the EPL conditions in the licence issued 17 December 2014. This audit has not sought to cover or address these matters while they are the subject of arbitration.

9 Noise Audit

In accordance with Condition 6.4B (v) this IEA included a comprehensive noise audit of the development. This was achieved by the following scope:

- Review the adequacy of the Noise Management Plan
- Assess the implementation of the Noise Management Plan
- Review the noise monitoring results and methodologies
- Assess compliance with the noise criteria
- Review noise complaints

This Section presents the findings of the noise audit.

9.1 Noise management overview

Newstan has developed a Noise Management Plan (NMP) as the main tool for managing noise on site. The NMP was revised following the issuing of the Modification for main west mining (MOD4) to Development Consent DA-73-11-98 received on the 16 March 2012. MOD 4 included a number of new conditions relating to noise including the requirement to revise the NMP, operational noise criteria, ventilation shaft site noise criteria and long term noise goals.

The revised NMP was prepared by a noise expert, John Cotterill of SLR whose appointment was approved by the DP&E (as required by CoC 6.4C(i)), and approved by the DPE by letter dated 30 January 2013. A review of the adequacy of the NMP is provided in Section 9.3.

The Noise Impact Assessment (NIA) undertaken by SLR in April 2011 to accompany the MOD 4 application predicted that operational noise levels would meet the project specific noise criteria at all residential locations under calm and prevailing weather conditions with mitigation measures in place. However a 2 dBA exceeded noise level was predicted at residential location NC3 under temperature inversion. L_{Amax} noise levels were predicted to meet the recommended sleep disturbance noise goal.

9.1.1 Nearest sensitive receivers

A number of noise sensitive receivers are located in the vicinity of the Newstan colliery predominately from the township of Fassifern (approximately 1.5 km southwest of the site) and Wakefield (approximately 2.6 km northwest of the site). The NMP lists six sensitive receivers NC1 to NC6 including Fassifern Primary School as being closest to the site. These sensitive receivers were identified during the NIA.

9.1.2 Key noise sources

Table 3 of the NMP lists the sound power levels of the acoustically significant plant and equipment used at Newstan. This includes the following noise sources:

- Coal Handling Plant (CHP): operation of CHP, truck loading at bin, reclaim conveyor transfer house, conveyor drift drive, loader, dozer, reclaim conveyor, truck tipping load, vent fan, compressor house, workshop and coal truck
- Coal Preparation Plant (CPP): operation of CPP, CPP compressor, CPP feed conveyor, coking bin
- SREA operations: use of traxcavator, compactor, excavators, dozer, coal trucks and dump trucks
- NREA operations: use of loader, dozer, excavator and coal truck
- Rail loop: operation of coal train shunting, loaders, dozer and coal truck
- Truck movements along haul road


With Newstan having moved to a “Care and Maintenance” status, the site activities and noise sources have reduced.

9.2 Implementation of Noise Management Plan / Site inspection

A summary of the key mitigation measures outlined in the NMP is provided in Table 9-1 along with an assessment of how well these were implemented based on observations made during the audit site inspection, interviews with site personnel and a review of the documents provided.

Table 9-1 Assessment of implementation of NMP including observations from the site inspection relating to noise

NMP Requirement	Comment / site observation
<u>Coal Preparation Plant</u> <ul style="list-style-type: none"> Sealing of openings in all the walls around the preparation plant The continuance of existing external walls down to the ground level Fully enclosing exposed conveyors with the same Colorbond steel currently being used for the building and conveyors Replace alsynite panels on eastern wall with Colorbond steel 	<p>It was reported that openings in the walls around the CPP had been sealed and that the old alsynite (fibre-glass) panels were replaced with steel. The enclosure of exposed conveyors was reportedly mostly complete. It was reported that the continuance of external CPP walls to ground level had been partially completed as far as required.</p>
<u>Reclaim Conveyor Transfer House (Transfer Tower)</u> <ul style="list-style-type: none"> The sealing of openings in all the walls around the reclaim conveyor transfer house The continuance of existing plant external walls down to the ground level Fully enclosing exposed conveyors with the same Colorbond steel currently being used for the building and conveyors Replace alsynite panels on eastern wall with Colorbond steel 	<p>It was reported that the alsynite panels of the conveyor transfer house were replaced with steel.</p> <p>Newstan engaged SLR to conduct a noise mitigation investigation of the transfer tower in May 2014 to determine whether the previous advice for additional cladding on the transfer tower was required. The SLR report (dated 20 June 2014) stated that the following modifications had been made to the transfer tower since its earlier assessment in 2010:</p> <ul style="list-style-type: none"> Modification of the chute work to improve flow characteristics and improve the processing of Mandalong Coal Installation of another chute inside the existing chute above the sizer Completely replaced chute below the sizer and included a spoon drive at the bottom of the transfer tower. <p>SLR conducted operator attended noise measurements of the transfer tower during the day in May 2014 which indicated a 9 dB reduction in the L_{eq} and a 6 dB reduction in the L_{max} from 2010 measured levels. The report concluded that as a result of the modifications to the transfer tower, significant reduction in the noise emissions from the transfer tower had been achieved and consequently the additional cladding was no longer required to meet the project specific noise levels.</p>
Implement noise attenuation of the compressor house	Noise attenuation of the compressor house was not undertaken, however Newstan moved one of the two compressors located within the compressor house to the Awaba Nitrogen Compound.

NMP Requirement	Comment / site observation
A 6m high (top of noise wall RL 25) acoustic barrier is proposed for the south eastern side of the coal train rail loop	
<p>The acoustic barrier was constructed in 2012</p> <p><u>Mobile Plant Management</u></p> <ul style="list-style-type: none"> Restrict coal train surface operations during the night-time period to two (2) front end loaders Avoid use of a dozer in the rail loop area during the night-time period Ensure all mobile plant onsite are fitted with quacker type reversing alarms 	<p>It was reported that loading of trains at night is restricted to two front end loaders and that there was no dozer working at night. It was reported that all mobile plant on site were fitted with quacker type reversing alarms. These were heard on plant during the site inspection. In addition, Newtsan reported implementing the following measures to minimise rail and road traffic noise:</p> <ul style="list-style-type: none"> a fleet of new generation locomotives was procured eliminated the use of bank engines the use of the locomotive horn at level crossings and prior to moving the train was restricted to emergency use only the rail speed limit on the Rail Loop was 10 km/h reversing on dozers was limited to low gear haul road trucks don't use compression brakes, instead trailers have air bag suspension
A real time noise monitoring system shall be installed at the site. This monitoring system will be set up to send alerts when a pre-set noise threshold is exceeded. If an exceedance is detected that is due to mine operations corrective actions will be applied to manage the noise from the site. It is planned to deploy the monitoring system early in 2013	At the time of the audit, the real-time noise monitor was yet to be installed. It is understood that the original site nominated by Centennial's noise experts was not practical as it was not on land owned by Centennial and there was no power supply to the site. Centennial, in consultation with its experts have selected a new site on Centennial land (adjacent to the rail loop). These changes to the location of the monitoring location compounded to delays in installing the monitor. It was reported that the monitor had been ordered.
Other - not in NMP	<p><u>Low frequency noise</u></p> <p>Newtsan engaged Advitech to undertake investigations into low frequency noise from the washery. As a result of these investigations the following modifications were made:</p> <ul style="list-style-type: none"> The drives in three screens were replaced with variable speed motors and two new screens (with variable screen motors) were installed. This enabled the operating speed of the screens to be adjusted (within manufacturers specifications) which resulted in a reduction in low frequency noise. modifications were made to the design of the sidewall / hungry-boards of the under pans at the washery which led to a small reduction in the low frequency noise outside the washery.

9.3 NMP adequacy review

As stated in Section 9.1, the NMP was prepared by a noise expert from environmental consultancy SLR and the Plan approved by the DP&E. A review of the NMP indicated that the requirements of Condition 6.4C had largely been addressed.

Section 6 of the Plan describes noise control measures. Section 6.1 discusses existing noise mitigation and management measures and Section 6.2 discusses recommended additional mitigation and management measures. Since this Plan was produced (2012) a number of the recommended measures have been implemented as were additional measures that were not proposed in the NMP. In the next review of the NMP, it is considered that these Sections be updated to reflect what measures were implemented and what new or ongoing measures are required.

Section 7 of the Plan describes the noise monitoring program. The plan commits to implementing a real time management system and quarterly attended monitoring at the six sensitive receivers identified in the noise impact assessment and for which criteria have been established for by Condition 6.4A.

The NMP does not specifically discuss how / when the effectiveness of the real –time noise management system will be evaluated and reported on, as required by Condition 6.4C (iv).

Section 9 of the NMP discusses data analysis and determining compliance with noise criteria. Section 10 discusses reporting including reporting of non-compliances and recording noise complaints. Whilst these sections state that non-compliances and complaints will be recorded and reported they do not refer to the Newstan or Centennial Coal processes for doing so. For example there is no link or reference in the NMP to Newstan's EMS. In accordance with Centennial Coal's EER (refer Section 6.1) a licence / approval / standard exceedance or non-compliance that does not cause environmental harm is considered a Category 4 Technical (minor) incident and should be recorded as such in ECD. This should be outlined in the NMP and implemented.

Opportunities for Improvement:

The following improvement opportunities have been identified with the Noise Management Plan:

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- Update Section 6 (Noise Mitigation Measures) to reflect the mitigation measures that have been implemented and outline any new or ongoing mitigation and management measures.
- Include additional detail on the installation and the effectiveness of the real –time noise management system.
- Include links / references to Newstan's EMS, in particular for recording complaints and recording and reporting on exceedances and non-compliances both internally and externally.

The updates are not considered critical, however could be considered in the next revision of the NMP.

9.4 Noise level criteria

Condition 6.4A which came into effect with MOD 4 of Development Consent DA-73-11-98 specifies operational noise criteria that Newstan has to ensure it does not exceed (summarised in **Table 9-2**).

Table 9-2 Operational noise criteria

Location	Shoulder dB(A)	Day dB(A)	Evening dB(A)	Night dB(A)	Night dB(A)
	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{A1} (1 min)
NC1	35	35	35	35	45
NC2	38	38	35	35	45
NC3	39	39	37	37	45
NC4	35	35	35	35	45
NC4	35	35	35	35	45
NC6-Fassifern public school	N/A	35	N/A	N/A	N/A

Condition 6.4D specifies operational noise criteria for the ventilation shaft site at Awaba (summarised in **Table 9-3**). Newstan is required to ensure that the noise generated at the ventilation shaft site does not exceed these levels for any privately owned residence during operation and during construction outside of the hours 7am to 6pm Monday to Friday and 8am to 1pm Saturdays.

Table 9-3 Ventilation shaft site at Awaba -Operational noise criteria

Location	Day (dB(A))	Evening (dB(A))	Night (dB(A))
	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)
All privately owned residences	38	40	36

In addition to the above noise criteria, Condition 6.4B requires that Newstan uses its best endeavours to achieve the long term noise goal (summarised in **Table 9-4**), where it is reasonable and feasible, and report on the progress towards achieving these goals in the AEMR.

Table 9-4 Long term noise goal

Location	Day /Evening / Night / Shoulder (dB(A))
	L _{Aeq} (15 min)
All privately owned land	35

9.5 Noise Monitoring

9.5.1 Operational noise monitoring

Quarterly noise monitoring was undertaken by Vipac Engineers and Scientists Ltd (Vipac) for the period May 2012 to September 2014. Vipac undertook operator attended 15 minute noise monitoring at sensitive receivers NC1, NC2, NR, NC3, NC4, NC5 and NC6 using a Brüel & Kjær 2250 Class 1 integrating sound level meter. The Vipac reports state that noise level measurements were conducted in accordance with the EPA NSW Industrial Noise Policy and AS1055-1997 *Acoustics-Description and Measurement of Environmental Noise*.

The Vipac reports discuss the three methods used to determine colliery noise (instantaneous meter reads by the acoustic engineer when colliery emissions are clearly audible and dominant, time trace and frequency spectra recording analysis when noise emissions are transient or frequency specific or noting the relative audibility of the operations at otherwise quiet times compared to the background noise levels). The reports also analysis the meteorological data and determine whether temperature conditions were present during the survey periods.

Newstan changed consultants post September 2014 and Global Acoustics undertook the quarterly noise monitoring for December 2014 and Quarter 1 2015. The Global Acoustics reports state that noise level measurements were conducted in accordance with the EPA NSW Industrial Noise Policy

and AS1055-1997 *Acoustics-Description and Measurement of Environmental Noise* using a Rion NA-28 sound level analyser (Class 1 integrated sound level meter). The Global Acoustics reports include a low frequency noise assessment and discuss the methodology for determining mine noise contribution.

9.5.2 Ventilation shaft site at Awaba

A Noise Monitoring Program for the Newstan ventilation fan at Awaba was prepared by SLR and approved by the DP&E by letter dated 8.8.12. The Monitoring Program states that operator attended noise surveys will be conducted monthly during construction and revert to quarterly at the commencement of operation at two of the most affected receiver locations (R3 and R4).

Construction

Construction of the ventilation shaft at Awaba commenced on the 27 July 2012 (drilling commenced in November 2012) and was completed in August 2013.

Noise monitoring of the construction activities of the ventilation shaft was included within the quarterly noise monitoring undertaken at Awaba (August 2012, November 2012, February 2013, May 2013, August 2013). This was supplemented by monitoring undertaken by SLR for the months in between the quarterly rounds resulting in monitoring being undertaken on a monthly basis during construction.

The auditors reviewed a selection of the reports provided by Vipac and SLR as well as the 2012 and 2013 AEMRs and confirmed monitoring was undertaken as per the Monitoring Program.

SLR conducted 15 minute operator attended noise monitoring at receivers R3 and R4 using a Brüel & Kjær 2270 Class 1, 1/3 octave band, integrating sound level meter. The reports provided by SLR state that noise surveys were conducted in accordance with the procedures described in AS 1055-1997 *“Acoustics – Description and Measurement of Environmental Noise”*. The reports provide the L_{Amax} , L_{A1} , L_{A10} , L_{A90} and L_{eq} measured levels and include description of noise emissions and based on these provided the estimated construction $L_{Aeq(15\ min)}$ contribution.

Operation

Following construction, monitoring of the operational noise of the Newstan ventilation shaft was included in the quarterly noise monitoring undertaken for Awaba. The first round of operational noise monitoring of the ventilation shaft was done in November 2013.

Quarterly noise monitoring was undertaken by Vipac. Vipac undertook operator attended 15 minute noise monitoring at sensitive receivers R1 and R4 using a Brüel & Kjær 2250 Class 1 integrating sound level meter and a 01dB Duo Sound Level Meter. The Vipac reports state that noise level measurements were conducted in accordance with the EPA NSW Industrial Noise Policy and AS1055-1997 *Acoustics-Description and Measurement of Environmental Noise*. The reports discuss the two methods used to determine colliery noise (instantaneous meter reads by the acoustic engineer when colliery emissions are clearly audible and dominant, or time trace and frequency spectra recording analysis when noise emissions are transient or frequency specific). The reports also analysed the meteorological data and determined whether temperature conditions were present during the survey periods.

The Vipac reports refer to the general Newstan operational noise criteria (prescribed by Condition 6.4) rather than the Newstan ventilation shaft site noise criteria prescribed by Condition 6.4D.

Section 6 of the reports summarise the findings of the compliance assessment. Tables 22, 23 and 24 present the Awaba and Newstan contribution ($L_{Aeq\ 15\ minutes}$) and the Awaba and Newstan criteria and then any excursion from the criteria for day, evening and night respectively. The criteria presented for Newstan is 35 (day) and N/A for evening and night. This does not represent the criteria stipulated by Condition 6.4D.

Newstan noted that the Awaba Criteria is more stringent than the noise criteria for the operation of the Vent shaft, hence compliance was not affected. Newstan noted that the 35 criteria was used for the installation of the compressor at Awaba.

9.6 Compliance with Noise Criteria

9.6.1 Operational Noise Criteria

Newstan reported exceedances with the operational noise criteria in its 2012, 2013 and 2014 AEMRs, as summarised in **Table 9-5**. Newstan stopped logging noise exceedances as incidents in ECD in 2012.

Table 9-5 Summary of exceedances of operational noise criteria during the audit period

Date	Location	Period	Nature of exceedance
May 2012	NC3	Night	3 dB(A) exceedance moderate temp inversion
Aug 2012	NC6	Day	5 dB(A) exceedance
	NC4	Day	1 dB(A) exceedance
	NC4	Evening	3 dB(A) exceedance
	NC3	Evening	5 dB(A) exceedance
	NC3	Night	3 dB(A) exceedance
Nov 2012	NC3	Evening	1 dB(A) exceedance
Feb 2013	NC3	Evening	7 dB(A) exceedance Moderate temp inversion
	NC3	Night	8 dB(A) exceedance Moderate temp inversion
	NC3	Night L _{A1} (1min)	2 dB(A) exceedance
May 2013	NC3	Evening	4 dB(A) exceedance Moderate temp inversion
	NC3	Night	6 dB(A) exceedance Moderate temp inversion
	NC4	Evening	8 dB(A) exceedance Moderate temp inversion
	NC4	Night	3 dB(A) exceedance Moderate temp inversion
Aug 2013	NC3	Evening	4 dB(A) exceedance Moderate temp inversion
	NC3	Night	7 dB(A) exceedance Moderate temp inversion
	NC4	Evening	3 dB(A) exceedance Moderate temp inversion
	NC4	Night	2 dB(A) exceedance Moderate temp inversion
Nov 2013	NC3	Night	5 dB(A) exceedance Moderate temp inversion
	NC6	Day	10 dB(A) exceedance – due to mobile plant activities and train
Feb 2014	NC1	Night	2 dB(A) exceedance
	NC2	Evening	2 dB(A) exceedance
May 2014	NC3	Evening	14 dB(A) exceedance cumulative mine noise plus weak and moderate temp inversions
	NC3	Night	7 dB(A) exceedance cumulative mine noise plus weak and moderate temp inversions

Date	Location	Period	Nature of exceedance
Sep 2014	NC4	Evening	5 dB(A) exceedance weak and moderate temp inversions
	NC4	Night	6 dB(A) exceedance weak and moderate temp inversions
	NC3	Evening	7 dB(A) exceedance moderate temp inversions
	NC3	Night	6 dB(A) exceedance moderate temp inversions
	NC3	Night L _{A1} (1min)	3 dB(A) exceedance moderate temp inversions

Newstan entered into care and maintenance in August 2014. As a result of the decreased production, the operation of the washery also reduced and as of October 2014 the washery was no longer operating during the night (10:30 pm to 6:30 am).

A review of the operator attended noise monitoring reports by Global Acoustics for December 2014 and Quarter 1 2015 indicated no exceedances were recorded at any monitoring locations during any periods. The December 2014 and the Quarter 1 2015 reports both found the noise from the mine to be inaudible.

9.6.2 Vent shaft site at Awaba

Construction

The 2012 AEMR reported compliance with the criteria at both locations during September to December noise surveys. This was verified by reviewing the Vipac reports for August and November 2012 and the SLR reports for September, October and December 2012. The 2013 AEMR reported compliance with the criteria at both locations during January to August 2013 for all months except May where an exceedance was recorded at one location during the night. This was verified by reviewing the SLR reports for January, March, April, June, July and August 2013 and the Vipac report for May 2013.

Operation

The 2014 AEMR reported that operational noise from the vent shaft site complied with the criteria at both locations during all four monitoring surveys. This was confirmed by reviewing the noise monitoring reports provided by Vipac (November 2013, February, May, July and December 2014).

9.6.3 Long term noise goals

Compliance with the long term noise goals was assessed in the quarterly noise monitoring reports provided by the acoustic consultants and discussed in the 2012, 2013 and 2014 AEMRs. Newstan did not meet the noise goals at all locations and all periods during the audit period (as evidenced by the exceedances of the operational noise goals summarised in Table 9-5). Detailed discussion of how Newstan was progressing towards achieving the goals was not provided in the AEMRs for example outlining the measures implemented to reduce operational noise and any measures planned for the future. However during the audit Newstan demonstrated that it was investigating and implementing measures to reduce noise levels. This was particularly evident at the washery where Newstan engaged Advitech to undertake investigations into low frequency noise and as a result replaced the drives in three screens with variable speed motors and installed two new screens (with variable screen motors) enabling the operating speed of the screens to be adjusted resulting in a reduction in low frequency noise. In addition modifications were also made to the design of the sidewall / hungry-boards of the under pans at the washery which led to a small reduction in the low frequency noise outside the washery.

9.7 Noise Complaints

As shown by Table 6-4, Newstan received two noise complaints in 2012, five in 2013 and none in 2014 and 2015. The five complaints received in 2013 related to noise impacts from the construction of the ventilation shaft at Awaba which was completed in 2013.

The number of noise complaints during the audit period (7) has significantly reduced compared to the previous audit period (21). The majority of noise complaints received in the previous audit period were from the one resident who was impacted by low frequency noise (which resulted in regenerated noise in the property) due to the nature and orientation of their property. Newstan (along with its acoustic consultants) conducted numerous investigations into the cause of the noise at the residence and in consultation with the resident proposed and implemented a property specific solution. A thank you card was sighted by the auditors from the resident thanking them for all their understanding, willingness to help and for the solution implemented.

9.8 Summary of Findings – Noise Audit

The following provides a summary of key findings specific to the Noise Audit:

- During the audit period a number of initiatives have been completed to minimise noise at Newstan. These included: construction of a noise wall at the coal loading area; detailed investigation into low frequency noise with acoustics consultants leading to installation of variable speed motors to reduce the potential for harmonic frequencies to occur; closure of openings in the walls of the CHPP; modifications to the transfer tower; loading of trains at night being restricted to two front end loaders with no dozer working at night; mobile plant on site were fitted with quacker type reversing alarms; and use of train alarms only during emergency's instead of as a regular action.
- Specific work was completed to address noise related issues at one residence.
- A full compliance assessment of all relevant conditions in the EPL and Development consent is provided in Appendix A. Section 10 of this report details the Non-compliant findings as well as all relevant recommendations relating to noise. The key non compliances were:
 - Various exceedances of the noise criteria (condition 6.4A) were observed and reported in AEMRs. These are summarised in Table 9.5.
 - At the time of the audit, real-time noise monitoring as required by Condition 6.4B was yet to be undertaken.
 - During attended monitoring, consultants used the data logged by the on-site meteorological station to identify temperature inversions however this is done and provided to Newstan with the quarterly noise monitoring reports and is therefore not able to be used to minimise impacts during the temperature inversion (as per Condition 6.4B). It was reported by Newstan that updates were going to be made to the meteorological station so that it can have these capabilities in the future.
- Noise complaints have reduced from twenty one complaints in the previous audit period to seven in this audit period. All of these complaints were in 2012 and 2013 with no noise complaints reported in 2014 or 2015.

10 Summary of Non Compliances and Recommendations

Some non-compliances have been identified with the Development Consent Conditions, EPL conditions CCL Conditions and ML Conditions. These non-compliances as well as the requirements assessed as indeterminate and the associated recommendations have been consolidated and are summarised in **Table 10-1** below. It is noted that where a condition is comprised of multiple parts (a, b, c etc) only the part considered non-compliant has been reproduced in **Table 10-1**. For the full condition (and it's assessment of compliance) refer to **Appendix A**.

For a number of requirements that were assessed as compliant, recommendations were developed to improve compliance. These recommendations are summarised in **Table 10-2**.

OFls relating to observations of general environmental management, the adequacy of the various plans / programs are provided in **Table 10-3**.

Table 10-1 Non-Compliant and Indeterminate Conditions

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation
DA-73-11-98 1	There is an obligation on the Applicant to prevent and minimise harm to the environment throughout the life of the project. This requires that all practicable measures are to be taken to prevent and minimise harm that may result from the construction, operation and, where relevant, decommissioning of the development.	<p>Newstan has developed an Environmental Management Strategy and a number of Environmental Management Plans outlining the systems, processes and measures in place to prevent and /or minimise harm to the environment from Newstan operations.</p> <p>Other than where issues have been identified, in general the site appeared to be implementing its management system. An assessment of the implementation of the various management plans was conducted and is presented under the relevant Conditions and in the main section of this report.</p> <p>In 2013 Newstan constructed a Clean Water Plant (CWP) which it commissioned in early 2014. The CWP uses coagulation, flocculation, sedimentation and filtration to reduce turbidity and concentration of TSS prior to discharge to LT Creek via LDP001. Water that was previously discharged directly from the Fassifern underground Storage is now directed to and treated by the CWP as is surface runoff on-site. Newstan submitted the CWP project for the Engineers Australia Excellence Awards and the Australian Water Association Industry Awards in 2014 for leading practice incorporating extremely efficient design, full automation and low maintenance operation.</p> <p>During the audit period Newstan recorded a number of non-compliances and reportable incidents. Newstan was issued with two Penalty Infringement Notices (PINs) by the EPA for exceedances of TSS concentration limits at Point 1 and Point 2 on the 20.12.13. Newstan requested that the EPA review the PINS by letter dated 13.01.14 and they were subsequently revoked by the EPA. At the time of the audit, Newstan and the EPA were in arbitration over licence conditions. Incidents are discussed further in the main section of this report.</p> <p>While there was general compliance with the condition, on the basis of the reportable incidents occurring and the PINs issued by the EPA during the audit period, Newstan are considered non-compliant with the condition.</p>	<p>Non-compliant</p> <p>Refer to recommendations made throughout the report.</p>
DA-73-11-98 3.2 (e)	<p>(d) The Applicant shall also prepare the following environmental management plans:</p> <ul style="list-style-type: none"> - Archaeology and cultural management plan (refer condition 3.3) - Flora and fauna management plan (refer condition 3.4) - Erosion and sediment control plan (refer condition 3.5(a)) - Soil stripping management plan (refer condition 3.5(c)) - Landscape management plan (refer condition 3.7) - Bushfire management plan (refer condition 3.8) - Land management plan (refer condition 3.9(a)) - Wetland management plan (refer condition 3.9 (c)) - Site water management plan (refer condition 4.1) - Dust management plan (refer condition 6.1) - Noise management plan (refer condition 6.4(d)) <p>(e) The management plans are to be revised/updated at least every 5 years or as otherwise directed by the Director-General in consultation with the relevant government agencies. They will reflect changing environmental requirements or changes in technology/operational practices. Changes shall be made and approved in the same manner as the initial environmental management plan. The plans shall also be made publicly available at LMCC within two weeks of approval of the relevant government authority.</p>	<p>(e) The following plans had not been revised and approved within the 5 year timeframe:</p> <ul style="list-style-type: none"> - Environmental Management Strategy (2010) (revised and submitted in 2014, awaiting DPE approval) - Erosion and Sediment Control Plan (2006) - Soil Stripping Management Plan (2010) - Bushfire Management Plan (2009) - Land Management Plan (2010) - Water Management Plan (2006) (revised in 2009 and called the Revised Water Management Plan – RWMP however this has not been approved by the DP&E). <p>On the basis of the above plans not been revised /approved in the last 5 years, this condition has been assessed as non-compliant.</p>	<p>Non-compliant</p> <p>REC 04 NEWSTAN IEA 2015</p> <p>Review, update and/or seek approval of the following environmental management plans:</p> <ul style="list-style-type: none"> - Environmental Management Strategy - Erosion and Sediment Control Plan (2006) - Soil Stripping Management Plan (2010) - Bushfire Management Plan (2009) - Land Management Plan (2010) - Water Management Plan <p>Refer also to discussion of improvement opportunities of individual plans in main report.</p>

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation
DA-73-11-98 3.3 (A)	<p>Heritage Assessment and Management</p> <p>(A) The Applicant shall prior to construction of surface facilities or secondary workings within identified areas of archaeological sensitivity within the LEA:</p> <p>(i) Prepare an archaeology and cultural management plan which shall include, but not be limited to:</p> <p>(a) identification of any future salvage, excavation, monitoring, and protection of any heritage and archaeological items, within the area of the surface facilities, particularly the waste emplacement and coal stockpile areas, Awaba Colliery, and the area within the LEA prior to and during development;</p> <p>(b) measures to undertake test excavations along Lords Creek to verify the archaeological potential of those areas identified as having low archaeological sensitivity at least one year prior to finalisation of the route of channelisation or other proposed works along Lords Creek;</p> <p>(c) details of proposed investigations of rock shelters and grinding groove sites identified as having potential to contain archaeological deposit to be undertaken prior to mining being undertaken in the vicinity of the identified sites. The investigation will include test excavations undertaken in accordance with a permit issued under section 87 of the National Parks and Wildlife Act 1974, under a research design which is acceptable to the Aboriginal community and OEH;</p> <p>(d) measures to protect Aboriginal sites from subsidence and mine working impacts, in consultation with OEH, the Aboriginal community and local residents to ensure integration of measures to protect Aboriginal sites;</p> <p>(e) identification and documentation of Aboriginal cultural heritage issues;</p> <p>(f) details of a monitoring program to document the effects of subsidence and mining works on Aboriginal sites and areas of archaeological sensitivity.</p> <p>The plan shall be prepared in consultation with OEH, the Local Aboriginal Land Council, LMCC, and to the satisfaction of the Director-General, and shall be considered by the Applicant when completing the final underground mine layout.</p>	<p>(A) Centennial Coal prepared an Aboriginal Cultural Heritage Management Plan (ACHMP) for its Northern Holdings which includes Newstan, Awaba, Myuna, Mannering and Mandalong mines. This Plan was approved by the DP&E by letter dated 26.11.12. In its letter the DP&E stated that the plan addresses the specific requirements of the development consent relating to Aboriginal heritage management.</p> <p>The Plan was developed in consultation with the various Aboriginal parties who had registered an interest to participate in the consultation processes for projects across Centennial's northern operations as well as OEH, LMCC and the CCC. A summary of the consultation process is presented in the ACHMP Aboriginal Consultation Log dated November 2012.</p> <p>An assessment of the adequacy of the plan is included in the main report.</p> <p>Newstan has also prepared an Archaeology and Cultural Management Plan for non-Aboriginal heritage which was last approved in 2006. It was reported that Newstan is in the process of revising this Plan for DP&E approval.</p>	<p>A (i) (b-f) Compliant</p> <p>A (i) (a) Non-compliant (non-Aboriginal)</p> <p>REC 02 NEWSTAN IEA 2015</p> <p>Update the 2006 Archaeology and Cultural Management Plan to address the requirements of this Condition for non-Aboriginal heritage and cultural management.</p>

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation
DA-73-11-98 3.4(a)	<p>Flora and Fauna Assessment and Management</p> <p>(a) The Applicant shall prior to commencement of any construction works for surface facilities in the relevant area or secondary workings within the LEA, prepare and implement a Flora and Fauna Management Plan for the management of flora and fauna issues for the areas of the proposed surface facilities and LEA. The Plan shall be prepared in consultation with OEH and LMCC, and to the satisfaction of the Director-General, and shall include but not be limited to:</p> <p>(i) a detailed assessment of the current characteristics and ecological values of existing ecosystems likely to be affected by the development;</p> <p>(ii) strategies to minimise the net loss of ecologically significant vegetation communities within DA area as a result of the development, including the provision of compensatory areas of equivalent ecological and habitat value where necessary;</p> <p>(iii) strategies to provide increased security for existing habitats and communities (including the strengthening of riparian communities, the management of Tetratheca juncea plants in the vicinity of the proposed surface facilities, particularly in and around the northern and southern reject emplacement areas), and LEA, and habitats of other threatened species such as the Squirrel Glider and Threatened Bat Species identified in the species impact statement;</p> <p>(iv) strategies to manage the impact of surface water management, erosion and sediment control measures, and flooding mitigation measures on flora and fauna, including the impact of heavy machinery;</p> <p>(v) details of monitoring the mine's impacts on native vegetation and threatened fauna and flora, and outline contingency measures should impacts be identified as occurring (refer also condition 8.5);</p> <p>(vi) measures to monitor the impacts on threatened species populations shall address:</p> <ol style="list-style-type: none"> 1. methods of clearing near existing vegetation and measures to protect existing vegetation from the edge affects. Consideration of buffers is essential, especially near drainage lines. 2. measures to reduce sediment into drainage lines. 3. subsidence impacts on Tetratheca juncea through a monitoring program. This program will be co-ordinated with a surveyed and levelled line to determine drops in the terrain, following mine subsidence; 4. development of a program to specifically monitor the success or otherwise of proposed ameliorative measures in relation to the threatened flora and fauna species over five years from the commencement of construction in the relevant area. The monitoring is to be undertaken by experienced Botanist(s)/ Zoologist(s). Annual progress reports and a final report outlining the implementation and success or otherwise of the ameliorative measures shall be included in the AEMR during the monitoring period. (vii) measures to maintain trees with denning hollows for the protection of threatened arboreal fauna species such as the Squirrel Glider and small Bats. In the event that trees and/or nesting value relevant to these species are felled and tree hollows relocated to augment habitat, and/or in the event that individual animals are captured and relocated during construction, this work shall be undertaken by a Zoologist with knowledge and experience in the implementation of such ameliorative techniques for these species; (viii) a large scale plan showing quadrat number locations for Tetratheca juncea together with a table showing sub-population sizes and their relevant co-ordinates. In particular, this information is required where populations will be lost by the Northern and Southern Reject Emplacement Areas; (ix) strategies to maintain and enhance wildlife corridors around and through the site for the movement of fauna particularly for arboreal mammals, small birds, and squirrel gliders. (x) development of a protocol for identifying and managing significant impacts on any threatened flora and fauna species not identified in the EIS, during development through construction or operation of the coal mine. 	<p>(a) The Flora and Fauna Management Plan was revised and submitted to the OEH and LMCC for consultation by letter dated 21.05.14. A letter was received from the OEH stating that it does not review management plans (11.06.14). No comments were received by the LMCC. The DP&E reviewed the plan and requested minor amendments (by email dated 22.07.14). The Plan was amended accordingly and approved by the DP&E by letter dated 25.08.14.</p> <p>Table 1 of the Plan lists where in the document these requirements have been addressed. A review of the adequacy of the management plans is provided in the main section of the report.</p> <p><u>Implementation</u></p> <p>No major clearing had occurred during the audit period. Some clearing was required for the installation of two permanent monitoring stations upstream and downstream of the mine water discharge that flows into an unnamed creek ultimately flowing into Stony Creek. Hunter Eco was engaged to assess the ecological impacts of the disturbance and conduct a 7-part test. Newstan's Permit to Clear or Disturb Land form had been completed and signed off by the Environment and Community Manager (dated 12.02.13).</p> <p>The revised Plan states that nest boxes will be erected to replace hollows which cannot be salvaged at a ratio of one box per hollow bearing tree. No nest boxes were installed during the audit period as no hollow bearing trees were reportedly removed.</p> <p>Weed management was undertaken by Hunter Land Management (HLM) for large areas and SNK for minor areas. A copy of HLM's weed spraying report for the 4-6th March 2015 was sighted.</p> <p>The 2006 Flora and Fauna Management included a requirement for</p> <ul style="list-style-type: none"> - Monitoring of the condition and composition of vegetation communities in the subsidence area. - Monitoring of forest and woodland areas in the study area to ensure that habitat for native flora and fauna is maintained. - Undertake vegetation monitoring on an annual basis and report in the AEMR. - Monitoring of rehabilitation areas on an annual basis to assess the development and success of the rehabilitation and implement any necessary remedial works. - Following construction, surveys will be conducted for a period of five years to monitor the effect of the development on threatened fauna identified as occurring in the area. <p>The 2012 IEA assessed this Condition as non-compliant on the basis that the above requirements of the Plan had not been implemented. This Plan was still relevant for part of the audit period (April 2012 to May 2014) prior to the approval of the revised plan.</p> <p>The revised Plan includes a comprehensive monitoring program including annual vegetation and fauna surveys and biennial habitat health assessment. At the time of the audit site inspection, Newstan was awaiting the draft report of the first annual ecological survey. Tetratheca juncea monitoring above longwalls 22-24 (in accordance with the previous version of the management plan) continued during the audit period (sighted reports for surveys conducted in 2012, 2013 and 2014).</p> <p>Whilst it is noted that the commencement of the monitoring program would demonstrate compliance with this requirement going forward, the lack of ecological monitoring (with the exception of Tetratheca juncea) during the audit period in accordance with the 2006 Plan has resulted in this Condition being assessed as non-compliant with regards to implementation of the Flora and Fauna Monitoring Plan.</p>	<p>Compliant (preparation)</p> <p>Non-compliant (implementation)</p>
DA-73-11-98 3.4(e)	(e) Any fencing of native vegetation which is to be retained shall not consist of barbed wire fencing.	Most of the fencing used on site is barbed wire boundary fencing to deter unauthorised access onto the site. It was reported that native vegetation to be retained is generally not fenced. The extent of the use of barbed wire fencing was not able to be determined during the audit site inspection.	Indeterminate
DA-73-11-98 3.5 (a)	a) The Applicant shall prepare Erosion and Sediment Control Plans for the surface facilities, particularly the waste reject emplacement areas, and the LEA in consultation with LMCC and to the satisfaction of DWE and Director-General, and submit these Plans to the EPA as part of applications for a licence under the Protection of the Environment Act. The Plans shall be prepared and implemented prior to the commencement of work in the relevant areas.	<p>Newstan had prepared an Erosion and Sediment Control Plan (ESCP) in 2006 prior to the commencement of work in the relevant areas. Consultation and approval of the 2006 plan was assessed in previous IEA.</p> <p>The ESCP was revised in 2012 and a Draft submitted to LMCC for consultation by letter dated 21.12.12. The LMCC conducted a site visit to assist in assessing the Plan and provided comments by letter dated 15.02.13. Newstan was yet to revise the plan to address the LMCC comments and seek approval of the revised plan.</p> <p>On the basis that the 2012 Plan was yet to be approved and the 2006 approved plan no longer reflecting the operations taking place at the time of the audit site inspection, this requirement has been assessed as non-compliant.</p>	<p>Non-compliant</p> <p>REC 05 NEWSTAN IEA 2015</p> <p>Revise the ESCP to incorporate LMCC comments and changes that have occurred on site since 2012 and obtain relevant approvals.</p>

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation
DA-73-11-98 3.5 (b)	(b) The Erosion and Sediment Control Plans shall include: (i) consideration and management of erosion and sedimentation of surface watercourses/water bodies, including LT Creek and all creeks within the LEA; and (ii) consideration of LMCC's Erosion and Sediment Control Policy and Code of Practice. (iii) a program for reporting on the effectiveness of the sediment and erosion control systems and performance against objectives contained in the approved erosion and sediment control management plans, and EIS. (refer also condition (d) (i) below)	The LMCC comments on the Draft 2012 ESC stated that the plan generally complies with the requirements of the "Blue Book" however it requested that minimum design criteria for the sediment basins be changed from the 90 th percentile to the 95 th percentile to reflect the sensitivity of the receiving environment. The LMCC also requested that the plan include more recent figures at a scale showing finer detail (1:2000 – 1:5000 was recommended). As discussed above at the time of the audit site inspection the Plan had not been revised to incorporate the LMCC comments and reflect changes that have occurred on site since 2012. On this basis this requirement has been assessed as non-compliant. Refer also to assessment of adequacy in the main section of this report.	As above
DA-73-11-98 4.1 (a)	Water Management (a) The Applicant shall: prior to the commencement of construction of each of the new surface facilities at Newstan Colliery, and prior to first workings within the LEA, prepare water management plans for the relevant developments, in consultation with DWE, EPA, LMCC, and DRE and to the satisfaction of the Director-General, which shall include, but not be limited to, the following matters: (i) management of the quality and quantity of surface and ground water within the areas covered by the water management plans, which shall include preparation of monitoring programs as provided by CoC 8.2. (ii) management of stormwater and general surface runoff diversion to ensure separate effective management of clean and dirty water; (refer also condition 3.5 (d) (iii)). (iii) measures to prevent the quality of any surface waters being degraded below the relevant water quality prior to construction, particularly in LT Creek and all creeks within the LEA due to the operation of the mine workings; (iv) investigation into opportunities to reduce the mine water discharge into LT Creek in consultation with the EPA and include the results of such investigations in the Annual Environmental Management Report; (v) identification of any possible adverse effects on water supply sources of surrounding land holders, as a result of the underground mining operations in the LEA and surface mine works, and implementation of mitigation measures as necessary; (vi) identification of changes in flow of surface waters including all creeks within the LEA, particularly in Lord's Creek, due to subsidence, and LT Creek particularly due to the southern and northern waste emplacement areas and coal stockpiling areas; (vii) identification of any stream rehabilitation works required to ameliorate subsidence effects on stream flows within Lords Creek; (viii) contingency plans for managing adverse impacts of the development on surface and groundwater quality, including the matter in condition 4.1(d)(iv); (ix) identification of the fresh quality groundwater resources within the project area, including the development of appropriate protection strategies; (x) projection of potential groundwater changes during mining (short term) and post-mining (long term) with particular attention given to the affect of changes to groundwater quality and mobilisation of salts; (xi) a monitoring and remediation strategy for all streams which may be adversely affected by subsidence including bed fracturing and/or degradation of the stream channel. Where the monitoring indicates any adverse impacts due to mining, the company shall implement the remediation strategy to the satisfaction of DWE. (xii) consideration of the State Wetlands Management Policy for all significant downstream wetlands that may be effected by mining activity within the LEA or the relevant area. (xiii) a program for reporting on the effectiveness of the water management systems and performance against objectives contained in the approved site water management plans, and EIS;	<p>The Water Management Plan was prepared and approved by the DP&E on the 28.09.06. The 2006 plan was reviewed during previous IEAs in 2006 and 2009.</p> <p>In 2008 a Pollution Reduction Program (PRP) was added to Newstan's EPL requiring a Revised Water Management Plan (RWMP) (this was later removed by variation dated 13.07.11). The 2012 IEA assessed the consultation requirements of this plan however at the time, the Plan (Revision 9) was yet to be approved by DP&E.</p> <p>The RWMP has not been updated since 2009 and has not been approved by the DP&E. On this basis, this condition has been assessed as non-compliant.</p> <p>The 2012 IEA reviewed the RWMP and found it to generally include the matters outlined in this CoC with the following exceptions:</p> <p>(xi) Plan states that monitoring in the vicinity of natural watercourses and longwall mining areas is undertaken on a continual basis. The Plan should be more specific about what type of monitoring is undertaken and at what frequency.</p> <p>(xiii) The Plan refers to Centennial's EMS as a means for reporting and recording against environmental performance. The Plan should include a program for specifically assessing and reporting against the effectiveness of the water management system and performance against RWMP objectives and EIS.</p> <p>Since the above review, the following changes have occurred on site relating to water management:</p> <ul style="list-style-type: none">- construction and operation of the CWP- upgrade of the FPCD- increase to the daily discharge limit from LDP 1- Stony Creek pipeline now a licensed discharge point (Point 7) <p>The RWMP does not reflect the above changes as well as the recommendations from the previous IEA. Further details of the adequacy of the plan and opportunities for improvement are provided in the main section of this report.</p>	a) Non-compliant REC 03 NEWSTAN IEA 2015 Revise the RWMP to reflect the changes that have occurred on site since this time (2009) and obtain relevant approvals of the document.

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation
DA-73-11-98 4.1 (c)	c) obtain a license with DWE under part 5 of the Water Act (1912) prior to construction of all new excavations, test bores and production bores (including dewatering bores) that intersect the groundwater.	<p>c) The previous IEA reported that Newstan proposed (letter dated 09.07.10) to relinquish the 25 monitoring bore licences held (listed in Table 1 of the letter) and replace them with licenses with alternative conditions for 16 of the bores (listed in Table 2 of the letter). Newstan also applied for monitoring bore licences for two existing bores (listed in Table 3 of the letter).</p> <p>In addition, Newstan proposed to relinquish the extraction licence applying to the By-wash Dam and extraction from LT Creek as several conditions of the licence were considered to no longer be valid and requested that a new licence be issued. Newstan also applied for an additional 3 extraction licences.</p> <p>It was reported in the 2012 IEA that, despite numerous repeated requests, no response was provided by NOW.</p> <p>Further to the above, during this audit period, the licence application was re-submitted on the 16.10.13. A meeting was held with NOW on the 15.02.15 at which Newstan was requested to provide additional information.</p> <p>On the basis that the resolution of the licence relinquishment and additional licence application is unknown this condition has been assessed as Indeterminate.</p>	<p>c) Indeterminate</p> <p>REC 06 NEWSTAN IEA 2015 Continue to work with NOW to resolve groundwater extraction licence relinquishment and additional licence application.</p>
DA-73-11-98 4.1	<p>General Terms of Approval EPA</p> <p>(ii) Discharge Concentration Limits The Applicant shall only discharge water from the development in accordance with the provisions of a current Environmental Protection Licence.</p>	<p>(ii) Newstan reported exceedances of the discharge concentration limits specified by its EPL during the audit period. Refer to assessment of compliance with EPL.</p>	<p>(ii) Non-compliant</p> <p>Refer to recommendations in main section of report and EPL compliance assessment table</p>
DA-73-11-98 4.2	<p>Assessment of LT Creek and Water Re-use Options</p> <p>The Applicant shall undertake an assessment of water quality and stream health in LT Creek and mine water re-use options to the satisfaction of the Director-General. This assessment must:</p> <p>(a) be prepared in consultation with the CCC, EPA, NOW and LMCC and be submitted to the Director-General by the end of March 2013 for approval;</p> <p>(b) review the history of operations at Newstan Colliery and describe any historical impacts from discharges from the Colliery on water quality and stream health in LT Creek;</p> <p>(c) identify the source(s) of exceedances of ANZECC water quality criteria for waters discharged from the site;</p> <p>(d) establish appropriate water quality criteria for waters discharged from the site;</p> <p>(e) identify any reasonable and feasible options for the improvement of water management at Newstan Colliery including water treatment, re-use or transfer; and</p> <p>(f) provide a proposed timetable for the implementation of reasonable and feasible measures identified in (d) above.</p>	<p>Newstan commissioned GHD to undertake an assessment of water quality and stream health to meet the requirements of this Condition. The Draft report (LT Creek Water Quality and Newstan Reuse Assessment March 2013) was submitted for consultation to the CCC, EPA, NOW and LMCC by letters dated 20.03.13. It was reported that no comments were received from any of the agencies and the report was submitted to the DP&E for approval on the 28.03.13. The DP&E reportedly requested further consultation with the agencies and so letters were sent to the EPA, LMCC and NOW asking if further information was required. It was reported that the Environment and Community Coordinator had a meeting with the LMCC to discuss the report in December 2013 however no further action has been taken since this time. It was reported that Newstan intends to resubmit the report to the DP&E for approval. On the basis of this report not being resubmitted to the DP&E, nor approved by the DP&E this Condition has been assessed as non-compliant.</p>	<p>Non-compliant</p> <p>REC 07 NEWSTAN IEA 2015 Re-submit the LT Creek Water Quality and Newstan Reuse Assessment Report (March 2013) to the DP&E for approval. If required, work with DP&E to achieve approval.</p>

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation																																										
DA-73-11-98 6.4A	<p>Operational Noise Criteria</p> <p>The Applicant shall ensure that noise from the development (excepting the Newstan ventilation shaft site at Awaba) does not exceed the noise criteria in Table 4.</p> <table><caption>Table 4: Noise criteria</caption><thead><tr><th>Location</th><th>Shoulder dB(A) LAeq(15 min)</th><th>Day dB(A) LAeq(15 min)</th><th>Evening dB(A) LAeq(15 min)</th><th>Night dB(A) LAeq(15 min)</th><th>Night dB(A) LAeq(15 min)</th></tr></thead><tbody><tr><td>NC1 – Davis</td><td>35</td><td>35</td><td>35</td><td>35</td><td>45</td></tr><tr><td>NC2 – Culpin</td><td>38</td><td>38</td><td>35</td><td>35</td><td>45</td></tr><tr><td>NC3 – Orock</td><td>39</td><td>39</td><td>37</td><td>37</td><td>45</td></tr><tr><td>NC4 – Phelps</td><td>35</td><td>35</td><td>35</td><td>35</td><td>45</td></tr><tr><td>NC5 – Pamel</td><td>35</td><td>35</td><td>35</td><td>35</td><td>45</td></tr><tr><td>NC6 – Fassifern Primary School</td><td>N/A</td><td>35</td><td>N/A</td><td>N/A</td><td>N/A</td></tr></tbody></table> <p>Notes:</p> <ul style="list-style-type: none">-To interpret the locations referred to in Table 4, see Figure 1 in Appendix 2; and-Noise generated by the development is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.- Day is defined as the period from 7am to 6pm;- Evening is defined as the period from 6pm to 10pm;- Night is defined as the period from 10pm to 6am; and- Shoulder is defined as the period from 6am to 7am. <p>However, these criteria do not apply if the Applicant has an agreement with the relevant owner/s of these residences/land to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.</p>	Location	Shoulder dB(A) LAeq(15 min)	Day dB(A) LAeq(15 min)	Evening dB(A) LAeq(15 min)	Night dB(A) LAeq(15 min)	Night dB(A) LAeq(15 min)	NC1 – Davis	35	35	35	35	45	NC2 – Culpin	38	38	35	35	45	NC3 – Orock	39	39	37	37	45	NC4 – Phelps	35	35	35	35	45	NC5 – Pamel	35	35	35	35	45	NC6 – Fassifern Primary School	N/A	35	N/A	N/A	N/A	<p>The operational noise criteria specified by this CoC came into effect with MOD 4 on the 16.03.12.</p> <p>Newstan reported exceedances with these criteria in the 2012, 2013 and 2014 AEMRs as summarised in the noise section of the main report.</p> <p>No exceedances were recorded at any monitoring locations during any periods in December 2014 and Quarter 1 2015 (reviewed noise monitoring reports by Global Acoustics).</p> <p>Based on the non-compliances reported, this Condition has been assessed as non-compliant. Further discussion of measures implemented to minimise noise is provided under Condition 6.4B below and in the main section of this report.</p>	Non-compliant
Location	Shoulder dB(A) LAeq(15 min)	Day dB(A) LAeq(15 min)	Evening dB(A) LAeq(15 min)	Night dB(A) LAeq(15 min)	Night dB(A) LAeq(15 min)																																								
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NC4 – Phelps	35	35	35	35	45																																								
NC5 – Pamel	35	35	35	35	45																																								
NC6 – Fassifern Primary School	N/A	35	N/A	N/A	N/A																																								
DA-73-11-98 6.4B	<p>Operating Conditions</p> <p>The Applicant shall:</p> <ul style="list-style-type: none">(ii) regularly assess the real-time noise monitoring and meteorological forecasting data and relocate, modify, and/or stop operations on site to ensure compliance with the relevant conditions of this consent;(iii) minimise the noise impacts of the development during temperature inversions;	<ul style="list-style-type: none">(ii) At the time of the audit, the real-time noise monitor was yet to be installed. It is understood that the original site nominated by Centennial’s noise experts was not practical as it was not on land owned by Centennial and there was no power supply to the site. Centennial, in consultation with its experts have selected a new site on Centennial land (adjacent to the rail loop). These changes to the location of the monitoring location compounded to delays in installing the monitor. It was reported that the monitor had been ordered at the time of the audit and civil works had commenced to lay power to the site, however on the basis that it was not operational during the audit period, this Condition has been assessed as non-compliant. It was reported that the real time noise monitor is scheduled to be operational by the end of July 2015.(iii) During attended monitoring, consultants use the data logged by the on-site meteorological station to identify temperature inversions. However this is done and provided to Newstan with the quarterly noise monitoring reports and is therefore not able to be used to minimise impacts during the temperature inversion. On this basis, this requirement has been assessed as non-compliant. It was reported that updates were going to be made to the meteorological station so that it can have these capabilities in the future.	<ul style="list-style-type: none">(ii) Non-compliant(iii) Non-compliant																																										
DA-73-11-98 8.2	<p>Surface and Groundwater</p> <p>(a) (ii) The Applicant shall prepare a detailed monitoring program in respect of ground and surface water quality and quantity, including water in and around the Newstan mine site, Northern and Southern Emplacements, and LEA, and also consistent with condition 4.1(b)(iv), during construction works, mine operations and post mine operations in consultation with DWE, EPA, and to the satisfaction of the Director-General. The monitoring program shall also include surveys of drainage channels within the LEA to update information obtained in the preparation of Property Subsidence Management Plans. The monitoring program shall be prepared prior to commencement of construction in the relevant area.</p>	<p>(a) ii) The surface water monitoring program is included within the Revised Water Management Plan (RWMP, 2009). The RWMP was prepared in consultation with the OEH and NOW and submitted to the DP&E for approval, however was not formally approved by the DP&E (refer also to CoC 4.1).</p> <p>On the basis that the RWMP and the Plan has not been approved by the DP&E and has not been updated since 2009 this part of the condition is considered Indeterminate.</p>	<p>(a) (ii) Indeterminate</p> <p>REC 03 NEWSTAN IEA 2015</p> <p>Revise the RWMP to reflect the changes that have occurred on site since 2009 and continue to seek relevant approvals of the Plan from DP&E.</p> <p>REC 08 NEWSTAN IEA 2015</p> <p>Update the surface water monitoring program in the RWMP to include the requirements of the current EPL.</p>																																										

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation
DA-73-11-98 8.5	Flora and Fauna Monitoring The Applicant shall prepare a detailed monitoring program of habitat areas, including any wetlands and aquatic habitats, during the development and for a period after the completion of the development to be determined by the Director-General in consultation with LMCC, OEH and DRE. The program shall monitor impacts attributable to the development and include monitoring of the success of any restoration or reconstruction works. The Applicant shall include the monitoring program in the Flora and Fauna Management Plan (condition 3.4). The Applicant shall carry out any further works required by the Director-General as a result of the monitoring. A summary of monitoring results shall be included in the AEMR.	<p>The monitoring program is outlined in Section 5 of the Flora and Fauna Management Plan (2014). The program was expanded to include details of additional monitoring to address the requirements of Condition 3.4 that were not included in the previous version of the plan. This includes:</p> <ul style="list-style-type: none"> - Annual Photo monitoring - Annual Vegetation surveys (species diversity, species abundance, dominant species and vegetation height and presence of dieback) - Annual Bird surveys - Annual Bat surveys - Annual General fauna (camera traps) - Biennial habitat health assessment <p>The previous Plan (2006) committed to annual vegetation monitoring, monitoring of rehabilitation areas, subsidence areas and fauna surveys but did not include details on the type of monitoring proposed at what frequency and which locations.</p> <p>The 2012 IEA assessed this Condition as non-compliant on the basis that ecological monitoring (other than <i>Tetratheca juncea</i>) was not undertaken and made a number of recommendations relating to expanding the monitoring program and revising the Plan.</p> <p>During this audit period annual <i>Tetratheca juncea</i> surveys over longwalls 22-24 and in the NREA and SRE continued with the following reports sighted:</p> <ul style="list-style-type: none"> - <i>Monitoring of Tetratheca juncea over longwalls 22-24 and in buffer areas NREA and SREA – 2013 season</i> (Hunter Eco, October 2013) - <i>Monitoring of Tetratheca juncea over longwalls 22-24 for years 2006-2014</i> (Hunter Eco, October 2014) - <i>Monitoring of Tetratheca juncea at the Northern and Southern Reject Emplacement Areas</i> (Hunter Eco, October 2014). <p>However other ecological monitoring did not commence until 2015. At the time of the audit site inspection, Newstan was awaiting the draft report of the first annual ecological survey from the ecological consultants engaged to undertake this work (RPS). The auditors sighted the proposal provided by RPS to undertake the annual ecological survey and noted it included the monitoring committed to in the Plan.</p> <p>On the basis that ecological monitoring (with the exception of <i>Tetratheca juncea</i>) had not been undertaken during the audit period, this condition has been assessed as non-compliant. The commencement of the monitoring program is noted and would ensure this requirement is compliant in future audits.</p>	<p>Non-compliant</p> <p>No action required as monitoring now commenced.</p>
DA-73-11-98 8.8 (ii) (g)	(ii) The Applicant shall, at its own expense: (g) forward a copy of these minutes to the Director-General; and	The CCC minutes were not forwarded to the DP&E.	<p>(g) Non-compliant</p> <p>REC 09 NEWSTAN IEA 2015 Ensure CCC meeting minutes are forwarded to the DP&E.</p>
DA-73-11-98 8.9	Independent Environmental Audit (iii) Within 3 months of submitting the audit report to the Director-General, the Applicant shall review, and if necessary revise the strategies/plans/programs required under this consent to the satisfaction of the Director-General.	<p>(iii) The Flora and Fauna Management Plan was still at a draft stage in December 2012, it was approved in August 2014. Other plans updated and approved during this audit period include:</p> <ul style="list-style-type: none"> - Air Quality and Greenhouse Gas Management Plan (December 2012) - Noise Management Plan (December 2012) - Pollution Incident Response Management Plan (October 2014) <p>Not all of the management plans were revised following the 2012 IEA to address the recommendations from the adequacy review (e.g RWMP and Aboriginal Cultural Heritage). Refer also to main section of report and Appendix B. On the basis of these actions remaining outstanding, this requirement has been assessed as non-compliant.</p>	<p>(iii) Non-compliant</p> <p>REC 01 NEWSTAN IEA 2015 Develop process for managing non-compliances identified from audits (internal and external), and closing out recommendations</p>

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation
EPL 395 L1.1	Pollution of Waters Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.	<p>Newstan reported non-compliance with this condition in its 2012 and 2013 Annual Returns on the following occasions:</p> <ul style="list-style-type: none"> - 6.03.12 to 7.09.12: unlicensed discharge to Stony Creek - 1.03.13: turbid water discharge from LDP002 - 18.11.13: turbid water discharge from LDP001 <p>In addition, Newstan reported the following incidents to the EPA via the pollution hotline in 2015:</p> <ul style="list-style-type: none"> - 09.04.15: seepage of water into LT Creek through electrical pit - 21.04.15 to 23.04.15: overflow of turbid water from FPCD through LDP002 <p>Based on the above incidents and related exceedance of the EPL criteria, this Condition was assessed as non-compliant during the audit period. Incidents and water management are discussed further in the main report.</p>	Non-compliant
EPL 395 L2.1	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.	<p>During the audit period Newstan recorded a number of exceedances of these concentration limits (refer Table 8-2):</p> <p>In December 2013 / January 2014 Newstan commissioned a Clean Water Plant (CWP). The CWP uses coagulation, flocculation, sedimentation and filtration to reduce turbidity and concentration of TSS prior to discharge from LDP001.</p> <p>At the time of the audit Newstan was in arbitration with the EPA regarding the pollutant concentration limits imposed by this EPL. This is discussed further in the main report.</p>	Non-compliant
EPL 395 L3.1	Volume and Mass Limits For each discharge point or utilisation area specified below (by a point number), the volume/mass of: (a) liquids discharged to water; or; (b) solids or liquids applied to the area; must not exceed the volume/mass limit specified for that discharge point or area: Point 1: 11,000 kilolitres per day	<p>In December 2013 Newstan installed a CWP and upgraded its pipeline and pumping system. The CWP allows for greater control of the water level within the Fassifern Seam and better management of surface water across the site using the CWP CITECT system. A v-notch weir was installed at LDP001 to monitor volume discharged. If the limit at LDP001 is reached, the discharge to LDP001 is switched off and alarms raised to investigate. Newstan personnel are able to log on to the CWP CITECT system and check dam levels, start / stop pumps etc.</p> <p>The Discharge limit at LDP001 was increased from 7,000 kL to 11,000 kL by EPL variation dated 15.10.12. Since this time, Newstan has reported the following exceedances with the volume limit:</p> <ul style="list-style-type: none"> - 2.03.13: 12,384 kL discharged following a significant rainfall event (152 mm in 27 hours prior to discharge). - 22 to 23.04.15: 11,519 kL discharged following major storm. <p>While Newstan have been typically compliant with the condition, based on the two exceedances listed, Newstan are considered non compliant with this condition.</p>	Non-compliant

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation										
EPL 395 M2.2	Air Monitoring Requirements	A non-compliance was reported with this Condition in the 2012 and 2013 EPL Annual Returns as the following air quality monitoring was not undertaken:	Non-compliant										
	POINT 7,8,9,10,11,12,13,14												
	<table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling Method</th></tr><tr><td>Particulates - Deposited Matter</td><td>grams per square metre per month</td><td>Monthly</td><td>AM-19</td></tr></table>	Pollutant		Units of measure	Frequency	Sampling Method	Particulates - Deposited Matter	grams per square metre per month	Monthly	AM-19			
	Pollutant	Units of measure		Frequency	Sampling Method								
	Particulates - Deposited Matter	grams per square metre per month		Monthly	AM-19								
POINT 15,16													
<table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling Method</th></tr><tr><td>Particulate matter</td><td>micrograms per cubic metre</td><td>Every 8 days</td><td>AM-18</td></tr><tr><td>Total suspended particles</td><td>micrograms per cubic metre</td><td>Every 8 days</td><td>AM-15</td></tr></table>	Pollutant	Units of measure	Frequency	Sampling Method	Particulate matter	micrograms per cubic metre	Every 8 days	AM-18	Total suspended particles	micrograms per cubic metre	Every 8 days	AM-15	
Pollutant	Units of measure	Frequency	Sampling Method										
Particulate matter	micrograms per cubic metre	Every 8 days	AM-18										
Total suspended particles	micrograms per cubic metre	Every 8 days	AM-15										
		<p>AM-19 refers to AS 3580.10.1-1991. Depositional dust monitoring was undertaken by AECOM. AECOM developed a procedure, Ambient Measurement Procedure – Dust</p> <p>Deposit Gauges which references AS 3580.1.1:2003.</p> <p>AM-18 refers to AS 3580.9.6-1990 and AM-15 refers to AS 2724.3-1984.</p> <p>The February 2015 Environmental Monitoring Report of TSP, PM₁₀ and PM_{2.5} provided by Carbon Based stated that the following Australian Standards were used:</p> <p>- AS3580.9.3 for TSP</p> <p>- AS3580.9.6 for PM₁₀</p> <p>AS 3580.9.3 is not listed within the EPA publication, <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> however it is noted AS3580.9.6 has superseded AS 2724.3-1984 and the EPA publication has not been reviewed since January 2007.</p> <p>On the basis of the non-compliances reported in the 2012 and 2013 Annual Returns this condition was deemed non-compliant.</p>											

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation
EPL 395 M2.3	<p>Water and/ or Land Monitoring Requirements</p> <p><i>Summarised below (see EPL 365 for full requirements)</i></p> <p><u>Point 1 (LDP001):</u></p> <ul style="list-style-type: none"> - Metals: weekly by composite sample. - Conductivity: daily by composite sample - Total suspended solids, oil and grease and pH: weekly by composite sample - Turbidity: weekly by grab sample <p><u>Point 2 (LDP002)</u></p> <ul style="list-style-type: none"> - Metals: weekly during any discharge by grab sample. - Conductivity, oil and grease, pH, total suspended solids and turbidity: within the first 6 hours of any discharge occurring; and every seven days thereafter for the duration of the discharge <p><u>Point 3, 4, 6, 20 (ambient water quality)</u></p> <ul style="list-style-type: none"> - Metals: monthly during discharge by grab sample. - Conductivity, oil and grease, pH, total suspended solids and turbidity: within the first 6 hours of any discharge occurring; and every seven days thereafter for the duration of the discharge <p><u>Point 17 (Stony Ck Pipeline Outlet)</u></p> <ul style="list-style-type: none"> -Metals: within the first 6 hours of any discharge occurring; and every seven days thereafter for the duration of the discharge - Conductivity, temperature and turbidity: continuously during any discharge (subject to the following note) - oil and grease, pH and total suspended solids: within the first 6 hours of any discharge occurring; and every seven days thereafter for the duration of the discharge <p><u>Point 18 (ambient water quality)</u></p> <ul style="list-style-type: none"> -Temperature: continuously during any discharge (subject to the following note – b) <p><u>Point 19 (ambient water quality)</u></p> <ul style="list-style-type: none"> - Metals: weekly by composite sample <p><u>Note</u></p> <p>Special Frequency 1 means in the event of a discharge, a grab sample of the water discharged must be collected:</p> <p>a) within the first 6 hours of any discharge occurring; and b) every seven days thereafter for the duration of the discharge;</p> <p>Special Frequency 2 means continuous sampling during any discharge, subject to the following in respect of Point 17 and Point 18.</p> <p>(a) A continuous monitoring system will be implemented by 31 March 2013, weather permitting. It is noted that, to minimise the possibility of a flow of mine wastewater though the pipeline during installation and excavation works, the installation of continuous monitoring equipment will not commence until there is a two (2) metre buffer from the water level in the seam to the Stony Creek pipeline inlet.</p> <p>(b) In the event of a discharge occurring prior to the implementation of continuous monitoring being installed, hourly monitoring must be carried out. This monitoring will commence within the first six (6) hours of any discharge occurring.</p>	<p>A non-compliance was reported with this Condition in the 2012 and 2013 Annual Returns as the sampling method and frequency for LDP001 and Point 19 (WMP03) was not in accordance with the requirement. The Licence Variation dated 15.10.12 changed the sampling method from grab sampling to composite sampling and the frequency from weekly to daily. Newstan continued to use weekly grab sampling whilst it was in the process of procuring, installing and commissioning the composite samplers. These were installed in April 2013. The composite samplers at LDP001 and Point 19 were observed during the audit site inspection.</p> <p><u>Note re Special Frequency 1</u></p> <p>Newstan has developed a procedure (EWP002– Environmental Monitoring During Discharge Events) which outlines the step by step process for sampling during discharge events. This was reviewed by the auditors and considered to be a comprehensive and well written procedure. Some opportunities for improving the procedure were identified (refer to recommendations).</p> <p>It was reported that where Newstan is required to take a sample within the first 6 hours of any discharge occurring this is managed in the following way:</p> <ul style="list-style-type: none"> - water levels are monitored in the CWP CITECT system; - If either the FPCD, Graunchs, Fassifern's storage or Connolly's dam gets to 80% an alarm sounds and an automated phone call is made to a prioritised list of Newstan personnel on rotation until someone answers the call. - Newstan personnel are able to log on to the CWP CITECT system and check dam levels, start / stop pumps etc. - if it becomes apparent that a discharge is imminent, the Environmental Coordinator takes the grab sample and stores it for pick up by AECOM for preparation and analysis by the laboratory as per Procedure EWP002. <p>In 2015, the requirement for monitoring within the first 6 hours of any discharge was triggered during the following events:</p> <ul style="list-style-type: none"> - 21.04.15 – overflow of Graunchs Dam through LDP001 - 21.04.15 – overflow of FPCD through LDP002 - 23.04.15 – overflow of Clean Water Dam <p>In its written report for the 21-23 April 2015 incident to the EPA dated 5.05.15, Newstan stated the dates and times of the discharges and the dates and times sampling was undertaken. Based on this information Newstan undertook sampling within 6 hours of the discharges occurring at all but one location (Point 6) where it was deemed unsafe to collect samples late at night during extreme storm conditions. Samples were taken at this location at 8:45am the next day when it was safe to do so.</p> <p><u>Note re Special Frequency 2</u></p> <p>(a) The continuous monitoring system was installed at Stony Creek on the 15.10.13. The EPA was notified of the completion of its installation by letter dated 8.11.13. The EPA was previously notified (by letter dated 11.03.13 that there would be a delay in the implementation of the monitoring system due to significant rain which raised the water levels in the Fassifern seam to within the 2m buffer of the inlet to the Stony Creek pipeline.</p> <p>b) Newstan reported that Point 17 (Stony Creek pipeline) commenced discharging on the 22.03.13. This was prior to the continuous monitoring system being completed as discussed above. It was reported that for this event, environmental consultants AECOM were undertaking hourly monitoring to satisfy this condition.</p> <p>In addition Newstan reported that Point 17 commenced discharging on the 11.05.15 at 8:20am. By this stage the continuous monitoring system had already been installed. The auditors were provided with a spreadsheet ("Stony Creek 2015) which included the half hourly temperature, conductivity and turbidity monitoring data for Point 17 for the period 8 am 11.05.15 to 03.06.15.</p> <p>Based on the non-compliances reported by Newstan in 2012 & 2013 as indicated above, Newstan were considered to be non-compliant with this condition.</p>	<p>Non-compliant</p> <p>REC 10 NEWSTAN IEA 2015</p> <p>Update EWP002- Environmental Monitoring During Discharge Events, to include the plan referenced in the EPL for monitoring locations (plan NS3303). Also ensure procedure includes monitoring requirements for EPA Monitoring Point 20 (WMP 16) during discharge events.</p>

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation
EPL 395 U2.1	<p>PRP6 Macroinvertebrate and Eco-toxicological Monitoring Program</p> <p>The licensee must implement an environmental monitoring program that will monitor the impacted sites of LT and Stony Creeks against control, where control means a system of the same Riverstyle™ (Brierley & Fryirs) as LT and Stony Creek monitoring reaches but not impacted by point source mining groundwater discharges or other major point source discharges. The monitoring program must be undertaken by a suitably qualified and experienced person and:</p> <p>a) include macroinvertebrate monitoring twice a year (Autumn and Spring) at:</p> <p>i) four or more locations downstream of LT Creek licensed discharge point 1 that includes site within the intertidal estuarine zone; and</p> <p>ii) two or more locations downstream of Stony Creek licensed discharge point 17 that includes a site within the intertidal estuarine zone; and</p> <p>iii) at a number of control locations that are the same Riverstyle™ (Brierley & Fryirs) as the impacted monitoring site reaches, which must include an estuarine non impacted site;</p> <p>b) include ecotoxicological assessment 3 times within a 6 month period from the date of the issue of this licence, with the timeframe between sampling events more than 7 weeks, that includes assessment of the toxic effects of the clean water treatment plant at licensed discharge point 1 to Eastern Rainbow Fish embryo development and post-hatch survival (10d exposure), freshwater shrimp (<i>Paratya australiensis</i>) survival (10d exposure) and freshwater cladoceran <i>C.dubia</i> reproductive impairment (8d exposure); thence</p> <p>c) ecotoxicological assessment twice annually, with the timeframe between sampling events more than 4 months, that includes assessment of the toxic effects of the clean water treatment plant at licensed discharge point 1 to Eastern Rainbow Fish embryo development and post-hatch survival (10d exposure), freshwater shrimp (<i>Paratya australiensis</i>) survival (10d exposure) and freshwater cladoceran <i>C.dubia</i> reproductive impairment (8d exposure).</p> <p>Note 1: Control does not mean 'natural' and unimpacted by humans in the context of this study.</p>	At the time of the audit site inspection Newstan and the EPA were in arbitration and as advised by letter from Newstan's lawyers Ashurst Australia dated 18.05.15 it was agreed by both parties that Conditions U2 and E1 are not to have effect until the Court finally resolves the proceedings.	Not to have Effect – subject of arbitration at time of audit.
EPL 395 U2.2	The licensee must prepare an ecotoxicological report for monitoring undertaken at condition U2.1 b) that is prepared by a suitably qualified and experienced person. This report must be provided to the EPA's Regional Manager Hunter at Hunter.region@epa.nsw.gov.au within two months from completion of the ecotoxicological assessment in condition U2.1 b).	As above	Not to have Effect – subject of arbitration at time of audit.
EPL 395 U2.3	<p>The licensee must prepare a macroinvertebrate and ecotoxicological report prepared by a suitably qualified and experienced person that reports on the monitoring undertaken in Condition U2.1 a) and Condition U2.1 c). The report:</p> <p>a) must be provided to the EPA with the Annual Return (noting that from the commencement of this Licence, only the Spring macroinvertebrate monitoring would have taken place within the 2014 licence period); and</p> <p>b) analysis must incorporate, but must not be limited to a beyond before after control impact (beyond BACI) style assessment comparing impacted and control sites but also include an assessment of macroinvertebrate assemblage dissimilarity between impacted and control sites highlighting the taxa / impact responsible for the majority of the dissimilarity. At the completion of two years and then three years of monitoring the macroinvertebrate and ecotoxicological report must incorporate temporal analysis of the preceeding data dating back to the commencement of the environmental study.</p> <p>This PRP must be completed by 27 February 2017.</p>	As above	Not to have Effect – subject of arbitration at time of audit.

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation
EPL 395 E1.1	<p>Special Conditions</p> <p>Water Treatment Plant Commissioning Study</p> <p>The licensee must undertake a Water Treatment Plant (WTP) Commissioning Study for the Newstan Clean Water Treatment Plant prepared by a suitably qualified and experienced person. The study must:</p> <p>a) monitor daily inflow to the WTP and daily outflow from the WTP testing for the pollutants identified in condition U1.1 c), and including the total fraction of individual metals mentioned in condition U1.1 c) for 7 consecutive days; thence after</p> <p>b) monitor weekly inflow to the WTP and weekly outflow from the WTP testing for the pollutants identified in condition U1.1 c), for eight weeks (using a range of days of the week); and that this monitoring must include</p> <p>i) a range of volumetric throughputs to test treatment efficiencies and residence time.</p> <p>Note: The laboratory analytical tests must be able to test the pollutants (analytes) at an appropriate level of detection such that change can be detected. The results of “<LOR” are not acceptable in a commissioning study where the intention is to detect a reduction.</p>	<p>Newstan sought clarification (by letter dated 07.01.14) regarding the note in this condition re LOR reporting. It also advised the EPA that it would not be able to complete the report within the stipulated timeframe and sought an extension.</p> <p>Court proceedings have since commenced between Newstan and the EPA and as advised by letter from Newstan’s lawyers Ashurst Australia dated 18.05.15 it was agreed by both parties that Conditions U2 and E1 are not to have effect until the Court finally resolves the proceedings.</p>	Not to have Effect – subject of arbitration at time of audit.
EPL 395 E1.2	<p>On completion of the monitoring identified in condition E1.1 the licensee must provide a report to the EPA, prepared by a suitably qualified and experienced person. The report must:</p> <p>a) analyse and report the efficiency of the clean water treatment plant in removing pollutants at a variety of flow rates and residence times and include near maximum flow rates that would be discharged in accordance with the maximum volumetric licence limit (11,000ML/day);</p> <p>c) compare and contrast the monitoring results to the targeted design treatment concentrations identified in Condition U1.1 c); and</p> <p>b) include recommendations of the most effective flow rate and the resultant treatment reductions that can be achieved.</p> <p>Note: The laboratory analytical tests must be able to test the pollutants (analytes) at an appropriate level of detection such that change can be detected. The results of “<LOR” are not acceptable in a commissioning study where the intention is to detect a reduction.</p> <p>The Report must be provided to the EPA’s Manager Hunter Region at hunter.region@epa.nsw.gov.au within 3 months of the issue of this licence variation (17 December 2014).</p>	As above	Not to have Effect – subject of arbitration at time of audit.
CCL 764 2	<p>Environmental Harm</p> <p>The proponent shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or rehabilitation of the development.</p>	Refer to DA 73-11-98 Condition 1	<p>Non-compliant</p> <p>Refer to recommendations made throughout the report</p>

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation
CCL 764 18	Prevention of Soil Erosion and Pollution Operations must be carried out in a manner that does not cause or aggravate air pollution, water pollution (including sedimentation) or soil contamination or erosion, unless otherwise authorised by a relevant approval, and in accordance with an accepted Mining Operations Plan. For the purpose of this condition, water shall be taken to include any watercourse, waterbody or groundwaters. The lease holder must observe and perform any instructions given by the Director-General in this regard.	<p>Newstan operates under an Environmental Protection Licence (EPL395) which outlines criteria for water quality discharges and monitoring requirements for dust and water quality.</p> <p>Refer to assessment of compliance with EPL.</p> <p>Newstan has developed a number of management plans to manage the environmental impacts of its operations, specifically a Revised Water Management Plan, Erosion and Sediment Control Plan and Air Quality and Greenhouse Gas Management Plan. Refer to main report for further discussion of these issues</p> <p>Newstan had undertaken significant works during the audit period to upgrade its water management system, including:</p> <ul style="list-style-type: none"> - increasing the capacity of the Final Pollution Control Dam - completing the clean water diversion drain around the SREA - installing a Clean Water Treatment Plant - upgrades to the pipeline and pumping system and increases in pumping capacity - upgrades to the CITECT system following construction of the CWP. The CWP CITECT system allows for remote management and movement of water across the site and incorporates alarms when trigger levels are reached. - increasing the daily discharge limit (volume) in its EPL from 7ML/day to 11 ML/day from LDP001. <p>The previous IEA (2012) identified an area of erosion at the discharge of the clean water diversion drain where the northern arm drains into LT Creek. The IEA reported that the clean water diversion drain had diverted water into an undefined drainage line which has as a result eroded in some areas down to bedrock and potentially led to some sediment build up in LT Creek. During the audit site inspection on the 11.05.15, the auditors inspected this area and observed that works had been undertaken to extend the rock lined channel approximately 10m, however the auditors were not able to gain access to the land (as this was private land) to observe the drainage line beyond this point. Newstan noted that no works had been undertaken beyond the area sighted due to it being on private land.</p> <p>No areas of significant erosion were observed during the site visit on the 11.05.15.</p> <p>On the basis of the non-compliances with the EPL relating to water pollution, Newstan is considered Non-compliant with this condition.</p>	Non-compliant
ML 1452 33 (a)	Catchment areas - (a) Operations shall be carried out in such a way as not to cause any pollution of the Lake Macquarie Catchment Area.	<p>(a) Newstan operates under an Environmental Protection Licence (EPL 395) which outlines criteria for water quality discharges and monitoring requirements for dust and water quality.</p> <p>Refer to assessment of compliance with EPL.</p> <p>Some aspects of the licence have not been complied with and some pollution events have been reported. While Newstan are generally compliant with this condition, on the basis of some events of pollution occurring, Newstan are considered Non Complaint with this condition. Full details are presented in the compliance assessment of the EPL.</p>	(a) Non-compliant

10.1 Recommendations

The following table has been compiled from **Appendix A**, site observations and consultation with agencies. For details on the requirement, and for further discussion of the issue, please refer directly to the table in **Appendix A** and Section 7.

Table 10-2 Recommendations for Conditions considered compliant and from site observations.

Approval & EPL Condition Number	Rec. #	Recommendation
Development Consent DA 73-11-98		
3.2	REC 11	Follow up with DP&E regarding the status of the approval of the Strategy. Once approval is received ensure copies are provided to the relevant agencies within 14 days.
3.8	REC 12	Revise the Bushfire Management Plan to ensure it remains up to date.
3.9	REC 13	Revise the Land Management Plan to ensure it remains up to date. Newstan should ensure that the OEH, NOW, and DRE are consulted with on the next version of the LMP. See recommendations below regarding rehabilitation as provided by DRE.
4.3	REC 14	Follow up the status of approval of the Groundwater Monitoring Program with the DP&E, and work with DP&E to address any comment required to approve the document.
6.4C	REC 15	Include discussion of how/ when the effectiveness of the real –time noise management system will be evaluated and reported on within the NMP.
9.1	REC 16	As per recommendation in 2012 IEA, it is considered that the AEMR should include a list of groundwater monitoring and extraction licences under Section 1.1 Consents Leases and Licences of the AEMR.
9.2	REC 17	Request clarification from the DP&E on whether historical data is required to be maintained on the website and for what period of time.
9.2	REC 18	Ensure that copies of the approved management plans and IEAs are provided to all of the relevant agencies (and not just the DP&E as the approving agency and the LMCC for public exhibition). The auditors consider the relevant agencies to be the agencies for which consultation was required (typically OEH, DRE, NOW, LMCC and DP&E). Alternatively, Newstan could inform the relevant agencies as part of the consultation that approved plans will be available on the Newstan website once approved.
Environmental Protection Licence 395		
L4.1	REC 19	Revise Procedure EWP005 to include discussion of the receipt of ENM (in accordance with the ENM Exemption 2014) and updated environmental coordinator contact details.
DRE Consultation - Rehabilitation		
DRE Consultation on Rehabilitation	REC 20	As per correspondence from DRE received during the audit consultation dated 27/8/15: <ul style="list-style-type: none"> • Continue to improve rehabilitation standards. • Complete a topsoil and subsoil material balance to verify availability of material for rehabilitation. Evaluate soil and growth medium requirements for the site and develop a soil amelioration methodology. • Review and modify rehabilitation methodologies based on performance of existing rehabilitation. • Continue to develop and refine performance indicators and quantifiable completion criteria in the Mining Operation Plan.
Consolidated Coal Lease 764		
5	REC 21	It is recommended that the AEMRs report against progress in respect of the Performance Indicators and Completion Criteria presented in the current MOP.
7	REC 22	Develop and Implement a rehabilitation monitoring program (to be conducted by suitably qualified people) to assess performance against performance indicators and quantifiable completion criteria as developed in the MOP and in consultation with DRE.
Other		
Section 6.4	REC 01	Develop process for managing non-compliances identified from audits (internal and external), and closing out recommendations.

10.2 Opportunities for Improvement (OFIs)

The following table has been compiled from the management plan adequacy review. The opportunities for improvement do not necessarily represent immediate potential non-compliance issues and vary in their level of risk and significance. They are not at a level of risk or significance that warrant an immediate review of the plan, however could be made during the next update of the plan. It is considered appropriate that Newstan take a risk based approach to address the comments on the plans, particularly in the light of the site being in an activity state of “care and maintenance”.

Table 10-3 Opportunities for Improvement for Management Plans

Approval & EPL Condition Number	OFI #	Opportunity for Improvement
Environmental Management Plans		
Environmental Management Strategy	OFI 01	<ul style="list-style-type: none"> Update the Legal and Other Section to include reference to the WorkCover notification for the storage and handling of dangerous goods at quantities that exceed the Manifest quantity in Schedule 5 of the OHS Regulation (due to chemicals required for the CWP). Also add further details of the Water Licences (extraction and monitoring) issued by NOW. Some Sections of the Strategy (e.g. cumulative impacts, ecological and community objectives for water catchment and objectives and strategies to protect existing economic productivity areas) are brief and refer back to original 1998 EIS. This is not practical or user friendly and it is recommended that the findings of the EIS be included within the Strategy if they are considered relevant. Better outline the integration between the Strategy, Management Plans and EMS including Centennial Coal Standards and Procedures. This could be in the form of a framework diagram. Address the comments of NOW to include objectives and performance outcomes relating to the extraction of water from surface and groundwater sources and to reference the most recent water management plan (i.e. the RWMP). Include reference to the Groundwater Monitoring Program in the Risk Management Section. Include a figure showing the key features of the mine and environmental monitoring locations. Include a discussion of how actions raised in internal or external audits are to be recorded and tracked to ensure close out.
Flora and Fauna Management Plan	OFI 03	<ul style="list-style-type: none"> Include further details of the proposed monitoring of rehabilitation areas in Section 5.3.4. Also include a Figure showing the specific monitoring locations. If this monitoring is highlighted in another document, then this document could be referenced. Improve the consistency and cross referencing between the Flora and Fauna Management Plan and other relevant plans such as the Wetland Management Plan and Landscape Management Plan to achieve overall ecological objectives. Also improve the cross referencing with the Environmental Management Strategy and other elements of Newstan's environmental management system such as the Permit to Clear process (using Form N122109) for the removal of trees and vegetation. Cross referencing the Fauna Management Plan and the MOP has the potential to align both approaches, reduce duplication and lead to consistent outcomes.
Wetland Management Plan	OFI 04	<ul style="list-style-type: none"> Ensure the Wetland Management Plan is consistent with and cross-references the Flora and Fauna Management Plan. Update the Wetland Management Plan to reflect changes to the surface water management system with potential impacts to the wetlands as a result of the operation of the CWP if any. Include discussion of how environmental performance will be measured and reporting requirements in the AEMR

Approval & EPL Condition Number	OFI #	Opportunity for Improvement
Erosion and Sediment Control Plan	OFI 05	<ul style="list-style-type: none"> Update the ESCP to incorporate LMCC comments and reflect changes that have occurred on site since 2012 including variations to the EPL. Also include reference to the relevant Conditions of Consent (in particular Condition 3.5).
Groundwater Monitoring Program	OFI 06	<ul style="list-style-type: none"> Clarify the relationship between the GWMP and the RWMP and whether the monitoring of bores MB1-MB6 and MB9-MB19 will continue to be undertaken. Include a list (and Figure) of all groundwater monitoring bores and their licence status. Reword Tables 4-1 and 4-2 to make it clear that the trigger values are the values which if exceeded trigger a management response.
Soil Stripping Management Plan	OFI 07	<ul style="list-style-type: none"> Review and update the Soil Stripping Management Plan and in particular the soil stripping schedule of works (as required of Condition 3.2(e)).
Air Quality and Greenhouse Gas Management Plan	OFI 08	<ul style="list-style-type: none"> During the next scheduled review of the Plan revise Table 1 so that the Table of Contents and cross-referencing within Table 1 is correct. Include discussion of how the real time monitor is used as a dust management tool e.g. through the use of alarms and alerts Remove reference to odour impact assessment criteria (not relevant as no criteria set by CoC or EPL) and instead include discussion of how off-site odour will be minimised and how the site will ensure no offensive odours are emitted Remove reference to Greenhouse Gas Management Plan in Section 7.2 Remove Appendix A, Development Consent as it is not required and unnecessarily bulks up the Plan
Archaeology and Cultural Management Plan (2006)	OFI 09	<ul style="list-style-type: none"> The revised Plan could be improved by clearly stating the scope of the Plan and describing the relationship between the two heritage management plans.
Land Management Plan	OFI 10	<ul style="list-style-type: none"> Review and update the Land Management Plan to ensure compliance with the requirement to update plans every 5 years. The Plan should align with or reference the MOP where it covers rehabilitation to avoid inconsistency between documents. Include a reference to criteria with which to assess the success of rehabilitation activities as may have been developed in other plans such as the Flora and Fauna Management Plan or the MOP. Reference the MOP where monitoring of rehabilitation is described and ensure consistency between the Plan and the MOP Expand the monitoring section to include ecological monitoring to assess the success of rehabilitation as per defined rehabilitation criteria. Reference reporting requirements in the MOP, or alternatively include a section on Reporting to cover the CCL requirement to report on progress with respect to rehabilitation criteria within the AEMR.
Landscape Management Plan	OFI 11	<ul style="list-style-type: none"> The Landscape Management Plan should be updated as required to reflect or reference the requirements of the recently approved MOP Either refer to the MOP or expand the Monitoring Section to outline what parameters will be used to judge rehabilitation success and include further details of what exactly is to be monitored / inspected during the quarterly SREA and NREA inspections and by whom. Consolidate Sections 5.5 and 12.7 (Maintenance Program) and revise to include further detail of the specifications and staged work programs to be undertaken. Expand Section 12.2.4 to provide further details of the soil testing and fertiliser application process e.g. who does the testing, who determines types and rates of fertiliser etc Update Section 12.3.2 (Topsoiling) to reflect practice of using VENM /ENM instead of 50 mm of topsoil. Include details of the process of importing VENM /ENM (including the screening process to ensure that the material is VENM / ENM)

Approval & EPL Condition Number	OFI #	Opportunity for Improvement
Revised Water Management Plan	OFI 12	<ul style="list-style-type: none"> • Include a program for specifically assessing and reporting against the effectiveness of the water management system and performance against RWMP objectives • With regards to monitoring in the vicinity of natural watercourses and longwall mining areas, the RWMP should be updated to include monitoring of water courses at the time of recommencement of mining; or be specific about what type of monitoring is undertaken and at what frequency will be undertaken when mining recommences.
Noise Management Plan	OFI 13	<ul style="list-style-type: none"> • Update Section 6 (Noise Mitigation Measures) to reflect the mitigation measures that have been implemented and outline the new or ongoing mitigation and management measures. • Include additional detail on how and when the effectiveness of the real –time noise management system will be evaluated and reported on. • Include links / references to Newstan's EMS, in particular for recording complaints and recording and reporting on exceedances and non-compliances. Exceedances of noise criteria should be logged in ECD as Category 4 incidents. This requirement / process should be outlined in the NMP and implemented.
Other		
Section 7.3.2 Overarching recommendation relating to management plans	OFI 02	<ul style="list-style-type: none"> • An opportunity exists to improve the consistency and links between management plans in terms of structure, integration with Centennial EMS and Standards, and level of detail including highlighting management actions and mitigation measures. This could be achieved through the development of a management plan template.

11 Limitations of Report

MCW Environmental Consulting Pty Limited (MCW Environmental) has conducted this Independent Environmental Audit (IEA) and generated this report in accordance with the usual care and thoroughness of the consulting profession for the use of Centennial Newstan Pty Ltd and only those third parties who have been authorised in writing by MCW Environmental 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. This IEA report did not assess any aspects relating to safety or soil or groundwater contamination at the site.

The IEA Report is prepared in accordance with the scope of work and for the purpose outlined in the MCW Environmental Proposal dated 4 April 2015 and the signed contract executed between MCW Environmental and Centennial Newstan Pty Ltd.

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

This IEA Report was prepared between May 2015 and 31 August 2015 and is based on the conditions encountered and information reviewed at the time of the site visit on 11 and 12 May 2015 and the 18 May 2015. MCW Environmental disclaims responsibility for any changes that may have occurred after this time.

This IEA 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 IEA 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 IEA Report unless otherwise agreed by MCW Environmental in writing. Where such agreement is provided, MCW Environmental will provide a letter of reliance to the agreed third party in the form required by MCW Environmental.

To the extent permitted by law, MCW Environmental expressly disclaims and excludes liability for any loss, damage, cost or expenses suffered by any third party relating to or resulting from the use of, or reliance on, any information contained in this IEA Report. MCW Environmental does not admit that any action, liability or claim may exist or be available to any third party.

Except as specifically stated in this section, MCW Environmental does not authorise the use of this IEA Report by any third party.

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 IEA Report. Any cost estimates that have been provided may therefore vary from actual costs at the time of expenditure.



Appendix A

Compliance Tables – Development Consent; Environmental Protection Licence Consolidated Coal Lease and Mining Lease Commitments

Conditions of Approval DA 73-11-98

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
Development Consent DA-73-11-98 MOD6	1	General There is an obligation on the Applicant to prevent and minimise harm to the environment throughout the life of the project. This requires that all practicable measures are to be taken to prevent and minimise harm that may result from the construction, operation and, where relevant, decommissioning of the development.	Newstan has developed an Environmental Management Strategy and a number of Environmental Management Plans outlining the systems, processes and measures in place to prevent and /or minimise harm to the environment from Newstan operations. Other than where issues have been identified, in general the site appeared to be implementing its management system. An assessment of the implementation of the various management plans was conducted and is presented under the relevant Conditions and in the main section of this report. In 2013 Newstan constructed a Clean Water Plant (CWP) which it commissioned in early 2014. The CWP uses coagulation, flocculation, sedimentation and filtration to reduce turbidity and concentration of TSS prior to discharge to LT Creek via LDP001. Water that was previously discharged directly from the Fassifern underground Storage is now directed to and treated by the CWP as is surface runoff on-site. Newstan submitted the CWP project for the Engineers Australia Excellence Awards and the Australian Water Association Industry Awards in 2014 for leading practice incorporating extremely efficient design, full automation and low maintenance operation. During the audit period Newstan recorded a number of non-compliances and reportable incidents. Newstan was issued with two Penalty Infringement Notices (PINs) by the EPA for exceedances of TSS concentration limits at Point 1 and Point 2 on the 20.12.13. Newstan requested that the EPA review the PINS by letter dated 13.01.14 and they were subsequently revoked by the EPA. At the time of the audit, Newstan and the EPA were in arbitration over licence conditions. Incidents are discussed further in the main section of this report. While there was general compliance with the condition, on the basis of the reportable incidents occurring and the PINs issued by the EPA during the audit period, Newstan are considered non-compliant with the condition.	Non-compliant Refer to recommendations made throughout the report
DA-73-11-98 MOD6	1.1	Terms of Approval The applicant shall carry out the development generally in accordance with the: a) DA 73-11-98; b) EIS titled "Newstan Colliery Life Extension Project", dated November 1998; c) SEE titled "Newstan Colliery Modifications to Development Consent", dated April 2007; d) the modification application DA 73-11-98 - MOD 2 and accompanying Environmental Assessment entitled Washing of Mandalong Coal at Newstan Section 96(1A) Application Statement of Environmental Effects, dated October 2009; and e) the modification application DA 73-11-98 - MOD 3 and accompanying Environmental Assessment entitled Washing of Awaba Coal at Newstan Section 75W Application Statement of Environmental Effects, dated September 2010; f) the modification application DA 73-11-98 – MOD 4 and accompanying Environmental Assessment entitled Centennial Coal Newstan Colliery Main West Mining Project Section 75W Modification Environmental Assessment, dated June 2011, and the Response to Submissions document entitled Centennial Coal Newstan Colliery Main West Mining Project Response to Submissions, dated December 2011; and g) the modification application DA 73-11-98 MOD 5 and accompanying Environmental Assessment entitled Newstan Colliery Modification 5 Environmental Assessment, dated September 2012; (h) the modification application DA 73-11-98 MOD 6 and accompanying Environmental Assessment entitled <i>Newstan Colliery Modification of Development Consent Boundary Section 75W Modification to Development Consent DA 73-11-98</i> , dated November 2013; and (i) the conditions of this consent.	In general Newstan demonstrated a good understanding of the Environmental Assessment (EA) and the planning approval process. It was reported that where it was foreseen that the project was planned to significantly deviate from what was presented in the EA that a modification would be sought from the DP&E. Historical evidence of this was the six modifications which had been sought and approved by the DP&E in the past. The commitments made in the EA were incorporated into the Environmental Management Strategy and Management Plans. Where modifications to the DA were approved that had significant changes, the management plans were revised to reflect the new commitments e.g. for MOD 4. An assessment of the implementation of the Strategy and various management plans is presented in the relevant sections of this compliance table and the main section of this report. Other than where issues have been identified, in general the site appeared to be compliant with most of the Conditions of Approval. It is noted that this audit did not assess the site against all of the detailed requirements in each of the documents listed and focussed on the conditions of consent as detailed in this table.	Compliant
Development Consent DA-73-11-98 MOD6	1.2	Period of Approval / Project Commencement (i) The approval for mining is for a period of 21 years from the date of granting of a mining lease pursuant to this consent. If, at any time, the Director-General is aware of environmental impacts from the proposal that pose serious environmental concerns due to the failure of existing environmental management measures to ameliorate the impacts, the Director-General may order the Applicant to cease the activities causing those impacts until those concerns have been addressed to the satisfaction of the Director-General. (ii) At least one month prior to the commencement of: construction of each of the surface facilities; and secondary workings within the LEA, or within such period as agreed by the Director-General, the Applicant shall submit for the approval of the Director-General a compliance report detailing compliance	(i) Mining Lease 1452 was granted on the 9.07.1999 and mining is approved until 2020. It was reported that there have been no orders from the Director General to cease activities during the audit period. (ii) Completed and assessed as compliant in previous independent audits by Hansen Bailey in 2006 and 2009. (iii) Completed and assessed in previous independent audit by URS in 2012. Newstan Colliery has been in Care and Maintenance since August 2014.	Compliant

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		with all the relevant conditions that apply prior to the commencement: of construction of each of the surface facilities; and secondary workings within the LEA. (iii) Date of commencement of construction of each of the surface facilities and date of commencement of first and secondary workings in the LEA is to be notified in writing to the Director-General and LMCC, at least two weeks prior to commencement of the surface construction works, and underground mining in the LEA respectively.		
Development Consent DA-73-11-98 MOD6	1.3	Dispute Resolution In the event that the Applicant and the LMCC or a Government agency, other than the Department, cannot agree on the specification or requirements applicable under this consent, the matter shall be referred by either party to the Director-General or if not resolved, to the Minister, whose determination of the disagreement shall be final and binding on the parties.	It was reported that this Condition was not triggered during the audit period.	Not Applicable
Development Consent DA-73-11-98 MOD6	1.4	Security Deposits and Bonds Security deposits and bonds will be paid as required by DRE under mining lease approval conditions.	A Security Certificate for \$10,700,000 (ANZ Bank LC No. 070108) was provided to the Director General of the Department of Primary Industries – Minerals on the 11.01.08. The security was recalculated and submitted to the DRE on the 11.11.13 and again on the 28.11.14. It was reported that Newstan and the DRE are still in discussion's regarding the recalculation of the security.	Compliant
Development Consent DA-73-11-98 MOD6	2.1	Deleted		
Development Consent DA-73-11-98 MOD6	2.2	Limits on Production or Hours of Operation The operation of bulldozers on the northern and southern reject emplacement areas shall occur only during daylight hours.	It was reported that operations at the northern and southern reject emplacement areas only work on day shifts. The KCE Pty Ltd Contractors Log on was viewed for June 2014. All contractors were observed to be signed out by 6pm.	Compliant
Development Consent DA-73-11-98 MOD6	3.1	Appointment of Environmental Officer (i) The Applicant shall employ a suitably qualified Environmental Officer throughout the life of the mine, whose qualifications are acceptable to the Director-General and who shall report to the Mine Manager. The Officer will: (a) be responsible for the preparation of the environmental management plans (refer condition 3.2); (b) be responsible for considering and advising on matters specified in the conditions of this consent and compliance with such matters; (c) be responsible responding to complaints in accordance with condition 10.2(a); (d) facilitate an induction and training program for all persons involved with construction activities, mining and remedial activities; and (e) have the authority and independence to require reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts and failing the effectiveness of such steps, to stop work immediately if an adverse impact on the environment is likely to occur. (ii) The Applicant shall notify the Director-General, DRE, EPA, NOW, LMCC and the CCC (refer condition 8.8) of the name and contact details of the Environmental Officer upon appointment and any changes to that appointment.	(i) Veronica Howat has been the Environmental Coordinator for Newstan Colliery since February 2013. The Environmental Coordinator reported that she was responsible for preparing / reviewing the environmental management plans, induction materials as well as for advising on CoC compliance and responding to environmental complaints. The position description for the Environment and Community Coordinator was noted to reflect the duties listed under CoC 3.1(i). (ii) Letters to CCC, DP&E, DRE, EPA and LMCC dated 13.02.13 notifying them of Veronica's appointment were sighted by auditors.	Compliant
Development Consent DA-73-11-98 MOD6	3.2	Environmental Management Strategies and Plans (a) The Applicant shall prepare an Environmental Management Strategy as a continuation of the existing Newstan Colliery Environmental Management System for the DA area including within the LEA and all proposed surface facilities. The Environmental Management Strategy shall be prepared in consultation with the relevant authorities and the Community Consultative Committee and to the satisfaction of the Director-General, prior to commencement of construction of surface facilities or secondary workings, whichever is the sooner. (b) The Environmental Management Strategy shall include: (i) statutory and other obligations which the Applicant is required to fulfil during construction and mining, including all approvals and consultations and agreements required from authorities and other stakeholders, and key legislation and policies; (ii) definition of the role, responsibility, authority, accountability and reporting of personnel relevant to environmental management, including the Environmental Officer;	(a) The Environmental Management Strategy was originally produced by Powercoal and approved in 2000 prior to commencement of construction. This was assessed as compliant in previous IEA's. The Strategy was revised in July 2014 and a Draft provided to DP&E, DRE, NOW, LMCC and the CCC for consultation on the 8.07.2014 (sighted cover letters to agencies). Minor comments were received from DRE by email dated 9.07.14 and from NOW by letter dated 24.07.14. The Strategy was further revised to incorporate these comments and the Final Environmental Management Strategy dated August 2014, provided to DP&E for approval by letter dated 25.08.14. At the time of reporting, DP&E had yet to approve the revised Strategy. (b) A review of the 2014 Strategy indicates the following: (i) statutory obligations are included in Section 1.6 (ii) roles and responsibilities are included in Section 7.1 (iii) objectives and performance outcomes are included in Table 1. (iv) ecological and community objectives for the water catchment a restoration strategy are addressed in Section 6.1 (v) cumulative environmental impacts and procedures are addressed in Section 6.2 (vi) objectives and strategies to protect existing economic productivity is addressed in Section 6.3 (vii) steps to ensure compliance with approvals, plans and procedures are included in Section 6.4 (viii) process for conflict resolution is included in Section 5.4.2.	(a) & (b) Compliant Recommendation: Follow up with DP&E regarding the status of the approval of the Strategy. Once approval is received ensure copies are provided to the relevant agencies within 14 days. (c) Not triggered

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		<p>(iii) overall environmental management objectives and performance outcomes, during construction, mining and decommissioning of the mine, for each of the key environmental elements for which management plans are required under this consent;</p> <p>(iv) overall ecological and community objectives for the water catchment, and a strategy for the restoration and management of the areas of the catchment affected by mining operations, including elements such as wetlands and other habitat areas, creek lines and drainage channels, within the context of those objectives;</p> <p>(v) identification of cumulative environmental impacts and procedures for dealing with these at each stage of the development;</p> <p>(vi) overall objectives and strategies to protect existing economic productivity within the area affected by mining, including agricultural productivity and other businesses;</p> <p>(vii) steps to be taken to ensure that all approvals, plans, and procedures are being complied with;</p> <p>(viii) processes for conflict resolution in relation to the environmental management of the project; and</p> <p>(ix) documentation of the results of consultations undertaken in the development of the Environmental Management Strategy.</p> <p>(c) The Applicant shall make copies of the Environmental Management Strategy available to LMCC, EPA, DWE, DRE, MSB and the Community Consultative Committee within fourteen days of approval by the Director-General.</p>	<p>(ix) the document details table on the cover page includes the dates circulated to the relevant agencies. Based on the review it is considered the revised Strategy addresses the requirements of Condition 3.2b). Refer also to the main report for further discussion of the adequacy of the Strategy.</p> <p>(c) As the revised Strategy was yet to be approved by the DP&E, it had not been provided to the relevant agencies or put on Newstan's website. The previously approved 2000 Strategy was available on Newstan's website.</p>	
Development Consent DA-73-11-98 MOD6	3.2	<p>(d) The Applicant shall also prepare the following environmental management plans:</p> <ul style="list-style-type: none"> - Archaeology and cultural management plan (refer condition 3.3) - Flora and fauna management plan (refer condition 3.4) - Erosion and sediment control plan (refer condition 3.5(a)) - Soil stripping management plan (refer condition 3.5(c)) - Landscape management plan (refer condition 3.7) - Bushfire management plan (refer condition 3.8) - Land management plan (refer condition 3.9(a)) - Wetland management plan (refer condition 3.9 (c)) - Site water management plan (refer condition 4.1) - Dust management plan (refer condition 6.1) - Noise management plan (refer condition 6.4(d)) <p>(e) The management plans are to be revised/updated at least every 5 years or as otherwise directed by the Director-General in consultation with the relevant government agencies. They will reflect changing environmental requirements or changes in technology/operational practices. Changes shall be made and approved in the same manner as the initial environmental management plan. The plans shall also be made publicly available at LMCC within two weeks of approval of the relevant government authority.</p> <p>(f) If the applicant is unable to prepare the relevant environmental strategies and plans within the period required by these conditions of consent, prior to commencing relevant works within the area of LW15A, the applicant shall prepare specific management strategies and plans for the area of LW15A prior to commencement of those works. The preparation, content and approval of the plans for the area of LW15A shall not otherwise be inconsistent with the requirements for the management strategies and plans set out in this consent.</p>	<p>(d) The listed environmental management plans have been prepared. Refer also to CoC relating to individual plans and main report for discussion of the adequacy of the plans.</p> <p>(e) The following plans had not been revised and approved within the 5 year timeframe:</p> <ul style="list-style-type: none"> - Environmental Management Strategy (2010) (revised and submitted in 2014, awaiting DPE approval) - Erosion and Sediment Control Plan (2006) - Soil Stripping Management Plan (2010) - Bushfire Management Plan (2009) - Land Management Plan (2010) - Water Management Plan (2006) (revised in 2009 and called the Revised Water Management Plan – RWMP however this has not been approved by the DP&E). <p>On the basis of the above plans not been revised /approved in the last 5 years, this condition has been assessed as non-compliant.</p> <p>(f) Assessed in previous IEAs. Not applicable during this audit period.</p>	<p>(d) Compliant</p> <p>(e) Non-compliant</p> <p>Recommendation: Review, update and seek approval of the following environmental management plans:</p> <ul style="list-style-type: none"> - Environmental Management Strategy - Erosion and Sediment Control Plan (2006) - Soil Stripping Management Plan (2010) - Bushfire Management Plan (2009) - Land Management Plan (2010) - Water Management Plan <p>Refer also to discussion of adequacy of individual plans in main report.</p> <p>(f) Not Applicable</p>
Development Consent DA-73-11-98 MOD6	3.3	<p>Heritage Assessment and Management</p> <p>(A) The Applicant shall prior to construction of surface facilities or secondary workings within identified areas of archaeological sensitivity within the LEA:</p> <p>(i) Prepare an archaeology and cultural management plan which shall include, but not be limited to:</p> <p>(a) identification of any future salvage, excavation, monitoring, and protection of any heritage and archaeological items, within the area of the surface facilities, particularly the waste emplacement and coal stockpile areas, Awaba Colliery, and the area within the LEA prior to and during development;</p> <p>(b) measures to undertake test excavations along Lords Creek to verify the archaeological potential of those areas identified as having low archaeological sensitivity at least one year prior to finalisation of the route of</p>	<p>(A) Centennial Coal prepared an Aboriginal Cultural Heritage Management Plan (ACHMP) for its Northern Holdings which includes Newstan, Awaba, Myuna, Mannering and Mandalong mines. This Plan was approved by the DP&E by letter dated 26.11.12. In its letter the DP&E stated that the plan addresses the specific requirements of the development consent relating to Aboriginal heritage management.</p> <p>The Plan was developed in consultation with the various Aboriginal parties who had registered an interest to participate in the consultation processes for projects across Centennial's northern operations as well as OEH, LMCC and the CCC. A summary of the consultation process is presented in the ACHMP Aboriginal Consultation Log dated November 2012.</p> <p>An assessment of the adequacy of the plan is included in the main report.</p> <p>Newstan has also prepared an Archaeology and Cultural Management Plan for non-Aboriginal heritage which was last approved in 2006. It was reported that Newstan is in the process of revising this Plan for DP&E approval.</p>	<p>A (i) (b-f) Compliant</p> <p>A (i) (a) Non-compliant (non-Aboriginal)</p> <p>B-D Compliant</p> <p>Recommendation: Update the 2006 Archaeology and Cultural Management Plan to address the requirements of this Condition for non-Aboriginal heritage and cultural management.</p>

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		<p>channelisation or other proposed works along Lords Creek;</p> <p>c) details of proposed investigations of rock shelters and grinding groove sites identified as having potential to contain archaeological deposit to be undertaken prior to mining being undertaken in the vicinity of the identified sites. The investigation will include test excavations undertaken in accordance with a permit issued under section 87 of the National Parks and Wildlife Act 1974, under a research design which is acceptable to the Aboriginal community and OEH;</p> <p>(d) measures to protect Aboriginal sites from subsidence and mine working impacts, in consultation with OEH, the Aboriginal community and local residents to ensure integration of measures to protect Aboriginal sites;</p> <p>(e) identification and documentation of Aboriginal cultural heritage issues;</p> <p>(f) details of a monitoring program to document the effects of subsidence and mining works on Aboriginal sites and areas of archaeological sensitivity. The plan shall be prepared in consultation with OEH, the Local Aboriginal Land Council, LMCC, and to the satisfaction of the Director-General, and shall be considered by the Applicant when completing the final underground mine layout.</p> <p>(B) The Applicant shall:</p> <p>(i) submit to and have approved by the Director-General of OEH, a Consent to Destroy application under section 90 of the National Parks and Wildlife Act 1974 for Aboriginal archaeological sites that have been identified to be damaged or destroyed as a result of the development prior to this consent and/or by the archaeology and cultural management plan, prior to any disturbance of the identified sites by mining activity; and</p> <p>(ii) not undertake surface development works within the area of high archaeological sensitivity identified as the alluvial terrace along Lords Creek (within proposed Longwall 42).</p>	<p>(B) The previous IEA reported that Umwelt conducted a survey in 1998 and identified sites of potential significance, however these were not registered at the time. Newstan conducted a further survey with the Local Aboriginal Land Council and LMCC in and specific sites were identified and registered. No section 90 permits have been sought for sites that were registered. It was reported that no surface works have been carried out or are planned for the Lords Creek area.</p>	
Development Consent DA-73-11-98 MOD6	3.3	<p>(C) If, during the course of construction of any surface facilities, or mining in the LEA, the Applicant becomes aware of any heritage or archaeological material not previously identified, all work likely to affect the material shall cease immediately and the relevant authorities consulted about an appropriate course of action prior to recommencement of work. The relevant authorities may include OEH, the NSW Heritage Office, and the Local Aboriginal Land Council. Any necessary permits or consents shall be obtained and complied with prior to recommencement of work.</p> <p>General Terms of Approval OEH</p> <p>(D) The Applicant shall invite the Koopahtoo Local Aboriginal Land Council to collect the identified isolated artefacts within the area of the proposed surface facilities prior to construction within the relevant area</p>	<p>(C) No sites of significance were reportedly identified during the audit period. A review of the 2015 Induction presentation indicated the requirement to stop activities upon becoming aware of any previously unidentified heritage or archaeological material is communicated.</p> <p>(D) The ACHMP (Attachment 1) states that Koopahtoo LALC is no longer an entity; however, the relevant Aboriginal community will be invited as outlined in Section 6 of the Plan.</p> <p>It was reported that there have been no works during the audit period that have necessitated the need for the relevant Local Aboriginal Land Council to be invited to collect artefacts.</p>	
Development Consent DA-73-11-98 MOD6	3.4	<p>Flora and Fauna Assessment and Management</p> <p>(a) The Applicant shall prior to commencement of any construction works for surface facilities in the relevant area or secondary workings within the LEA, prepare and implement a Flora and Fauna Management Plan for the management of flora and fauna issues for the areas of the proposed surface facilities and LEA. The Plan shall be prepared in consultation with OEH and LMCC, and to the satisfaction of the Director-General, and shall include but not be limited to:</p> <p>(i) a detailed assessment of the current characteristics and ecological values of existing ecosystems likely to be affected by the development;</p> <p>(ii) strategies to minimise the net loss of ecologically significant vegetation communities within DA area as a result of the development, including the provision of compensatory areas of equivalent ecological and habitat value where necessary;</p> <p>(iii) strategies to provide increased security for existing habitats and communities (including the strengthening of riparian communities, the management of <i>Tetratheca juncea</i> plants in the vicinity of the proposed surface facilities, particularly in and around the northern and southern reject emplacement areas), and LEA, and habitats of other threatened species such as the Squirrel Glider and Threatened Bat Species identified in the species impact statement;</p> <p>(iv) strategies to manage the impact of surface water management, erosion and sediment control measures, and flooding mitigation measures on flora and fauna, including the impact of heavy machinery;</p> <p>(v) details of monitoring the mine's impacts on native vegetation and threatened fauna and flora, and outline contingency measures should</p>	<p>(a) The Flora and Fauna Management Plan was revised and submitted to the OEH and LMCC for consultation by letter dated 21.05.14. A letter was received from the OEH stating that it does not review management plans (11.06.14). No comments were received by the LMCC. The DP&E reviewed the plan and requested minor amendments (by email dated 22.07.14). The Plan was amended accordingly and approved by the DP&E by letter dated 25.08.14.</p> <p>Table 1 of the Plan lists where in the document these requirements have been addressed. A review of the adequacy of the management plans is provided in the main section of the report.</p> <p><u>Implementation</u></p> <p>No major clearing had occurred during the audit period. Some clearing was required for the installation of two permanent monitoring stations upstream and downstream of the mine water discharge that flows into an unnamed creek ultimately flowing into Stony Creek. Hunter Eco was engaged to assess the ecological impacts of the disturbance and conduct a 7-part test. Newstan's Permit to Clear or Disturb Land form had been completed and signed off by the Environment and Community Manager (dated 12.02.13).</p> <p>The revised Plan states that nest boxes will be erected to replace hollows which cannot be salvaged at a ratio of one box per hollow bearing tree. No nest boxes were installed during the audit period as no hollow bearing trees were reportedly removed.</p> <p>Weed management was undertaken by Hunter Land Management (HLM) for large areas and SNK for minor areas. A copy of HLM's weed spraying report for the 4-6th March 2015 was sighted.</p> <p>The 2006 Flora and Fauna Management included a requirement for</p> <ul style="list-style-type: none"> - Monitoring of the condition and composition of vegetation communities in the subsidence area. - Monitoring of forest and woodland areas in the study area to ensure that habitat for native flora and fauna is maintained. - Undertake vegetation monitoring on an annual basis and report in the AEMR. - Monitoring of rehabilitation areas on an annual basis to assess the development and success of the rehabilitation and implement any necessary remedial works. 	<p>(a) Compliant (preparation)</p> <p>(a) Non-compliant (implementation)</p>

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		<p>impacts be identified as occurring (refer also condition 8.5);</p> <p>(vi) measures to monitor the impacts on threatened species populations shall address:</p> <ol style="list-style-type: none"> 1. methods of clearing near existing vegetation and measures to protect existing vegetation from the edge affects. Consideration of buffers is essential, especially near drainage lines. 2. measures to reduce sediment into drainage lines. 3. subsidence impacts on <i>Tetratheca juncea</i> through a monitoring program. This program will be co-ordinated with a surveyed and levelled line to determine drops in the terrain, following mine subsidence; 4. development of a program to specifically monitor the success or otherwise of proposed ameliorative measures in relation to the threatened flora and fauna species over five years from the commencement of construction in the relevant area. The monitoring is to be undertaken by experienced Botanist(s)/ Zoologist(s). Annual progress reports and a final report outlining the implementation and success or otherwise of the ameliorative measures shall be included in the AEMR during the monitoring period. <p>(vii) measures to maintain trees with denning hollows for the protection of threatened arboreal fauna species such as the Squirrel Glider and small Bats. In the event that trees and/or nesting value relevant to these species are felled and tree hollows relocated to augment habitat, and/or in the event that individual animals are captured and relocated during construction, this work shall be undertaken by a Zoologist with knowledge and experience in the implementation of such ameliorative techniques for these species;</p> <p>(viii) a large scale plan showing quadrat number locations for <i>Tetratheca juncea</i> together with a table showing sub-population sizes and their relevant co-ordinates. In particular, this information is required where populations will be lost by the Northern and Southern Reject Emplacement Areas;</p> <p>(ix) strategies to maintain and enhance wildlife corridors around and through the site for the movement of fauna particularly for arboreal mammals, small birds, and squirrel gliders.</p> <p>(x) development of a protocol for identifying and managing significant impacts on any threatened flora and fauna species not identified in the EIS, during development through construction or operation of the coal mine.</p>	<p>- Following construction, surveys will be conducted for a period of five years to monitor the effect of the development on threatened fauna identified as occurring in the area.</p> <p>The 2012 IEA assessed this Condition as non-compliant on the basis that the above requirements of the Plan had not been implemented. This Plan was still relevant for part of the audit period (April 2012 to May 2014) prior to the approval of the revised plan.</p> <p>The revised Plan includes a comprehensive monitoring program including annual vegetation and fauna surveys and biennial habitat health assessment. At the time of the audit site inspection, Newstan was awaiting the draft report of the first annual ecological survey. <i>Tetratheca juncea</i> monitoring above longwalls 22-24 (in accordance with the previous version of the management plan) continued during the audit period (sighted reports for surveys conducted in 2012, 2013 and 2014).</p> <p>Whilst it is noted that the commencement of the monitoring program would demonstrate compliance with this requirement going forward, the lack of ecological monitoring (with the exception of <i>Tetratheca juncea</i>) during the audit period in accordance with the 2006 Plan has resulted in this Condition being assessed as non-compliant with regards to implementation.</p>	
Development Consent DA-73-11-98 MOD6	3.4 (cont)	<p>(b) Deleted</p> <p>(c)The Applicant shall not disturb the <i>Tetratheca juncea</i> population within the area identified as common in figure 7 of the species impact statement, which is close to the northern reject emplacement area boundary.</p> <p>(d) The Applicant shall implement the ameliorative measures for <i>Tetratheca juncea</i>, Squirrel Glider, and Threatened Bat Species identified in sections 11.1 and 11.2 of the species impact statement.</p> <p>(e) Any fencing of native vegetation which is to be retained shall not consist of barbed wire fencing.</p>	<p>c) It was reported in the previous IEA that the <i>Tetratheca juncea</i> population identified in figure 7 of the Species Impact Statement is actually outside Newstan's site boundary on land owned by Rhonda Colliery. It was reported that this population had not been disturbed by Newstan activities.</p> <p>d) The majority of the ameliorative measures for <i>Tetratheca juncea</i>, squirrel glider and threatened bat species identified in the Species Impact Statement have been incorporated in the Flora and Fauna Management Plan. Implementation of the Plan is discussed above.</p> <p>(e) Most of the fencing used on site is barbed wire boundary fencing to deter unauthorised access onto the site. It was reported that native vegetation to be retained is generally not fenced. The extent of the use of barbed wire fencing was not able to be determined during the audit site inspection.</p>	<p>(c) Compliant</p> <p>(d) Compliant</p> <p>(e) Indeterminate</p>
Development Consent DA-73-11-98 MOD6	3.5	<p>Prevention of Soil Erosion</p> <p>(a) The Applicant shall prepare Erosion and Sediment Control Plans for the surface facilities, particularly the waste reject emplacement areas, and the LEA in consultation with LMCC and to the satisfaction of DWE and Director-General, and submit these Plans to the EPA as part of applications for a licence under the Protection of the Environment Act. The Plans shall be prepared and implemented prior to the commencement of work in the relevant areas.</p> <p>(b) The Erosion and Sediment Control Plans shall include:</p> <ol style="list-style-type: none"> (i) consideration and management of erosion and sedimentation of surface watercourses/water bodies, including LT Creek and all creeks within the LEA; and (ii) consideration of LMCC's Erosion and Sediment Control Policy and Code of Practice. (iii) a program for reporting on the effectiveness of the sediment and erosion control systems and performance against objectives contained in the approved erosion and sediment control management plans, and EIS. (refer also condition (d) (i) below) 	<p>(a) Newstan had prepared an Erosion and Sediment Control Plan (ESCP) in 2006 prior to the commencement of work in the relevant areas. Consultation and approval of the 2006 plan was assessed in previous IEA. The ESCP was revised in 2012 and a Draft submitted to LMCC for consultation by letter dated 21.12.12. The LMCC conducted a site visit to assist in assessing the Plan and provided comments by letter dated 15.02.13. Newstan was yet to revise the plan to address the LMCC comments and seek approval of the revised plan.</p> <p>On the basis that the 2012 Plan was yet to be approved and the 2006 approved plan no longer reflecting the operations taking place at the time of the audit site inspection, this requirement has been assessed as non-compliant.</p> <p>(b) The LMCC comments on the Draft 2012 ESC stated that the plan generally complies with the requirements of the "Blue Book" however it requested that minimum design criteria for the sediment basins be changed from the 90th percentile to the 95th percentile to reflect the sensitivity of the receiving environment. The LMCC also requested that the plan include more recent figures at a scale showing finer detail (1:2000 – 1:5000 was recommended). As discussed above at the time of the audit site inspection the Plan had not been revised to incorporate the LMCC comments and reflect changes that have occurred on site since 2012. On this basis this requirement has been assessed as non-compliant. Refer also to assessment of adequacy in the main section of this report.</p> <p>(c) The Soil Stripping Management Plan (SSMP) was revised and approved in March 2010 and assessed as generally complying with the requirements of this Condition in the previous IEA. This Plan was due for revision by March 2015 in accordance with 3.2(e) which requires plans to be updated every 5 years The 2014 AEMR reported that 2.0 hectares of soil</p>	<p>(a) Non-compliant</p> <p>(b) Non-compliant</p> <p>(c) Compliant</p> <p>(d) Compliant</p> <p>Recommendations: Revise the ESCP to incorporate LMCC comments and changes that have occurred on site since 2012 and obtain relevant approvals.</p>

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		<p>(c) The Applicant shall also prepare a soil stripping management plan for the northern waste emplacement extension area and southern waste emplacement area to the requirements of DPI which shall include, but not be limited to:</p> <p>(i) details of the management of soil stockpiles, soil stripping techniques and scheduling; and</p> <p>(ii) a program for reporting on the effectiveness of the soil stripping methods and performance against objectives contained in the soil stripping management plan, and EIS.</p> <p>(d) General Terms of Approval EPA</p> <p>(i) Stormwater/sediment Control - Construction Phase</p> <p>The Erosion and Sediment Control Plan (ESCP) in sub clause (a) above must also be prepared to describe the measures that will be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities. The ESCP should be consistent with the requirements for such plans outlined in Managing Urban Stormwater: Soils and Construction (Landcom), or most recent version of these guidelines.</p> <p>(ii) Stormwater/sediment Control- Operation Phase</p> <p>A Stormwater Management Scheme must be developed and implemented to mitigate the impacts of stormwater runoff from the site following the completion of construction activities. The Scheme should be consistent with the Stormwater Management Plan for the catchment and the Water Management Plans in condition 4.1. Where a Stormwater Management Plan has not yet been prepared, the Scheme should be consistent with the guidance contained in Managing Urban Stormwater: Council Handbook (available from the EPA). The Scheme shall be prepared at the same time as the Water Management Plans in condition 4.1.</p>	<p>was cleared in 2012 for the Stage 2 tailings dam and that soil stripping was undertaken in accordance with the SSMP. No soil stripping activities were reportedly undertaken in 2013 and 2014. On the basis that the current plan (although requiring review) is still generally relevant, this requirement has been assessed as compliant.</p> <p>(d) The Draft 2012 ESC describes general erosion and sediment controls and management principals and includes a description of clean water and dirty water management across the site. Refer also to assessment of adequacy in the main section of this report.</p> <p>The Draft 2012 ESC states that it is consistent with the requirements of the “Blue Book” and refers to the “Blue Book” for the design and application of erosion and sediment controls. As stated in (b) above, the LMCC in its review of the 2012 ESC found that the plan generally complies with the requirements of the “Blue Book” however requested that minimum design criteria for the sediment basins be changed from the 90th percentile to the 95th percentile to reflect the sensitivity of the receiving environment.</p> <p>The Draft 2012 ESC also states that prior to any construction activity, temporary sediment and erosion controls shall be installed and that external contractors will be required to provide project specific Erosion and Sediment Control Plans for their work. Newstan reported that temporary controls were installed around areas where the ground was disturbed. Evidence to demonstrate that this was implemented was not provided, however given the works were within a dirty water catchment; no erosion was observed in site visits and based on comments from Newstan, Newstan are considered compliant with the condition.</p> <p>(ii) A separate Stormwater Management Scheme has not been prepared. Management of stormwater runoff from the site during the operational phase of the project is addressed in the Water Management Plan. Refer to the main report for further discussion of water management.</p>	
Development Consent DA-73-11-98 MOD6	3.6	<p>Site Rehabilitation Management</p> <p>The Applicant shall carry out rehabilitation of all mine areas in accordance with the requirements of any Mining Lease.</p>	Refer to assessment of compliance with Mining Lease 1452.	
Development Consent DA-73-11-98 MOD6	3.7	<p>Visual Amenity and Landscaping</p> <p>(a) The Applicant shall, prior to the commencement of construction works in the relevant area, submit for the approval of LMCC a detailed landscape and revegetation management plan for the surface facility sites prepared by a suitably qualified person. The plan shall include, but not be limited to:</p> <p>(i) details of the establishment of vegetation and the construction of mounding or bunding, for the purposes of maintaining satisfactory visual amenity, ecological functioning and habitat provision;</p> <p>(ii) consideration of revegetation works along creek lines;</p> <p>(iii) use of indigenous species;</p> <p>(iv) details of the visual appearance of all buildings, structures, facilities or works (including paint colours and specifications). Buildings and structures shall be designed and constructed so as to blend as far as possible with the surrounding landscape;</p> <p>(v) details, specifications and staged work programs to be undertaken, including a maintenance program of all landscape works, building materials and cladding.</p> <p>The landscaping and revegetation plan must be consistent with the Environmental Management Strategy (condition 3.2).</p> <p>(b) The Applicant shall ensure that an undisturbed barrier of 50 metres be maintained between the eastern boundary of the property at 1 Fassifern Road, Wakefield, and the toe of the proposed NREA.</p>	<p>(a) Assessed as compliant during the previous IEA. No changes were made to the Landscape Management Plan (2011) during this audit period.</p> <p>(b) An undisturbed barrier of at least 50 metres between the NREA and Fassifern Road was observed during the site inspection and by aerial photos. This requirement has been included within the Landscape Management Plan 2011.</p>	Compliant
Development Consent DA-73-11-98 MOD6	3.8	<p>Bushfire and other Fire Controls</p> <p>The Applicant shall:</p> <p>(a) provide adequate fire protection works on the sites of surface works in accordance with the Coal Mine Regulation Act, 1982; and</p> <p>(b) prior to commencement of construction of surface facilities/works prepare a bushfire management plan for all its holdings contained in the DA, particularly the southern waste emplacement area to the satisfaction of the LMCC.</p>	<p>(a) This condition has not been assessed as the auditors are not experts in bushfire and fire management.</p> <p>(b) Assessed as compliant during the previous IEA. No changes were made to the Bushfire Management Plan (2009) during this audit period.</p> <p>As it has been more than 5 years since this plan was last revised it is recommended that it is updated to ensure it reflects the current operations and environment.</p>	<p>(a) Not assessed</p> <p>(b) Compliant</p> <p>Recommendation:</p> <p>Revise the Bushfire Management Plan to ensure it remains up to date.</p>
Development Consent DA-73-11-98 MOD6	3.9	<p>Land Management</p> <p>The Applicant shall:</p> <p>(a) prior to commencement of construction works in the relevant area</p>	(a) Assessed as compliant during the previous IEA. No changes were made to the Land Management Plan (2010) during this audit period. As it is approaching 5 years since this plan was last revised it is recommended that it is updated to ensure it reflects the current operations and environment.	<p>Compliant</p> <p>Recommendation:</p>

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
		<p>prepare a Land Management Plan for the areas of the proposed surface facilities, and its holdings in the LEA, to provide for proper land management in consultation with OEH, DRE, and LMCC, and to the satisfaction of the Director-General . The plan shall include, but not be limited to:</p> <p>(i) pastures and remnant vegetation management;</p> <p>(ii) prevention and rehabilitation of land degradation;</p> <p>(iii) eradication of vermin and noxious weeds as required by the Rural Lands Protection Authority, the Prickly Pear Authority and other relevant authorities;</p> <p>(iv) feral animal control.</p> <p>(b) Minimise the removal of trees and other vegetation from the proposed surface facilities, particularly the waste emplacement areas and proposed new coal stockpile areas, and restrict any clearance to the areas occupied by mine activity, buildings and paved surfaces, and those areas necessary for fire control in accordance with LMCC's requirements.</p> <p>(c) Prepare and implement a Wetland Management Plan for all wetland areas affected by the surface facilities, particularly within the proposed southern reject emplacement area. The Plans shall be prepared in consultation with OEH, DWE, DRE and affected landowners, and to the satisfaction of LMCC, prior to surface construction works in the relevant area. The plan shall include, but not limited to, replacement of habitat and in creek storages for water flows as part of the restoration of the emplacement areas.</p>	<p>(b) Newstan manages the removal of trees and vegetation through a Permit to Clear process. A Form (N155109 Permit to Clear or Disturb Land) is to be completed by the Newstan representative responsible for supervising any vegetation clearing and/or ground disturbance activity. This form is required to be forwarded to the Environment and Community Coordinator for approval prior to commencing works. The Environment and Community Coordinator in approving the works undertakes a site inspection, completes a checklist and can specify any special environmental requirements. An example of a completed Form was sighted dated 12.03.13 for clearing associated with the installation of monitoring equipment at Stony Creek. It was reported that LMCC has not specified any fire control requirements. Newstan reportedly undertakes regular maintenance of fence lines, power lines and easements and fire trails.</p> <p>(c) Newstan revised its Wetland Management Plan (WLMP) in 2012 and provided it to the DRE for comment on the 20.01.12. No comments were reportedly provided and so Newstan submitted the Plan to the LMCC for approval by letter dated 1.03.12. No comment was received and the plan was assumed by Newstan to be approved. The WLMP was provided to the DP&E by letter dated 10.04.12 and to the LMCC requesting it be made publicly available at the council (letter dated 10.04.12). The requirement to consult with DWE (NOW) came into effect with MOD4 issued in March 2012 post revision of the Plan. However the requirement to consult with DECCW (OEH) was required by the earlier version of the Development Consent (MOD3). OEH were not consulted with in the 2012 revision of the WLMP. On the basis that the OEH has generally not provided comment on any of Newstan's management plans, other than those required by the EPL, (based on letters sighted for other plans) this requirement has been assessed as compliant.</p> <p>The adequacy of the WLMP was reviewed in the main section of this audit report and recommendations made for its improvement. Newstan should ensure that the OEH, NOW, DRE are consulted with on the next version of the WLMP as per the most recent modification.</p> <p>Wetlands in the NREA include the Graunch's Dam and By-wash Dam. Wetlands in the SREA include the Causeway Dam, Seepage Dam and the Clean Water Dam.</p>	Revise the Land Management Plan to ensure it remains up to date.
Development Consent DA-73-11-98 MOD6	3.10	<p>Subsidence Management Plan</p> <p>Prior to carrying out any underground mining operations that could cause subsidence, the Applicant shall prepare a Subsidence Management Plan (SMP) to the satisfaction of the Executive Director, Mineral Resources. This plan must be prepared in accordance with:</p> <p>(a) new Approval Process for Management of Coal Mining Subsidence - Policy; and</p> <p>(b) Guidelines for Applications for Subsidence Management Approvals (or the latest versions or replacements of these documents).</p>	The previous IEA reported that Newstan was in the process of preparing SMPs for the next stage of underground mining (LW 1-3). It was reported during this audit that these were withdrawn and no new SMPs were prepared. It was reported that SMPs were not required for the first workings that were undertaken during the audit period as less than 20mm subsidence was predicted.	Not Applicable
Development Consent DA-73-11-98 MOD6	3.11	<p>Subsidence Protection</p> <p>In preparation of the SMP, the Applicant shall pay particular attention to assessing and managing the potential surface impacts on all areas of the proposed underground mining area where:</p> <p>a) cover depths are less than 100 metres (not including any depth of alluvium);</p> <p>b) overlying mine working occur; or</p> <p>c) surface infrastructure such as power line towers an Hawkmount Road occurs.</p>	Not applicable during the audit period.	Not Applicable
Development Consent DA-73-11-98 MOD6	3.12	<p>Subsidence Management in the Main West Mining Area</p> <p>The Applicant shall:</p> <p>(a) not conduct mining operations within 100 metres of points in the seam directly below Tension Tower # 18;</p> <p>(b) ensure that underground mining in the Main West Mining Area does not cause more than 20 mm of vertical subsidence at the surface in any location; and</p> <p>(c) remediate any unpredicted subsidence impacts on the 330 kV power transmission lines and towers in the Main West Mining Area, to the satisfaction of TransGrid.</p>	<p>Not applicable during audit period</p> <p>Addressed in the AEMR 2014 (Section 3.6)</p> <p>a) It was reported that a 100m mining barrier is maintained around Tension Tower #18 on Transmission Line 93.</p> <p>b) The 2014 AEMR reported that:</p> <ul style="list-style-type: none"> - monitoring of towers in the first workings area showed subsidence between -6 to -16mm - monitoring along the bush track showed subsidence between +4 to -20mm - monitoring along part of LW24B (XL21-44) showed subsidence between +5 to -17mm after first workings <p>and that the above results fall within the range of natural ground movement.</p> <p>c) it was reported that there had not been any unpredicted impacts on the power transmission lines and towers in the Main West Mining Area during the audit period.</p>	Compliant
Development Consent DA-73-11-98 MOD6	4.1	<p>Water Management</p> <p>(a) The Applicant shall:</p> <p>prior to the commencement of construction of each of the new surface facilities at Newstan Colliery, and prior to first workings within the LEA, prepare water management plans for the relevant developments, in consultation with DWE, EPA, LMCC, and DRE and to the satisfaction of the Director-General, which shall include, but not be limited to, the following matters:</p> <p>(i) management of the quality and quantity of surface and ground water within the areas covered by the water management plans, which shall include preparation of monitoring programs as provided by CoC 8.2.</p> <p>(ii) management of stormwater and general surface runoff diversion to</p>	<p>The Water Management Plan was prepared and approved by the DP&E on the 28.09.06. The 2006 plan was reviewed during previous IEAs in 2006 and 2009.</p> <p>In 2008 a Pollution Reduction Program (PRP) was added to Newstan's EPL requiring a Revised Water Management Plan (RWMP) (this was later removed by variation dated 13.07.11). The 2012 IEA assessed the consultation requirements of this plan however at the time, the Plan (Revision 9) was yet to be approved by DP&E.</p> <p>The RWMP has not been updated since 2009 and has not been approved by the DP&E. On this basis, this condition has been assessed as non-compliant.</p> <p>The 2012 IEA reviewed the RWMP and found it to generally include the matters outlined in this CoC with the following exceptions:</p> <p>(xi) Plan states that monitoring in the vicinity of natural watercourses and longwall mining areas is undertaken on a continual basis. The Plan should be more specific about what type of monitoring is undertaken and at what frequency.</p>	<p>(a) Non-compliant</p> <p>Recommendation:</p> <p>Revise the RWMP to reflect the changes that have occurred on site since this time (2009) and obtain relevant approvals of the document.</p> <p>Continuous Improvement Opportunities</p> <p>Opportunities for improvement to the RWMP identified in the 2012 IEA which are still relevant included:</p> <ul style="list-style-type: none"> -include a program for specifically assessing and

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
		<p>ensure separate effective management of clean and dirty water; (refer also condition 3.5 (d) (ii)).</p> <p>(iii) measures to prevent the quality of any surface waters being degraded below the relevant water quality prior to construction, particularly in LT Creek and all creeks within the LEA due to the operation of the mine workings;</p> <p>(iv) investigation into opportunities to reduce the mine water discharge into LT Creek in consultation with the EPA and include the results of such investigations in the Annual Environmental Management Report;</p> <p>(v) identification of any possible adverse effects on water supply sources of surrounding land holders, as a result of the underground mining operations in the LEA and surface mine works, and implementation of mitigation measures as necessary;</p> <p>(vi) identification of changes in flow of surface waters including all creeks within the LEA, particularly in Lord's Creek, due to subsidence, and LT Creek particularly due to the southern and northern waste emplacement areas and coal stockpiling areas;</p> <p>(vii) identification of any stream rehabilitation works required to ameliorate subsidence effects on stream flows within Lords Creek;</p> <p>(viii) contingency plans for managing adverse impacts of the development on surface and groundwater quality, including the matter in condition 4.1(d)(iv);</p> <p>(ix) identification of the fresh quality groundwater resources within the project area, including the development of appropriate protection strategies;</p> <p>(x) projection of potential groundwater changes during mining (short term) and post-mining (long term) with particular attention given to the affect of changes to groundwater quality and mobilisation of salts;</p> <p>(xi) a monitoring and remediation strategy for all streams which may be adversely affected by subsidence including bed fracturing and/or degradation of the stream channel. Where the monitoring indicates any adverse impacts due to mining, the company shall implement the remediation strategy to the satisfaction of DWE.</p> <p>(xii) consideration of the State Wetlands Management Policy for all significant downstream wetlands that may be effected by mining activity within the LEA or the relevant area.</p> <p>(xiii) a program for reporting on the effectiveness of the water management systems and performance against objectives contained in the approved site water management plans, and EIS;</p>	<p>(xiii) The Plan refers to Centennial's EMS as a means for reporting and recording against environmental performance. The Plan should include a program for specifically assessing and reporting against the effectiveness of the water management system and performance against RWMP objectives and EIS.</p> <p>Since the above review, the following changes have occurred on site relating to water management:</p> <ul style="list-style-type: none"> - construction and operation of the CWP - upgrade of the FPCD - increase to the daily discharge limit from LDP 1 - Stony Creek pipeline now a licensed discharge point (Point 7) <p>The RWMP does not reflect the above changes as well as the recommendations from the previous IEA. Further details of the adequacy of the plan are provided in the main section of this report.</p>	<p>reporting against the effectiveness of the water management system and performance against RWMP objectives.</p> <p>- With regards to monitoring in the vicinity of natural watercourses and longwall mining areas, the RWMP should be updated to include monitoring of water courses at the time of recommencement of mining; or be specific about what type of monitoring is undertaken and at what frequency will be undertaken when mining recommences.</p>
	4.1 Cont	<p>b) implement remediation measures, to the satisfaction of DWE, where the development is responsible for the loss of groundwater quality or quantity below its current beneficial use;</p> <p>c) obtain a license with DWE under part 5 of the Water Act (1912) prior to construction of all new excavations, test bores and production bores (including dewatering bores) that intersect the groundwater.</p>	<p>b) It was reported that there had been no loss of groundwater quality or quantity during the audit period. The auditors have not conducted any further verification of this. Results of groundwater monitoring is provided in the AEMR which is submitted to NOW. It was reported that there had been no requests from NOW relating to groundwater remediation measures.</p> <p>c) The previous IEA reported that Newstan proposed (letter dated 09.07.10) to relinquish the 25 monitoring bore licences held (listed in Table 1 of the letter) and replace them with licenses with alternative conditions for 16 of the bores (listed in Table 2 of the letter). Newstan also applied for monitoring bore licences for two existing bores (listed in Table 3 of the letter). In addition, Newstan proposed to relinquish the extraction licence applying to the By-wash Dam and extraction from LT Creek as several conditions of the licence were considered to no longer be valid and requested that a new licence be issued. Newstan also applied for an additional 3 extraction licences. It was reported in the 2012 IEA that, despite numerous repeated requests, no response was provided by NOW. Further to the above, during this audit period, the licence application was re-submitted on the 16.10.13. A meeting was held with NOW on the 15.02.15 at which Newstan was requested to provide additional information. On the basis that the resolution of the licence relinquishment and additional licence application is unknown this condition has been assessed as Indeterminate.</p>	<p>(b) Not triggered</p> <p>(c) Indeterminate</p> <p>Recommendation: Continue to work with NOW to resolve groundwater extraction licence relinquishment and additional licence application.</p>
	4.1 (cont)	<p>General Terms of Approval - DWE Pursuant to Part 2 of the Water Act, 1912:</p> <p>(i) the licensed works shall:</p> <p>(a) be constructed in accordance with plans and specifications approved by DWE;</p> <p>(b) be constructed and maintained in a safe and proper manner;</p> <p>(c) not impede or capture floodwater;</p> <p>(d) not cause erosion or sedimentation of adjacent and downstream watercourses shall;</p> <p>(ii) Deleted</p> <p>(iii) an appropriate vegetative buffer zone shall be installed between the licensed works and any adjacent mining activities;</p> <p>(iv) groundwater and surface water quality monitoring shall be conducted, to the satisfaction of DWE, in the vicinity of the licensed works. The monitoring</p>	<p>(i) It was reported that there have been no new test bores, production bores or excavations that intersect groundwater requiring licencing under the Water Act during the audit period.</p> <p>(a) completed in previous IEAs for existing bores. Not triggered during audit period.</p> <p>(b) as above</p> <p>(c) as above</p> <p>(d) as above</p> <p>(iii) completed in previous IEAs for existing bores. Not triggered during audit period.</p> <p>(iv) Groundwater and surface water quality monitoring was being undertaken in accordance with the RWMP. A summary of the results is presented in the AEMRs sighted and in monthly monitoring summary reports available on Centennial – Newstan's website (surface water only). Monitoring results to date have not identified a degradation of water quality as a result of the works.</p> <p>It was reported that should degradation in water quality be identified, a contingency plan would be developed to the satisfaction of NOW to remediate any such degradation. This requirement should be documented within the RWMP.</p>	<p>(i) Not triggered</p> <p>(iii) Not triggered</p> <p>(iv) Compliant</p>

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
		program is to identify any degradation in water quality as a result of the works (also refer to condition 8.2(ii)). A contingency plan shall be developed, to the satisfaction of DWE, to remediate any such degradation (also refer to condition 4.1(a) (ix)). A copy of the finding shall be submitted to LMCC.		
	4.1 Cont.	General Terms of Approval EPA (i) Pollution of Waters The licensee must design construct and operate all plant and equipment and any other facilities on the premises so as to minimise the pollution of waters. (ii) Discharge Concentration Limits The Applicant shall only discharge water from the development in accordance with the provisions of a current Environmental Protection Licence. (iii) Wastewater Utilisation Areas Spray from the application of wastewater must not drift beyond the boundary of the waste water utilisation area to which it is applied. (iv) Maintaining Waste Water Utilisation Areas Waste water utilisation areas must effectively utilise the waste water applied to those areas. This includes the use for pasture or crop production, as well as ensuring the soil is able to absorb the nutrients, salts, hydraulic load and organic materials in the solids or liquids. Monitoring of land and receiving waters to determine the impact of waste water application may be required by the EPA.	(i) During the audit period Newstan implemented a number of improvements to its water management system, including: - construction and commissioning of the CWP and upgrading of the pipeline and pumping system (2014). The CWP uses coagulation, flocculation, sedimentation and filtration to reduce turbidity and concentration of TSS prior to discharge from LDP001. The CWP allows for greater control of the water level within the Fassifern Seam and better management of surface water across the site using the CWP CITECT system. The CITECT system incorporates alarms if dam levels reach critical levels and allows for remote access to start / stop pumps etc. - the capacity of the FPCD was expanded from 18 ML to 50 ML in October 2012. - completion of the SREA clean water diversion drains in September 2013. The above measures have minimised the likelihood of pollution of waters however a number of incidents have occurred within the audit period with the potential to pollute waters. These were reported to the EPA and are considered in the Non Compliance discussed for ii) below. On the basis of the extensive water treatment and management works conducted since the last audit as described above; and the reduced incidents reported since this time, Newstan are considered generally compliant with this condition. (ii) Newstan reported exceedances of the discharge concentration limits specified by its EPL during the audit period. Refer to assessment of compliance with EPL. (iii) Not applicable. The wastewater utilisation area was not constructed. (iv) Not applicable. The wastewater utilisation area was not constructed.	(i) Compliant (ii) Non-compliant Refer to recommendations in main section of report and EPL compliance assessment table. (iii) & (iv) Not applicable
Development Consent DA-73-11-98 MOD6	4.2	Assessment of LT Creek and Water Re-use Options The Applicant shall undertake an assessment of water quality and stream health in LT Creek and mine water re-use options to the satisfaction of the Director-General. This assessment must: (a) be prepared in consultation with the CCC, EPA, NOW and LMCC and be submitted to the Director-General by the end of March 2013 for approval; (b) review the history of operations at Newstan Colliery and describe any historical impacts from discharges from the Colliery on water quality and stream health in LT Creek; (c) identify the source(s) of exceedances of ANZECC water quality criteria for waters discharged from the site; (d) establish appropriate water quality criteria for waters discharged from the site; (e) identify any reasonable and feasible options for the improvement of water management at Newstan Colliery including water treatment, re-use or transfer; and (f) provide a proposed timetable for the implementation of reasonable and feasible measures identified in (d) above.	Newstan commissioned GHD to undertake an assessment of water quality and stream health to meet the requirements of this Condition. The Draft report (LT Creek Water Quality and Newstan Reuse Assessment March 2013) was submitted for consultation to the CCC, EPA, NOW and LMCC by letters dated 20.03.13. It was reported that no comments were received from any of the agencies and the report was submitted to the DP&E for approval on the 28.03.13. The DP&E reportedly requested further consultation with the agencies and so letters were sent to the EPA, LMCC and NOW asking if further information was required. It was reported that the Environment and Community Coordinator had a meeting with the LMCC to discuss the report in December 2013 however no further action has been taken since this time. It was reported that Newstan intends to resubmit the report to the DP&E for approval. On the basis of this report not being resubmitted to the DP&E, nor approved by the DP&E this Condition has been assessed as non-compliant.	Non-compliant Recommendation: Re-submit the LT Creek Water Quality and Newstan Reuse Assessment Report (March 2013) to the DP&E for approval. If required, work with DP&E to achieve approval.
Development Consent DA-73-11-98 MOD6	4.3	Groundwater Monitoring Program - Main West Mining Area The Applicant shall prepare a Groundwater Monitoring Program for the Main West Mining Area. This program must: (a) be prepared in consultation with NOW, and be submitted to the Director-General by the end of August 2012 for approval; and (b) include: - baseline data on groundwater levels (including alluvial and weathered rock aquifers), yield and quality in the region, and any privately owned groundwater bores that may be affected by mining operations; - groundwater impact assessment criteria based on analysis of baseline data, including trigger levels for investigating any potentially adverse groundwater impacts; and - a program to monitor and/or validate the impacts of mining in the Main West Mining Area on alluvial and coal seam aquifers, and any groundwater bores.	Newstan commissioned GHD to prepare a Groundwater Monitoring Program. The Main West Groundwater Monitoring Program (August 2012) was submitted to NOW by letter dated 8.08.12. It was reported that no comments were received and so the program was submitted to the DP&E for approval in the 24.08.12. It was reported that no response had been received by the DP&E.	Compliant Recommendation: Follow up the status of approval of the Groundwater Monitoring Program with the DP&E, and work with DP&E to address any comment required to approve the document.
Development Consent DA-73-11-98 MOD6	5.1	Waste Rock Emplacement and Management The Applicant shall construct and manage the waste emplacements as set out in the EIS, and to the approval of the DRE.	Approvals for the establishment of emplacement areas under Section 126 of the Coal Mines Regulation Act 1982 (now repealed) and Section 100 of the Coal Mine Health and Safety Act 2002 were sighted during the IEA by Hanson Bailey in 2009 for Stages 1-5 of the Southern Reject Emplacement Area (SREA). Newstan has developed a Fine Rejects Management Plan (March 2011) which was approved by the DRE by letter dated 05.04.12. The Plan refers to Southern Reject Emplacement Strategy and the Operation and Maintenance Manual: Newstan Stage 2-4 Main Tailings Embankment Dam. This Plan had not been revised during the audit period and was still in operation at the time of the audit. Figures 3.16 a-e in the original 1998 EIS (pg. 112-115) show the conceptual layout of the SREA at years 5, 10, 13, 21 and 25. At the time of the audit site inspection Newstan was operating at approximately year 13.	Compliant

Title	Condition No	Requirement	Comments	Compliance/ Recommendations																																	
			The auditors compared the year 13 conceptual layout with a more recent plan provided by the site and through observations made during the audit site inspection note that there were differences between the layout of the emplacement areas presented in the EIS and those observed on site. A detailed review of the 1998 EIS was not undertaken. It is noted however that changes have been tracked through the MOP approval process with the DRE and on the basis of recent DRE approvals, this Condition has been assessed as compliant. .																																		
Development Consent DA-73-11-98 MOD6	5.2	Fine Rejects / Tailings Emplacement and Management The Applicant shall prepare a Fine Rejects Management Plan for the placement of fine rejects in the Southern Waste Emplacement area to the satisfaction of the DRE prior to any placement of fine rejects in the emplacement areas.	Assessed as compliant in the previous IEA. No changes have been made to the Fine Rejects Management Plan (2011) during the audit period.	Compliant																																	
Development Consent DA-73-11-98 MOD6	5.3	Waste Receiving or Disposing of Waste (a) Except as expressly permitted in a licence, waste must not be: received at the premises for storage, treatment, processing, reprocessing or disposal; or disposed of at the premises. Hazardous and industrial waste (b) Hazardous or industrial waste must be stored and disposed of in a manner that will minimise the wastes impact on the environment including appropriate segregation for storage or disposal and transportation by a waste transporter licensed by the EPA.	(a) Refer to assessment of compliance with EPL (Condition L4.1) (b) Newstan has engaged J.R Richards to manage the waste storage and disposal on site. J.R. Richards conducts weekly inspections of waste storage areas, and organises disposal of wastes and replenishing of spill kits. J.R Richards provides Newstan with completed Mine Site Review Forms on a weekly basis and a Monthly Waste Management Report. Examples of completed weekly Mine Site Review Forms were sighted for the 28.01.15, 23.02.15, 14.04.15 and 12.05.15 and noted to include: inspection of waste liquid tank volumes, number and content levels of waste receptacles (oils, greases, chemicals, general waste, scrap steel, paper cardboard, batteries etc.), evidence of hydrocarbon spills, spill kit stock levels, inspection of bunded areas and general comments. The Monthly Waste Management Report was in the form of a spread sheet which included monthly waste stream summary, annual waste stream summary, graphs, disposal locations, key performance standards and identified opportunities for improvement (sighted December 2014 and April 2015 report). - Waste oils, greases, coolant and wash bay sludge were taken off-site for recycling by Renewable Oil Services (licensed transporters and facility). Waste chemicals were transported by Renewable Oil Services to licensed Hazmat Services Facility. - Waste was observed to be appropriately segregated and stored during the audit site inspection.	Compliant																																	
Development Consent DA-73-11-98 MOD6	6.1 6.1A	Air Quality and Greenhouse Gas Odour The Applicant shall ensure that no offensive odours, as defined under the Protection of the Environment Operations Act 1997, are emitted from the site.	A review of the complaints database indicated that no complaints had been received relating to offensive odours emitted from the site.	Compliant																																	
Development Consent DA-73-11-98 MOD6	6.1B	Greenhouse Gas Emissions The Applicant 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.	Newstan developed an Energy Savings Action Plan (ESAP) in 2008 to meet the requirements of a previous Condition (removed from MOD 4). The ESAP was prepared following an energy efficiency opportunities assessment facilitated by Energetics and approved by the DP&E on the 28.04.09. The ESAP identified a number of measures to reduce energy usage and therefore minimise greenhouse gas emissions. The measures identified in the ESAP were largely completed (AEMR 2012) and Newstan stopped reporting against the ESAP in the 2013 AEMR. Greenhouse gas emissions are reported through the National Greenhouse and Energy Reporting (NGER) scheme under the National Greenhouse and Energy Reporting Act 2007. The 2013 and 2014 AEMRs present a summary of the main greenhouse gas emissions however do not discuss measures implemented to reduce emissions. Total greenhouse gas emissions increased slightly in 2014 compared to 2013 as Newstan included emissions for “post mining activities” in its calculations for the first time. Newstan entered into care and maintenance in August 2014 resulting in lower energy usage. On this basis Newstan are considered compliant with this condition. Should mining re-commence, more specific measures would be expected to address this condition.	Compliant																																	
Development Consent DA-73-11-98 MOD6	6.1C	Air Quality Criteria The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not exceed the criteria listed in Tables 1, 2 and 3 at any residence on privately owned land, or on more than 25 percent of any privately owned land. <table><tr><th colspan="3">Table 1: Long term impact assessment criteria for particulate matter</th></tr><tr><th>Pollutant</th><th>Averaging period</th><th>^a Criterion</th></tr><tr><td>Total suspended particulate (TSP) matter</td><td>Annual</td><td>^a 90 µg/m³</td></tr><tr><td>Particulate matter < 10 µm (PM₁₀)</td><td>Annual</td><td>^a 30 µg/m³</td></tr></table> <table><tr><th colspan="3">Table 2: Short term impact assessment criterion for particulate matter</th></tr><tr><th>Pollutant</th><th>Averaging period</th><th>^aCriterion</th></tr><tr><td>Particulate matter < 10 µm (PM₁₀)</td><td>24 hour</td><td>^a 60 µg/m³</td></tr></table> <table><tr><th colspan="4">Table 3: Long term impact assessment criteria for deposited dust</th></tr><tr><th>Pollutant</th><th>Averaging period</th><th>Maximum increase^c in deposited dust level</th><th>Maximum total^d deposited dust level</th></tr><tr><td>^eDeposited dust</td><td>Annual</td><td>^b 2 g/m²/month</td><td>^a 4 g/m²/month</td></tr></table> <small>Notes to Tables 1-3</small> <i>a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources);</i>	Table 1: Long term impact assessment criteria for particulate matter			Pollutant	Averaging period	^a Criterion	Total suspended particulate (TSP) matter	Annual	^a 90 µg/m ³	Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³	Table 2: Short term impact assessment criterion for particulate matter			Pollutant	Averaging period	^a Criterion	Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 60 µg/m ³	Table 3: Long term impact assessment criteria for deposited dust				Pollutant	Averaging period	Maximum increase ^c in deposited dust level	Maximum total ^d deposited dust level	^e Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month	This Condition was inserted into MOD 4 (issued on the 16.03.12). Prior to this modification no air quality criteria were stipulated by the CoC or the EPL. Dust deposition monitoring was being undertaken at 8 locations in accordance with the EPL. The monitoring was being undertaken by AECOM with monthly reports provided to Newstan. Total suspended particulate (TSP) matter and Particulate matter < 10 µm (PM ₁₀) monitoring was being undertaken at two locations in accordance with the EPL. The monitoring was undertaken by Carbon Based who provides Newstan with a monthly report and updated spreadsheet summarising the results and updating the rolling averages. Results are summarised in AEMRs, and in the monthly Environmental Monitoring Reports available on Newtsan's website. <u>Deposited Dust</u> The 2013 and 2014 AEMRs stated that all particulate dust gauges recorded an annual average particulate monitoring result below 4g/m ² /month for the annual averaging period. A review of the Environmental Monitoring Report for April 2015 and the spreadsheet “DDG Monitoring” indicated the rolling annual average for the period May 2014 to April 2015 was well below 4 g/m ² /month at each of the dust gauges (ranging from 0.89 to 2.72 g/m ² /month). <u>TSP and PM₁₀</u> The high volume air sampling (HVAS) results were reviewed (spreadsheets “Newstan HVAS 2015_03 and “Newstan HVAS 2014_12”) and demonstrated compliance with the criteria for TSP of 90 µg/m ³ (annual average), PM ₁₀ of 30 µg/m ³ (annual average) and PM ₁₀ 24 hour limit of 50 µg/m ³ during 2014 and up until March 2015. The 2013 AEMR also reported compliance with these criteria during 2013.	Compliant
Table 1: Long term impact assessment criteria for particulate matter																																					
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Title	Condition No	Requirement	Comments	Compliance/ Recommendations
		<p><i>b Incremental impact (i.e. incremental increase in concentrations due to the development on its own);</i></p> <p><i>c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method; and</i></p> <p><i>d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Director-General.</i></p>		
Development Consent DA-73-11-98 MOD6	6.1D	<p>Operating Conditions</p> <p>The Applicant shall:</p> <p>(a) implement best management practice to minimise the off-site odour and dust emissions of the development;</p> <p>(b) operate a comprehensive air quality management system on site that uses a combination of predictive meteorological forecasting and real-time air quality monitoring data to guide the day to day planning of surface activities and the implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent;</p> <p>(c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see Note d to Tables 1-3);</p> <p>(d) minimise any visible off-site air pollution; and</p> <p>(e) minimise the surface disturbance of the site generated by the development, to the satisfaction of the Director-General.</p>	<p>(a) The following measures were implemented during the audit period to minimise off site odour and dust emissions:</p> <ul style="list-style-type: none"> - Progressive rehabilitation. During the audit period rehabilitation activities included contouring, construction of drop structures, progressive capping of the NREA Tailings storage facility (as stone reject material and VENM became available) and progressive planting. The tailings dam was reported in the 2014 AEMR to be 68% capped. - At the audit site inspection on the 11.05.15 the majority of the NREA had some sort of ground cover (either grass or small shrubs and trees). - Use of water carts. Giacci had three water carts for use on the NREA, coal stockpile and pit top area. These were observed in operation during the audit site inspection. It was reported that water trucks are available 24 hours / day if required. A chemical dust suppressant is reportedly periodically added to the water cart. - Giacci had a dedicated vacuum sweeper truck on site to sweep roads. - Haul roads have a designated speed limit. - Vehicles were observed to be restricted to dedicated haulage routes. <p>Dust emissions were not observed during the site inspection.</p> <p>Odour emissions were not experienced during the site inspection.</p> <p>A review of the 2013 and 2014 Annual Returns and the 2015 Incident Report (which includes complaints) indicated no complaints related to odour were received during the audit period. One complaint relating to dust was recorded for the period January 2013 to April 2015. This was received from the EPA who forwarded it on to Newstan for investigation and related to an alleged build up of coal dust at a residence in Blackalls Park. The residents details were not provided so Newstan could not follow up the complainant directly but it was reported that Newstan provided a response to the EPA.</p> <p>(b) The air quality management system is described in the Air Quality and Greenhouse Gas Management Plan (AQ&GHG MP) which was approved by the DP&E in 2013. Newstan has installed a Tapered Element Oscillating Microbalance (TEOM) located approximately 50 m north of the closest residential receptor in Wakefield for the real time monitoring of PM₁₀. The real time monitoring was reportedly used as a management tool to assist in dust control across the site. As the criteria are approached a text message alert is sent to the Environment and Community Coordinator who can investigate what activities are occurring on site, analyse wind conditions and decide whether additional mitigation measures are required. It was reported that predictive meteorological forecasting was not undertaken.</p> <p>(c) Section 9 of the AQ&GHG MP discusses reactive response procedures and includes mitigation measures for excessive dust events. This Section does not specifically discuss extraordinary events such as bushfires, prescribed burns, dust storms etc but the measures proposed are considered appropriate for these events. Refer also to the assessment of the adequacy of the Plan in the main section of this report.</p> <p>(d) A screen has been planted to provide a visual buffer to the SREA. This screen also aids in minimising visible off-site dust emissions. Visible air pollution was not observed during the site inspection.</p> <p>(e) Newstan reported that as a general rule only the minimum area necessary for on-site activities is disturbed and that areas are rehabilitated as soon as practicable following completion. Refer to discussion of progressive rehabilitation in (a) above. At the audit site inspection on the 11.05.15 the majority of the NREA had some sort of ground cover (either grass or small shrubs and trees).</p>	Compliant

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
Development Consent DA-73-11-98 MOD6	6.1E	Air Quality and Greenhouse Gas Management Plan The Applicant shall prepare and implement an Air Quality and Greenhouse Gas Management Plan for the development to the satisfaction of the Director-General. This plan must: (a) be prepared in consultation with the EPA, and be submitted to the Director-General for approval by the end of September 2012; (b) describe the measures that would be implemented to ensure: - best management practice is being employed; - the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events; and - compliance with the relevant conditions of this consent; (c) describe the proposed air quality management system; (d) include an air quality monitoring program that: - uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the development; - adequately supports the proactive and reactive air quality management system; - includes PM2.5 monitoring; - evaluates and reports on the effectiveness of the air quality management system; - includes a protocol for determining any exceedances of the relevant conditions of this consent.	(a) Newstan has prepared an Air Quality and Greenhouse Gas Management Plan which was submitted to the D-G for approval on the 28.09.12. The AQ&GHG MP was provided to the EPA for consultation on the 14.09.12 and a letter received from the EPA dated 24.10.12 stating that the EPA does not review documents of this type. The Plan was revised and resubmitted to the DP&E on the 21.12.12 approved by the DP&E by letter dated 30.01.13. (b) Section 8 of the Plan describes active dust control measures. Discussion of how air quality impacts are minimised during adverse meteorological conditions and extraordinary events is not provided in the Plan. Table 1 outlines where in the Plan the requirements of the relevant consent conditions have been addressed. (c) Sections 7, 8, 9, 10 and 11 of the Plan describe the air quality management system (d) The Plan includes an air monitoring program which includes: - one real time monitor (TEOM) for the measurement of PM ₁₀ - two HVAS for TSP, PM ₁₀ and PM _{2.5} monitoring - eight depositional dust gauges - proactive dust control measures are included in Section 8 of the Plan. Reactive measures are included in Section 9 of the Plan. - data analysis and reporting is discussed in Section 11 of the Plan - data analysis is included in Section 11 of the Plan and non-compliance response procedure is discussed in Section 9.1. <u>Implementation</u> The AQ&GHG MP was generally found to be implemented by the site. The monitoring requirements of the Plan were being implemented. Results were observed as discussed under Condition 6.1C. PM _{2.5} monitoring commenced in 2011. Dust controls were implemented as discussed under Condition 6.2. Reporting requirements were being implemented (e.g AEMRs include discussion of air quality management and monitoring results, monthly environmental reports include monitoring results and are available on Newstan's website). Monitoring results and compliance with criteria were discussed at the CCC meetings (e.g February 2015).	Compliant
Development Consent DA-73-11-98 MOD6	6.2	Dust Suppression and Control (a) The Applicant shall: (i) maintain and use sufficient equipment with the capacity to apply water to all unsealed trafficked areas at a rate which minimises dust emissions; (ii) ensure the prompt and effective rehabilitation of all disturbed areas to minimise generation of wind erosion dust, in accordance with the requirements of DRE; (iii) keep the surface of the coal stockpiles sufficiently damp to minimise windblown dust. (b) General Terms of Approval EPA Dust Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.	(a) (i) Newstan's haulage contractor, Qube, had three water carts for use on the NREA, coal stockpile and pit top area. These were observed in operation during the audit site inspection. It was reported that water trucks are available 24 hours / day if required. A chemical dust suppressant is periodically added to the water cart. - Qube had a dedicated vacuum sweeper truck on site to sweep roads. (ii) It was reported that no specific requirements have been provided by DRE with regards to rehabilitation and minimising wind erosion dust. During the audit period rehabilitation activities included contouring, construction of drop structures, progressive capping of the NREA Tailings storage facility (as stone reject material and VENM became available) and progressive planting. The tailings dam was reported in the 2014 AEMR to be 68% capped. - At the audit site inspection on the 11.05.15 the majority of the NREA had some sort of ground cover (either grass or small shrubs and trees). (iii) It was reported that Newstan (and Mandalong) coal is inherently damp and that one of the water carts includes a water cannon which can be used to dampen the coal stockpiles as required. The decision on when to use water cannon is largely decided by Qube. The day of the site inspection (11.05.15) had higher than average wind speed and there was a negligible amount of wind-blown dust observed. (b) A daily checklist is completed by the Washery team for the Cooranbong Haul Road which includes a comment on the number of trucks with their tarps on. Completed Daily Operating Inspection Sheets were sighted for 20.01.15 to 30.01.15, 2.02.15 to 6.02.15 and 28.03.15 to 3.04.15. In the examples sighted there were no instances recorded where trucks did not have their tarps covering loads. In addition the Environment and Community Coordinator conducted a spot audit on the 4.03.15 of the haul trucks along the Newstan Haul Road. The audit found that within 40 minutes, there were 12 truck movements and all trucks carrying coal had tarps on correctly.	Compliant
Development Consent DA-73-11-98 MOD6	6.3	Blast Management (a) The Applicant shall only blast for the purposes of underground mining or constructing the vent shaft at the Awaba Colliery. (refer to condition 8.4 (b) for blast monitoring). General Terms of Approval - EPA (b) Overpressure The overpressure level from blasting operations on the premises must not: (i) exceed 115dB (Lin Peak) for more than 5% of the total number of blasts over a period of 12 months; and (ii) exceed 120dB (Lin Peak) at any time. (c) Ground Vibration (ppv) Ground vibration peak particle velocity from the blasting operations on the premises must not: (i) exceed 5mm/s for more than 5% of the total number of blasts over a	It was reported that blasting was not undertaken during the audit period.	Not Applicable

Title	Condition No	Requirement	Comments	Compliance/ Recommendations																																										
		<p>period of 12 months; and</p> <p>(ii) exceed 10mm/s at any time, when measured or computed at a free field location within 30 metres of any potentially affected residential boundary or other noise sensitive location such as a school or hospital.</p> <p>(d) Time of Blasting</p> <p>(i) Blasting operations associated with surface construction works may only take place between the hours of 9am and 5pm Monday to Saturday inclusive.</p> <p>(e) Blast Management Protocol</p> <p>A Blasting/Vibration Management Protocol must be prepared and implemented which will include details on:</p> <ul style="list-style-type: none">- Compliance standards;- Mitigation measures;- Remedial action;- Monitoring methods and program;- Monitoring program for flyrock distribution;- Measures to protect underground utilities (e.g.: rising mains, subsurface telecommunication and electric cables), and livestock nearby;- Notification of procedures for neighbours prior to detonation of each blast;- Measures to ensure no damage by flyrock to people, property, livestock and power lines.																																												
Development Consent DA-73-11-98 MOD6	6.4A	<p>Operational Noise Criteria</p> <p>The Applicant shall ensure that noise from the development (excepting the Newstan ventilation shaft site at Awaba) does not exceed the noise criteria in Table 4.</p> <table><caption>Table 4: Noise criteria</caption><thead><tr><th>Location</th><th>Shoulder dB(A) L_{Aeq}(15 min)</th><th>Day dB(A) L_{Aeq}(15 min)</th><th>Evening dB(A) L_{Aeq}(15 min)</th><th>Night dB(A) L_{Aeq}(15 min)</th><th>Night dB(A) L_{Aeq}(15 min)</th></tr></thead><tbody><tr><td>NC1 – Davis</td><td>35</td><td>35</td><td>35</td><td>35</td><td>45</td></tr><tr><td>NC2 – Culpin</td><td>38</td><td>38</td><td>35</td><td>35</td><td>45</td></tr><tr><td>NC3 – Orrock</td><td>39</td><td>39</td><td>37</td><td>37</td><td>45</td></tr><tr><td>NC4 – Phelps</td><td>35</td><td>35</td><td>35</td><td>35</td><td>45</td></tr><tr><td>NC5 – Parnell</td><td>35</td><td>35</td><td>35</td><td>35</td><td>45</td></tr><tr><td>NC6 – Fassifern Primary School</td><td>N/A</td><td>35</td><td>N/A</td><td>N/A</td><td>N/A</td></tr></tbody></table> <p>Notes:</p> <ul style="list-style-type: none">-To interpret the locations referred to in Table 4, see Figure 1 in Appendix 2; and-Noise generated by the development is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.- Day is defined as the period from 7am to 6pm;- Evening is defined as the period from 6pm to 10pm;- Night is defined as the period from 10pm to 6am: and- Shoulder is defined as the period from 6am to 7am. <p>However, these criteria do not apply if the Applicant has an agreement with the relevant owner/s of these residences/land to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.</p>	Location	Shoulder dB(A) L _{Aeq} (15 min)	Day dB(A) L _{Aeq} (15 min)	Evening dB(A) L _{Aeq} (15 min)	Night dB(A) L _{Aeq} (15 min)	Night dB(A) L _{Aeq} (15 min)	NC1 – Davis	35	35	35	35	45	NC2 – Culpin	38	38	35	35	45	NC3 – Orrock	39	39	37	37	45	NC4 – Phelps	35	35	35	35	45	NC5 – Parnell	35	35	35	35	45	NC6 – Fassifern Primary School	N/A	35	N/A	N/A	N/A	<p>The operational noise criteria specified by this CoC came into effect with MOD 4 on the 16.03.12.</p> <p>Newstan reported exceedances with these criteria in the 2012, 2013 and 2014 AEMRs as summarised in the noise section of the main report.</p> <p>No exceedances were recorded at any monitoring locations during any periods in December 2014 and Quarter 1 2015 (reviewed noise monitoring reports by Global Acoustics).</p> <p>Based on the non-compliances reported, this Condition has been assessed as non-compliant. Further discussion of measures implemented to minimise noise is provided under Condition 6.4B below and in the main section of this report.</p>	Non-compliant
Location	Shoulder dB(A) L _{Aeq} (15 min)	Day dB(A) L _{Aeq} (15 min)	Evening dB(A) L _{Aeq} (15 min)	Night dB(A) L _{Aeq} (15 min)	Night dB(A) L _{Aeq} (15 min)																																									
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NC4 – Phelps	35	35	35	35	45																																									
NC5 – Parnell	35	35	35	35	45																																									
NC6 – Fassifern Primary School	N/A	35	N/A	N/A	N/A																																									
Development Consent DA-73-11-98 MOD6	6.4B	<p>Operating Conditions</p> <p>The Applicant shall:</p> <p>(i) implement best practice noise management to minimise the operational, low frequency, rail and road traffic noise of the development;</p> <p>(ii) regularly assess the real-time noise monitoring and meteorological forecasting data and relocate, modify, and/or stop operations on site to ensure compliance with the relevant conditions of this consent;</p> <p>(iii) minimise the noise impacts of the development during temperature inversions;</p> <p>(iv) use its best endeavours to achieve the long-term noise goal in Table 5, where this is reasonable and feasible, and report on the progress towards achieving these goals in the Annual Environmental Management Report; and</p>	<p>This CoC came into effect with MOD 4 on the 16.03.12.</p> <p>(i) Newstan has implemented the following noise management to minimise operational, low frequency, rail and road traffic noise:</p> <ul style="list-style-type: none">- investigations into low frequency noise were carried out by Advitech. The drives in three screens were replaced with variable speed motors and two new screens (with variable screen motors) installed. This enabled the operating speed of the screens to be adjusted (within manufacturers specifications) which resulted in a reduction in low frequency noise.-modifications were made to the design of the sidewall / hungry-boards of the under pans at the washery which led to a small reduction in the low frequency noise outside the washery- the tower chute was re-designed and enclosed to reduce impact noise- openings within the washery building were closed off using conveyer belts and old fibreglass panels replaced with steel panels- a fleet of new generation locomotives was procured eliminated the use of bank engines	<p>(i) Compliant</p> <p>(ii) Non-compliant</p> <p>(iii) Non-compliant</p> <p>(iv) Compliant</p> <p>(v) Compliant</p>																																										

Title	Condition No	Requirement	Comments	Compliance/ Recommendations				
		<p>(v) carry out a comprehensive noise audit of the development in conjunction with each independent environmental audit, to the satisfaction of the Director-General.</p> <table><caption>Table 5: Long-term noise goal</caption><thead><tr><th>Location</th><th>Day/Evening/Night/Shoulder dB(A) L_{night}max</th></tr></thead><tbody><tr><td>All privately owned land</td><td>35</td></tr></tbody></table> <p><small>Note: Noise generated by the development is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.</small></p>	Location	Day/Evening/Night/Shoulder dB(A) L _{night} max	All privately owned land	35	<p>- the use of the locomotive horn at level crossings and prior to moving the train is restricted to emergency use only</p> <p>- the rail speed limit on the Rail Loop is 10 km/h</p> <p>- a 6 m high noise wall was constructed at the south-eastern end of the Rail Loop stockpile in 2012</p> <p>- reversing on dozers was limited to low gear</p> <p>- there was no dozer at night on the product coal stockpile</p> <p>- plant use quacker type reversing alarms</p> <p>- haul road trucks don't use compression brakes (trailers have air bag suspension)</p> <p>(ii) At the time of the audit, the real-time noise monitor was yet to be installed. It is understood that the original site nominated by Centennial's noise experts was not practical as it was not on land owned by Centennial and there was no power supply to the site. Centennial, in consultation with its experts have selected a new site on Centennial land (adjacent to the rail loop). These changes to the location of the monitoring location compounded to delays in installing the monitor. It was reported that the monitor had been ordered at the time of the audit and civil works had commenced to lay power to the site, however on the basis that it was not operational during the audit period, this Condition has been assessed as non-compliant. It was reported that the real time noise monitor is scheduled to be operational by the end of July 2015. .</p> <p>(iii) During attended monitoring, consultants use the data logged by the on-site meteorological station to identify temperature inversions. However this is done and provided to Newstan with the quarterly noise monitoring reports and is therefore not able to be used to minimise impacts during the temperature inversion. On this basis, this requirement has been assessed as non-compliant. It was reported that the real time monitor (once installed) will have the functionality to predict temperature inversions and allow for real time response.</p> <p>(iv) The 2012, 2013 and 2014 AEMRs reported exceedances with the long term criteria at some locations during some periods. Detailed discussion of how Newstan is progressing towards achieving the goals is not provided e.g. outlining the measures implemented and any measures planned for the future. However during the audit Newstan demonstrated that it was investigating and implementing measures to reduce noise levels. This was particularly evident at the washery where Newstan commenced an investigation into low frequency noise. This has been a staged approach over 3 years and has involved changes to operations followed by noise assessments to quantify the effects of the changes. Refer also to the measures outlined in (i) above. On the basis of the evidence of measures implemented by Newstan to minimise noise impacts from its operations, this requirement has been assessed as compliant.</p> <p>(v) This audit fulfils the requirements of a comprehensive noise audit of the development. This approach was confirmed by the DP&E in an email dated 13 May 2015 stating <i>"The Department requires that the currently appointed audit team for the Newstan Independent Audit required by condition 8.9 of the consent undertake a thorough review of the monitoring methodologies and results. The team should determine, in their opinion, whether these monitoring results are able to be relied upon. If so, whether the monitoring results indicate that the site was in compliance with its noise impact criteria and the predictions made in respect of noise levels at the time of the determination of Modification 4 –Main West."</i> Refer also to the main section of the report.</p>	
Location	Day/Evening/Night/Shoulder dB(A) L _{night} max							
All privately owned land	35							
Development Consent DA-73-11-98 MOD6	6.4C	<p>Noise Management Plan</p> <p>The Applicant shall revise the Noise Management Plan for the development to the satisfaction of the Director-General. This revised plan must:</p> <p>(i) be prepared by a suitably qualified expert whose appointment has been approved by the Director-General;</p> <p>(ii) be submitted to the Director-General by the end of September 2012 for approval;</p> <p>(iii) describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent, including a real-time noise management system that employs both reactive and proactive mitigation measures; and</p> <p>(iv) include a Noise Monitoring Program that:</p> <ul style="list-style-type: none">- uses a combination of real-time and supplementary attended noise monitoring measures to evaluate the performance of the development;- is capable of monitoring temperature inversion strengths at an appropriate sampling rate;- evaluates and reports on the effectiveness of the real-time noise management system; and- includes a protocol for determining exceedances of the relevant conditions of this consent.	<p>This CoC came into effect with MOD 4 on the 16.03.12.</p> <p>A revised Noise Management Plan was prepared by John Cotterill of SLR whose appointment was approved by the DP&E by letter dated 26.07.12. The Plan was submitted to the DP&E by letter dated 28.09.12. Comments were received from the DP&E by email dated 9.10.12. The plan was further revised to address the DP&E comments and was approved by the DP&E by letter dated 30.01.13.</p> <p>Section 6 of the Plan describes noise control measures. Section 7 of the Plan describes the noise monitoring program. The plan commits to implementing a real time management system and quarterly attended monitoring at the 6 sensitive receivers identified in the noise impact assessment and for which criteria have been established for by Condition 6.4A.</p> <p>The Plan states that temperature inversions will be quantified using the measurements of sigma theta data from the weather station to determine the Pasquill stability classes.</p> <p>The Plan does not specifically discuss how / when the effectiveness of the real –time noise management system will be evaluated and reported on.</p> <p>Section 9 of the Plan discusses data analysis and determining compliance with noise criteria.</p> <p>Refer also to discussion of the adequacy and implementation of the Plan in the main section of the report.</p>	<p>Compliant</p> <p>Recommendation:</p> <p>Include discussion of how/ when the effectiveness of the real –time noise management system will be evaluated and reported on within the NMP.</p>				

Title	Condition No	Requirement	Comments	Compliance/ Recommendations												
Development Consent DA-73-11-98 MOD6	6.4D	<p>Noise Control – Newstan Ventilation Shaft Site at Awaba Operational Noise Criteria</p> <p>The Applicant shall ensure that the noise generated at the Newstan ventilation shaft site at Awaba does not exceed the noise impact assessment criteria in Table 3A for any privately owned residence.</p> <p><i>Table 3A: Noise impact assessment criteria dB(A)</i></p> <table><tr><td>Location</td><td>Day</td><td>Evening</td><td>Night</td></tr><tr><td></td><td>L_{Aeq}(15 minute)</td><td>L_{Aeq}(15 minute)</td><td>L_{Aeq}(15 minute)</td></tr><tr><td>All privately owned residences</td><td>38</td><td>40</td><td>36</td></tr></table> <p><i>Notes:</i></p> <p>a) Noise from the development is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary, to determine compliance with the L_{Aeq}(15 minute) noise limits in the above table. The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.</p> <p>b) Where it can be demonstrated that direct measurement of noise from the development is impractical, the OEH may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy).</p> <p>c) The noise emission limits identified in the above table apply under meteorological conditions of: wind speeds of up to 3 m/s at 10 metres above ground level; or temperature inversion conditions of up to 3°C/100m, and wind speeds of up to 2 m/s at 10 metres above ground level.</p> <p>d) In this condition:</p> <p>Day is defined as the period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays;</p> <p>Evening is defined as the period from 6pm to 10pm; and</p> <p>Night is defined as the period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays.</p> <p>Construction Activities</p> <p>The Applicant shall ensure that noise caused by construction activities at the Newstan ventilation shaft site at Awaba outside of the hours 7am to 6pm Monday to Friday and 8am to 1pm Saturdays does not exceed the operational noise criteria in Table 3A.</p> <p>Noise Monitoring</p> <p>Prior to the commencement of construction activities at the Newstan ventilation shaft site at Awaba the Applicant shall prepare and implement a Noise Monitoring Program for the Awaba surface facilities and ventilation shaft site to the satisfaction of the Director-General. This program must:</p> <p>(a) be submitted to the Director-General for approval; and</p> <p>(b) provide for the monitoring of both construction and operational activities.</p>	Location	Day	Evening	Night		L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	All privately owned residences	38	40	36	<p>A Noise Monitoring Program for the Newstan ventilation fan at Awaba was prepared by SLR and approved by the DP&E by letter dated 8.8.12.</p> <p>The Monitoring Program states that operator attended noise surveys will be conducted monthly during construction and revert to quarterly at the commencement of operation at two of the most affected receiver locations.</p> <p><u>Construction</u></p> <p>Construction of the ventilation shaft at Awaba commenced in July 2012 (drilling commenced in November 2012) and was completed in August 2013. The 2012 AEMR reported compliance with the criteria at both locations during September to December noise surveys. The 2013 AEMR reported compliance with the criteria at both locations during January to August 2013 for all months excepting May where an exceedance was recorded at one location during the night. The monitoring reverted to quarterly following completion in August 2013.</p> <p>While it is acknowledged one exceedance of the criteria was recorded during the construction phase, the auditors consider Newstan generally compliant with noise criteria given that construction is completed.</p> <p><u>Operational</u></p> <p>The 2014 AEMR reported that operational noise from the vent shaft site complied with the criteria at both locations during all four monitoring surveys. This was confirmed by reviewing the noise monitoring reports provided by Vipac Engineers and Scientists (November 2013, February, May, July and December 2014).</p> <p>No exceedances of the criteria were recorded during operations.</p> <p>.</p>	Compliant
Location	Day	Evening	Night													
	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)													
All privately owned residences	38	40	36													
Development Consent DA-73-11-98 MOD6	6.5	<p>Light Emissions</p> <p>The Applicant shall screen or direct all onsite lighting away from residences and roadways to the satisfaction of LMCC.</p>	<p>Onsite lighting is predominately related to the coal washery, pit top and stockpile areas. A vegetation barrier exists between the main work areas and Fassifern residences.</p> <p>A review of the complaints database indicated no complaints were received relating to light emissions from the mine.</p> <p>The LMCC has reportedly not expressed any concerns relating to light emissions.</p>	Compliant.												
Development Consent DA-73-11-98 MOD6	7.1	(a) No approval is granted for the haulage of coal on public roads.	<p>It was reported that public roads are not used for the haulage of coal.</p> <p>The Haul Road is used to transport coal from Mandalong Mine to Newstan for washing.</p>	Compliant												
Development Consent DA-73-11-98 MOD6	8	<p>Monitoring / auditing</p> <p>(a) In addition to the requirements contained elsewhere in this consent, the Director-General may, at any time in consultation with the relevant government authorities and Applicant, require the monitoring programs in conditions 8.1 - 8.7 below to be revised/updated to reflect changing environmental requirements or changes in technology/operational practices. Changes shall be made and approved in the same manner as the initial monitoring programs. All monitoring programs shall also be made publicly available at LMCC within two weeks of approval of the relevant government authority.</p> <p>(b) All sampling strategies and protocols undertaken as part of any monitoring program shall include a quality assurance/quality control plan and shall require approval from the relevant regulatory agencies to ensure the effectiveness and quality of the monitoring program. Only accredited laboratories shall be used for laboratory analysis.</p>	<p>(a) It was reported that there have been no requests from the Director General to revise or update the monitoring programs in CoC 8.1-8.7 during the audit period. The Management Plans which outline monitoring programs relating to CoC 8.2 to 8.7 (water, noise, flora and fauna, cultural heritage and subsidence) were available on the Centennial Coal – Newstan website.</p> <p>(b) Sampling strategies and quality assurance / quality control measures are outlined within the appropriate management plans e.g. dust, water, noise. The EPL specifies sampling and testing methods for water and air pollution (refer to assessment of compliance with the EPL).</p> <p>The following National Association of Testing Authorities (NATA) accredited laboratories were used during the audit period:</p> <ul style="list-style-type: none">- Depositional dust: ALS Environmental (ALS)- Particulate matter and total suspended particles: SLR and Steel River Testing- Water quality testing: ALS	Compliant												

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
Development Consent DA-73-11-98 MOD6	8.1	Meteorological For the life of the development, the Applicant shall ensure that there is a meteorological station in the vicinity of the site that: (i) complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline; and (ii) is capable of continuous real-time measurement of temperature lapse rate in accordance with the NSW Industrial Noise Policy, unless a suitable alternative is approved by the Director- General following consultation with the EPA.	(i) A meteorological station was installed in 2011 to the south of the coal washery by Greenspan. This was assessed as complying with the required standards during the previous IEA in 2012. There were no changes to the location or functionality of the meteorological station during the audit period. (ii) The meteorological station takes real time measurements of air temperature (ground, 2 metres and 10 metres) as well as rainfall, wind speed, wind direction and other parameters. The data is accessed through the Greenspan's Envault program. During the audit site inspection access to the real time measurements through Greenspan website was demonstrated to the auditors.	Compliant
Development Consent DA-73-11-98 MOD6	8.2	Surface and Groundwater (a) (i) The Applicant shall construct and locate surface and ground water monitoring positions, as identified in the site water management plan (condition 4.1 (a)), in consultation with DWE, LMCC and EPA, and to the satisfaction of the Director-General, at least three months prior to the commencement of construction works in the relevant area and first workings in the LEA; (ii) The Applicant shall prepare a detailed monitoring program in respect of ground and surface water quality and quantity, including water in and around the Newstan mine site, Northern and Southern Emplacements, and LEA, and also consistent with condition 4.1(b)(iv), during construction works, mine operations and post mine operations in consultation with DWE, EPA, and to the satisfaction of the Director-General. The monitoring program shall also include surveys of drainage channels within the LEA to update information obtained in the preparation of Property Subsidence Management Plans. The monitoring program shall be prepared prior to commencement of construction in the relevant area. (iii) The results and interpretation of surface and ground water monitoring are to be provided by the Applicant in an approved form to the DWE, LMCC and EPA on a six monthly basis, unless otherwise directed by the Director-General. The results are also to be contained and analysed in the Annual Environmental Management Report (Condition 9.1). General Terms of Approval - EPA b) The Applicant must conduct water quality monitoring for pollutants in accordance with any current Environment Protection Licence under the Protection of the Environment Operations Act 1997 for the site.	(a) (i) The construction and location of surface and groundwater monitoring locations has been assessed in previous audits. There have been minor modifications since last audit period; these are outlined in the updated EPL. (ii) The surface water monitoring program is included within the Revised Water Management Plan (RWMP, 2009). The RWMP was prepared in consultation with the OEH and NOW and submitted to the DP&E for approval, however was not formally approved by the DP&E (refer also to CoC 4.1). On the basis that the RWMP and the Plan has not been approved by the DP&E and has not been updated since 2009 this part of the condition is considered Indeterminate. It was reported that surveys of drainage channels were conducted in early Subsidence Management Plans. The RWMP includes a section on underground water monitoring (Section 8.3) which was previously used as the groundwater monitoring program. When Mod 4 was approved Condition 4.3 was inserted which required the preparation of a groundwater monitoring program for the Main West mining area. A separate Groundwater Monitoring Program was prepared by GHD in 2012. Since the 2012 IEA, the following changes have occurred on site relating to water monitoring: - updates to remote monitoring via CITECT following construction and commissioning of CWP and upgrades to pumping and pipeline systems - changes to surface water monitoring requirements of the EPL The RWMP requires updating to reflect the above changes. (iii) The DP&I confirmed by letter dated 18.03.04 that the provision of surface and groundwater monitoring results and interpretation annually as part of the AEMR is appropriate. The 2012, 2013 and 2014 AEMRs included results and analysis of surface water and groundwater monitoring. (b) Refer to assessment of compliance with EPL.	Compliant (a) (i) (iii) Indeterminate (a) (ii) Recommendation: Revise the RWMP to reflect the changes that have occurred on site since 2009 and continue to seek relevant approvals of the Plan from DP&E. Recommendation: Ensure the surface water monitoring program includes the requirements of the current EPL.
Development Consent DA-73-11-98 MOD6	8.3	Deleted	Deleted in MOD 4 (16 March 2012). Previous condition has been covered in EPL 395.	
Development Consent DA-73-11-98 MOD6	8.4	Noise and Blast Noise Investigations and Management - Newstan Surface Facilities The Applicant shall: (i) prior to commencement of construction in the relevant area, develop a plan to conduct noise investigations at three monthly intervals to evaluate, assess and report the LA10 (15 minute) noise emission levels due to normal operations of the mine under prevailing weather conditions, or as otherwise determined by EPA. The methodologies, including establishing the mine's operating configuration, determining survey intervals, weather conditions, seasonal variations, selecting variations, selecting locations, periods and times of measurements, the design of any noise modelling or other studies, including the means for determining the noise levels emitted by the mining operations, shall be in accordance with the requirements of EPA; (ii) survey and investigate noise reduction measures from plant and equipment at the conclusion of the first 12 months; (iii) arrange independent noise emission investigations as provided in Condition 11.2; A summary of noise monitoring results shall be included in the AEMR.	(i) Assessed in previous IEAs. (ii) Assessed in previous IEAs. (iii) It was reported that CoC 11.2 relating to land acquisition as a result of excessive noise and / or dust had not been triggered during the reporting period. The 2012, 2013 and 2014 AEMRs were reviewed and noted to include a summary of noise monitoring results.	(i) & (ii) Completed (iii) Not triggered Compliant

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
Development Consent DA-73-11-98 MOD6	8.4 (cont)	Blasting - Newstan Surface Facilities and Newstan Ventilation Shaft Site at Awaba The Applicant shall: (i) monitor any blasts and record the overpressure and peak particle velocity as agreed by EPA, including details of monitoring locations; and (ii) include the results of the monitoring information as required by EPA and in the Annual Environmental Management Report (Condition 9.2).	It was reported that no blasting had been undertaken during the audit period.	Not applicable
Development Consent DA-73-11-98 MOD6	8.5	Flora and Fauna Monitoring The Applicant shall prepare a detailed monitoring program of habitat areas, including any wetlands and aquatic habitats, during the development and for a period after the completion of the development to be determined by the Director-General in consultation with LMCC, OEH and DRE. The program shall monitor impacts attributable to the development and include monitoring of the success of any restoration or reconstruction works. The Applicant shall include the monitoring program in the Flora and Fauna Management Plan (condition 3.4). The Applicant shall carry out any further works required by the Director-General as a result of the monitoring. A summary of monitoring results shall be included in the AEMR.	The monitoring program is outlined in Section 5 of the Flora and Fauna Management Plan (2014). The program was expanded to include details of additional monitoring to address the requirements of Condition 3.4 that were not included in the previous version of the plan. This includes: - Annual Photo monitoring - Annual Vegetation surveys (species diversity, species abundance, dominant species and vegetation height and presence of dieback) - Annual Bird surveys - Annual Bat surveys - Annual General fauna (camera traps) - Biennial habitat health assessment The previous Plan (2006) committed to annual vegetation monitoring, monitoring of rehabilitation areas, subsidence areas and fauna surveys but did not include details on the type of monitoring proposed at what frequency and which locations. The 2012 IEA assessed this Condition as non-compliant on the basis that ecological monitoring (other than <i>Tetratheca juncea</i>) was not undertaken and made a number of recommendations relating to expanding the monitoring program and revising the Plan. During this audit period annual <i>Tetratheca juncea</i> surveys over longwalls 22-24 and in the NREA and SRE continued with the following reports sighted: - <i>Monitoring of Tetratheca juncea over longwalls 22-24 and in buffer areas NREA and SREA – 2013 season</i> (Hunter Eco, October 2013) - <i>Monitoring of Tetratheca juncea over longwalls 22-24 for years 2006-2014</i> (Hunter Eco, October 2014) - <i>Monitoring of Tetratheca juncea at the Northern and Southern Reject Emplacement Areas</i> (Hunter Eco, October 2014). However other ecological monitoring did not commence until 2015. At the time of the audit site inspection, Newstan was awaiting the draft report of the first annual ecological survey from the ecological consultants engaged to undertake this work (RPS). The auditors sighted the proposal provided by RPS to undertake the annual ecological survey and noted it included the monitoring committed to in the Plan. On the basis that ecological monitoring (with the exception of <i>Tetratheca juncea</i>) had not been undertaken during the audit period, this condition has been assessed as non-compliant. The commencement of the monitoring program is noted and would ensure this requirement is compliant in future audits.	Preparation: Compliant Implementation: Non-compliant
Development Consent DA-73-11-98 MOD6	8.6	Cultural Heritage Monitoring The Applicant shall monitor the effectiveness of measures outlined in the archaeology and heritage management plan (condition 3.3). A summary of monitoring results shall be included in the AEMR.	Section 3.5 of the AEMRs for 2012, 2013 and 2014 all state that mining did not occur in the vicinity of the heritage areas identified in the EIS and that the scar tree identified in the LW24 SEE has not been impacted by mining operations. No further monitoring of the effectiveness of measures outlined in the plan has been reported for the audit period.	Compliant
Development Consent DA-73-11-98 MOD6	8.7	Subsidence Monitoring The Applicant shall undertake a detailed and ongoing monitoring program of subsidence resulting from mining to the satisfaction of the Director-General and in consultation with DWE, DRE and MSB throughout the life of the mine and for a period of at least five years after the completion of mining, or other such period as determined by the Director-General in consultation with DWE and DRE. Monitoring shall include the following: (i) a survey of watercourses within areas mined within the DA Area; (ii) monitoring of groundwater levels and quality; (iii) monitoring of impacts on any buildings, structures and roads within areas mined within the DA Area; (iv) a monitoring program to identify any subsidence impacts on the 330 kV power transmission lines and towers in the Main West Mining Area, developed in consultation with DRE and TransGrid; (v) monitoring of remedial measures; and (vi) a comparison of predicted impacts with actual impacts, including mapping of subsidence profiles within areas mined within the DA Area. The Applicant shall include information on monitoring conducted and the interpreted results in the Annual Environmental Management Report (condition 9.2).	During the audit period mining activities were limited to first workings in the Main West Area. Subsidence modelling predictions for this method were reported to be up to 20 mm. Subsidence Monitoring Reports are produced when longwall mining is in progress and an End of Panel Report prepared which details subsidence monitoring during the period of operations. As no longwall mining was undertaken during the audit period, subsidence monitoring was limited to surveying of the monitoring points established on the Transgrid transmission towers, bushtrack and along part of LW24B as well as visual inspections. (i) The previous IEA reported that the Lords Creek tributaries in the vicinity of LW23, 24 & 25 were reportedly inspected daily when mining was approaching and / or passing. A survey of watercourses within areas mined had not been undertaken. Newstan justified this by indicating no mining has occurred in this area for 5 years. ii) Groundwater monitoring requirements are outlined in the Groundwater Monitoring Program prepared by GHD in 2012. The Program commits to quarterly monitoring of pH, EC and standing water level at MB10, MB11, MB12, MB13 and MB15. In addition, monitoring requirements for underground water are included in the RWMP. The 2014 AEMR states that Newstan has 18 monitoring bores and that biannual monitoring of water level, pH and electrical conductivity (EC) is undertaken. The spread sheet (" <i>Groundwater Monitoring</i> ") was reviewed by the auditors and noted to include results for water levels, pH, EC as well as major cations (Ca, Mg, Na and K), major anions (Cl, SO ₄ , and alkalinity) and minor anions (NO ₂ as N, NO ₃ as N, reactive P and F) biannually. The quarterly monitoring results required by the Groundwater Monitoring Program were included in the spreadsheet. (iii) Other than transmission towers there are no buildings or structures within the areas mined during the audit period. (iv) The 2014 AEMR reported that monitoring of the towers in the first workings area showed subsidence between -6 to -16mm which was within the range of natural ground movement. Newstan reported (email dated 10 July 2015) " <i>that a monitoring program was developed in September 2013 for first workings in the Main West Area. It was focussed primarily on the 330kV transmission towers (Towers 22E, 23E, 24E, 25E and Tension Tower 18). Additional monitoring points were established along a fire trail above 304 and MW4 panels. Newstan relevelled part of a previously established monitoring line that was associated</i> "	Compliant

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
			<p>with LW24 (above 305 Panel).</p> <p>Results of monitoring to date confirmed that subsidence of 20mm or less has occurred (spreadsheet sighted by auditors). A survey was planned for August 2015 - which will be 12 months after mining was suspended."</p> <p>Noted that some results for Tower Transgrid_92TL_Tower 25E on 14-3-14 were slightly in excess of 20mm. The Newstan Surveyor reported that the original levels on the tower were taken before the extraction of Longwall 21. The tower is approximately 100 metres from the goaf edge and there could possibly have been some additional settling after the 5/4/04 survey.</p> <p>(v) Remedial measures are reported in Section 3.6 of the AEMR. The 2014 AEMR discusses the rehabilitation of a sink hole which was identified on Centennial Coal property in Blackalls Park. The AEMR also referred to a Subsidence Rehabilitation Schedule and stated that a previously identified crack was on the schedule to be remediated. A letter to DRE dated 4 May 2015 was sighted that provided notification to DRE on the timing of rehabilitation of sink holes (Awaba) and a subsidence crack at Newstan. These works commenced in May and were to continue for approximately 18 weeks, however were reported to have been delayed by rain and are due to be completed by the end of 2015. The subsidence crack was not sighted by the Auditors. It is understood the sink holes related to the Awaba mine hence are not the subject of this report.</p> <p>(vi) The 2014 AEMR included some comparison with subsidence modelling predictions. Prior to 2014, this was not done. The 2014 AEMR presented subsidence monitoring for the towers (discussed under (iv) above), the bush track (+4 to -20mm) and along part of LW24B (+5 to -17mm). These were within the 20mm predictions for first workings.</p>	
Development Consent DA-73-11-98 MOD6	8.8	<p>Community Consultative Committee</p> <p>The Applicant shall:</p> <p>(i) The applicant shall maintain a Community Consultative Committee (CCC) for the development. This committee shall:</p> <p>a) comprise</p> <ul style="list-style-type: none"> - 2 representatives from the Applicant, including the person responsible for environmental management at the mine; - at least 1 representative from Council (if available); and - at least 3 representatives (or as otherwise agreed by the Director-General) from the local community whose appointment has been approved by the Director-General; <p>b) be chaired by an independent chairperson, whose appointment has been approved by the Director-General;</p> <p>c) meet at least twice per year;</p> <p>d) review the Applicant's performance with respect to environmental management and community relations;</p> <p>e) undertake regular inspections of the mining operations;</p> <p>f) review community concerns or complaints about mine operations, and the Applicant's complaints handling procedures;</p> <p>g) provide advice to:</p> <ul style="list-style-type: none"> - the Applicant on improved environmental management and community relations, including the provision of information to the community and the identification of community initiatives to which the Applicant could contribute; - the Department regarding conditions of this consent; and - the general community on the performance of the mine with respect to environmental management and community relations; and <p>h) be operated generally in accordance with any guidelines the department may publish in regard to the operation of Community Consultative Committee for mining projects.</p> <p><i>Notes:</i></p> <p>1) Guidelines were published by the department in June 2007.</p> <p>2) The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.</p>	<p>(a) At the time of the audit the CCC comprised:</p> <ul style="list-style-type: none"> - At least 2 Centennial / Newstan representatives (it is noted the meetings are generally attended by the Newstan Mine Manager, Centennial Environmental Manager and Newstan Environment and Community Coordinator) - 1 representative from LMCC. - 4 local community members (2 Fassifern residents, 1 Awaba residents and 1 Blackalls Park resident) were reportedly approved by the DG. <p>This was verified by viewing the meeting minutes for the 18.02.15, 06.11.14, 09.09.14, 17.06.14 and 11.03.14.</p> <p>b) The CCC Chairman (Margaret McDonald-Hill) was approved by the Director General (sighted letter from former chairperson dated 17.06.13 confirming her approval).</p> <p>c) CCC meetings were generally held quarterly during the audit period (sighted meeting minutes from August 2012 through to February 2015).</p> <p>d) The Environment and Community Coordinator provides a summary of environmental monitoring data and incidents and complaints to the CCC.</p> <p>e) The CCC reportedly undertook an inspection of the CWP following its commissioning (the June 2014 minutes confirmed that an opportunity to inspect the plant was offered following the meeting).</p> <p>(f) The CCC meeting agenda includes a Community Agenda item where members can raise any questions / concerns they may have. The auditor reviewed the CCC meeting minutes for 18.02.15, 06.11.14, 09.09.14, 17.06.14 and 11.03.14 and notes the issues and questions raised by the community members appear to be addressed.</p> <p>g) The CCC is provided the opportunity to provide advice regarding improved environmental management, community relations and community initiatives. Items raised by the community under the "Community Agenda" item were noted to be followed up and addressed (e.g. November 2014). Community events supported by Newstan were reported in Section 4.2 of the AEMRs and in 2014 included:</p> <ul style="list-style-type: none"> - Clean up for Miller Road at Fassifern - The LT Creek Sustainable Neighbourhood group tour(s) of the Clean Water Plant (CWP) - Australian Institute of Engineers tour & presentation of the CWP - Charlton Christian College site inspection of the CWP & presentation on the washery, water monitoring etc - Chuck Duck & Rooster Cluck's (Vegetable gardens at public schools) <p>h) Newstan undertook a review of the CCC operation against the DP&I Guidelines in March 2012. The findings of the review concluded that Newstan was compliant with the Guidelines for Establishing & Operating CCC's for Mining Projects. A further review has not been undertaken however there have not been any significant changes to the operation of the CCC.</p>	Compliant
Development Consent DA-73-11-98 MOD6	8.8 (cont)	<p>(ii) The Applicant shall, at its own expense:</p> <p>(a) ensure that 2 of its representatives attend CCC meetings;</p> <p>(b) provide the CCC with regular information on the environmental performance of the development;</p> <p>(c) provide meeting facilities for the CCC;</p> <p>(d) arrange site inspections for the CCC, if necessary;</p> <p>(e) respond to any advice or recommendations the CCC may have in relation to environmental management or community relations;</p> <p>(f) take minutes of the CCC meeting;</p> <p>(g) forward a copy of these minutes to the Director-General; and</p> <p>(h) put a copy of these minutes on its website.</p>	<p>(a) Refer 8.8 (a) above</p> <p>(b) The agenda for the CCC meeting includes a presentation by the Mine Manager which provides an update on operations and projects and a presentation by the Environment and Community Coordinator on environmental performance. The meeting minutes reviewed included a summary of environmental monitoring data, complaints and incidents.</p> <p>(c) The CCC meetings are held in the boardroom of Centennial Coal's Corporate office in Fassifern.</p> <p>(d) Refer to 8.8 (e) above</p> <p>(e) The auditor reviewed the CCC meeting minutes for the 18.02.15, 06.11.14, 09.09.14, 17.06.14 and 11.03.14 and notes the issues and questions raised by the community members appear to be addressed.</p> <p>(f) meetings minutes were taken and uploaded to Newstan's website.</p> <p>(g) The CCC minutes were not forwarded to the DP&E.</p> <p>(h) The CCC meeting minutes were available on Newstan's website.</p> <p>It is noted that review of this condition was without the benefit of auditors interviewing members of the CCC.</p>	<p>Compliant (a-f)</p> <p>Non-compliant (g)</p> <p>Recommendation:</p> <p>Ensure CCC meeting minutes are forwarded to the DP&E.</p>

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
Development Consent DA-73-11-98 MOD6	8.9	<p>Independent Environmental Audit</p> <p>(i) Prior to 14 May 2009, and every 3 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:</p> <p>(a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;</p> <p>(b) include consultation with the relevant agencies;</p> <p>(c) assess the environmental performance of the project and assess whether it is complying with the relevant requirements of this approval and any relevant mining leases or EPL (including any strategy, plan or program required under these approvals);</p> <p>(d) review the adequacy of strategies, plans or programs required under these approvals; and, if appropriate,</p> <p>(e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals.</p> <p>Note: This audit team must be led by a suitably qualified auditor.</p> <p>(ii) Within 6 weeks of the completion of this audit, or as otherwise agreed by the Director-General, the applicant shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.</p> <p>(iii) Within 3 months of submitting the audit report to the Director-General, the Applicant shall review, and if necessary revise the strategies/plans/programs required under this consent to the satisfaction of the Director-General.</p>	<p>(i) The previous Independent Environmental Audit was conducted by URS in March 2012. The audit period for this Independent Environmental Audit is March 2012 to the date of the first site inspection on the 11.05.15. The audit team (Michael Woolley and Helen Onus) were approved by the Director General by letter dated 01.05.15. There was no requirement stated in the consent conditions or by DP&E for further experts.</p> <p>The scope of this audit is as per the requirements of this Condition. This audit also includes the noise audit required by Condition 6.4B (v). Refer also to main report.</p> <p>(ii) The previous IEA report was submitted to the DP&E on the 21.12.2012 with an accompanying Action Plan outlining Newstan's response to the recommendations in the audit report.</p> <p>The previous IEA identified 19 non-compliances. Of these 3 were reported as having No Action Required to rectify the non-compliance as they were either historical or administrative non compliances. A discussion of the close out of the previous recommendations is provided in Appendix B.</p> <p>(iii) The Flora and Fauna Management Plan was still at a draft stage in December 2012, it was approved in August 2014. Other plans updated and approved during this audit period include:</p> <ul style="list-style-type: none"> - Air Quality and Greenhouse Gas Management Plan (December 2012) - Noise Management Plan (December 2012) - Pollution Incident Response Management Plan (October 2014) <p>Not all of the management plans were revised following the 2012 IEA to address the recommendations from the adequacy review (e.g RWMP and Aboriginal Cultural Heritage). Refer also to main section of report. On the basis of these actions remaining outstanding, this requirement has been assessed as non-compliant.</p>	<p>(i) & (ii) Compliant (iii) Non-compliant</p> <p>Recommendation Implement a process to close-out recommendations made in the 2012 IEA and this 2015 IEA.</p>
Development Consent DA-73-11-98 MOD6	9.1	<p>Annual Environmental Management Report</p> <p>Each year the Applicant shall submit an AEMR to the Director-General and to all relevant agencies. This report must:</p> <p>(a) identify the standards and performance measures that apply to the development;</p> <p>(b) describe the works carried out in the last 12 months;</p> <p>(c) describe the works that will be carried out in the next 12 months;</p> <p>(d) include a summary of the complaints received during the past year, and compare this to the complaints received in the previous 5 years;</p> <p>(e) include a summary of the monitoring results on the development during the past year;</p> <p>(f) include an analysis of these monitoring results against the relevant:</p> <ul style="list-style-type: none"> - impact assessment criteria/limits; - monitoring results from the previous years; and - predictions in the EIS and SEE noted in condition 1.1; <p>(g) identify any trends in the monitoring results over the life of the development;</p> <p>(h) identify any non-compliance during the previous year; and</p> <p>(i) describe what actions were, or are being, taken to ensure compliance.</p>	<p>The following AEMRs are relevant to this audit period:</p> <ul style="list-style-type: none"> - 2012 AEMR, approved 16.06.13 - 2013 AEMR, approved 27.05.14 - 2014 AEMR, pending approval – DP&E requested further information in relation to Flora and Fauna monitoring. Newstan provided DP&E with a revised AEMR on 22.04.15. <p>Further discussion of the DRE and DP&E reviews of the AEMRs is included in the main section of this report.</p> <p>The auditors reviewed the 2014 AEMR and are satisfied that the Condition requirements were generally met in the following sections:</p> <ul style="list-style-type: none"> a) 1.1 & 1.2 b) 2 & Appendix 4 c) 6 & Appendix 4 d) 4.1 & Appendix 5 e) 3 f) 3.1-3.16; 3.1.2; 3.2; 3.3.2; 3.4.1; 3.5; 3.6; 3.7; Appendix 2; 3.1.2; 3.3.1; 3.3.2; 3.4.1; and 3.5. g) 3.1.2; 3.2; 3.3.2; 3.4.1; 3.4.2; 3.4.3; 3.6; 3.6; 3.7 & Appendix 1 h) 3.16; Section 3 & Appendix 1 i) 3.16; Section 3 & Appendix 1 <p>The recommendations of the previous (2012) IEA relating to improvements to the AEMR have largely not been addressed and are still considered relevant. Although it is noted some discussion was evident in the 2014 AEMR regarding comparisons with predictions made in the EIS and identification of trends.</p>	<p>Compliant</p> <p>Recommendation: As per recommendation in 2012 IEA, it is considered that the AEMR should include a list of groundwater monitoring and extraction licences under Section 1.1 Consents Leases and Licences of the AEMR.</p>

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
Development Consent DA-73-11-98 MOD6	9.2	Access to Information (a) Within 3 months of the approval of any plan/strategy/program required under this consent (or any subsequent revision of these plans/strategies/programs), or the completion of the audits or AEMRs required under this consent, the Applicant shall: - provide a copy of the relevant document/s to the relevant agencies; - ensure that a copy of the relevant document/s is made publicly available at the mine; and - put a copy of the relevant document/s on its website. (b) During the development, the Applicant shall: - make a summary of monitoring results required under this consent publicly available at the mine and on its website; and - update these results on a regular basis (at least every three months).	(a) The following management plans were revised and approved during the audit period: - Flora and Fauna Management Plan (August 2014), - Air Quality and Greenhouse Gas Management Plan (December 2012). - Noise Management Plan (December 2012) - Pollution Incident Response Management Plan (October 2014). The most recent IEA (2012) was provided to the DP&E on the 21.12.12 and was available on the website. The 2014 AEMR was provided to the agencies by letter dated 27.02.15. The approved management plans, most recent (2012) IEA and AEMRs (2011 – 2014) were available via the Newstan Centennial Coal website. It was also reported that these documents are publicly available at the mine on request. The approved documents (management plans and IEAs) were reportedly provided to the LMCC for public availability (sighted examples e.g. Flora and Fauna Management Plan provided to LMCC on 01.09.14 within one month of approval, 25.08.14) however with the exception of the AEMR the approved management plans and IEA's were only being provided to DP&E and LMCC. The auditors consider the relevant agencies to be the agencies for which consultation was required (typically OEH, DRE, NOW, LMCC and DP&E). On the basis that not all documents were being provided to all of these agencies, Newstan were considered to be potentially non-compliant with this condition. However, given that the condition is not specific on who the "relevant" agencies are, and that documents have been made available on the website for agencies to view if required, the condition is considered compliant (see recommendation). b) monthly environmental monitoring data was available on the Newstan Centennial Coal website for the audit period (May 2012 to April 2015).	(a) Compliant (b) Compliant Recommendation: Request clarification from the DP&E on whether historical data is required to be maintained on the website and for what period of time. Recommendation: Ensure that copies of the approved management plans and IEAs are provided to all of the relevant agencies (and not just the DP&E as the approving agency and the LMCC for public exhibition). The auditors consider the relevant agencies to be the agencies for which consultation was required (typically OEH, DRE, NOW, LMCC and DP&E). Alternatively, Newstan could inform the relevant agencies as part of the consultation that approved plans will be available on the Newstan website once approved.
Development Consent DA-73-11-98 MOD6	9.3	Recording and Reporting Requirements (i) Recording of Monitoring The results of any monitoring required must be recorded and retained as set out in the licence (ii) Reporting Requirements The EPA will require reporting on the environmental performance of the proposal as set out in the licence. The timing of reporting shall be consistent with the environmental reporting required by this consent, as far as practical.	Refer to assessment of compliance with EPL.	Refer to EPL.
Development Consent DA-73-11-98 MOD6	10.2	Community Consultation / Obligation The Environmental Officer (refer condition 3.1) shall be responsible: (i) for responding to complaints with respect to construction works and mine operations on a dedicated and publicly advertised telephone line, 24 hours per day 7 days per week, entering complaints or comments in an up to date system, and ensuring that a response is provided to the complainant within 24 hours; and (ii) providing a report of complaints in the AEMR throughout the life of the project to the Director-General, LMCC, EPA, DRE, and CCC. Other community consultation required by this consent Refer condition 8.8 - Community Consultative Committee Refer condition 3.3 - Heritage Assessment and Management	(i) Newstan operates a dedicated community information and complaints telephone line (1800 247 662). The telephone line is publicly advertised on Centennial Coal's website. The complaints telephone line is directed to Veronica Howat the Environment and Community Coordinator. If the call is not answered an option is provided to contact the Environmental Coordinator on her mobile phone or to leave a message. It was reported that if the Environmental Coordinator is on leave the complaints line diverts to Nerida Manley (Environment and Community Officer). Complaints can also be lodged via the Newstan website. Email complaints are reportedly responded to within 24hrs of being received. For weekends this comprises 24 hours since reading the email on Monday. Complaints are logged by the Environment and Community Coordinator within Lotus Notes (using the ECD system). The log includes the following information: reference number, incident type (of which community complaint is an option), complainant details, date and time of occurrence, complaint details, investigation / cause, remediation details, implementation process, implementation date and details of consultation. The ECD system was demonstrated to the auditors during the audit site inspection. A report was run within ECD which summarised all the incidents and complaints for the calendar years applicable to this audit period. In general the complaint handling process was observed to be transparent. A factual record of complaints received and responses provided was maintained. It is noted that the scope of this audit does not include consulting with members of the CCC or local community to verify the satisfaction of complainants in the management of complaints by Newstan. (ii) The AEMRs for 2012, 2013 and 2014 were reviewed and noted to include a summary of complaints (Appendix 5). The AEMRs are provided to the DP&E, LMCC, EPA, DRE and CCC and are also available via the website.	Compliant
Development Consent DA-73-11-98 MOD6	11.1	Land Acquisition as a Result of Subsidence Initial Valuation and Options Agreement (a) The Applicant shall compensate landowners for compensable loss in accordance with the provisions of the Mining Act, 1992. Compensable loss is defined in that Act. (b) Within six months of the date of this consent, any landowner within the LEA may request in writing a valuation of their property from the Applicant. Upon receipt of the request, the Applicant shall: (i) obtain a valuation within one month of receipt of the request, which includes proper consideration of a sum not less than the current market value of the owner's interest in the land as if the land was unaffected by the development proposal, whosoever is the occupier, having regard to:	It was reported that there have been no written requests for compensation or land valuation and acquisition by any landowners within the LEA during the audit period.	Not triggered

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
		<p>the existing use and permissible use of the land in accordance with the applicable planning instruments at the date of the written request; and the presence of improvements on the land and/or any Council approved building or structure which although substantially commenced at the date of the request is completed subsequent to that date ; and</p> <p>(ii) within 14 days of receipt of the valuation, offer in writing to enter into an options agreement with the landowner to acquire the land when notification is received if the mine plan submitted with an application for approval under s138 of the Coal Mine Regulation Act, 1982 indicates that the landowner is entitled to acquisition under Conditions 11.1(B) and (C).</p> <p>(c) The valuation and options agreement shall also be available to any landowner who may be affected by noise and/or dust impacts from the surface facilities as proposed in the EIS. The options agreement shall be based on an option to sell if and when the landowner is entitled to acquisition under Condition 11.2.</p>		
Development Consent DA-73-11-98 MOD6	11.1 Cont.	<p>Dwellings</p> <p>(a) Where a dwelling within the DA area is, or is likely to be, subject to damage beyond the safe, serviceable and repairable criteria as a result of the development, the landowner, after receiving notification from the Applicant, may request the Applicant in writing to:</p> <p>(i) carry out such works as agreed by the landowner to remedy or mitigate any damage; or</p> <p>(ii) compensate the landowner for such effects; or</p> <p>(iii) acquire the whole of the property, or such part of the property requested by the landowner where subdivision is approved.</p> <p>(b) The Applicant shall comply with any such request for acquisition or compensation in accordance with Conditions 11.1(D) and (E). If necessary to confirm the impact, the Applicant shall, at the request of the landowner in writing, conduct a structural inspection.</p> <p>Acquisition and Compensation Land Use Impacts</p> <p>(a) Where a landowner suffers a loss of agricultural productivity or other adverse impact on the use of land as a result of the development, the landowner, may request the Applicant in writing to:</p> <p>(i) carry out such works as agreed by the landowner to rectify the problem; or</p> <p>(ii) compensate the landowner for such effects; or</p> <p>(iii) acquire the whole of the property, or such part of the property requested by the landowner where subdivision is approved.</p> <p>(b) The Applicant shall comply with any such request for acquisition or compensation in accordance with Conditions 11.1(D)-(E). If necessary to confirm the impact, the Applicant shall, at the request of the landowner in writing, conduct a structural inspection.</p> <p>(c) Where the landowner requests acquisition, significant adverse impact to agricultural productivity or the use of the land or an enterprise must be demonstrated.</p> <p>Note: The Independent Panel may be requested to advise on whether significant adverse impact has been demonstrated.</p>	It was reported that there have been no written requests for compensation or land valuation and acquisition by any landowners within the LEA during the audit period.	Not triggered
Development Consent DA-73-11-98 MOD6	11.1 Cont.	<p>Acquisition and Compensation Procedure</p> <p>(a) Any disputes relating to land acquisition or compensation (except those relating to valuation matters) may be referred by either party to the Independent Panel for consideration and advice if no agreement is reached within three months of receipt by the Applicant of the written request, or to the Mining Warden at any time in accordance with the provisions of the Mining Act.</p> <p>(b) Upon receipt of a written request to purchase property in accordance with any conditions of this consent, the Applicant shall negotiate and purchase the whole of the property (unless the request specifically requests acquisition of only part of the property and subdivision has already been approved) within six months of receipt of the request. The Applicant shall pay the landowners an acquisition price resulting from proper consideration of:</p> <p>(i) a sum not less than the current market value of the owner's interest in the land as if the land was unaffected by the development proposal, whosoever is the occupier, having regard to:</p> <p>the existing use and permissible use of the land in accordance with the applicable planning instruments at the date of the written request; and</p> <p>the presence of improvements on the land and/or any Council approved building or structure which although substantially commenced at the date of</p>	It was reported that there have been no written requests for compensation or land valuation and acquisition by any landowners within the LEA during the audit period.	Not triggered

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
		<p>the request is completed subsequent to that date. In determining the effect of the development, consideration shall be given to any valuation conducted under Condition 11.1(A)(b);</p> <p>(ii) the owner's reasonable compensation for disturbance allowance and relocation within the Lake Macquarie or Wyong local government areas, or within such other location as may be determined by the Director-General in exceptional circumstances;(iii) the owner's reasonable costs for obtaining legal advice and expert witnesses for the purposes of determining the acquisition price for the land and the terms upon which it is to be acquired; and (iv) the purchase price determined by reference to points (i), (ii) and (iii) shall be reduced by the amount of any compensation awarded to a landowner pursuant to the Mining Act, 1992 or other legislation providing for compensation in relation to coal mining but limited to compensation for dwellings, structures and other fixed improvements on the land, unless otherwise determined by the Director-General in consultation with the DRE or MSB.</p> <p>c) An offer by the Applicant to purchase a property under the conditions of this consent shall remain open to the landowner for the following periods from the date of the offer:</p> <p>(i) for damage to a dwelling beyond the safe, serviceable and repairable criteria (Condition 11.1(B)), three years after completion of mining of longwall panels that affect the property;</p> <p>(ii) for land use impacts (Condition 11.1(C)), five years after completion of mining of longwall panels that affect the property; and</p> <p>(iii) for noise or dust impacts (Condition 11.2), for the life of the mine.</p> <p>(d) Notwithstanding any other Condition of this consent, the landowner and the Applicant may enter into any other agreed arrangement regarding compensation; or the Applicant may, upon request of the landowner, acquire any property affected by the project during the course of this consent on terms agreed to between the Applicant and the landowner.</p>		
Development Consent DA-73-11-98 MOD6	11.1 Cont.	<p>Independent Valuation</p> <p>(a) In the event that the Applicant and the landowner cannot agree within three months upon the acquisition price of the land and/or the terms upon which it is to be acquired under the terms of this consent, then either party may refer the matter to the Director-General who shall request an independent valuation to determine the acquisition price. The independent valuer shall consider any submissions from the landowner and the Applicant in determining the acquisition price.</p> <p>(b) If the independent valuer requires guidance on any contentious legal, planning or other issues, the independent valuer shall refer the matter to the Director-General, who, if satisfied that there is a need for a qualified panel, shall arrange for the constitution of the panel. The panel shall consist of:</p> <p>(i) the appointed independent valuer;</p> <p>(ii) the Director-General; and/or</p> <p>(iii) the President of the Law Society of NSW or nominee.</p> <p>The qualified panel shall, on the advice of the valuer, determine the issue referred to it and advise the valuer.</p> <p>(c) The Applicant shall bear the costs of any independent valuation or survey assessment requested by the Director-General.</p> <p>(d) The Applicant shall, within fourteen days of receipt of a valuation by the independent valuer, offer in writing to acquire the relevant land at a price not less than the said valuation.</p>	It was reported that this Condition has not been triggered.	Not triggered

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
Development Consent DA-73-11-98 MOD6	11.2	<p>Land Acquisition as a Result of Excessive Noise and/or Dust</p> <p>Note: In Condition 11.2 (a)-(e) "land" means the whole of a lot in a current plan registered at the Land Titles Office as at the date of this consent.</p> <p>(i) In the event that landowners consider that noise and/or dust from the Newstan mining operations, including surface facilities at their dwelling(s) is in excess of the noise levels set out in this consent or the relevant EPA amenity criteria or dust levels, and the Director-General, in consultation with EPA, is satisfied that an investigation is required, the Applicant shall upon receipt of a written request:</p> <ul style="list-style-type: none"> - appoint a qualified independent person to undertake direct discussions with the landowners affected to ascertain their concerns and to plan and implement an investigation to quantify the impact and determine the sources of the effect, and - bear the cost of the independent investigation and make available plans, programmes and other information necessary for the independent person to form an appreciation of the past, present and future mining operations and their effects on noise and/or dust emissions. <p>(ii) The investigation is to be carried out by a qualified independent person in accordance with a documented Plan. The Plan shall be designed and implemented to measure and/or compute (with appropriate calibration by measurement) the relevant noise and/or dust levels at the complainant's residence emitted by the current normal mining operations.</p> <p>(iii) The independent person, the Plan and the timing of its implementation shall be approved by the Director-General, in consultation with LMCC, the EPA, the affected landowner and the Applicant. A report of the investigation shall be provided to the Director-General, the EPA, the Applicant and the affected landowner.</p> <p>(iv) The results of the investigation shall be assessed and reported by the independent person in the light of the mine's current operations and proposed short, medium and long term development plans.</p> <p>(v) If the independent noise and/or dust investigation finds that the relevant criteria are being exceeded by noise and/or dust emission from normal mining operations, the Applicant shall:</p> <ul style="list-style-type: none"> - modify those areas of the mining operation which are causing the exceedances; or - undertake other measures, as agreed with the affected landowner, to ameliorate the effects of the impact, within three (3) months or as otherwise directed by the Director General in consultation with the EPA. <p>(vi) Within two (2) months after the expiry of the three (3) month period in sub-clause (v) above, and upon written request from the landowner, the Applicant shall arrange for a further independent noise and/or dust investigation to be completed.</p> <p>(vii) If the investigation in sub-clause (vi) above finds that the relevant noise and/or dust emission levels from normal mine operations exceed relevant amenity criteria or consent conditions, the Applicant shall purchase the property within six months of receipt of a written request from the owner of the affected property.</p> <p>(viii) Further independent investigations shall cease if the Director-General, in consultation with the EPA is satisfied that the relevant consent limits or EPA amenity criteria are not being exceeded and are unlikely to be exceeded in the future.</p>	It was reported that this Condition has not been triggered.	Not triggered
Development Consent DA-73-11-98 MOD6	11.2 Cont.	<p>In respect of a request to purchase land arising under Condition 11.2(a), the Applicant shall pay the owner the acquisition price which shall take into account and provide payment for:</p> <p>(i) a sum not less than the current market value of the owner's interest in the land used for its existing use at the date of this consent who is the occupier and all improvements thereon at this date as if the land was unaffected by the development proposal.</p> <p>(ii) the owner's reasonable compensation for disturbance allowance and relocation costs within the Lake Macquarie City or Wyong Local Government Areas.</p> <p>(iii) the owner's reasonable costs for obtaining legal advice and expert witnesses for the purposes of determining the acquisition price of the land and the terms upon which it is to be acquired.</p> <p>In the event that the Applicant and any owner referred to in Condition 11.2(a) cannot agree within the time limit upon the acquisition price of the land</p>	It was reported that this Condition has not been triggered.	Not triggered

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
		and/or the terms upon which it is to be acquired, then: (i) either party may refer the matter to the Director-General, who shall request the President of the Australian Institute of Valuers and Land Economists to appoint a qualified independent valuer, suitably qualified in compensation issues, who shall determine, after consideration of any submissions from the land owner and the Applicant, the acquisition price. ii) in the event that the independent valuer requires guidance on any contentious legal, planning or other issues, the independent valuer shall refer the matter to the Director-General, who if satisfied that there is need for a qualified panel, shall arrange for the constitution of the panel. The panel shall consist of: 1. the appointed independent valuer, 2. the Director-General, and/or 3. the President of the Law Society of NSW or his/her nominee. The qualified panel shall, on the advice of the valuer, determine the issue referred to it and advise the valuer. The Applicant shall bear the costs of any valuation or survey assessment requested by the Director-General in accordance with Conditions 11.2(a) - 11.2(c). Upon receipt of a valuation, the Applicant shall offer to acquire the relevant land at a price not less than the said valuation. Should the Applicant's offer to acquire not be accepted by the owner within six (6) months of the date of such offer, the Applicant's obligations to such owner and in respect of that property under Conditions 11.2(a) - 11.2(e) above shall cease.		
Development Consent DA-73-11-98 MOD6	12.1	Structural Adequacy The Applicant 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 Building Code of Australia. Notes: - Under part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works. - Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.	The only new building and structure constructed during the audit period was the CWP. The auditors sighted the Design Compliance Certificate for the CWP (dated 17.09.13). Newstan could not provide an Occupation Certificate or a Construction Certificate. As the auditors are not specialists in Structural Adequacy and have not assessed compliance with this condition.	Not Assessed
Development Consent DA-73-11-98 MOD6	12.2	Demolition The Applicant shall ensure that all demolition work is carried out in accordance with Australian Standards AS 2601-2001: The Demolition of Structures, or its latest version.	It was reported that this Condition has not been triggered.	Not triggered

Environmental Protection Licence 395

Title	Condition No	Requirement	Comments	Compliance / Recommendations																																																
EPL 395	A1.1	<p>What the licence authorises and regulates</p> <p>This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee based activity classification and the scale of the operation.</p> <p>Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.</p> <table><tr><th>Scheduled Activity</th><th>Fee Based Activity</th><th>Scale</th></tr><tr><td>Coal Works</td><td>Coal works</td><td>> 2000000 - 5000000 T handled</td></tr><tr><td>Mining for Coal</td><td>Mining for coal</td><td>> 2000000 - 3500000 T produced</td></tr></table>	Scheduled Activity	Fee Based Activity	Scale	Coal Works	Coal works	> 2000000 - 5000000 T handled	Mining for Coal	Mining for coal	> 2000000 - 3500000 T produced	<p>The 2014 AEMR reported that Newstan Run of Mine (ROM) production during 2014 was 530,845 tonnes –within the limits specified.</p> <p>As of August 2014 Newstan has been under care and maintenance.</p>	Compliant																																							
Scheduled Activity	Fee Based Activity	Scale																																																		
Coal Works	Coal works	> 2000000 - 5000000 T handled																																																		
Mining for Coal	Mining for coal	> 2000000 - 3500000 T produced																																																		
EPL 395	A2.1	<p>Premises to which this licence applies</p> <p>The licence applies to the following premises: Premises Details NEWSTAN COLLIERY 100 MILLER ROAD FASSIFERN NSW 2283</p>	Noted.	Noted																																																
EPL 395	A3.1	<p>Other Activities</p> <p>This licence applies to all other activities carried on at the premises, including: SEWAGE TREATMENT SYSTEM</p>	Noted.	Noted																																																
EPL 395	A4.1	<p>Information supplied to the EPA</p> <p>Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.</p> <p>In this condition the reference to "the licence application" includes a reference to:</p> <p>(a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and</p> <p>(b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.</p>	Noted.	Noted																																																
EPL 395	P1.1	<p>Location of monitoring/discharge points and areas</p> <p>The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.</p> <table><tr><th colspan="4">Air</th></tr><tr><th>EPA Identification no.</th><th>Type of Monitoring Point</th><th>Type of Discharge Point</th><th>Location Description</th></tr><tr><td>7</td><td>Dust deposition gauge</td><td></td><td>Labeled D1 on map numbered NE 3904 - west of closed tailings dam</td></tr><tr><td>8</td><td>Dust deposition gauge</td><td></td><td>Labeled D2 on map numbered NE 3904 - east of LDF1 near Main Sewash dam</td></tr><tr><td>9</td><td>Dust deposition gauge</td><td></td><td>Labeled D3 on map numbered NE 3904 - north of 10th A</td></tr><tr><td>10</td><td>Dust deposition gauge</td><td></td><td>Labeled D4 on map numbered NE 3904 - south of 12th A</td></tr><tr><td>11</td><td>Dust deposition gauge</td><td></td><td>Labeled D5 on map numbered NE 3904 - north of 12th Street, between 12th and 13th A</td></tr><tr><td>12</td><td>Dust deposition gauge</td><td></td><td>Labeled D6 on map numbered NE 3904 - south west of pit heap</td></tr><tr><td>13</td><td>Dust deposition gauge</td><td></td><td>Labeled D7 on map numbered NE 3904 - Andrew Club Ashle road</td></tr><tr><td>14</td><td>Dust deposition gauge</td><td></td><td>Labeled D8 on map numbered NE 3904 - 38th A</td></tr><tr><td>15</td><td>High volume air sampler</td><td></td><td>Labeled HVS1 on map numbered NE 3904 - Hill Top North of premises</td></tr><tr><td>16</td><td>High volume air sampler</td><td></td><td>Labeled HVS2 on map numbered NE 3904 - south west of premises</td></tr></table>	Air				EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description	7	Dust deposition gauge		Labeled D1 on map numbered NE 3904 - west of closed tailings dam	8	Dust deposition gauge		Labeled D2 on map numbered NE 3904 - east of LDF1 near Main Sewash dam	9	Dust deposition gauge		Labeled D3 on map numbered NE 3904 - north of 10th A	10	Dust deposition gauge		Labeled D4 on map numbered NE 3904 - south of 12th A	11	Dust deposition gauge		Labeled D5 on map numbered NE 3904 - north of 12th Street, between 12th and 13th A	12	Dust deposition gauge		Labeled D6 on map numbered NE 3904 - south west of pit heap	13	Dust deposition gauge		Labeled D7 on map numbered NE 3904 - Andrew Club Ashle road	14	Dust deposition gauge		Labeled D8 on map numbered NE 3904 - 38th A	15	High volume air sampler		Labeled HVS1 on map numbered NE 3904 - Hill Top North of premises	16	High volume air sampler		Labeled HVS2 on map numbered NE 3904 - south west of premises	Appendix 9 in the 2014 AEMR identifies the locations of dust gauges (D1 – D7, D9) and High volume samplers (HVS1 and HVS2). Dust monitoring data provided by Newstan indicates that these monitoring points are operational on site and link directly to the EPA Identification Number.	Compliant
Air																																																				
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7	Dust deposition gauge		Labeled D1 on map numbered NE 3904 - west of closed tailings dam																																																	
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EPL 395	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																																																
EPL 395	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.	Noted	Noted																																																

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		<div><p><i>Water and land</i></p><table><tr><th>EPA Identification no.</th><th>Type of Monitoring Point</th><th>Type of Discharge Point</th><th>Location Description</th></tr><tr><td>1</td><td>Discharge to waters Discharge water quality monitoring Volume monitoring</td><td>Discharge to waters Discharge water quality monitoring Volume monitoring</td><td>Outlet labelled as LDP1 on plan numbered NS3303 that discharge into the Main Bywash dam and the LT Creek</td></tr><tr><td>2</td><td>Discharge to waters Discharge water quality monitoring</td><td>Discharge to waters Discharge water quality monitoring</td><td>Final Pollution Dam Overflow labelled as LDP2 on plan number NS3303</td></tr><tr><td>3</td><td>Ambient water quality monitoring</td><td></td><td>Northern Arm of LT Creek upstream of LDP2, downstream from point 18 labelled SP003 on plan numbered NS3303</td></tr><tr><td>4</td><td>Ambient water quality monitoring</td><td></td><td>Downstream from LDP2 labelled SP004 on plan numbered NS3303 on northern arm of LT Creek.</td></tr><tr><td>5</td><td>Ambient water quality monitoring</td><td></td><td>Downstream of SREA on southern arm of LT creek, upstream of Hat Road labelled as WMP13 on plan numbered NS3303</td></tr><tr><td>17</td><td>Discharge to waters Discharge water quality monitoring</td><td>Discharge to waters Discharge water quality monitoring</td><td>Stony Creek Pipeline Outlet labelled as LDP on plan number NS3303</td></tr><tr><td></td><td>Volume monitoring</td><td>Volume monitoring</td><td></td></tr><tr><td>18</td><td>Ambient water quality monitoring</td><td></td><td>Upstream of Stony Creek Pipeline discharge at LDP labelled as WMP20 on plan numbered NS3303</td></tr><tr><td>19</td><td>Ambient water quality monitoring</td><td></td><td>Outlet of Main Bywash dam on northern arm of LT Creek labelled as WMP3 on plan numbered NS3303</td></tr><tr><td>20</td><td>Ambient water quality monitoring</td><td></td><td>Upstream on LT Creek South Arm above SREA - clean water diversion. Labelled as WMP16 on plan numbered NS3303</td></tr></table></div>	EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description	1	Discharge to waters Discharge water quality monitoring Volume monitoring	Discharge to waters Discharge water quality monitoring Volume monitoring	Outlet labelled as LDP1 on plan numbered NS3303 that discharge into the Main Bywash dam and the LT Creek	2	Discharge to waters Discharge water quality monitoring	Discharge to waters Discharge water quality monitoring	Final Pollution Dam Overflow labelled as LDP2 on plan number NS3303	3	Ambient water quality monitoring		Northern Arm of LT Creek upstream of LDP2, downstream from point 18 labelled SP003 on plan numbered NS3303	4	Ambient water quality monitoring		Downstream from LDP2 labelled SP004 on plan numbered NS3303 on northern arm of LT Creek.	5	Ambient water quality monitoring		Downstream of SREA on southern arm of LT creek, upstream of Hat Road labelled as WMP13 on plan numbered NS3303	17	Discharge to waters Discharge water quality monitoring	Discharge to waters Discharge water quality monitoring	Stony Creek Pipeline Outlet labelled as LDP on plan number NS3303		Volume monitoring	Volume monitoring		18	Ambient water quality monitoring		Upstream of Stony Creek Pipeline discharge at LDP labelled as WMP20 on plan numbered NS3303	19	Ambient water quality monitoring		Outlet of Main Bywash dam on northern arm of LT Creek labelled as WMP3 on plan numbered NS3303	20	Ambient water quality monitoring		Upstream on LT Creek South Arm above SREA - clean water diversion. Labelled as WMP16 on plan numbered NS3303		
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EPL 395	P1.4	In respect of Condition P1.2 Plan NS 3303 refers to the plan titled "Location of Licensed Discharge Points, Surface Water Monitoring Points, Water Bodies and Water Management Devices - for Newstan EPL 395" dated 18/11/2014 DOC14/292013-03 EF13/2761. In respect of Condition P1.1 Plan NS 3304 refers to the plan titled "Location of Air, Noise, Weather Monitoring Points and Ventilation System - for Newstan EPL 395" plan number NS 3304 dated 17/11/2014 DOC14/292013-04 EF13/2761	Noted	Noted																																												
EPL 395	L1.1	Pollution of Waters Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.	Newstan reported non-compliance with this condition in its 2012 and 2013 Annual Returns on the following occasions: - 6.03.12 to 7.09.12: unlicensed discharge to Stony Creek - 1.03.13: turbid water discharge from LDP002 - 18.11.13: turbid water discharge from LDP001 In addition, Newstan reported the following incidents to the EPA via the pollution hotline in 2015: - 09.04.15: seepage of water into LT Creek through electrical pit - 21.04.15 to 23.04.15: overflow of turbid water from FPCD through LDP002 Based on the above incidents and related exceedance of the EPL criteria, this Condition was assessed as non-compliant during the audit period. Incidents and water management are discussed further in the main report.	Non-compliant																																												
EPL 395	L2.1	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.	Refer to condition 2.4.	Non-compliant																																												
EPL 395	L2.2	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.	Noted.	Noted																																												
EPL 395	L2.3	To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table/s.	Noted.	Noted																																												

Title	Condition No	Requirement	Comments	Compliance / Recommendations																																																																																																																																										
EPL 395	L2.4	<div>Water and/or Land Concentration Limits</div> <div>POINT 1,17</div> <table><thead><tr><th>Pollutant</th><th>Units of Measure</th><th>50 percentile concentration limit</th><th>90 percentile concentration limit</th><th>30GM concentration limit</th><th>100 percentile concentration limit</th></tr></thead><tbody><tr><td>Aluminium (dissolved)</td><td>milligrams per litre</td><td></td><td></td><td></td><td>0.22</td></tr><tr><td>Antimony</td><td>milligrams per litre</td><td></td><td></td><td></td><td>0.006</td></tr><tr><td>Arsenic (dissolved)</td><td>milligrams per litre</td><td></td><td></td><td></td><td>0.042</td></tr><tr><td>Barium (dissolved)</td><td>milligrams per litre</td><td></td><td></td><td></td><td>0.25</td></tr><tr><td>Beryllium (dissolved)</td><td>milligrams per litre</td><td></td><td></td><td></td><td>0.004</td></tr><tr><td>Bicarbonate alkalinity</td><td>milligrams of calcium carbonate per litre</td><td></td><td></td><td></td><td>7.1</td></tr><tr><td>Boron (dissolved)</td><td>milligrams per litre</td><td></td><td></td><td></td><td>0.37</td></tr><tr><td>Cadmium (dissolved)</td><td>milligrams per litre</td><td></td><td></td><td></td><td>0.0024</td></tr><tr><td>Calcium</td><td>milligrams per litre</td><td></td><td></td><td></td><td>38</td></tr><tr><td>Chloride</td><td>milligrams per litre</td><td></td><td></td><td></td><td>516</td></tr></tbody></table>	Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	30GM concentration limit	100 percentile concentration limit	Aluminium (dissolved)	milligrams per litre				0.22	Antimony	milligrams per litre				0.006	Arsenic (dissolved)	milligrams per litre				0.042	Barium (dissolved)	milligrams per litre				0.25	Beryllium (dissolved)	milligrams per litre				0.004	Bicarbonate alkalinity	milligrams of calcium carbonate per litre				7.1	Boron (dissolved)	milligrams per litre				0.37	Cadmium (dissolved)	milligrams per litre				0.0024	Calcium	milligrams per litre				38	Chloride	milligrams per litre				516	<div>During the audit period Newstan recorded the following exceedances of these concentration limits:</div> <table><thead><tr><th>Pollutant</th><th>Date</th><th>Point</th><th>Note</th></tr></thead><tbody><tr><td>TSS</td><td>05.02.12 22.02.12</td><td>1</td><td>Reported in 2012 Annual Return</td></tr><tr><td>Sulfate</td><td>25.09.12 10.10.12 16.10.12 23.10.12 30.10.12 6.11.12 13.11.12 20.11.12 27.11.12 4.12.12</td><td>1</td><td>Reported in 2012 Annual Return</td></tr><tr><td>TSS & Titanium</td><td>2.03.13</td><td>1</td><td>Reported in 2013 Annual Return</td></tr><tr><td>Potassium (total)</td><td>23.03.13</td><td>17</td><td>Reported in 2013 Annual Return</td></tr><tr><td>Magnesium (total)</td><td>26.03.13</td><td>17</td><td>Reported in 2013 Annual Return</td></tr><tr><td>Magnesium (total) Potassium (total) Sulfate TKN Nitrogen (total) Phosphorus (total)</td><td>02.04.13</td><td>17</td><td>Reported in 2013 Annual Return</td></tr><tr><td>Calcium (total) Magnesium (total) Potassium (total) Sulfate (total)</td><td>09.04.13 16.04.13 23.04.13</td><td>17</td><td>Reported in 2013 Annual Return</td></tr><tr><td>Sulfate</td><td>24.01.13</td><td>1</td><td>Reported in 2013 Annual Return</td></tr><tr><td>Sulfate Sodium</td><td>30.01.13</td><td>1</td><td>Reported in 2013 Annual Return</td></tr><tr><td>Sodium Calcium (total) Magnesium (total) Potassium (total)</td><td>10.04.13</td><td>1</td><td>Reported in 2013 Annual Return</td></tr><tr><td>Calcium (total)</td><td>17.04.13 23.04.13</td><td>1</td><td>Reported in 2013 Annual Return</td></tr><tr><td>TSS Potassium (dissolved) Titanium (total) Vanadium (total)</td><td>25.04.14</td><td>1</td><td>Reported in 2014 Annual Return</td></tr><tr><td>Lithium (dissolved) Sodium (total)</td><td>26.11.14 to 07.12.14</td><td>1</td><td>Reported in 2014 Annual Return</td></tr><tr><td>Lithium (dissolved)</td><td>31.12.14</td><td>1</td><td>Reported in 2014 Annual Return</td></tr><tr><td>Bicarbonate alkalinity Calcium Chloride Lithium (dissolved) Sodium</td><td>6.01.15</td><td>1</td><td>Auditor review of 2015 monthly monitoring reports</td></tr><tr><td>TSS Aluminium Zinc (dissolved)</td><td>21.04.15</td><td>1</td><td>Auditor review of 2015 monthly monitoring reports</td></tr><tr><td>TSS</td><td>21.04.15</td><td>2</td><td>Auditor review of 2015 monthly monitoring reports</td></tr></tbody></table> <div>In December 2013 / January 2014 Newstan commissioned a Clean Water Plant (CWP). The CWP uses coagulation,</div>	Pollutant	Date	Point	Note	TSS	05.02.12 22.02.12	1	Reported in 2012 Annual Return	Sulfate	25.09.12 10.10.12 16.10.12 23.10.12 30.10.12 6.11.12 13.11.12 20.11.12 27.11.12 4.12.12	1	Reported in 2012 Annual Return	TSS & Titanium	2.03.13	1	Reported in 2013 Annual Return	Potassium (total)	23.03.13	17	Reported in 2013 Annual Return	Magnesium (total)	26.03.13	17	Reported in 2013 Annual Return	Magnesium (total) Potassium (total) Sulfate TKN Nitrogen (total) Phosphorus (total)	02.04.13	17	Reported in 2013 Annual Return	Calcium (total) Magnesium (total) Potassium (total) Sulfate (total)	09.04.13 16.04.13 23.04.13	17	Reported in 2013 Annual Return	Sulfate	24.01.13	1	Reported in 2013 Annual Return	Sulfate Sodium	30.01.13	1	Reported in 2013 Annual Return	Sodium Calcium (total) Magnesium (total) Potassium (total)	10.04.13	1	Reported in 2013 Annual Return	Calcium (total)	17.04.13 23.04.13	1	Reported in 2013 Annual Return	TSS Potassium (dissolved) Titanium (total) Vanadium (total)	25.04.14	1	Reported in 2014 Annual Return	Lithium (dissolved) Sodium (total)	26.11.14 to 07.12.14	1	Reported in 2014 Annual Return	Lithium (dissolved)	31.12.14	1	Reported in 2014 Annual Return	Bicarbonate alkalinity Calcium Chloride Lithium (dissolved) Sodium	6.01.15	1	Auditor review of 2015 monthly monitoring reports	TSS Aluminium Zinc (dissolved)	21.04.15	1	Auditor review of 2015 monthly monitoring reports	TSS	21.04.15	2	Auditor review of 2015 monthly monitoring reports	Non-compliant
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		Chromium (dissolved)	milligrams per litre			0.008	flocculation, sedimentation and filtration to reduce turbidity and concentration of TSS prior to discharge from LDP001. At the time of the audit Newstan was in arbitration with the EPA regarding the pollutant concentration limits imposed by this EPL. This is discussed further in the main report.	
		Cobalt (dissolved)	milligrams per litre			0.003		
		Conductivity	microsiemens per centimetre			3250		
		Copper (dissolved)	milligrams per litre			0.007		
		Iron (dissolved)	milligrams per litre			230		
		Lead (dissolved)	milligrams per litre			0.023		
		Lithium (dissolved)	milligrams per litre			0.164		
		Magnesium	milligrams per litre			16		
		Manganese (dissolved)	milligrams per litre			1.2		
		Mercury (dissolved)	milligrams per litre			0.0006		
		Molybdenum (dissolved)	milligrams per litre			0.045		
		Nickel (dissolved)	milligrams per litre			0.024		
		Nitrogen (total)	milligrams per litre			2.7		
		Oil and Grease	milligrams per litre			6		
		pH	pH			6.5-8.5		
		Phosphorus (total)	milligrams per litre			0.41		
		Potassium	milligrams per litre			6		
		Selenium (total)	milligrams per litre			0.011		
		Silica (dissolved)	milligrams per litre			24.8		
		Silver (dissolved)	milligrams per litre			<0.001		
		Sodium	milligrams per litre			635		
		Sulfate	milligrams per litre			232		
		Tin	milligrams per litre			0.00		
		Titanium	milligrams per litre			10		
		TKN-N	milligrams per litre			2.6		
		POINT 1,2,17						
		Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DCM concentration limit	100 percentile concentration limit	
		Total suspended solids	milligrams per litre				50	
		POINT 1,17						

Title	Condition No	Requirement	Comments	Compliance / Recommendations																																				
		<table><tr><th>Pollutant</th><th>Units of Measure</th><th>50 percentile concentration limit</th><th>90 percentile concentration limit</th><th>3DGM concentration limit</th><th>100 percentile concentration limit</th></tr><tr><td>Vanadium (dissolved)</td><td>milligrams per litre</td><td></td><td></td><td></td><td><0.010</td></tr><tr><td>Zinc (dissolved)</td><td>milligrams per litre</td><td></td><td></td><td></td><td>0.04</td></tr></table> <p>POINT 2</p> <table><tr><th>Pollutant</th><th>Units of Measure</th><th>50 percentile concentration limit</th><th>90 percentile concentration limit</th><th>3DGM concentration limit</th><th>100 percentile concentration limit</th></tr><tr><td>Oil and Grease</td><td>milligrams per litre</td><td></td><td></td><td></td><td>10</td></tr><tr><td>pH</td><td>pH</td><td></td><td></td><td></td><td>6.5-8.5</td></tr></table>	Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit	Vanadium (dissolved)	milligrams per litre				<0.010	Zinc (dissolved)	milligrams per litre				0.04	Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit	Oil and Grease	milligrams per litre				10	pH	pH				6.5-8.5		
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EPL 395	L3.1	<p>Volume and Mass Limits</p> <p>For each discharge point or utilisation area specified below (by a point number), the volume/mass of:</p> <p>(a) liquids discharged to water; or;</p> <p>(b) solids or liquids applied to the area;</p> <p>must not exceed the volume/mass limit specified for that discharge point or area.</p> <table><tr><th>Point</th><th>Unit of Measure</th><th>Volume/Mass Limit</th></tr><tr><td>1</td><td>kilolitres per day</td><td>11,000</td></tr></table>	Point	Unit of Measure	Volume/Mass Limit	1	kilolitres per day	11,000	<p>In December 2013 Newstan installed a CWP and upgraded its pipeline and pumping system. The CWP allows for greater control of the water level within the Fassifern Seam and better management of surface water across the site using the CWP CITECT system. A v-notch weir was installed at LDP001 to monitor volume discharged. If the limit at LDP001 is reached, the discharge to LDP001 is switched off and alarms raised to investigate. Newstan personnel are able to log on to the CWP CITECT system and check dam levels, start / stop pumps etc.</p> <p>The Discharge limit at LDP001 was increased from 7,000 kL to 11,000 kL by EPL variation dated 15.10.12. Since this time, Newstan has reported the following exceedances with the volume limit:</p> <ul style="list-style-type: none">- 2.03.13: 12,384 kL discharged following a significant rainfall event (152 mm in 27 hours prior to discharge).- 22 to 23.04.15: 11,519 kL discharged following major storm	Non-compliant																														
Point	Unit of Measure	Volume/Mass Limit																																						
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EPL 395	L4.1	<p>Waste –</p> <p>The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled “Waste” and meeting the definition, if any, in 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 titled “Activity” in the table below. Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled “Other Limits” in the table below. This condition does not limit any other conditions in this licence.</p> <table><tr><th>Code</th><th>Waste</th><th>Description</th><th>Activity</th><th>Other Limits</th></tr><tr><td>NA</td><td>Waste</td><td>Any other waste received on the premises for storage, treatment, processing, sorting or disposal and which receipt is not a scheduled activity under Schedule 1 of the POEO Act, as in force from time to time</td><td>-</td><td>N/A</td></tr><tr><td>NA</td><td>General or Specific exempted waste</td><td>Waste that meets all the conditions of a resource recovery exemption under Clause 51A of the Protection of the Environment Operations (Waste) Regulation 2005</td><td>As specified in each particular resource recovery exemption</td><td>N/A</td></tr></table>	Code	Waste	Description	Activity	Other Limits	NA	Waste	Any other waste received on the premises for storage, treatment, processing, sorting or disposal and which receipt is not a scheduled activity under Schedule 1 of the POEO Act, as in force from time to time	-	N/A	NA	General or Specific exempted waste	Waste that meets all the conditions of a resource recovery exemption under Clause 51A of the Protection of the Environment Operations (Waste) Regulation 2005	As specified in each particular resource recovery exemption	N/A	<p>This Condition was revised by Variation dated 17.12.14 to allow for the waste in the table to be permitted to be received at the premises. Previous to this no waste was allowed to be received at the premises.</p> <p>Newstan receives the following waste at the premises:</p> <ul style="list-style-type: none">- Virgin Excavated Natural Material (VENM)- Excavated Natural Material (ENM)- Stone reject materials from Centennial's Cooranbong (Mandalong) mine. <p>The above waste is used for capping of the NREA tailings dam and also for drain construction within emplacement areas.</p> <p>Receipt of VENM is not a Scheduled Activity under Schedule 1 of the POEO Act. Receipt of ENM is exempt under the Excavated Natural Material Exemption 2012 (allowed for under the POEO (Waste) Regulation 2005 – General Exemption Under Part 6, Clause 51 and 51A).</p> <p>Newstan developed a procedure EWP005 which outlines the process for accepting NREA capping material. The procedure states that all material brought to site must have a VENM certificate and be approved by the Environmental Coordinator. The procedure was dated 14.02.12 and needs to be revised to include discussion of the receipt of ENM (in accordance with the exemption) and updated environmental coordinator contact details.</p> <p>The auditors sighted evidence indicating this procedure is being followed. For example VENM assessment reports from geotechnical engineering consultants RCA Australia (20.12.12) and Alliance Geotechnical (6.08.13 and 6.11.13) and ENM assessment report from Sanko geotechnical engineering (5.08.13). An example was also sighted where the Environment and Community Coordinator rejected material based on an unacceptable ENM report (email dated 25.08.14). The auditors did not sight and assess all VENM Assessments.</p>	<p>Compliant</p> <p>Recommendation</p> <p>Revise Procedure EWP005 to include discussion of the receipt of ENM (in accordance with the ENM Exemption 2012) and updated environmental coordinator contact details.</p>																					
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EPL 395	O1.1	<p>Activities must be carried out in a competent manner</p> <p>Licensed activities must be carried out in a competent manner. This includes:</p> <p>(a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and</p> <p>(b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.</p>	<p>A full assessment of compliance with this condition has not been undertaken, Newstan was found to be generally compliant with this requirement based on the following evidence / examples:</p> <ul style="list-style-type: none">- surface water is managed by the CWP CITECT system, which shows: dam capacity; dam volume; how many litres/s is being pumped across the site; release volume L/s; and total release volumes for current day and previous days- Sediment sumps within the Pit Top Area are inspected weekly by contractors Qube and cleaned out when necessary. Extracted sediment is disposed of to the Tailings Dam.- the Environment and Community Coordinator conducts weekly inspections of the site using EWP008 (sighted examples 7.01.15, 15.01.15 and 29.01.15).- waste management contractor J.R. Richards conducts weekly inspections of waste storage areas, and organises disposal of wastes and topping up of spill kits. J.R Richards provides Newstan with completed Mine Site Review Forms on a weekly basis	Compliant																																				

Title	Condition No	Requirement	Comments	Compliance / Recommendations
			<p>and a Monthly Waste Management Report. Examples of completed Mine / Site Waste Review Forms were sighted for the 28.01.15, 23.02.15, 14.04.15 and 12.05.15 and noted to include: inspection of waste liquid tank volumes, number and content levels of waste receptacles (oils, greases, chemicals, general waste, scrap steel, paper cardboard, batteries etc.), evidence of hydrocarbon spills, spill kit stock levels, inspection of bunded areas and general comments. The Monthly Waste Management Report was in the form of a spread sheet which included monthly waste stream summary, annual waste stream summary, graphs, disposal locations, key performance standards and identified opportunities for improvement (sighted December 2014 and April 2015 report).</p> <p>- Waste oils, greases, coolant and wash bay sludge were taken off-site for recycling by Renewable Oil Services (licensed transporters and facility). Waste chemicals were transported by Renewable Oil Services to licensed Hazmat Services Facility.</p> <p>- Waste was observed to be appropriately segregated and stored during the audit site inspection.</p> <p>In July 2014, the EPA conducted a compliance audit at Newstan as part of an audit program on coal train loading and unloading facilities focusing on management methods and procedures to prevent or minimise coal lost (in the form of leaks, spills and dust emissions) during rail transport. The audit assessed Newstan was non-compliant with carrying out train loading activities in a manner which minimises or prevents coal spills and dust emissions from the top of wagons during rail transport. One of the EPA's concerns was that whilst Newstan reported that it maintained the moisture content of the coal above Dust Extinction Moisture (DEM) that this was measured when the coal comes out of the washery after which the coal is transferred to product stockpiles at the rail loop where it may reside for some time. The EPA stated that it is unknown whether the moisture content of the coal is still above the DEM when loaded and whether the moisture content is sufficient to minimise or prevent coal dust emissions during the rail journey.</p> <p>Following the EPA audit, Newstan collected further information on the DEM of its coal. The auditors were provided with a spreadsheet and graph showing the DEM of Mandalong coal measured at the Port for the period Jan 2014 to March 2013. In each instance the moisture content was above the DEM for Mandalong (4.5%). It was reported that this information will be provided to the EPA as part of its response which is due by the end of June 2015. In addition, following the EPA audit, Newstan developed a Train Loading Standard and a train loading training presentation. On the basis of the measures implemented since the EPA audit and the finding that the Mandalong Coal DEM measured at the Port is above 4.5%, this Condition has been assessed as compliant.</p> <p>It is however noted that the EPA are still to receive the response from Newstan, and will make their own judgement on whether the information closes out the Non Compliance raised by the EPA.</p>	
EPL 395	O2.1	<p>Maintenance of plant and equipment</p> <p>All plant and equipment installed at the premises or used in connection with the licensed activity:</p> <p>(a) must be maintained in a proper and efficient condition; and</p> <p>(b) must be operated in a proper and efficient manner.</p>	<p>A full assessment of compliance with this condition has not been undertaken, however, Newstan was found to be generally compliant with this requirement based on the following evidence / examples provided below.</p> <p>(a) Haulage contractor, Qube was responsible for maintenance of its fleet of vehicles. A recent ISO14001 certification audit by Lloyd's Register LRQA (6-8 May 2015) found that operational control systems were well implemented and reported the following regarding maintenance:</p> <ul style="list-style-type: none"> - Mainpac implemented in March 2015 previously used Fleetmex. - 103 pre-starts include a check of tarpaulin condition, oil and fuel leaks - scheduled maintenance for monthly truck / trailer inspections included check of hydraulic hoses <p>In addition it was reported that Qube undertakes monthly Workplace and Workshop inspections. Qube reported they maintain a fleet of up to date trucks that have up to date environmental controls to Euro 4 standard.</p> <p>Newstan utilises the Pulse Work Order System to manage electrical and mechanical maintenance. The system sends out notifications when plant or equipment is due for maintenance.</p> <p>The CWP undergoes annual maintenance and it was reported that spare parts are available on site for most equipment. Examples of maintenance records were sighted including:</p> <p>Clean water plant electrical 3 monthly test 1.07.14, 1.10.14; Clean water plant 3 monthly mechanical inspections 1.02.15, 1.11.2014; Water quality Meter monthly calibration 1.05.15; Acrodyne – Clean water plant - valve checks 11.02.2015.</p> <p>The auditors sighted a number of examples of item specific maintenance inspection checks and inspection records, including: R&D Centennial Newstan Fassifern bore pumps vacon drive service report 05.05.14; Water quality meter – electrical 12 monthly – periodic internal inspection of field equipment 1.1.15; Purchase order for 6 monthly testes of valves at stony Creek – 01.02.15; Northern coal services pump and coal handling pump electrical supply earth leakage tests (all pumps) 1.12.14; Mechanical diesel fire pump weekly inspection 2.11.14; Switchroom chitter dam pump electrical monthly inspection 1.02.15, 01.12.14; Krone - Electromagnetic Flowmeter Verification Certificate Inspected on 12-8-2014 – yearly check of Portable Water Pipe, Filtered Water Pipe, Reuse Water Pipe, Raw Water Pipe.</p> <p>The Weekly Environmental Inspection undertaken by the Environment and Community Coordinator includes checks of the following areas: hydrocarbon storage area, general pit top, separator diesel bay, drive in sump, wash down bay, M&M collection sump, separator- compressor house, separator – northern hardstand, northern hardstand area, waste bunkers, conveyor drift, LDP001, CHP stockpile perimeter drain, haul road drive in sumps, weigh bridge sumps, sewerage and grey water, water tank, sewerage maturation pond and weed and pest management. Examples of completed inspections were observed (7.01.15, 15.01.15 and 29.01.15)</p> <p>It was reported that oil water separators are serviced quarterly or as required by contractors SNK. The Weekly Environmental</p>	Compliant

Title	Condition No	Requirement	Comments	Compliance / Recommendations
			<p>Inspection for the 29.01.15 was observed to note that oil levels in the waste oil tank, conveyor drift sump and compressor bund at the conveyor drift site were high and SNK were notified.</p> <p>b) All contractors are reportedly required to provide records of training and certification to operate machinery. It was reported that all plant that comes on site must present a 103 document which verifies it's fit for work status prior to it being inspected and signed off by a Newstan engineer.</p> <p>General environmental awareness training was provided through the site induction process. The site induction presentation was noted to include a section on environmental management which covered: water management, noise management, legal requirements, spill response, hydrocarbon management, waste, heritage, responsibilities and environmental contacts. The CWP was designed to be largely self-operating. Formal training for Newstan personnel was undertaken for operation of the plant (sighted CWP Operator Training Module 1 presentation by Aquatec Maxcon).</p> <p>While not all plant and equipment was reviewed in relation to this condition, based on the evidence discussed, it is considered Newstan are generally compliant with the condition.</p>	
EPL 395	O2.2	The licensee is responsible for the correct operation of the sewage treatment system on their premises.	The CITECT system program is used to monitor the sewerage treatment plant (STP) on a real time basis. This includes recording of pH, dissolved oxygen, aerator operations, de-nitrification etc. It was reported that the Washery control room would be notified if any maintenance issues occur. Quarterly inspections / services were conducted by service contractors, Waste Water Maintenance. Service reports were sighted as outlined in Condition O2.4 below.	Compliant
EPL 395	O2.3	Correct operation involves regular supervision and system maintenance. The licensee must be aware of the system management requirements and must ensure that the necessary service contracts are in place.	Refer O2.2 and O2.4.	Compliant
EPL 395	O2.4	The sewage treatment system must be serviced by a suitably qualified and experienced wastewater technician at least once in each quarterly period and a minimum of four times per year.	Quarterly inspections / services were conducted by service contractors, Waste Water Maintenance. Service reports were sighted for 13.03.12, 6.06.12, 26.09.12, 19.12.12, 12.03.13, 19.06.13, 10.09.13, 10.12.13, 19.03.14, 25.06.14, 24.09.14, and 15.12.14. These were provided to the EPA with the 2012, 2013 and 2014 Annual Returns.	Compliant
EPL 395	O2.5	The licensee must record each inspection and any actions required or recommended by the technician including all results of tests performed on the sewage treatment system by the technician as required in Condition O2.4.	The service reports provided by Waste Water Maintenance were noted to include results of tests performed on the STP and recommended actions.	Compliant
EPL 395	O2.6	The licensee must prepare a sewage treatment system maintenance program. The program must include: <ul style="list-style-type: none"> a) Certification from the system provider that the sewage treatment system is operating within its capacity; b) Date, time and results of all routine maintenance procedures undertaken to the sewage treatment system; and c) Provide written records of each quarterly inspection. 	The auditors sighted the Scope of Work provided by Waste Water Maintenance for the period 1 July 2014 to 30 June 2015 outlining the analytical tests, mechanical, electrical and instrumentation checks/adjustments and reporting proposed to be undertaken on a three monthly basis at the Newstan STP. The auditors also sighted completed quarterly inspection reports. This indicated that a maintenance program was being implemented. Written records of the quarterly inspections were provided to the EPA with the 2012, 2013 and 2014 Annual Returns.	Compliant
EPL 395	O3.1	Dust The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	<p>The following measures were implemented during the audit period to minimise the generation of wind blown or traffic generated dust:</p> <ul style="list-style-type: none"> - Progressive rehabilitation. During the audit period rehabilitation activities included contouring, construction of drop structures, progressive capping of the NREA Tailings storage facility (as stone reject material and VENM became available) and progressive planting. The tailings dam was reported in the 2014 AEMR to be 68% capped. - At the audit site inspection on the 11.05.15 the majority of the NREA had some sort of ground cover (either grass or small shrubs and trees). - Use of water carts. Newstan's haulage contractor, Qube, had three water carts for use on the NREA, coal stockpile and pit top area. These were observed in operation during the audit site inspection. It was reported that water trucks are available 24 hours / day if required. A chemical dust suppressant is reportedly periodically added to the water cart. - Qube had a dedicated vacuum sweeper truck on site to sweep roads. - Haul roads have a designated speed limit. - Vehicles were observed to be restricted to dedicated haulage routes. <p>Dust emissions were not observed during site inspections.</p> <p>The 2013 and 2014 AEMRs reported that all particulate dust gauges recorded an annual average particulate monitoring result below development consent limit of 4g/m2/month for the annual averaging period.</p> <p>Results for high volume monitors demonstrated compliance with the criteria for TSP of 90 µg/m3 (annual average), and PM10 of 30 µg/m3 (annual average), and the results were also below the PM10 24 hour limit of 50 µg/m3 during the 2013 and 2014 reporting periods.</p> <p>Based on the above, it is considered Newstan were compliant with the condition.</p>	Compliant
EPL 395	O3.2	Activities occurring in or on the premises must be carried out in a manner that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.	Refer O3.1 above.	Compliant
EPL 395	O3.3	All trafficable areas, coal storage areas and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.	Refer O3.1 above.	Compliant

Title	Condition No	Requirement	Comments	Compliance / Recommendations
EPL 395	O3.4	Trucks transporting coal from the premises must be covered immediately after loading to prevent wind blown emissions and spillage. The covering must be maintained until immediately before unloading the trucks.	A daily checklist is completed by the Washery team for the Cooranbong Haul Road which includes a comment on the number of trucks with their tarps on. Completed Daily Operating Inspection Sheets were sighted for 20.01.15 to 30.01.15, 2.02.15 to 6.02.15 and 28.03.15 to 3.04.15. In the examples sighted there were no instances recorded where trucks did not have their tarps covering loads. In addition the Environment and Community Coordinator conducted a spot audit on the 4.03.15 of the haul trucks along the Newstan Haul Road. The audit found that within 40 minutes, there were 12 truck movements and all trucks carrying coal had tarps on correctly.	Compliant
EPL 395	O3.5	The tailgates of all haulage trucks leaving the premises must be securely fixed prior to loading or immediately after unloading to prevent loss of material.	Newstan coal transport vehicles are side loading trucks, which do not have tailgates to secure. It was reported that there were no incidents involving the release of material during the audit period.	Not applicable
EPL 395	O3.6	Coal stockpiles must be maintained in a condition that will minimise the generation and emission of dust on the premises.	It was reported that Newstan (and Mandalong) coal processed through the washery is inherently damp. Newstan provided the auditors with a spreadsheet and graph showing the DEM of Mandalong coal measured at the Port for the period Jan 2014 to March 2015. In each instance the moisture content was above the DEM for Mandalong (4.5%). Newstan indicated that due to the moisture content of the washed coal; limited dust is generated from stockpiles. It was reported that one of the water carts includes a water cannon which can be used to dampen the coal stockpiles as required. As discussed above; dust monitoring has not indicated levels at monitoring locations to exceed development consent criteria.	Compliant
EPL 395	O4.1	Emergency Response The licensee must maintain, and implement as necessary, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The emergency response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. If a current emergency response plan does not exist at the date on which this condition is attached to the licence, the licensee must develop an emergency response plan within three months of that date.	Newstan maintains a Pollution Incident Response Management Plan which was last revised in October 2014. A simulated environmental emergency was conducted in March 2014. The auditors sighted the de-brief notes which included improvement opportunities.	Compliant
EPL 395	O5.1	Other operating conditions All above-ground tanks containing material that is likely to cause environmental harm must be bunded or have an alternative spill containment system in place.	The following above ground tanks were observed on site: - 1 X 53,000 L diesel tank (Qube facility-concrete bund) - 2 X 20,000 L Diesel tanks (concrete bund) - Oil drums - Compressor - Self bunded tanks at the CWP Bunds were observed around the tanks during the site inspection. The Weekly Environmental Inspection (EWP008) undertaken by the Environment and Community Coordinator includes a check of levels in bunds, sumps and waste oil tanks (sighted examples 7.01.15, 15.01.15 and 29.01.15). Weekly inspections undertaken by waste contractor J.R. Richards include inspection of bunded areas (sighted examples 28.01.15, 23.02.15, 14.04.15, 12.05.15).	Compliant
EPL 395	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
EPL 395	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.	(a) The following monitoring records are required by this licence: dust; water; and meteorological. - Depositional dust monitoring was undertaken by AECOM. AECOM provides Newstan with a spreadsheet of the results on a monthly basis. - Particulate matter and Total Suspended Particles (TSP) monitoring was undertaken by contractors Carbon Based. Carbon Based provided Newstan with monthly monitoring reports. - Water quality monitoring was undertaken by AECOM. AECOM provide Newstan with a spreadsheet of monitoring results on a weekly and monthly basis. - Water levels and discharges were recorded using the CWP CITECT system. - Meteorological data is accessed through the Citrix program. (b) Reports for surface water, dust, groundwater and meteorological data from 2011 to 2015 were sighted during the audit site inspection. (c) In November 2014, the EPA requested raw water quality data to accompany a licence variation application. This was reported by Newstan to have been provided by letter and CD on the 28.11.14.	Compliant
EPL 395	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.	The monitoring spreadsheet was sighted on the audit site inspection and noted to include the records required by this condition.	Compliant

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EPL 395	M2.1	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 M2.2.	Noted																				
EPL 395	M2.2	Air Monitoring Requirements POINT 7,8,9,10,11,12,13,14 <table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling Method</th></tr><tr><td>Particulates - Deposited Matter</td><td>grams per square metre per month</td><td>Monthly</td><td>AM-19</td></tr></table> POINT 15,16 <table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling Method</th></tr><tr><td>Particulate matter</td><td>micrograms per cubic metre</td><td>Every 8 days</td><td>AM-18</td></tr><tr><td>Total suspended particles</td><td>micrograms per cubic metre</td><td>Every 8 days</td><td>AM-15</td></tr></table>	Pollutant	Units of measure	Frequency	Sampling Method	Particulates - Deposited Matter	grams per square metre per month	Monthly	AM-19	Pollutant	Units of measure	Frequency	Sampling Method	Particulate matter	micrograms per cubic metre	Every 8 days	AM-18	Total suspended particles	micrograms per cubic metre	Every 8 days	AM-15	<p>A non-compliance was reported with this Condition in the 2012 and 2013 EPL Annual Returns as the following air quality monitoring was not undertaken:</p> <ul style="list-style-type: none">- TSP at EPA Monitoring point 16-HVS2 on 09.01.12- PM₁₀ at EPA Monitoring point 16-HVS2 on 11.09.12 due to a power outage;- TSP at EPA Monitoring point 16-HVS2 on 11.09.12 due to a power outage;- Particulates – deposited matter at EPA Monitoring Point 13-D7 for the monthly sample of 20 March to 19 April 2012 due to vandalism of the dust gauge.- PM₁₀ at EPA Monitoring point 16-HVS2 on the 15.03.15, 21.05.13 and 27.05.13 due to an electrical failure within the sampler- Particulates – deposited matter at EPA Monitoring Point 10-D4 for the monthly sample of 18 March to 18 April 2013 due to vandalism of the dust gauge. <p>AM-19 refers to AS 3580.10.1-1991. Depositional dust monitoring was undertaken by AECOM. AECOM developed a procedure, Ambient Measurement Procedure - Dust Deposit Gauges which references AS 3580.1.1:2003.</p> <p>AM-18 refers to AS 3580.9.6-1990 and AM-15 refers to AS 2724.3-1984.</p> <p>The February 2015 Environmental Monitoring Report of TSP, PM₁₀ and PM_{2.5} provided by Carbon Based stated that the following Australian Standards were used:</p> <ul style="list-style-type: none">- AS3580.9.3 for TSP- AS3580.9.6 for PM₁₀ <p>AS 3580.9.3 is not listed within the EPA publication, <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> however it is noted AS3580.9.6 has superseded AS 2724.3-1984 and the EPA publication has not been reviewed since January 2007.</p> <p>On the basis of the non-compliances reported in the 2012 and 2013 Annual Returns this condition was deemed non-compliant.</p>	Non-compliant
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Particulates - Deposited Matter	grams per square metre per month	Monthly	AM-19																					
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Particulate matter	micrograms per cubic metre	Every 8 days	AM-18																					
Total suspended particles	micrograms per cubic metre	Every 8 days	AM-15																					
EPL 395	M2.3	Water and/ or Land Monitoring Requirements <i>Summarised below (see EPL 365 for full requirements)</i> <u>Point 1 (LDP001):</u> - Metals: weekly by composite sample. - Conductivity: daily by composite sample - Total suspended solids, oil and grease and pH: weekly by composite sample Turbidity: weekly by grab sample <u>Point 2 (LDP002)</u> - Metals: weekly during any discharge by grab sample. - Conductivity, oil and grease, pH, total suspended solids and turbidity: within the first 6 hours of any discharge occurring; and every seven days thereafter for the duration of the discharge <u>Point 3, 4, 6, 20 (ambient water quality)</u> - Metals: monthly during discharge by grab sample. - Conductivity, oil and grease, pH, total suspended solids and turbidity: within the first 6 hours of any discharge occurring; and every seven days thereafter for the duration of the discharge <u>Point 17 (Stony Ck Pipeline Outlet)</u> -Metals: within the first 6 hours of any discharge occurring; and every seven days thereafter for the duration of the discharge - Conductivity, temperature and turbidity: continuously during any discharge (subject to the following note) - , oil and grease, pH and total suspended solids: within the first 6 hours of any discharge occurring; and every seven days thereafter for the duration of the discharge <u>Point 18 (ambient water quality)</u> -Temperature: continuously during any discharge (subject to the following note - b) <u>Point 19 (ambient water quality)</u> - Metals: weekly by composite sample	<p>A non-compliance was reported with this Condition in the 2012 and 2013 Annual Returns as the sampling method and frequency for LDP001 and Point 19 (WMP03) was not in accordance with the requirement. The Licence Variation dated 15.10.12 changed the sampling method from grab sampling to composite sampling and the frequency from weekly to daily. Newstan continued to use weekly grab sampling whilst it was in the process of procuring, installing and commissioning the composite samplers. These were installed in April 2013. The composite samplers at LDP001 and Point 19 were observed during the audit site inspection.</p> <p><u>Note re Special Frequency 1</u> Newstan has developed a procedure (EWP002– Environmental Monitoring During Discharge Events) which outlines the step by step process for sampling during discharge events. This was reviewed by the auditors and considered to be a comprehensive and well written procedure. Some opportunities for improving the procedure were identified (refer to recommendations).</p> <p>It was reported that where Newstan is required to take a sample within the first 6 hours of any discharge occurring this is managed in the following way:</p> <ul style="list-style-type: none">- water levels are monitored in the CWP CITECT system;- If either the FPCD, Graunchs, Fassifern's storage or Connolly's dam gets to 80% an alarm sounds and an automated phone call is made to a prioritised list of Newstan personnel on rotation until someone answers the call.- Newstan personnel are able to log on to the CWP CITECT system and check dam levels, start / stop pumps etc.- if it becomes apparent that a discharge is imminent, the Environmental Coordinator takes the grab sample and stores it for pick up by AECOM for preparation and analysis by the laboratory as per Procedure EWP002. <p>In 2015, the requirement for monitoring within the first 6 hours of any discharge was triggered during the following events:</p> <ul style="list-style-type: none">- 21.04.15 - overflow of Graunchs Dam through LDP001- 21.04.15 – overflow of FPCD through LDP002- 23.04.15 – overflow of Clean Water Dam <p>In its written report for the 21-23 April 2015 incident to the EPA dated 5.05.15, Newstan stated the dates and times of the discharges and the dates and times sampling was undertaken. Based on this information Newstan undertook sampling within 6 hours of the discharges occurring at all but one location (Point 6) where it was deemed unsafe to collect samples late at night during extreme storm conditions. Samples were taken at this location at 8:45am the next day when it was safe to do so.</p>	Non-compliant Recommendation: Update EWP002- Environmental Monitoring During Discharge Events, to include the plan referenced in the EPL for monitoring locations (plan NS3303). Also ensure procedure includes monitoring requirements for EPA Monitoring Point 20 (WMP 16) during discharge events.																				

Title	Condition No	Requirement	Comments	Compliance / Recommendations																				
		<p><u>Note</u> Special Frequency 1 means in the event of a discharge, a grab sample of the water discharged must be collected: a) within the first 6 hours of any discharge occurring; and b) every seven days thereafter for the duration of the discharge;</p>																						
EPL 395	M2.3	<p>Special Frequency 2 means continuous sampling during any discharge, subject to the following in respect of Point 17 and Point 18. (a) A continuous monitoring system will be implemented by 31 March 2013, weather permitting. It is noted that, to minimise the possibility of a flow of mine wastewater through the pipeline during installation and excavation works, the installation of continuous monitoring equipment will not commence until there is a two (2) metre buffer from the water level in the seam to the Stony Creek pipeline inlet.</p> <p>(b) In the event of a discharge occurring prior to the implementation of continuous monitoring being installed, hourly monitoring must be carried out. This monitoring will commence within the first six (6) hours of any discharge occurring.</p>	<p><u>Note re Special Frequency 2</u> (a) The continuous monitoring system was installed at Stony Creek on the 15.10.13. The EPA was notified of the completion of its installation by letter dated 8.11.13. The EPA was previously notified (by letter dated 11.03.13 that there would be a delay in the implementation of the monitoring system due to significant rain which raised the water levels in the Fassifern seam to within the 2m buffer of the inlet to the Stony Creek pipeline.</p> <p>b) Newstan reported that Point 17 (Stony Creek pipeline) commenced discharging on the 22.03.13. This was prior to the continuous monitoring system being completed as discussed above. It was reported that for this event, environmental consultants AECOM were undertaking hourly monitoring to satisfy this condition.</p> <p>In addition Newstan reported that Point 17 commenced discharging on the 11.05.15 at 8:20am. By this stage the continuous monitoring system had already been installed. The auditors were provided with a spreadsheet ("Stony Creek 2015) which included the half hourly temperature, conductivity and turbidity monitoring data for Point 17 for the period 8 am 11.05.15 to 03.06.15.</p> <p>Based on the non-compliances reported by Newstan in 2012 & 2013 as indicated above, Newstan were considered to be non-compliant with this condition.</p>																					
EPL 395	M2.4	The licensee must conduct monitoring for the pollutants listed in Condition M2.3. At the end of the first six (6) months monitoring all results must be submitted to the EPA to be reviewed.	Completed during previous IEA audit period.	Completed																				
EPL 395	M3.1	<p>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 d) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.</p> <p><i>Note: The Protection of the Environment Operations (Clean Air) Regulation 2010 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".</i></p>	Noted. Refer to Condition M2.2 above.	Noted																				
EPL 395	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.	The EPA publication <i>Approved Methods for the Sampling and Analysis of Water Pollutants in New South Wales</i> states that samples should be collected, handled and preserved in a manner consistent with AS/NZS 5667.1:1998. AECOM undertakes the surface water monitoring at Newstan and has prepared a Surface Water Monitoring Procedure. The Procedure references Australian Standard AS/NZS 5667.1:1998.	Compliant																				
EPL 395	M4.1	<p>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 licence must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns.</p> <p>POINT W1</p> <table border="1"> <thead> <tr> <th>Parameter</th><th>Units of Measure</th><th>Frequency</th><th>Averaging Period</th><th>Sampling Method</th></tr> </thead> <tbody> <tr> <td>Rainfall</td><td>mm</td><td>Continuous</td><td>24 hour</td><td>AM 4</td></tr> <tr> <td>Wind direction</td><td>degrees</td><td>Continuous</td><td>1 hour</td><td>AMS-2 and AMS-4</td></tr> <tr> <td>Wind speed</td><td>metres per second</td><td>Continuous</td><td>1 hour</td><td>AM 2 and AM 4</td></tr> </tbody> </table>	Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method	Rainfall	mm	Continuous	24 hour	AM 4	Wind direction	degrees	Continuous	1 hour	AMS-2 and AMS-4	Wind speed	metres per second	Continuous	1 hour	AM 2 and AM 4	<p>Compliance with the sampling methods and suitability of the location of the meteorological station was assessed during the previous IEA. There were no changes made to the instrumentation and data logger configuration or location of the meteorological station during the audit period.</p> <p>The meteorological station was operational on the day of the audit site inspections. The monitoring system sighted on CITECT showed the required parameters including, rainfall (24 hours), wind speed and wind direction. In addition the station reports temperature, humidity, solar radiation and barometric pressure</p>	Compliant
Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method																				
Rainfall	mm	Continuous	24 hour	AM 4																				
Wind direction	degrees	Continuous	1 hour	AMS-2 and AMS-4																				
Wind speed	metres per second	Continuous	1 hour	AM 2 and AM 4																				
EPL 395	M4.2	For the purpose of condition M4.1, Point W1 refers to a meteorological station established on the premises and is labelled as W1 on the plan titled "Location of Air, Noise, Weather Monitoring Points and Ventilation System - for Newstan EPL 395" plan numbered NS 3304 dated 17/11/2014	The location of the meteorological station was not changed during the audit period.	Compliant																				

Title	Condition No	Requirement	Comments	Compliance / Recommendations																											
		DOC14/292013-04 EF13/2761																													
EPL 395	M5.1	Recording of Pollution Complaints licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	Complaints are logged by the Environmental Coordinator within Lotus Notes (using the ECD system).	Compliant																											
EPL 395	M5.2	The record must include details of the following: (a) the date and time of the complaint; (b) the method by which the complaint was made; (c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; (d) the nature of the complaint; (e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and (f) if no action was taken by the licensee, the reasons why no action was taken.	The log includes the following information: reference number, incident type (of which community complaint is an option), complainant details, date and time of occurrence, method by which complaint was made, complaint details, investigation / cause, remediation details, implementation process, implementation date and details of consultation. The ECD system was demonstrated to the auditors during the audit site inspection. A report was run within ECD which summarised all the incidents and complaints for the calendar years applicable to this audit period.	Compliant																											
EPL 395	M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Records are kept for the required four years. Examples of complaint records were sighted dating back to 2011.	Compliant																											
EPL 395	M5.4	The record must be produced to any authorised officer of the EPA who asks to see them.	The records are available upon request by the EPA. A summary of complaints is provided to the EPA in the Annual Return and the AEMR (which is publicly available on the Centennial Newstan website).	Compliant																											
EPL 395	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.	Newstan operates a dedicated community information and complaints telephone line (1800 247 662).	Compliant																											
EPL 395	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.	The telephone line is publicly advertised on Centennial Coal's website and in the White Pages.	Compliant																											
EPL 395	M6.3	Conditions M6.1 and M6.2 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 395	M6.4	The licensee must nominate a representative of the company that is available all times and is capable of providing immediate assistance or response during emergencies or any other incidents at the premises. The name of the nominated representative and their contact details, including a telephone number, must be current at all times. Note: This condition does not apply until two (2) weeks after the date of issue of this licence.	This Condition was added by the licence variation on the 17.12.14. The EPA was advised by letter dated 7.01.14 that Environment and Community Coordinator Veronica Howat is the nominated representative of the company and her contact details provided.	Compliant																											
EPL 395	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. <table><tr><td colspan="3">POINT 1</td></tr><tr><td>Frequency</td><td>Unit of Measure</td><td>Sampling Method</td></tr><tr><td>Daily during any discharge</td><td>megalitres per day</td><td>Continuously</td></tr></table> <table><tr><td colspan="3">POINT 2</td></tr><tr><td>Frequency</td><td>Unit of Measure</td><td>Sampling Method</td></tr><tr><td>Daily during any discharge</td><td>megalitres per day</td><td>Continuously</td></tr></table> <table><tr><td colspan="3">POINT 17</td></tr><tr><td>Frequency</td><td>Unit of Measure</td><td>Sampling Method</td></tr><tr><td>Continuous during discharge</td><td>litres per day</td><td>Continuously</td></tr></table> Note: In relation to Point 17, volumemass is to be determined in the event of a discharge by estimation until continuous monitoring equipment is installed as per note to condition M2.3	POINT 1			Frequency	Unit of Measure	Sampling Method	Daily during any discharge	megalitres per day	Continuously	POINT 2			Frequency	Unit of Measure	Sampling Method	Daily during any discharge	megalitres per day	Continuously	POINT 17			Frequency	Unit of Measure	Sampling Method	Continuous during discharge	litres per day	Continuously	Point 1 (LDP001), Point 2 (LDP002) and Point 17 (Stony Creek pipeline) have flow loggers installed to enable continuous monitoring of discharge volumes. These volumes are tracked using the CWP CITECT system. The CWP CITECT system was demonstrated to the auditors during the site inspection. At the time LDP001 was showing that it was discharging and the volume was being monitored. No discharges were occurring from LDP002. The requirement for continuous monitoring at Point 17 during discharge was triggered for the first time on the 11 May 2015.	Compliant
POINT 1																															
Frequency	Unit of Measure	Sampling Method																													
Daily during any discharge	megalitres per day	Continuously																													
POINT 2																															
Frequency	Unit of Measure	Sampling Method																													
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POINT 17																															
Frequency	Unit of Measure	Sampling Method																													
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Title	Condition No	Requirement	Comments	Compliance / Recommendations
EPL 395	M8.1	<p>Other monitoring and recording conditions</p> <p>Sediment Monitoring</p> <p>The licensee must undertake a sediment monitoring program. This sediment monitoring program must be undertaken by a suitably qualified and experienced person. The sampling program must</p> <p>a) be undertaken at 6 monthly intervals;</p> <p>b) include the sediments within the Bywash Dam located downstream of Point 1 and at three locations (including one within the intertidal zone) within LT Creek downstream of the point referred to as "WMP03";</p> <p>c) be undertaken of the sediments for the suite of nine metals provided in table 3.5.1 of the ANZECC and ARMCANZ Sediment Quality Guidelines; and</p> <p>d) a report prepared by a suitably qualified and experienced person must be provided with the Annual Return, and must include discussion of any temporal change for the purpose of continuing to assess the capacity of sediments in the downstream environment to adsorb metals. This report must:</p> <p>i) include graphical analysis of the spatial and temporal trends in the creek;</p> <p>ii) include the raw data in an appendice; and</p> <p>iii) include the previous data collected dating back to 2010.</p> <p>Note 1: The location of the point referred to as "WMP03" is shown on the plan titled "Newstan Colliery, Surface Plan, All Water Monitoring Points" dated 25 November 2009 attached to the Licence Variation Application dated 23 February 2012.</p> <p>Note 2: The EPA will review the frequency of monitoring two years after commissioning of the water treatment plant and two years of monitoring data under this clause is available.</p>	<p>GHD has prepared an Ecotoxicological, Sediment, Macroinvertebrate and Water (ESMW) Monitoring Program (November 2012).</p> <p>In accordance with the ESMW monitoring procedure, sediment and water quality sampling was undertaken in February, April, July and October 2013, as well as in January 2014. GHD prepared a summary report (LT Creek Aquatic Monitoring Summary Report March 2014) which was included as Appendix B to the CWP Commissioning Phase Water Quality Assessment required by Condition U1. The summary report was reviewed by the auditors and the following noted:</p> <p>a) sediment monitoring was undertaken at a minimum of 6 monthly intervals. Some sites were monitored more frequently.</p> <p>b) sediment monitoring was undertaken at:</p> <p>- Impact Sites: Bywash dam, WMP003, SP003, SP004</p> <p>- Recovery sites: Weir, IZ (estuarine)</p> <p>- Reference Sites: Stony Creek, Ref1 (estuarine)</p> <p>c) sediments were sampled for Antimony, Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Silver, Zinc.</p> <p>d) The summary report was prepared by environmental consultants GHD. The report includes a review of data dating back to May 2011. The report was included as Appendix B to the CWP Commissioning Phase Water Quality Assessment required by Condition U1 which was submitted to the EPA on 2.04.14. Newstan reported that it was not provided with the 2014 Annual Return.</p> <p>A detailed review of the adequacy of the graphical analysis of the trends in the creek was not undertaken as part of this audit.</p>	Compliant
EPL 395	R1.1	<p>Annual Return Documents</p> <p>The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:</p> <p>(a) a Statement of Compliance; and</p> <p>(b) a Monitoring and Complaints Summary.</p> <p>At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.</p>	The 2012, 2013 and 2014 Annual Returns were reviewed and noted to include a Statement of Compliance and a Monitoring and Complaints Summary on the approved form.	Compliant
EPL 395	R1.2	<p>An Annual Return must be prepared in respect of each reporting period, except as provided below.</p> <p>Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.</p>	Annual Returns were prepared for each reporting period applicable to this audit period (2012, 2013 and 2014).	Compliant
EPL 395	R1.3	<p>Where this licence is transferred from the licensee to a new licensee:</p> <p>(a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and</p> <p>(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.</p> <p>Note: An application to transfer a licence must be made in the approved form for this purpose.</p>	Not applicable during the audit period.	Not applicable
EPL 395	R1.4	<p>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:</p> <p>a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or</p> <p>b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.</p>	Not applicable during the audit period.	Not applicable
EPL 395	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').	It was reported that the Annual Returns were hand delivered to the EPA within the specified time frame.	Compliant

Title	Condition No	Requirement	Comments	Compliance / Recommendations																								
EPL 395	R1.6	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least4 years after the Annual Return was due to be supplied to the EPA.	It was sighted that electronic records were retained back to 2004. The 2011 Annual Return was sighted during the audit site inspection.	Compliant																								
EPL 395	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.	The 2012, 2013 and 2014 Annual Returns were reviewed and it was noted that the Complaints Summary was signed by a Director and Company Secretary.	Compliant																								
EPL 395	R2.1	Notification of Environmental Harm Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable 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 EPA's Pollution Line service on 131 555.	<div>During the audit period Newstan notified the EPA pollution line of incidents causing or threatening material harm to the environment on nine occasions. A summary of the incident (date and details), date and time the EPA was notified and date and time a written report was provided to the EPA (as per R2.2) is provided in the Table below.</div> <table><tr><th>Date & time of incident</th><th>Incident details</th><th>Date & time reported to EPA</th><th>Date report provided to EPA</th></tr><tr><td>1.03.13 approx. 9:30pm to 3.03.13 approx. 4pm</td><td>Overflow of Graunch's Dam through LDP001</td><td>01.03.13 11:45pm</td><td>08.03.13</td></tr><tr><td>8.04.13</td><td>Exceedance of criteria for several parameters at EPL Point 17 (Stony Creek pipeline)</td><td>8.04.13 2:50pm</td><td>15.04.13</td></tr><tr><td>19.04.13</td><td>Exceedance of criteria for several parameters at EPL Point 17</td><td>19.04.13</td><td>26.04.13</td></tr><tr><td>13.11.13</td><td>Exceedance of Lithium and bicarbonate alkalinity criteria at LDP001</td><td>13.11.13 4:15pm</td><td>20.11.13</td></tr><tr><td>18.11.13 approx. 7:30am</td><td>Overflow of water from Graunch;s Dam through LDP001</td><td>18.11.13 9:30am</td><td>25.11.13</td></tr></table>	Date & time of incident	Incident details	Date & time reported to EPA	Date report provided to EPA	1.03.13 approx. 9:30pm to 3.03.13 approx. 4pm	Overflow of Graunch's Dam through LDP001	01.03.13 11:45pm	08.03.13	8.04.13	Exceedance of criteria for several parameters at EPL Point 17 (Stony Creek pipeline)	8.04.13 2:50pm	15.04.13	19.04.13	Exceedance of criteria for several parameters at EPL Point 17	19.04.13	26.04.13	13.11.13	Exceedance of Lithium and bicarbonate alkalinity criteria at LDP001	13.11.13 4:15pm	20.11.13	18.11.13 approx. 7:30am	Overflow of water from Graunch;s Dam through LDP001	18.11.13 9:30am	25.11.13	Compliant
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EPL 395	R2.1		<table><tr><th>Date & time of incident</th><th>Incident details</th><th>Date & time reported to EPA</th><th>Date report provided to EPA</th></tr><tr><td>25.04.14 Approx. 8:00am</td><td>Overflow of turbid water from Graunch's dam through LDP001</td><td>25.04.14 10:30am</td><td>02.15.15 Refer Condition R3.1 below</td></tr><tr><td>2.12.14</td><td>Exceedance of Lithium at LDP001</td><td>02.12.14 11:06am</td><td>9.12.14 Show cause letter received by EPA (not sighted by auditors)</td></tr><tr><td>9.04.15</td><td>Turbid water discharge</td><td>9.04.15 5:18pm</td><td>Refer Condition R3.1 below.</td></tr><tr><td>21.04.15 approx 4:45pm 23.04.15 approx 9:30pm</td><td>Discharge from FPCD through LDP002 Overflow of Clean Water Dam</td><td>21.04.15 7:05pm</td><td>05.05.15 Extension granted by EPA on 28.04.15.</td></tr></table> <div>Based on the above, the auditors consider Newstan complied with the requirement to notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after becoming aware of the incident via the Pollution Line.</div>	Date & time of incident	Incident details	Date & time reported to EPA	Date report provided to EPA	25.04.14 Approx. 8:00am	Overflow of turbid water from Graunch's dam through LDP001	25.04.14 10:30am	02.15.15 Refer Condition R3.1 below	2.12.14	Exceedance of Lithium at LDP001	02.12.14 11:06am	9.12.14 Show cause letter received by EPA (not sighted by auditors)	9.04.15	Turbid water discharge	9.04.15 5:18pm	Refer Condition R3.1 below.	21.04.15 approx 4:45pm 23.04.15 approx 9:30pm	Discharge from FPCD through LDP002 Overflow of Clean Water Dam	21.04.15 7:05pm	05.05.15 Extension granted by EPA on 28.04.15.					
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EPL 395	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.	As summarised in the table above (refer R2.1), Newstan provided the EPA with written reports of the incident notifications within 7 days of the date on which the incident occurred with the exception of the report for the incident on the 21.04.15 for which an extension of 7 days was provided by the EPA by email dated 28.04.15.	Compliant																								

Title	Condition No	Requirement	Comments	Compliance / Recommendations
EPL 395	R3.1	Written Report Where an authorised officer of the EPA suspects on reasonable grounds that: (a) where this licence applies to premises, an event has occurred at the premises; or (b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.	Following the notification of an incident under R2.1 on 9.04.15, an EPA officer undertook a spot inspection and requested Newstan provide an incident report under R3.1 instead of R2.2 (email from EPA dated 10.04.14). The email also attached a Section 200 Notice to Provide Reasonable Assistance and requested the report be provided by the 17.04.15. A written report was provided to the EPA by letter dated 17.04.15. The DRE & DP&E were copied into the email attaching the report. At the time of writing no further correspondence had been received by Newstan. Following notification of an incident under R2.1 on the 25.04.14 and receipt of written report 02.05.14, the EPA requested by email dated 04.03.15 that an additional report be provided in accordance with R3 as it believed the initial report did not disclose that the overflow of Graunch's dam was compounded by a failure of a clean water diversion bank. The report was required to be provided by the 20.03.15. Newstan provided a written report to the EPA by letter dated 19.03.15. At the time of writing no further correspondence had been received by Newstan.	Compliant
EPL 395	R3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.	As per R3.1 above	
EPL 395	R3.3	The request may require a report which includes any or all of the following information: (a) the cause, time and duration of the event; (b) the type, volume and concentration of every pollutant discharged as a result of the event; (c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; (d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort; (e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants; (f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and (g) any other relevant matters.	As per R3.1 above	
EPL 395	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.	It was reported that the EPA has not requested further details in relation to the above incidents.	Not applicable
EPL 395	R4.1	The sewage treatment system maintenance program required by Condition O2.6 must be submitted annually to the EPA with the Annual Return.	The auditors sighted the Scope of Work provided by contractors Waste Water Maintenance dated 1.06.12 outlining the analytical tests, mechanical, electrical and instrumentation checks/adjustments and reporting proposed to be undertaken on a three monthly basis at the Newstan STP. Written records of the quarterly inspections were provided to the EPA with the 2012, 2013 and 2014 Annual Returns.	Compliant
EPL 395	R4.2	The licensee must retain a copy of each report required by Condition O2.5 for 3 years from the date each record is made.	The inspections undertaken by Waste Water Maintenance were provided to the EPA within the Annual Return. The Annual Returns are kept on file. The 2012 Annual Return was sighted.	Compliant
EPL 395	G1.1	Copy of Licence to be kept at the premises or plant A copy of this licence must be kept at the premises to which the licence applies.	A copy of the licence was maintained in the Newstan office (sighted during site inspection on 11.05.15). The licence was also available on the Centennial Newstan environment drive and on the website.	Compliant
EPL 395	G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	Not triggered. The licence is reportedly available at the EPAs request.	Compliant
EPL 395	G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	A copy of the licence was maintained in the Newstan office (sighted during site inspection on 11.05.15). The licence was also available on the Centennial Coal Intranet (on Lotus Notes) and on the website.	Compliant
EPL 395	G2.1	Other General Conditions Completed Pollution Studies and Reduction Programs (PRPs) <ul style="list-style-type: none"> PRP 1 - Revised water management plan – Completed July 2008 PRP 2 – Assessment of Potential Impacts of Metals – Completed June 2013 Coal Mine Particulate Matter Control Best Practice – Completed Sep 2012 Eco-toxicological Monitoring Program – Completed March 2014 	Noted.	Noted

Title	Condition No	Requirement	Comments	Compliance / Recommendations																																																																						
EPL 395	U1.1	<p>Pollution Studies and Reduction Programs</p> <p>Construction of Water Treatment Plant</p> <p>a) The licensee must design, construct, commission, operate and maintain a Water Treatment Plant capable of treating at least 11ML per day of water to be discharged from Point 1.</p> <p>b) The Water Treatment Plant must be designed and constructed such that the concentration of pollutants discharging the premises at Point 1 meet the indicative concentration limits specified in the table below. It is noted that these are indicative targets for design purposes and concentration limits will be confirmed following the commissioning and monitoring period (refer to condition U3.4 and condition U4.1). Until the concentration limits are confirmed as referred to in condition U3.4, the limits for Point 1 set out in condition L2.4 continue to apply for compliance purposes. Where pH quality is specified, pH must be within the range specified.</p> <p>c) To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table.</p> <table><thead><tr><th>Pollutant</th><th>Concentration Limit</th></tr></thead><tbody><tr><td>Total Suspended Solids</td><td>30mg/L</td></tr><tr><td>Conductivity</td><td>3000uS/cm</td></tr><tr><td>pH</td><td>6.5-8.5</td></tr><tr><td>Oil and grease</td><td>5mg/L</td></tr><tr><td>Bicarbonate alkalinity</td><td>682mg CaCO3/L</td></tr><tr><td>TKN as N</td><td>0.6mg/L</td></tr><tr><td>Total nitrogen as N</td><td>0.6mg/L</td></tr><tr><td>Total phosphorous</td><td>0.5mg/L</td></tr><tr><td>Chloride</td><td>518mg/L</td></tr><tr><td>Sulfate</td><td>232mg/L</td></tr><tr><td>Calcium</td><td>38mg/L</td></tr><tr><td>Magnesium</td><td>16mg/L</td></tr><tr><td>Potassium</td><td>6mg/L</td></tr><tr><td>Sodium</td><td>635mg/L</td></tr><tr><td>Aluminium (dissolved)</td><td>0.055mg/L</td></tr><tr><td>Arsenic (dissolved)</td><td>0.013mg/L</td></tr><tr><td>Beryllium (dissolved)</td><td>0.002mg/L</td></tr><tr><td>Boron (dissolved)</td><td>0.29mg/L</td></tr><tr><td>Cadmium (dissolved)</td><td>0.0002mg/L</td></tr><tr><td>Chromium</td><td>0.004mg/L</td></tr><tr><td>Cobalt (dissolved)</td><td>0.003mg/L</td></tr><tr><td>Copper (dissolved)</td><td>0.0035mg/L</td></tr><tr><td>Iron (dissolved)</td><td>0.23mg/L</td></tr><tr><td>Lead (dissolved)</td><td>0.01mg/L</td></tr><tr><td>Lithium (dissolved)</td><td>0.15mg/L</td></tr><tr><td>Manganese (dissolved)</td><td>1.2mg/L</td></tr><tr><td>Mercury (dissolved)</td><td>0.0006mg/L</td></tr><tr><td>Molybdenum (dissolved)</td><td>0.03mg/L</td></tr><tr><td>Nickel (dissolved)</td><td>0.017mg/L</td></tr><tr><td>Selenium (total)</td><td><0.01mg/L</td></tr><tr><td>Silica (dissolved)</td><td>24.8mg/L</td></tr><tr><td>Silver (dissolved)</td><td><0.001mg/L</td></tr><tr><td>Vanadium (dissolved)</td><td><0.001mg/L</td></tr><tr><td>Zinc (dissolved)</td><td>0.02mg/L</td></tr></tbody></table>	Pollutant	Concentration Limit	Total Suspended Solids	30mg/L	Conductivity	3000uS/cm	pH	6.5-8.5	Oil and grease	5mg/L	Bicarbonate alkalinity	682mg CaCO3/L	TKN as N	0.6mg/L	Total nitrogen as N	0.6mg/L	Total phosphorous	0.5mg/L	Chloride	518mg/L	Sulfate	232mg/L	Calcium	38mg/L	Magnesium	16mg/L	Potassium	6mg/L	Sodium	635mg/L	Aluminium (dissolved)	0.055mg/L	Arsenic (dissolved)	0.013mg/L	Beryllium (dissolved)	0.002mg/L	Boron (dissolved)	0.29mg/L	Cadmium (dissolved)	0.0002mg/L	Chromium	0.004mg/L	Cobalt (dissolved)	0.003mg/L	Copper (dissolved)	0.0035mg/L	Iron (dissolved)	0.23mg/L	Lead (dissolved)	0.01mg/L	Lithium (dissolved)	0.15mg/L	Manganese (dissolved)	1.2mg/L	Mercury (dissolved)	0.0006mg/L	Molybdenum (dissolved)	0.03mg/L	Nickel (dissolved)	0.017mg/L	Selenium (total)	<0.01mg/L	Silica (dissolved)	24.8mg/L	Silver (dissolved)	<0.001mg/L	Vanadium (dissolved)	<0.001mg/L	Zinc (dissolved)	0.02mg/L	<p>a) Construction of the Clean Water Treatment Plant (CWP) commenced in 2013, commissioning commenced on the 02.12.13 and the plant was fully operational in March / April 2014. The CWP can treat a maximum rate of 14 ML/day. The CWP was inspected and observed to be operating during the audit site inspection.</p> <p>b) As required by U1.4 Newstan provided the EPA with a Clean Water Plant Commissioning Phase Water Quality Assessment Report (March 2014) prepared by GHD. The report provided the results of the monitoring undertaken during the commissioning phase and reported no exceedance during this period (2.02.12 to 02.03.14). The report also proposed recommended concentration limits. On the basis that the concentration limits specified in the table were indicative for design purposes and these limits were complied with during commissioning, this requirement has been assessed as compliant. Exceedances following the commissioning period are discussed under Condition L2.4.</p> <p>c) Noted</p>	Compliant
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Title	Condition No	Requirement	Comments	Compliance / Recommendations								
EPL 395	U1.2	<p>The water treatment plant must be designed, constructed, operated and maintained such that the specified toxic effect of the effluent released from Point 1 on the specified test organism must not exceed the corresponding percentile limit listed for that organism in the table below.</p> <table><tr><th>Species (toxic effect)</th><th>Concentration limit (% effluent by volume)</th></tr><tr><td>Ceriodaphnia cf dubia reproduction (9 day EC50 reproductive impairment)</td><td>50</td></tr><tr><td>Eastern Rainbow fish embryo development and post-hatch survival test (10 day EC50)</td><td>50</td></tr><tr><td>Freshwater shrimp Paratya australiensis survival (10-day LC50)</td><td>50</td></tr></table>	Species (toxic effect)	Concentration limit (% effluent by volume)	Ceriodaphnia cf dubia reproduction (9 day EC50 reproductive impairment)	50	Eastern Rainbow fish embryo development and post-hatch survival test (10 day EC50)	50	Freshwater shrimp Paratya australiensis survival (10-day LC50)	50	<p>The Clean Water Plant Commissioning Phase Water Quality Assessment Report (March 2014) required by U1.4 stated that toxicity testing of the CWP treated discharge was attempted twice during the commissioning phase however reliable results were not able to be obtained due to ongoing issues with the culture prepared by Ecotox Services Australasia. As a result further toxicity testing was undertaken within 6 months following completion of the commissioning phase and the results provided to the EPA by letter dated 24.07.14 (Clean Water Treatment Plant Ecotoxicology Assessment July 2014, GHD). The assessment included toxicity testing using the Ceriodaphnia cf. dubia test species. The assessment concluded that, based on the results, the CWP discharge meets the requirements where the EC50 for the reproductive test must not exceed a discharge concentration limit of 50%.</p> <p>A second round of toxicity testing was undertaken in November 2014 by GHD. This included:</p> <ul style="list-style-type: none">- Seven day partial life-cycle test using the freshwater cladoceran Ceriodaphnia cf. dubia,- 10 day fish embryonic development and post-hatch survival test using the freshwater eastern rainbowfish Melanotaenia splendida splendida,- 10 day survival test using the freshwater shrimp Paratya australiensis, <p>The results of the second round of toxicity testing concluded that the treated discharge from the CWP was not acutely or chronically toxic to the test species and that the CWP discharge through LDP001 meets the requirements of the EPL 395 where the EC50 was found to not exceed a discharge concentration limit of 50% for the test species. The Clean Water Treatment Plant Ecotoxicology Assessment Report, December 2014, by GHD was provided to the EPA by letter dated 02.03.15. A detailed review of these assessments was not undertaken by the auditors.</p> <p>Refer also to Condition U2.1 PRP6 Macroinvertebrate and Eco-toxicological monitoring program.</p>	Compliant
Species (toxic effect)	Concentration limit (% effluent by volume)											
Ceriodaphnia cf dubia reproduction (9 day EC50 reproductive impairment)	50											
Eastern Rainbow fish embryo development and post-hatch survival test (10 day EC50)	50											
Freshwater shrimp Paratya australiensis survival (10-day LC50)	50											
EPL 395	U1.3	<p>The water treatment plant must be constructed by 31 December 2013 at which time the three (3) month commissioning period will commence.</p>	<p>The EPA was informed by letter dated 2.12.13 that the CWP was first used to treat water as part of its commissioning on 2.12.13.</p>	Compliant								
EPL 395	U1.4	<p>a) The licensee must provide written notification to the EPA's Regional Manager - Hunter upon the date that the Water Treatment Plant is first used to treat water as part of its commissioning.</p> <p>b) The licensee must complete the commissioning of the Water Treatment Plant within three (3) months of the Water Treatment plant being first used to treat water.</p> <p>c) Within four (4) months of the Water Treatment Plant first being used to treat water as part of its commissioning the licensee must provide a report to EPA's Regional Manager - Hunter that provides the result of all concentration and volume monitoring undertaken during the three (3) month commissioning period, and report on the outcome of the plant's commissioning.</p> <p><u>Note:</u> The EPA anticipates that it will confirm the concentration limits for Point 1 by 30 September 2014. These concentration limits will be determined by the EPA following consideration of the following:</p> <ul style="list-style-type: none">(i) the completion of the commissioning of the Water Treatment Plant;(ii) review of the results of monitoring referred to in condition U3.4 and condition U4.1(iii) any other outcomes of expert ecotoxicology assessments both prior to the Water Treatment Plant construction and six months following completion of commissioning; and(iv) any other information the EPA considers relevant to impacts on receiving waters.	<p>a) The EPA was informed by letter dated 2.12.13 that the CWP was first used to treat water as part of its commissioning on 2.12.13.</p> <p>b) Commissioning of the CWP was undertaken during December 2013 to March 2014.</p> <p>c) A Letter dated 2.14.14 was provided to the EPA which included as Attachment 2 the Clean Water Plant Commissioning Phase Water Quality Assessment March 2014 report prepared by GHD.</p> <p><u>Note:</u> At the time of the audit Newstan and the EPA were in arbitration with regards to the concentration limits for Point 1.</p>	Compliant								
EPL 395	U2.1	<p>PRP6 Macroinvertebrate and Eco-toxicological Monitoring Program</p> <p>The licensee must implement an environmental monitoring program that will monitor the impacted sites of LT and Stony Creeks against control, where control means a system of the same Riverstyle™ (Brierley & Fryirs) as LT and Stony Creek monitoring reaches but not impacted by point source mining groundwater discharges or other major point source discharges. The monitoring program must be undertaken by a suitably qualified and experienced person and:</p> <p>a) include macroinvertebrate monitoring twice a year (Autumn and Spring) at:</p> <ul style="list-style-type: none">i) four or more locations downstream of LT Creek licensed discharge point 1 that includes site within the intertidal estuarine zone; andii) two or more locations downstream of Stony Creek licensed discharge point 17 that includes a site within the intertidal estuarine zone; andiii) at a number of control locations that are the same Riverstyle™ (Brierley & Fryirs) as the impacted monitoring site reaches, which must include an estuarine non impacted site;	<p>At the time of the audit site inspection Newstan and the EPA were in arbitration and as advised by letter from Newstan's lawyers Ashurst Australia dated 18.05.15 it was agreed by both parties that Conditions U2 and E1 are not to have effect until the Court finally resolves the proceedings.</p>	Not to have Effect – subject of arbitration at time of audit.								

Title	Condition No	Requirement	Comments	Compliance / Recommendations
		<p>b) include ecotoxicological assessment 3 times within a 6 month period from the date of the issue of this licence, with the timeframe between sampling events more than 7 weeks, that includes assessment of the toxic effects of the clean water treatment plant at licensed discharge point 1 to Eastern Rainbow Fish embryo development and post-hatch survival (10d exposure), freshwater shrimp (<i>Paratya australiensis</i>) survival (10d exposure) and freshwater cladoceran <i>C.dubia</i> reproductive impairment (8d exposure); thence</p> <p>c) ecotoxicological assessment twice annually, with the timeframe between sampling events more than 4 months, that includes assessment of the toxic effects of the clean water treatment plant at licensed discharge point 1 to Eastern Rainbow Fish embryo development and post-hatch survival (10d exposure), freshwater shrimp (<i>Paratya australiensis</i>) survival (10d exposure) and freshwater cladoceran <i>C.dubia</i> reproductive impairment (8d exposure). Note 1: Control does not mean 'natural' and unimpacted by humans in the context of this study.</p>		
EPL 395	U2.2	The licensee must prepare an ecotoxicological report for monitoring undertaken at condition U2.1 b) that is prepared by a suitably qualified and experienced person. This report must be provided to the EPA's Regional Manager Hunter at Hunter.region@epa.nsw.gov.au within two months from completion of the ecotoxicological assessment in condition U2.1 b).	As above	Not to have Effect – subject of arbitration at time of audit.
EPL 395	U2.3	<p>The licensee must prepare a macroinvertebrate and ecotoxicological report prepared by a suitably qualified and experienced person that reports on the monitoring undertaken in Condition U2.1 a) and Condition U2.1 c). The report:</p> <p>a) must be provided to the EPA with the Annual Return (noting that from the commencement of this Licence, only the Spring macroinvertebrate monitoring would have taken place within the 2014 licence period); and</p> <p>b) analysis must incorporate, but must not be limited to a beyond before after control impact (beyond BACI) style assessment comparing impacted and control sites but also include an assessment of macroinvertebrate assemblage dissimilarity between impacted and control sites highlighting the taxa / impact responsible for the majority of the dissimilarity. At the completion of two years and then three years of monitoring the macroinvertebrate and ecotoxicological report must incorporate temporal analysis of the preceeding data dating back to the commencement of the environmental study.</p> <p>This PRP must be completed by 27 February 2017.</p>	As above	Not to have Effect – subject of arbitration at time of audit.
EPL 395	E1.1	<p>Special Conditions</p> <p>Water Treatment Plant Commissioning Study</p> <p>The licensee must undertake a Water Treatment Plant (WTP) Commissioning Study for the Newstan Clean Water Treatment Plant prepared by a suitably qualified and experienced person. The study must:</p> <p>a) monitor daily inflow to the WTP and daily outflow from the WTP testing for the pollutants identified in condition U1.1 c), and including the total fraction of individual metals mentioned in condition U1.1 c) for 7 consecutive days; thence after</p> <p>b) monitor weekly inflow to the WTP and weekly outflow from the WTP testing for the pollutants identified in condition U1.1 c), for eight weeks (using a range of days of the week); and that this monitoring must include</p> <p>i) a range of volumetric throughputs to test treatment efficiencies and residence time.</p> <p>Note: The laboratory analytical tests must be able to test the pollutants (analytes) at an appropriate level of detection such that change can be detected. The results of "<LOR" are not acceptable in a commissioning study where the intention is to detect a reduction.</p>	<p>Newstan sought clarification (by letter dated 07.01.14) regarding the note in this condition re LOR reporting. It also advised the EPA that it would not be able to complete the report within the stipulated timeframe and sought an extension.</p> <p>Court proceedings have since commenced between Newstan and the EPA and as advised by letter from Newstan's lawyers Ashurst Australia dated 18.05.15 it was agreed by both parties that Conditions U2 and E1 are not to have effect until the Court finally resolves the proceedings.</p>	Not to have Effect – subject of arbitration at time of audit.
EPL 395	E1.2	<p>On completion of the monitoring identified in condition E1.1 the licensee must provide a report to the EPA, prepared by a suitably qualified and experienced person. The report must:</p> <p>a) analyse and report the efficiency of the clean water treatment plant in removing pollutants at a variety of flow rates and residence times and include near maximum flow rates that would be discharged in accordance with the maximum volumetric licence limit (11,000ML/day);</p> <p>c) compare and contrast the monitoring results to the targeted design treatment concentrations identified in Condition U1.1 c); and</p> <p>b) include recommendations of the most effective flow rate and the resultant</p>	As above	Not to have Effect – subject of arbitration at time of audit.

Title	Condition No	Requirement	Comments	Compliance / Recommendations
		<p>treatment reductions that can be achieved.</p> <p>Note: The laboratory analytical tests must be able to test the pollutants (analytes) at an appropriate level of detection such that change can be detected. The results of "<LOR" are not acceptable in a commissioning study where the intention is to detect a reduction.</p> <p>The Report must be provided to the EPA's Manager Hunter Region at hunter.region@epa.nsw.gov.au within 3 months of the issue of this licence variation (17 December 2014).</p>		
EPL 395	E2.1	<p>Transfer of waste water to Centennial Awaba</p> <p>The licensee is permitted to transfer waste water to Awaba Colliery (EPL 443).</p>	<p>Water levels in the water storages across the site were tracked and managed using the CWP CITECT system. It was reported that there is an automatic flow meter cut of valve to restrict flow to only 4 ML of waste water discharge to Awaba each day.</p> <p>A demonstration of the CWP CITECT system was provided to the auditors during the site inspection. A print out of the spreadsheet "Citect data – LDP001" was provided to the auditors. The "Flow Data" worksheet included the kL pumped to Awaba for the period 01.01.13 to 21.03.15. For this period there were no instances where the volume pumped to Awaba exceeded 4 ML. Newstan stopped pumping water to Awaba on the 28.06.13.</p>	Compliant
EPL 395	E2.2	<p>In accordance with condition E1.1, the licensee is permitted to transfer a maximum of 4ML per day of waste water from the Newstan Colliery to the underground workings at Awaba Colliery.</p>	<p>Refer above.</p>	Compliant
EPL 395	E3.1	<p>Implementation of Additional Water Treatment Works</p> <p>Should water quality monitoring and/or ecotoxicological monitoring indicate that effluent is failing to meet the required quality as set out in conditions of this Licence, or indicate toxicity, the Licensee must implement additional water treatment works to address the water quality issues to the satisfaction of the EPA within a reasonable period.</p>	<p>It was reported that this requirement has not been triggered.</p>	Not triggered



Consolidated Coal Lease 764

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
CCL 764	1	Notice to Landholders Within a period of three months from the date of 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. 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.	The notification of the current lease was assessed as compliant in previous audits. The lease was not renewed during the audit period.	Compliant
CCL 764	2	Environmental Harm The proponent shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or rehabilitation of the development.	Refer to DA 73-11-98 Condition 1	Non-compliant Refer to specific recommendations made throughout the report.
CCL 764	3	Mining Operations Plan (a) Mining Operations must not be carried out otherwise than in accordance with a Mining Operations Plan (MOP) which has been approved by the Director-General of the Department of Primary Industries. (b) The MOP must: - Identify areas that will be disturbed by mining operations; - detail the staging of specific mining operations; - identify how the mine will be managed to allow mine closure; - Identify how mining operation will be carried out on site in order to prevent and or minimise harm to the environment; - reflect the conditions of approval under: - the Environmental Planning and Assessment Act 1979 - the Protection of the Environmental Operations Act 1997; - and any other approvals relevant to the development including the conditions of this lease; and - have regard to any relevant guidelines adopted by the Director-General. (c) The titleholder may apply to the Director-General to amend an approved MOP at any time (d) It is not a breach of this condition if: i) the operations constituting the breach were necessary to comply with a lawful order or direction given under the Mining Act 1992, the Environmental Planning and Assessment Act 1979, Protection of the Environmental Operations Act 1997 or the Occupational Health and Safety Act 2000; and ii) the Director- General had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out. (e) A MOP ceases to have affect 7 years after the date of approval or other such period as identified by the Director-General. An approved amendment to the MOP under condition 5 does not constitute an approval for the purpose of this paragraph unless otherwise identified by the Director-General.	(a) A revised MOP for the period 2014 to 2020 was approved by DRE by letter dated 10.06.14. The letter had specific conditions including: <i>Centennial Coal is to incorporate additional Rehabilitation Objectives and Criteria (incorporating analogue sites) into the next MOP Amendment once additional research is undertaken.</i> <i>The review of the performance of the mine against the commitments outlined in the MOP shall be incorporated in the existing Annual Environmental Management Report (AEMR).</i> A detailed assessment of compliance with the MOP was not undertaken as part of this audit. At the time of the audit site inspection, Centennial Newstan was in the process of finalising a Centennial Newstan Complex MOP for Operations and Care and Maintenance 2014-2017. Following the site inspection for the audit, and post the audit period, a MOP was approved by DRE on 5 August 2015. This MOP replaces the Newstan 2014-2020 MOP and includes the operations of both Newstan Colliery and Awaba Colliery. The MOP was not reviewed as part of this audit as it was post the audit period. (b) The 2014-2020 MOP (approved 10.06.14) was prepared in general accordance with the requirements of this Condition as determined by DRE approval. A detailed assessment of the adequacy of the MOP was not undertaken as part of this audit. No review of the recently approved MOP was undertaken. (c) refer (a) above. (d) Noted. (e) Noted. Approved MOP in place during audit period.	Compliant
CCL 764	4	Environmental Management Reporting The lease holder must lodge Environmental Management Reports (EMR) with the Director-General annually or at dates otherwise directed by the Director-General.	Refer to DA 73-11-98 Condition 9.1 The 2012, 2013 and 2014 AEMRs were reviewed.	Compliant
CCL 764	5	The EMR must: - report against compliance with the MOP - report on progress in respect to rehabilitation completion criteria; - report on the extent of compliance with regulatory requirements, and - have regard to any relevant guidelines adopted by the Director-General;	A review of the 2013 and 2014 AEMRs indicated that: - Section 3.16 includes a discussion of non-conformances with the EPL. - Section 3.17 includes a summary of the compliance assessment and audit score from the 2012 IEA. This presents the % compliant and number of conditions assessed as non- compliant and indeterminate for each of the DA, EPL, Mining Lease 1452 and CCL 764. An indication of which conditions or what issues they relate to was not provided. - Table 6 outlines the actions required by the regulatory agencies during their AEMR review and site inspection and how / where these requirements have been addressed. Based on the above, the auditors have assessed the requirement to report on the extent of compliance with regulatory requirements as compliant.	Compliant Recommendation: It is recommended that the AEMRs report against progress in respect of the Performance Indicators and Completion Criteria presented in the current MOP.

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
			<p>The 2014 AEMR did not specifically report on compliance with the MOP however it is noted some aspects of the MOP are broadly discussed e.g. environmental issues management.</p> <p>The DRE conducts annual site inspections, following receipt of the AEMR, the purpose of which is to review compliance with environmental requirements of relevant approval instruments including the Mining Lease, MOP and AEMR. The 2012 and 2013 AEMR reviews and site inspections were undertaken and the letters provided stated that there was general compliance with the relevant statutory approval instruments administered by the DRE (refer to main report for further discussion). On this basis the requirement for reporting on compliance with the MOP has been assessed as compliant. At the time of the audit, DRE was yet to conduct its annual inspection and comment on the 2014 AEMR.</p> <p>The Rehabilitation Summary table which provides the number of hectares affected / rehabilitated within the 2014 AEMR was expanded (compared to the 2013 AEMR) to include more Domains (e.g. stockpiles, underground mining, mining entries, clean water dams and drains, dirty water dams, hydrocarbon storage areas and tailings dam). These Domains correspond with the Domains identified in the 2014-2020 MOP. The AEMRs however do not discuss rehabilitation completion criteria. Section 6 of the 2014-2020 MOP (in particular, Table 14) presents Performance Indicators and Completion Criteria. It is recommended that the AEMRs report against progress in respect of these criteria or any others developed in consultation with the DRE in the next amendment of the MOP (Centennial Complex MOP)</p> <p>The consultation undertaken by the DRE as part of this audit indicated that the DRE would like a greater focus on rehabilitation and monitoring against completion criteria to assess the success or otherwise of the rehabilitation. These sentiments were echoed in its approval of the MOP dated 10.06.14 as described above for Condition 3 and an action regarding this was raised in the 2014 AEMR approval.</p> <p>The auditors consider that the 2014 AEMR does not adequately report on the progress in respect to rehabilitation completion criteria and on this basis considers this aspect of the condition as potentially non-compliant. However, it is noted that DRE have approved the 2014 AEMR (dated 25 June 2015) hence the regulatory body over seeing this condition has accepted the report and therefore the condition is considered compliant.</p> <p>The AEMRs have generally been prepared in accordance with the DRE “<i>Guidelines and Format for Preparation of an Annual Environmental Management Report</i>”. The preamble to the Guidelines state that to be acceptable, an AEMR must meet the Department’s content and format guidelines for AEMR documents. The 2012, 2013 and 2014 AEMRs were accepted by the DRE. This requirement has been assessed as compliant.</p>	
CCL 764	6	Additional environmental reports may be required on specific surface disturbing operations or environmental incidents from time to time as directed in writing by the Director-General and must be lodged as instructed.	It was reported that no additional environmental reports were required by the Director-General during the audit period.	Not applicable
CCL 764	7	Rehabilitation Disturbed land must be rehabilitated to a sustainable / agreed end land use to the satisfaction of the Director – General.	<p>The 2014-2020 MOP states that the primary objective for Newstan Colliery is to return disturbed areas to a natural land use that is consistent with its pre-mining land use, and a standard acceptable to DRE, the land owners and other relevant government agencies. The MOP was approved by DRE on the 10.06.14.</p> <p>Since the audit site inspection a new MOP has been approved (5 August 2015). This was not reviewed as part of this audit. As part of consultation for this audit, DRE provided the following comments:</p> <p>DRE comments on environmental performance are limited to matters relating to rehabilitation and mine closure. DRE encourage Newstan Mine to:</p> <ul style="list-style-type: none"> · Continue to improve rehabilitation standards. · Complete a topsoil and subsoil material balance to verify availability of material for rehabilitation. Evaluate soil and growth medium requirements for the site and develop a soil amelioration methodology. · Review and modify rehabilitation methodologies based on performance of existing rehabilitation. · Continue to develop and refine performance indicators and quantifiable completion criteria in the Mining Operation Plan. <p>DRE have undertaken extensive consultation with Centennial Newstan Pty Limited throughout the development of a Mining Operations Plan which includes detailed performance indicators and quantifiable completion criteria. The current MOP was approved by DRE on 5 August 2015.</p> <p>During the site inspections and audit the following was noted by auditors:</p> <ul style="list-style-type: none"> • There was no regular and ongoing rehabilitation monitoring program to assess rehabilitation performance across the site; • There was limited completion criteria developed for rehabilitation at the site; • No regular performance checks of the rehabilitation was being undertaken, hence the status of rehabilitation in terms of success and diversity was not known. • Recent rehabilitation at the NREA appeared to be dominated by acacia species in some areas. <p>These findings support the comments from DRE. Further to DRE’s comments, it is recommended that Newstan develop and implement a suitable rehabilitation monitoring program to be conducted by suitable competent people to assess performance against performance indicators and quantifiable completion criteria as developed in the MOP and with DRE.</p>	<p>Compliant</p> <p>Recommendation: As per comments provided from DRE during the audit consultation:</p> <ul style="list-style-type: none"> • Continue to improve rehabilitation standards. • Complete a topsoil and subsoil material balance to verify availability of material for rehabilitation. Evaluate soil and growth medium requirements for the site and develop a soil amelioration methodology. • Review and modify rehabilitation methodologies based on performance of existing rehabilitation. • Continue to develop and refine performance indicators and quantifiable completion criteria in the Mining Operation Plan. <p>Recommendation:</p> <ul style="list-style-type: none"> • Develop and Implement a rehabilitation monitoring program (to be conducted by suitably qualified people) to assess performance against performance indicators and quantifiable completion criteria as developed in the MOP and in consultation with DRE.

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
CCL 764	8	Subsidence Management (a) 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. (b) Underground mining operations which will potentially lead to subsidence include secondary extraction panels such as longwalls or miniwalls, associated first workings (gateroads, installation roads and associated main headings, etc), and pillar extractions, and are otherwise defined by the Applications for Subsidence Management Approvals guidelines (EDG17) (c) The lease holder must not commence or undertake underground mining operations that will potentially lead to subsidence other than in accordance with a Subsidence Management Plan approved by the Director-General, an approval under the Coal Mine Health and Safety Act 2002, or the document New Subsidence Management Plan Approval Process - Transitional Provisions (EDP09) (d) Subsidence Management Plans are to be prepared in accordance with the Guideline for Applications for Subsidence Management Approvals. (e) Subsidence Management Plans as approved shall form part of the Mining Operations Plan required under Condition 2 and will be subject to the Annual Environmental Management Report process as set out under Condition 3. The SMP is also subject to the requirement for subsidence monitoring and reporting set out in the document New Approval Process for the Management of Coal Mining Subsidence - Policy.	a) No new Subsidence Management Plans (SMPs) had been prepared during the audit period as it was reported that no underground mining potentially leading to subsidence had been undertaken. b) Newstan conducted first workings during the audit period, however these works were not predicted to cause subsidence. c) as per a). d) Not applicable. e) Not applicable.	Not applicable
CCL 764	9	Working Requirement The leaseholder must" (a) ensure that at least 5 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 \$87,500 per annum whilst the lease is in force. The Minister may at any time or times, by instrument in writing served on the lease holder, increase or decrease the expenditure required or the number of people to be employed.	It was reported that during the audit period Newstan had a workforce of more than 5 people each day of the week. As Newstan has entered into care and maintenance, its workforce has decreased. It was reported that approximately 23 people were employed on the Newstan site at the time of the audit site inspection. Notwithstanding this, it was evident that annual expenditure was well in excess of \$87,500 per annum.	Compliant
CCL 764	10	Control of Operations (a) If an Environmental Officer of the Department believes that the lease holder is not complying with any provisions of the Act or any condition of this lease relating to the working of the lease, he may direct the lease holder to:- i) cease working the lease; or ii) cease that part of the operation not complying with the Act or conditions; until in the opinion of the Environmental Officer the situation is rectified. (b) The lease holder must comply with any direction given. The Director-General may confirm, vary or revoke any such direction. (c) A direction referred to in this condition may be served on the Mine Manager.	It was reported that there had been no directions given by the Department to cease works.	Not applicable
CCL 764	11	Reports The leaseholder 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, or 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 month period; (b) Details of expenditure of all geological findings acquired through mining or development evaluation activities; (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.	DRE approved Centennial's request for group reporting by letter dated 25.02.11. This letter specified that reporting date for Newstan was the 31 December with reports due within 30 days of the reporting date. The Annual Exploration Report for Newstan Colliery Mining Titles for 2014 was submitted by email dated 04.12.14. An email was received on the 18.12.14 from EROL Coal Geology stating that the Annual Group report has been assessed and approved.	Compliant

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
CCL 764	12	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 or section 365 of the Mining Act 1992.	Noted.	Noted
CCL 764	13	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
CCL 764	14	Terms of the Non-Exclusive Licence The terms of the non-exclusive copyright licence granted under condition 8 (a) are: (a) the Minister may sub-licence other to publish, print, adapt and reproduce but not on-licence reports. (b) the Minister and any sub-licensee will acknowledge the lease holders and any identifiable consultants ownership of copyright in any reproduction of the reports, including storage of reports onto an electronic database. (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. (d) there is no royalty payable to the Minister for the licence. (e) if the lease holder has reasonable grounds to believe that the Minister has exercised his rights under the non-exclusive copyright licence 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.	Noted.	Noted
CCL 764	15	Blasting (a) Ground Vibrations The Lease holder must ensure that the ground vibration peak particle velocity generated by any blasting within the lease area does not exceed 10mm/second and does not exceed 5mm/ 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 may be, unless determined otherwise by the Department of Climate Change and Environment. (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 Climate Change and Environment.	It was reported that blasting was not undertaken during the audit period.	Not applicable
CCL 764	16	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 filled in or otherwise rendered safe to a standard acceptable to the Director-General.	Newstan operates under a Health and Safety Management System. The site is fenced and no stock was observed on site. It was reported that there are no abandoned shafts on site. There were however historical portals remaining unsealed on site which have been isolated using security fencing. It was reported that in May 2014 a sinkhole was identified on Centennial Coal property in Blackalls Park. Newstan restricted access to the area using construction fencing and rehabilitated the area. This was reported in the 2014 AEMR. No inspections were undertaken of subsidence areas.	Compliant

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
CCL 764	17	Exploratory Drilling (1) At least twenty eight days prior to commencement of drilling operation the lease holder must notify the relevant Department of Climate Change and Environment 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 holes meets natural of 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 Department 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.	The 2012, 2013 and 2014 AEMRs reported that no exploration drilling had been undertaken during the reporting period. Newstan reported that it had not undertaken exploration drilling in 2015.	Not applicable
CCL 764	18	Prevention of Soil Erosion and Pollution Operations must be carried out in a manner that does not cause or aggravate air pollution, water pollution (including sedimentation) or soil contamination or erosion, unless otherwise authorised by a relevant approval, and in accordance with an accepted Mining Operations Plan. For the purpose of this condition, water shall be taken to include any watercourse, waterbody or groundwaters. The lease holder must observe and perform any instructions given by the Director-General in this regard.	Newstan operates under an Environmental Protection Licence (EPL395) which outlines criteria for water quality discharges and monitoring requirements for dust and water quality. Refer to assessment of compliance with EPL. Newstan has developed a number of management plans to manage the environmental impacts of its operations, specifically a Revised Water Management Plan, Erosion and Sediment Control Plan and Air Quality and Greenhouse Gas Management Plan. Refer to main report for further discussion of these issues. Newstan had undertaken significant works during the audit period to upgrade its water management system, including: - increasing the capacity of the Final Pollution Control Dam - completing the clean water diversion drain around the SREA - installing a Clean Water Treatment Plant - upgrades to the pipeline and pumping system and increases in pumping capacity - upgrades to the CITECT system following construction of the CWP. The CWP CITECT system allows for remote management and movement of water across the site and incorporates alarms when trigger levels are reached. - increasing the daily discharge limit (volume) in its EPL from 7ML/day to 11 ML/day from LDP001 The previous IEA (2012) identified an area of erosion at the discharge of the clean water diversion drain where the northern arm drains into LT Creek. The IEA reported that the clean water diversion drain had diverted water into an undefined drainage line which has as a result eroded in some areas down to bedrock and potentially led to some sediment build up in LT Creek. During the audit site inspection on the 11.05.15, the auditors inspected this area and observed that works had been undertaken to extend the rock lined channel approximately 10m, however the auditors were not able to gain access to the land (as this was private land) to observe the drainage line beyond this point. Newstan noted that no works had been undertaken beyond the area sighted due to it being on private land. No areas of significant erosion were observed during the site visit on the 11.05.15. On the basis of the non-compliances with the EPL relating to water pollution, Newstan is considered Non-compliant with this condition.	Non-compliant
CCL 764	19	Transmission lines, Communication lines and Pipelines Operations must not interfere with or impair the stability or efficiency of any transmission line, communication line, pipeline or any other utility on the lease area without the prior written approval of the Director-General and subject to any conditions he may stipulate.	Transmission lines on site are owned by TransGrid. It was reported that a 100 m mining barrier was maintained around Tension Tower #18. The 2014 AEMR reported that monitoring of the towers in the first workings area showed subsidence results within the range of natural ground movement. It was reported that there are no pipelines on site.	Compliant
CCL 764	20	Fences, Gates (a) Activities on the lease must not interfere with or damage fences without the prior written approval of the owner thereof or the Minister and subject to any conditions the Minister may stipulate. (b) Gates within the lease area must be closed or left open in accordance with the requirements of the landholder.	There is a perimeter fence around the site boundary however it was reported that this does not extend around the lease boundary. New gates were installed in 2013 at the entrance to Stony Creek to prevent unauthorised access for illegal dumping. It was reported that no activities are undertaken which would interfere with or damage fences without approval. It was reported that no private land is required to be accessed.	Compliant

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
CCL 764	21	Roads and Tracks (a) Operations must not affect any road unless in accordance with an accepted Mining Operations Plan or with the prior written approval of the Director-General and subject to any conditions he may stipulate. (b) The lease holder must pay to the designated authority in control of the road (generally the local council or the Roads and Traffic Authority) the cost incurred in fixing any damage to roads caused by operations carried out under the lease, less any amount paid or payable from the Mine Subsidence Compensation Fund.	(a) No damage to roads due to subsidence or other mine activities were reported during the audit period. (b) Not triggered during the audit period.	(a) Compliant (b) Not applicable
CCL 764	22	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 CoCE.	Tracks used on site were historical tracks: no additional tracks had reportedly been constructed on site.	Compliant
CCL 764	23	Trees and Timber (a) The lease holder must not fell trees, strip bark or cut timber on the lease without the consent of the landholder who is entitled to the use of the timber, or if such a landholder refuses consent or attaches unreasonable conditions to the consent, without the approval of a warden. (b) The lease holder must not cut, destroy, ringbark or remove any timber or other vegetative cover on the lease area except such as directly obstructs or prevents the carrying on of operations. Any clearing not authorised under the Mining Act 1992 must comply with the provisions of the Native Vegetation Act 2003. (c) The lease holder must obtain all necessary approvals or licences before using timber from any Crown land within the lease area.	(a) It was reported that no trees had been felled in areas owned by other lease holders during the audit period. (b) Clearing is authorised by the Mining Act 1992 and by the Project Approval. Newstan manages the removal of trees and vegetation through a Permit to Clear process (refer DA 73-11-98 Condition 3.9). (c) No timber from Crown land was reportedly used on site.	Compliant
CCL 764	25	Resource Recovery (a) Notwithstanding any description of mining methods and their sequence or of proposed resource recovery contained within the Mining Operations Plan, if at any time the Director-General is of the opinion that minerals which the lease entitles the lease holder to mine and which are economically recoverable at the time are not being recovered from the lease area, or that any such minerals which are being recovered are not being recovered to the extent which should be economically possible or which for environmental reasons are necessary to be recovered, he may give notice in writing to the lease holder requiring the holder to recover such minerals. (b) The notice shall specify the minerals to be recovered and the extent to which they are to be recovered, or the objectives in regard to resource recovery, but shall not specify the processes the lease holder shall use to achieve the specified recovery. (c) The lease holder must, when requested by the Director-General, provide such information as the Director-General may specify about the recovery of the mineral resources of the lease area. (d) The Director-General shall issue no such notice unless the matter has firstly been thoroughly discussed with and a report to the Director-General has incorporated the views of the lease holder. (e) The lease holder may object to the requirements of any notice issued under this condition and on receipt of such an objection the Minister shall refer it to a Warden for inquiry and report under Section 334 of the Mining Act, 1992. (f) After considering the Warden's report the Minister shall decide whether to withdraw, modify or maintain the requirements specified in the original notice and shall give the lease holder written notice of the decision. The lease holder must comply with the requirements of this notice.	It was reported that no directions had been issued by the Director General during the audit period.	Not applicable

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
CCL 764	26	Indemnity The lease holder must indemnify and keep indemnified the Crown from and against all actions, suits, claims and demands of whatsoever nature and all costs, charges and Indemnity expenses which may be brought against the lease holder or which the lease holder may incur in respect of any accident or injury to any person or property which may arise out of the construction, maintenance or working of any workings now existing or to be made by the lease holder within the lease area or in connection with any of the operations notwithstanding that all other conditions of this lease shall in all respects have been observed by the lease holder or that any such accident or injury shall arise from any act or thing which the lease holder may be licensed or compelled to do.	Noted.	Noted
CCL 764	28	Single Security (extended) (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 Private Lands Lease 497 (Act 1906), Consolidated Coal Leases 727, 746, 763 (Act 1973), Mining Purpose Leases 304, 305, 327, 328 (Act 1973) and Mining Leases 1380, 1452, 1480, 1542, 1587 (Act 1992) is extended to apply to this lease. (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.	a) Letter from DPI dated 28 .06.11 confirms that a security of \$10,652,000 was held at this time. This is in aggregate with Awaba. The security was recalculated and submitted to the DRE on the 11.11.13 and again on the 28.11.14. It was reported that Newstan is still awaiting DRE review and comment on the rehabilitation security calculations. b) Noted	Compliant
CCL 764	29	Prescribed Dam (a) Notwithstanding any Mining Operations Plan, the lease holder must not mine within any part of the lease area which is within the notification area of the Newstan Area 7 Tailings Dam and the Newstan Southern REA Tailings Dam without the prior written approval of the Minister and subject to any conditions he may stipulate. (b) Where the lease holder desires to mine within the notification area he must: (i) at least twelve (12) months before mining is to commence or such lesser time as the Minister may permit, notify the Minister of the desire to do so. A plan of the mining system to be implemented must accompany the notice; and (ii) provide such information as the Minister may direct. (c) The Minister must not, except in the circumstances set out in sub-paragraph (ii), grant approval unless sub-paragraph (i) of this paragraph has been complied with. (i) This sub-paragraph is complied with if: (a) the Dams Safety Committee as constituted by Section 7 of the Dams Safety Act 1978 and the owner of the dam have been notified in writing of the desire to mine referred to in paragraph (B). (b) the notifications referred to in clause (a) are accompanied by a description or plan of the area to be mined. (c) the Director-General has complied with any reasonable request made by the Dams Safety Committee or the owner of the dam for further information in connection with the mining proposal. (d) the Dams Safety Committee has made its recommendations concerning the mining proposal or has informed the Minister in writing that it does not propose to make any such recommendations; and (e) where the Dams Safety Committee has made recommendations the approval is in terms that are: (i) in accordance with those recommendations; or (ii) where the Minister does not accept those recommendations or any of them - in accordance with a determination under sub-paragraph (ii) of this paragraph, (ii) Where the Minister does not accept the recommendations of the Dams Safety Committee or where the Dams Safety Committee has failed to make any recommendations and has not informed the Minister in writing that it	It was reported that there had been no mining undertaken within the notification area of the Newstan Area 7 Tailings Dam or under the SREA during the audit period as the mining in these areas had been completed.	Not applicable

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
		does not propose to make any recommendations, the approval shall be in terms that are, in relation to matters dealing with the safety of the dam: (a) as determined by agreement between the Minister and the Minister administering the Dams Safety Act 1978; or (b) in the event of failure to reach such agreement - as determined by the Premier. (d) The Minister, on notice from the Dams Safety Committee, may at any time or times: (i) cancel any approval given where a notice pursuant to Section 18 of the Dams Safety Act 1978 is given. (ii) suspend for a period of time, alter, omit from or add to any approval given or conditions imposed.		
CCL 764	30	Suspension of Mining Operations The holder of a consolidated mining lease may not suspend mining operations in the mining area other than in accordance with the consent of the Minister.	A meeting was held with DRE on 3.09.14 at which Centennial informed it of its intention to go into Care and Maintenance (sighted presentations slides). Newstan consequently completed an Application for Suspension of Mining Operations Form XML14. A letter from DRE dated 2.19.14 was received acknowledging the application and stating that further advice would be forwarded in due course. A letter from the DRE dated 30.03.15 was received suspending mining operations until 31 December 2016.	Compliant
CCL 764	31	Special Conditions The registered holder shall not work or cause to be worked any seam of coal within the subject area without leaving, if the Minister by order given in writing to the registered holder so directs, a barrier of such width or a protective pillar or pillars of such size or sizes as specified in the order, against any surface improvements or any feature whether natural or artificial.	Not Assessed	Not Assessed
CCL 764	32	Unless with the consent of the Minister first had and obtained and subject to such conditions as he may impose the registered holder shall not work or cause to be worked any seam of coal by underground methods within the subject area within the barrier defined as follows: The land within the zone beneath and adjacent to the Main Northern Railway and the Fassifern Railway enclosed by an angle of draw of 35 degrees from the vertical plane of the boundary parallel to and thirty metres horizontally distant from the outermost rails of the railway track(s), such angle of draw being measured outwards from the point on the vertical plane of the said boundary at the surface or at the level of the horizontal plane of the railway track, whichever may be the higher, to the floor of the coal seam in which mining operations are to be carried out.	Not Assessed	Not Assessed
CCL 764	33	Any approval or consent given by the Minister including any approval or consent given pursuant to any condition or term contained in a lease consolidated into this lease to the effect that the registered holder may conduct mining operations in those parts of the subject area within the zone defined in Condition 32 shall be deemed to be a consent for the purposes of the said Condition 32 subject to the same conditions of that approval or consent.	Noted.	Noted
CCL 764	34	The registered holder shall not conduct any mining operations on so much of the subject area as is necessary to form a barrier of solid coal within 60 metres of L.T. Creek and to a depth of 152.4 metres below the excepted surface of the subject area, without the written consent of the Minister first had and obtained and subject to such conditions as he may impose.	Newstan reported that it did not mine in the vicinity of LT creek during the audit period.	Compliant
CCL 764	35	Any approval or consent given by the Minister including any approval or consent given pursuant to any condition or term contained in a lease consolidated into this lease to the effect that the registered holder may conduct mining operations in those parts of the subject area within the barrier defined in Condition 34 shall be deemed to be a consent for the purposes of the said Condition 34 subject to the same conditions of that approval or consent.	Noted.	Noted

Mining Lease 1452

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
ML1452	1	Extraction of coal - The lease holder shall extract as large a percentage of the coal in the subject area as is practicable consistent with the provisions of the Coal Mines Regulations Act 1982 and the Regulations thereunder and shall comply with any direction given or which may be given in this regard by the Minister.	It was reported that Newstan extracts as large a percentage of coal as practicable. No direction has reportedly been given in this regard by the Minister. Newstan entered into Care and Maintenance in August 2014.	Compliant
ML1452	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 lodgement. (3) A Plan must be lodged with the Director-General:- (a) prior to the commencement of operations; (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@) 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 land use 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 accordance with clause (6) is not issued within two months of the lodgement of a Plan, the lease holder may proceed with implementation of the Plan submitted subject to the lodgement of the required security deposit within the specified time. (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 (5) - (7) above.	<p>A revised MOP for the period 2014 to 2020 was approved by DRE by letter dated 10.06.14. A detailed assessment of compliance with the MOP was not undertaken as part of this audit. The MOP was prepared in general accordance with the Director General's guideline as determined by DRE approval. A detailed assessment of the adequacy of the MOP was not undertaken as part of this audit.</p> <p>At the time of the audit site inspection, Centennial Newstan was in the process of finalising a Centennial Newstan Complex MOP for Operations and Care and Maintenance 2014-2017. Following the site inspection for the audit, and post the audit period, a MOP was approved by DRE on 5 August 2015. This MOP replaces the Newstan 2014-2020 MOP and includes the operations of both Newstan Colliery and Awaba Colliery. The MOP was not reviewed as part of this audit as it was post the audit period.</p> <p>See comments in CCL 764 – Conditions 3 and 4 for further discussion on the MOP.</p>	Compliant

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
ML1452	3	Annual Environmental Management Report (AEMR) 1 Within 12 months of the commencement of mining operations and thereafter annually or, at such other times as may be allowed by the Director-General, the lease holder must lodge an Annual Environmental Management Report (AEMR) with the Director-General, (2) 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:- (a) the accepted Mining Operations Plan; (b) development consent requirements and conditions; (c) Environment Protection Authority and Department of Land and Water Conservation licences and approvals; (d) any other statutory environmental requirements; (e) details of any variations to environmental approvals applicable to the lease area; and (f) where relevant, progress towards final rehabilitation objectives. (3) After considering an AEMR the Director-General may, by notice in writing, 1 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. (4) The lease holder shall, as and when directed by the Minister, co-operate with the Director-General to conduct and facilitate review of the AEMR involving other government agencies.	Refer to DA 73-11-98 Condition 9.1 and CCL 764 Conditions 4 and 5.	Compliant See comments and recommendations made in CCL 764 – Conditions 3 and 4.
ML1452	9	The lease holder shall not work or cause to be worked any seam of coal within the subject area without leaving, if the Minister, so directs, a barrier of such width or a protective pillar or pillars of such size or sizes against any surface improvements of any feature whether natural or artificial.	It was reported that there were no directions by the Minister to leave any barriers or protective pillars.	Not applicable
ML1452	11	The lease holder unless with the consent of the Minister and subject to such conditions as the Minister may impose shall not work or cause to be worked any seam of coal by underground methods within the subject area within the barrier defined as follows: The land within the zone beneath and adjacent to the Main Northern Railway enclosed by an angle of draw of 35' from either side of the railway lands excluding lands not related to railway operations such as carparks or quarries, such angle of draw being measured outwards from the point on the vertical plane of the said boundary at the surface or at the level of the horizontal plane of the railway track, whichever may be the higher, to the floor of the coal seam in which mining operations are to be carried out.	Not assessed	Not assessed
ML1452	19	The lease holder shall observe any instruction given or which may be given by the Minister with a view to minimising or preventing public inconvenience or damage to public or private property.	It was reported that this Condition was not triggered during the audit period.	Not applicable
ML1452	20	If required to do so by the Minister and within such time as may be stipulated by the Minister the lease holder shall carry out to the satisfaction of the Minister surveys of structures, buildings and pipelines on adjacent landholdings to determine the effect of operations on any such structures, buildings and pipelines.	It was reported that this Condition was not triggered during the audit period.	Not applicable
ML1452	23	If so directed by the Minister the lease holder shall rehabilitate to the satisfaction of the Minister and within such time as may be allowed by the Minister any lands within the subject area which may have been disturbed by mining or prospecting operations whether such operations were, or were not carried out by the lease holder.	It was reported that this Condition was not triggered during the audit period.	Not applicable
ML1452	25	The lease holder shall provide and maintain to the satisfaction of the Minister efficient means to prevent contamination, pollution, erosion or siltation of any river, stream, creek, tributary, lake, dam, reservoir, watercourse, groundwater or catchment area or any undue interference to fish or their environment and shall observe any instruction given or which may be given by the Minister with a view to preventing or minimising the contamination, pollution, erosion or siltation of any river, stream, creek, tributary, lake, dam, reservoir, watercourse, groundwater or catchment area or any undue interference to fish or their environment.	Newstan provided the RWMP to DRE for comment during the previous audit period. The Plan had not been updated during the audit period. Newstan had undertaken significant works during the audit period to upgrade its water management system, including: - increasing the capacity of the Final Pollution Control Dam - completing the clean water diversion drain around the SREA - installing and operating a CWP - increasing the daily discharge limit (volume) in its EPL - upgrades to the pipeline and pumping system and increases in pumping capacity - upgrades to the CITECT system following construction of the CWP. The CWP CITECT system allows for remote management and movement of water across the site and incorporate alarms when trigger levels are reached. The RWMP requires updating to reflect the changes made to the on-site water management system.	Compliant

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
			It was reported that there has been no instruction given by the Minister in this regard during the audit period.	
ML1452	27	TREES (PLANTING AND PROTECTION OF) FLORA AND FAUNA AND ARBOREAL SCREENS - If so directed by the Minister, the lease holder shall ensure that operations are carried out in such manner so as to minimise disturbance to flora and fauna within the subject area.	It was reported that there has been no direction by the Minister in this regard during the audit period. Flora and Fauna disturbance is managed through the Flora and Fauna Management Plan and the Permit to Clear process (refer DA 73-11-98 Condition 3.9).	Compliant
ML1452	31	ROADS - The lease holder shall pay to Lake Macquarie City Council, Department of Land and Water Conservation or the Chief Executive, Roads and Traffic Authority or the Executive Officer, State Forests of NSW the cost incurred by such Council or Department or Chief Executive or Executive Officer of making good any damage caused by operations carried on by or under the authority of the lease holder to any road adjoining or traversing the surface or the excepted surface or the excepted surface, as the case may be of the subject area. PROVIDED HOWEVER that the amount to be paid by the lease holder as aforesaid shall be reduced by such sum of money if any as may be paid to the said Council the Department of Conservation and Land Management or the Chief Executive, Roads and Traffic Authority as the case may be from the Mine Subsidence Compensation Fund constituted under the Mine Subsidence Compensation Act, 1961, in settlement of a claim for compensation for the same damage, and provided any approval required to be obtained from the Mine Subsidence Board at the time of construction of any road had been obtained by Lake Macquarie City Council, Department of Land and Water Conservation or the Executive Officer, State Forests of NSW, Roads and Traffic Authority or Chief Executive or Executive Officer.	It was reported that there has been no damage to roads caused by operations during the audit period therefore this condition has not been triggered.	Not applicable
ML1452	32	In the event of operations being conducted on the surface of any road, track or firetrail traversing the subject area or in the event of such operations causing damage to or interference with any such road, track or firetrail the lease holder, at his own expense, shall if directed to do so by the Minister provide to the satisfaction of the Minister an alternate road, track or firetrail in a position as required by the Minister and shall allow free and uninterrupted access along such alternate road, track or firetrail and, if required to do so by the Minister, the lease holder shall upon completion of operations rehabilitate the surface of the original road, track or firetrail to a condition satisfactory to the Minister.	It was reported that no operations were conducted on the surface of any road, track or firetrails, therefore this condition has not been triggered.	Not applicable
ML1452	33	Catchment areas - (a) Operations shall be carried out in such a way as not to cause any pollution of the Lake Macquarie Catchment Area. (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. (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.	(a) Newstan operates under an Environmental Protection Licence (EPL 395) which outlines criteria for water quality discharges and monitoring requirements for dust and water quality. Refer to assessment of compliance with EPL. Some aspects of the licence have not been complied with and some pollution events have been reported. While Newstan are generally compliant with this condition, on the basis of some events of pollution occurring, Newstan are considered Non Compliant with this condition. Full details are presented in the compliance assessment of the EPL. (b) It was reported that no directions were received from the Minister in this regard during the audit period. (c) Noted.	(a) Non-compliant
ML1452	34	TRIG. STATIONS AND SURVEY MARKS – (a) The lease holder shall contact the Newcastle Surveyor-General's office prior to the mining of each section to ascertain which marks will be disturbed. (b) In the event of operations being likely to interfere with or damage any Trigonometrical Station, Permanent Mark or State Survey Mark (under the Survey Co-ordination Act 1 949) erected on or near the subject area, the lease holder shall inform the Surveyor General's office (Newcastle) and shall comply with any directions given by the Surveyor General with respect to re-establishing any Trigonometrical Station, Permanent Mark or State Survey Mark after mining is completed.	(a) Only one trig station was reported on the ML and this has not been impacted by subsidence. (b) No operations have reportedly taken place during the audit period that have interfered with the Trig stations or survey marks.	Compliant

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
ML1452	41	TRANSMISSION LINES, COMMUNICATION LINES AND PIPELINES - The lease holder shall as far as is practicable so conduct operations as not to interfere with or impair the stability or efficiency of any transmission line, communication line or pipeline traversing the surface or the excepted surface of the subject area and shall comply with any direction given or which may be given by the Minister in this regard.	Refer to CCL 764 Condition 19.	Compliant
ML1452	44	Labour/expenditure - The lease holder shall during each year of the term of the authority: (a) ensure that at least 64 workers are efficiently employed on the subject area Or (b) expend on operations carried out in the course of prospecting or mining the subject area, an amount of not less than \$1,120,000.	As Newstan has entered into care and maintenance, its workforce has decreased. It was reported that approximately 23 people were employed on the Newstan site at the time of the audit site inspection. However Newstan reported that its environmental budget for 2014 was over 2.4 million.	Compliant
ML1452	45	Additional information - The lease holder shall if directed by the Minister and within such time as the Minister may stipulate furnish to the Minister: (a) information regarding the ownership of the land within the subject area; (b) information regarding the ownership of the coal within the subject area prior to 1st January, 1982; (c) an indemnity in a form approved by the Minister indemnifying the Crown and the Minister against any wrong payment effected as a result of incorrect information furnished by the lease holder; (d) information regarding the financial viability of the lease holder and operations within and associated with the subject area; and (e) information regarding share holdings in the lease holder.	It was reported that there has been no direction from the Minister requesting additional information during the audit period.	Not applicable
ML1452	46	Service of notices - Within a period of three (3) months from the date of this authority or a period of three (3) months from the date of service of the notice of renewal, or within such further time as the Director General may allow the lease holder shall serve on each owner and occupier of the private land and on each occupier of the Crown land held under a pastoral lease within the subject area a notice in writing indicating that this authority has been granted or renewed and whether the authority includes the surface. The notice shall be accompanied by an adequate plan and description of the subject area. If there are ten (10) or more owners or occupiers affected the lease holder may serve the notice by publication in a newspaper circulating in the region where the subject area is situated. The notice shall indicate that this authority has been granted or renewed, state whether the authority includes the surface and shall contain an adequate plan and description of the subject area.	The Mining Lease was not renewed during the audit period. The initial serving of notices would have been assessed in previous IEAs.	Not applicable
ML1452	47	Inspectors (a) Where the Inspector is of the opinion that any condition of this authority relating to operations within the subject area, or any provision of the Mining Act, 1992, relating to operations within the subject area, are not being complied with by the lease holder, the Inspector may serve on the lease holder a notice stating that and give particulars of the reason why, and may in such notice direct the lease holder: (i) to cease operations within the subject area in contravention of that condition or Act; and (ii) to carry out within the specified time works necessary to rectify or remedy the situation. (b) The lease holder shall comply with the directions contained in any notice served pursuant to sub paragraph (a) of this condition. The Director General may confirm, vary or revoke any such direction. (c) A notice referred to in his condition may be served on the Colliery Manager.	It was reported that there have been no notices issued from Inspectors during the audit period.	Not applicable
ML1452	48	Indemnities - The lease holder shall indemnify and keep indemnified the Crown from and against all actions suits and claims and demands of whatsoever nature and all costs charges and expense which may be brought against the lease holder or which the lease holder may incur in respect of any accident or injury to any person or property which may arise out of the construction maintenance or working of any workings now existing or to be made by the lease holder within the boundaries of the subject area or in connection with any of the operations notwithstanding that all other conditions of this authority shall in all respects have been observed by the lease holder or that any such accident or injury shall arise from any act or thing which the lease holder may be licensed or compelled to do hereunder.	Noted.	Noted

Title	Condition No	Requirement	Comments	Compliance/ Recommendations
ML1452	49	The lease holder shall save harmless the Crown from payment of compensation and from and against all claims, actions, suits or demands whatsoever in the event of any damage resulting from mining operations under or near the subject area.	Noted.	Noted
ML1452	50	Prospecting (general) – (a) Where the lease holder desires to commence prospecting operations in the subject area the lease holder shall notify the Director General in writing and shall comply with such additional conditions as the Minister may impose including any condition requiring the lodgement of an additional bond of other form of security or rehabilitation of the area affected by such operations. (b) Where the lease holder notifies the Director General pursuant to sub paragraph (a) of this condition the lease holder shall furnish with that notification details of the type of prospecting methods that would be adopted and the extent and location of the area that would be affected by them.	The 2012, 2013 and 2014 AEMRs reported that no exploration drilling had been undertaken during the reporting period. Newstan reported that it had not undertaken exploration drilling in 2015.	Not applicable
ML1452	51	Prior to lodging an application under Section 138 of the Coal Mines Regulation Act, where such application involves mining beneath transmission lines under the control of Transgrid, the lease holder as far as practicable adopt the procedures outlined in the Mines Subsidence Board's "Guidelines for Coal Mining & Transmission Lines with respect to Subsidence1'.	It was reported that there have been no mining operations carried out beneath transmission lines during the audit period.	Not applicable
ML1452	52	The lease holder shall prior to any consent given by the Minister subject to Condition 11 of this lease, consult with the relevant authority in respect to operations on the Main Northern Railway and note their requirements in relation to the use of the line, the loading of trains and subsidence monitoring.	It was reported that mining was not undertaken within the barrier zone.	Not assessed
ML1452	53	The lease holder shall, in accordance with Condition 4 of the Development Consent, consult with the New South Wales Fisheries and note their requirements for mining beneath Lords Creek.	It was reported that no mining operations have taken place under Lords Creek during the audit period.	Not applicable
ML1452	54	Second workings approvals will be consistent with the Conditions of the Development Consent (14 May 1999, Newstan Colliery Life Extension, DA 73-1 1- 98, File N91100544), safety requirements under the Coal Mines Regulation Act 1982 and the Department of Mineral Resources' subsidence impact criteria.	During the audit period only first workings have taken place.	Not applicable
ML1452	55	Prior to undertaking second workings where any potential damage to a dwelling fails to meet safe, serviceable and repairable criteria, the leaseholder shall: (a) demonstrate that works are able to be carried out to mitigate any potential damage and such works are in place; or (b) have appropriate agreements in place with the landowner; or (c) have acquisition arrangements in place following an offer to acquire the whole of the property, (or such part of the property requested by the landowner where subdivision is approved) in accordance with the Conditions of Consent.	During the audit period only first workings have taken place.	Not applicable
ML1452	56	Prior to seeking a second workings approval, the leaseholder shall prepare a Longwall Subsidence Management Plan for the relevant area to the satisfaction of the Director General. Each Longwall Subsidence Management Plan shall be consistent with the Development Consent Conditions and the Environmental Management Strategy developed pursuant to Conditions 3.2 and 3.11 of the Development Consent. The leaseholder shall ensure that the terms and details of each relevant Property Subsidence Management Plan (prepared pursuant to Condition 3.10 of the Development Consent) are incorporated into any Longwall Subsidence Management Plan for that part of the development which may affect the property.	During the audit period only first workings have taken place.	Not applicable



Appendix B

Close out of previous IEA (URS, 2012) actions

Status of close out of non-compliances and recommendations of previous IEA (URS, 2012)

Title	Condition No	Requirement	2012 IEA Compliance/ Recommendations	Newstan Action (as reported in Action Plan to DP&E 2012)	Status in 2015
DA-73-11-98 MOD6	1	General There is an obligation on the Applicant to prevent and minimise harm to the environment throughout the life of the project. This requires that all practicable measures are to be taken to prevent and minimise harm that may result from the construction, operation and, where relevant, decommissioning of the development.	Non Compliant Recommendation: As per specific recommendations made throughout the report.	Noted and addressed below.	
Development Consent DA-73-11-98 MOD6	3.2	(d) The Applicant shall also prepare the following environmental management plans: - Archaeology and cultural management plan (refer condition 3.3) - Flora and fauna management plan (refer condition 3.4) - Erosion and sediment control plan (refer condition 3.5(a)) - Soil stripping management plan (refer condition 3.5(c)) - Landscape management plan (refer condition 3.7) - Bushfire management plan (refer condition 3.8) - Land management plan (refer condition 3.9(a)) - Wetland management plan (refer condition 3.9 (c)) - Site water management plan (refer condition 4.1) - Dust management plan (refer condition 6.1) - Noise management plan (refer condition 6.4(d)) (e) The management plans are to be revised/updated at least every 5 years or as otherwise directed by the Director-General in consultation with the relevant government agencies. They will reflect changing environmental requirements or changes in technology/operational practices. Changes shall be made and approved in the same manner as the initial environmental management plan. The plans shall also be made publicly available at LMCC within two weeks of approval of the relevant government authority. (f) If the applicant is unable to prepare the relevant environmental strategies and plans within the period required by these conditions of consent, prior to commencing relevant works within the area of LW15A, the applicant shall prepare specific management strategies and plans for the area of LW15A prior to commencement of those works. The preparation, content and	(e) Non compliant Recommendation: Review, update and seek approval of environmental management plans. Refer also to discussion of adequacy of individual plans in main report.	Noted and addressed below.	

Title	Condition No	Requirement	2012 IEA Compliance/ Recommendations	Newstan Action (as reported in Action Plan to DP&E 2012)	Status in 2015
		approval of the plans for the area of LW15A shall not otherwise be inconsistent with the requirements for the management strategies and plans set out in this consent.			
Development Consent DA-73-11-98 MOD6	3.4	Flora and Fauna Assessment and Management (a) The Applicant shall prior to commencement of any construction works for surface facilities in the relevant area or secondary workings within the LEA, prepare and implement a Flora and Fauna Management Plan for the management of flora and fauna issues for the areas of the proposed surface facilities and LEA. The Plan shall be prepared in consultation with OEH and LMCC, and to the satisfaction of the Director-General, and shall include but not be limited to: (refer to Appendix A for complete list of requirements)	(a) Non compliant (implementation of Plan) Recommendation: Ensure the revised Flora and Fauna Management Plan has a clear and specific flora and fauna monitoring program and that this is implemented. Recommendation: Investigate the erection of nest boxes for squirrel gliders and microchiropteran bats, including number and location of nest boxes.	Flora and Fauna Management Plan is still in draft and will be submitted when finalised.	The Flora and Fauna Management Plan was revised and approved by the DP&E by letter dated 25.08.14. The revised Plan includes a comprehensive monitoring program including annual vegetation and fauna surveys and biennial habitat health assessment. At the time of the audit site inspection, Newstan was awaiting the draft report of the first annual ecological survey. Nest boxes had not been installed to replace trees removed in previous audit periods as was recommended in the 2012 IEA.
Development Consent DA-73-11-98 MOD4	4.1 Cont.	General Terms of Approval EPA (i) Pollution of Waters The licensee must design construct and operate all plant and equipment and any other facilities on the premises so as to minimise the pollution of waters. (ii) Discharge Concentration Limits The Applicant shall only discharge water from the development in accordance with the provisions of a current Environmental Protection Licence.	Non compliant Refer to recommendations in main section of report and EPL compliance assessment table.	(i) Stony Creek discharge has been resolved with the EPA and is now licenced on EPL395. (ii) Upgrades to the water management system in 2012 are designed to prevent exceedances of concentration limits specified by the EPL.	Newstan has implemented significant improvements to its water management system as discussed in main report. Incidents and exceedances were recorded during this audit period and are discussed in Appendix A.
Development Consent	6.4 (a) (superseded)	(a) Noise Level Criteria Noise emissions from the operation of the Newstan Colliery Life	Non compliant	Newstan washery is in the process of having designs	Newstan implemented noise management measures to

Title	Condition No	Requirement	2012 IEA Compliance/ Recommendations	Newstan Action (as reported in Action Plan to DP&E 2012)	Status in 2015
DA-73-11-98 MOD3	by 6.4A above but applicable for audit period)	Extension Project must not exceed the levels specified in Table 3: The criteria applies under prevailing conditions (winds up to 3 metres per second). Noise impacts that may be enhanced by temperature inversions must be addressed by the following strategies: - Documenting noise complaints received to identify any higher level of impacts or patterns of temperature inversions; and - Where the level of complaints indicates a higher level of impact then actions to quantify and ameliorate the impacts must be developed and implemented.		completed by an external contractor to upgrade the washery to reduce noise levels. Works to commence in 2013.	minimise operational low frequency noise at the washery as discussed in main report. Exceedances were recorded during this audit period and are discussed in Appendix A.
Development Consent DA-73-11-98 MOD4	8.2	Surface and Groundwater (a) (i) The Applicant shall construct and locate surface and ground water monitoring positions, as identified in the site water management plan (condition 4.1 (a)), in consultation with DWE, LMCC and EPA, and to the satisfaction of the Director-General, at least three months prior to the commencement of construction works in the relevant area and first workings in the LEA; (ii) The Applicant shall prepare a detailed monitoring program in respect of ground and surface water quality and quantity, including water in and around the Newstan mine site, Northern and Southern Emplacements, and LEA, and also consistent with condition 4.1(b)(iv), during construction works, mine operations and post mine operations in consultation with DWE, EPA, and to the satisfaction of the Director-General. The monitoring program shall also include surveys of drainage channels within the LEA to update information obtained in the preparation of Property Subsidence Management Plans. The monitoring program shall be prepared prior to commencement of construction in the relevant area. (iii) The results and interpretation of surface and ground water monitoring are to be provided by the Applicant in an approved form to the DWE, LMCC and EPA on a six monthly basis, unless otherwise directed by the Director-General. The results are also to be contained and analysed in the Annual Environmental Management Report (Condition 9.1). General Terms of Approval - EPA b) The Applicant must conduct water quality monitoring for pollutants in accordance with any current Environment Protection Licence under the Protection of the Environment	Non compliant Recommendation: Continue to work towards obtaining DP&I approval of the RWMP. Recommendation: Revise the groundwater monitoring program so it is clear, succinct and easy to implement. It is recommended that a table is included listing all the monitoring bores, the parameters to be monitored and the frequency. Whilst Appendix N includes details of the monitoring bores (easting, northing, depth, aquifer and purpose) this would be complemented by a map / site plan showing the locations of the monitoring bores. Recommendation: Include a map / site plan within the RWMP showing the surface water monitoring locations.	Noted. RWMP to be reviewed in 2013 and will endeavour to include the recommendations	The RWMP was not revised during the audit period. The recommendations from the previous IEA are still considered relevant and have been included as recommendations in this IEA. Refer to assessment of adequacy in main report.

Title	Condition No	Requirement	2012 IEA Compliance/ Recommendations	Newstan Action (as reported in Action Plan to DP&E 2012)	Status in 2015
		Operations Act 1997 for the site.			
Development Consent DA-73-11-98 MOD4	8.5	<p>Flora and Fauna Monitoring</p> <p>The Applicant shall prepare a detailed monitoring program of habitat areas, including any wetlands and aquatic habitats, during the development and for a period after the completion of the development to be determined by the Director-General in consultation with LMCC, OEH and DRE.</p> <p>The program shall monitor impacts attributable to the development and include monitoring of the success of any restoration or reconstruction works. The Applicant shall include the monitoring program in the Flora and Fauna Management Plan (condition 3.4). The Applicant shall carry out any further works required by the Director-General as a result of the monitoring. A summary of monitoring results shall be included in the AEMR.</p>	<p>Non compliant</p> <p>Recommendation: Ensure implementation of the Flora and Fauna Management Plan. This will require expansion of the current monitoring program to include:</p> <ul style="list-style-type: none"> • broader flora and fauna monitoring across the site including annual vegetation monitoring (beyond <i>Tetratheca juncea</i>), fauna surveys and fauna habitat monitoring; • flora and fauna monitoring of wetland and aquatic habitats (as per CoA 8.5); • flora and fauna monitoring within rehabilitated areas to assess the success of rehabilitation works. <p>Recommendation: Ensure the revised Flora and Fauna Management Plan specifically addresses the requirements of CoA 8.5 (Table 1-1 of 2006 Plan does not list this CoA).</p> <p>Recommendation: Plan needs to be more specific regarding what type of monitoring is proposed at what frequency and which locations. The monitoring of threatened fauna in particular requires more detail.</p>	<p>Flora and Fauna Management Plan is still in draft and will be submitted when finalised.</p> <p>Recommendations to be considered as part of the review of the draft Flora and Fauna Management Plan.</p>	<p>The revised Flora and Fauna Management Plan (2014) included an expanded monitoring program to address the requirements of Condition 3.4 that were not included in the previous version of the plan.</p> <p>Ecological monitoring commenced in 2015. At the time of the audit site inspection, Newstan was awaiting the draft report of the first annual ecological survey from the ecological consultants engaged to undertake this work (RPS).</p>
Development Consent DA-73-11-	8.7	<p>Subsidence Monitoring</p> <p>The Applicant shall undertake a detailed and ongoing monitoring program of subsidence resulting from mining to the satisfaction</p>	<p>Non compliant (vi)</p> <p>Recommendation:</p>	<p>Noted.</p> <p>Only first workings currently</p>	<p>subject to obtaining water course monitoring data for (i)) which is required for five</p>

Title	Condition No	Requirement	2012 IEA Compliance/ Recommendations	Newstan Action (as reported in Action Plan to DP&E 2012)	Status in 2015
98 MOD4		<p>of the Director-General and in consultation with DWE, DRE and MSB throughout the life of the mine and for a period of at least five years after the completion of mining, or other such period as determined by the Director-General in consultation with DWE and DRE. Monitoring shall include the following:</p> <ul style="list-style-type: none"> (i) a survey of watercourses within areas mined within the DA Area; (ii) monitoring of groundwater levels and quality; (iii) monitoring of impacts on any buildings, structures and roads within areas mined within the DA Area; (iv) a monitoring program to identify any subsidence impacts on the 330 kV power transmission lines and towers in the Main West Mining Area, developed in consultation with DRE and TransGrid; (v) monitoring of remedial measures; and (vi) a comparison of predicted impacts with actual impacts, including mapping of subsidence profiles within areas mined within the DA Area. <p>The Applicant shall include information on monitoring conducted and the interpreted results in the Annual Environmental Management Report (condition 9.2).</p>	<p>Include a comparison of predicted subsidence impacts with actual subsidence impacts in the End of Panel Reports and AEMR.</p> <p>Recommendation: Undertake a survey of watercourses prior to mining in the vicinity of any watercourses within the DA Area.</p>	<p>being undertaken so this recommendation may not be relevant until secondary extraction commences in the future. This would require a Clause 88 Approval which would cover this as a requirement.</p> <p>Water course surveys prior to mining are covered within SMP.</p>	years post mining.
EPL 395	L1.1	<p>Pollution of Waters</p> <p>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.</p>	Not compliant	<p>Noted.</p> <p>Civil works were undertaken to rectify seepage from NREA and seepage into LT Creek.</p> <p>Stony Creek discharge has been resolved with the EPA and is now licenced on EPL395.</p> <p>Upgrades to the water management system in 2012 are designed to prevent exceedances of concentration limits specified by the EPL through complete automation of the site system.</p>	<p>Newstan has implemented significant improvements to its water management system as discussed in main report.</p> <p>Incidents and exceedances were recorded during this audit period and are discussed in Appendix A.</p> <p>Water Management is discussed in Section 8 of the report.</p>

Title	Condition No	Requirement	2012 IEA Compliance/ Recommendations	Newstan Action (as reported in Action Plan to DP&E 2012)	Status in 2015																																																
EPL 395	L2.4	<p>Water and/or Land Concentration Limits</p> <p>POINT 1</p> <table><tr><th>Pollutant</th><th>Units of Measure</th><th>50 percentile concentration limit</th><th>90 percentile concentration limit</th><th>SDQM concentration limit</th><th>100 percentile concentration limit</th></tr><tr><td>Oil and Grease</td><td>milligrams per litre</td><td></td><td></td><td></td><td>10</td></tr><tr><td>pH</td><td>pH</td><td></td><td></td><td></td><td>6.5-8.5</td></tr><tr><td>Total suspended solids</td><td>milligrams per litre</td><td></td><td></td><td></td><td>50</td></tr></table> <p>POINT 2</p> <table><tr><th>Pollutant</th><th>Units of Measure</th><th>50 percentile concentration limit</th><th>90 percentile concentration limit</th><th>SDQM concentration limit</th><th>100 percentile concentration limit</th></tr><tr><td>Oil and Grease</td><td>milligrams per litre</td><td></td><td></td><td></td><td>10</td></tr><tr><td>pH</td><td>pH</td><td></td><td></td><td></td><td>6.5-8.5</td></tr><tr><td>Total suspended solids</td><td>milligrams per litre</td><td></td><td></td><td></td><td>50</td></tr></table>	Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	SDQM concentration limit	100 percentile concentration limit	Oil and Grease	milligrams per litre				10	pH	pH				6.5-8.5	Total suspended solids	milligrams per litre				50	Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	SDQM concentration limit	100 percentile concentration limit	Oil and Grease	milligrams per litre				10	pH	pH				6.5-8.5	Total suspended solids	milligrams per litre				50	Not compliant	Upgrades to the water management system in 2012 are designed to prevent exceedances of concentration limits specified by the EPL through complete automation of the site system.	<p>Newstan has implemented significant improvements to its water management system as discussed in main report.</p> <p>Incidents and exceedances were recorded during this audit period and are discussed in Appendix A.</p> <p>Water Management is discussed in Section 8 of the report.</p>
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EPL 395	L3.1	<p>Volume and Mass Limits</p> <p>For each discharge point or utilisation area specified below (by a point number), the volume/mass of:</p> <p>(a) liquids discharged to water; or;</p> <p>(b) solids or liquids applied to the area;</p> <p>must not exceed the volume/mass limit specified for that discharge point or area.</p> <table><tr><th>Point</th><th>Unit of Measure</th><th>Volume/Mass Limit</th></tr><tr><td>1</td><td>kilolitres per day</td><td>7000</td></tr></table>	Point	Unit of Measure	Volume/Mass Limit	1	kilolitres per day	7000	Non compliant	Upgrades to the water management system in 2012 are designed to prevent exceedances of concentration limits specified by the EPL through complete automation of the site system. EPA approved the increased discharge from LDP001 from 7ML to 11ML in October 2012.	Since the variation approving the increased 11 ML/day discharge volume, Newstan has reported two exceedances of this limit following major storms.																																										
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Title	Condition No	Requirement	2012 IEA Compliance/ Recommendations	Newstan Action (as reported in Action Plan to DP&E 2012)	Status in 2015
EPL 395	L4.1	Waste – The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.	Non compliant Recommendation: Determine whether the waste received from Mandalong meets the conditions of the Coal Washery Rejects (Coal Mine Void) Exemption 2009 and / or Coal Washery Rejects General Exemption 2009. If this is the case, seek EPL variation to permit receiving the exempt waste and ensure compliance with the General Conditions of the Exemption. If it is determined the Exemption does not apply, seek EPL variation to include the Scheduled Activity of waste application to land.	Noted. Once the status of the material is determined application for any exemption or EPL variation required will be undertaken	This Condition was revised by variation dated 17.12.14 to allow for non-scheduled waste and general or specific exempt waste to be permitted to be received at the premises
EPL 395	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.	Non compliant (based on incident reported in 2011 Annual Return)	Civil works were undertaken to rectify seepage from NREA after the incident occurred	Closed out during previous IEA
EPL 395	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.	Non compliant (based on incident reported in 2009 Annual Return)	Noted – no further action currently required	Closed out during previous IEA

Title	Condition No	Requirement	2012 IEA Compliance/ Recommendations	Newstan Action (as reported in Action Plan to DP&E 2012)	Status in 2015																				
EPL 395	M2.2	<p>Air Monitoring Requirements</p> <p>POINT 7,8,9,10,11,12,13,14</p> <table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling Method</th></tr><tr><td>Particulates - Deposited Matter</td><td>grams per square metre per month</td><td>Monthly</td><td>AMS-19</td></tr></table> <p>POINT 15,16</p> <table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling Method</th></tr><tr><td>Particulate matter</td><td>micrograms per cubic metre</td><td>Every 5 days</td><td>AMS-15</td></tr><tr><td>Total suspended particles</td><td>micrograms per cubic metre</td><td>Every 5 days</td><td>AMS-15</td></tr></table>	Pollutant	Units of measure	Frequency	Sampling Method	Particulates - Deposited Matter	grams per square metre per month	Monthly	AMS-19	Pollutant	Units of measure	Frequency	Sampling Method	Particulate matter	micrograms per cubic metre	Every 5 days	AMS-15	Total suspended particles	micrograms per cubic metre	Every 5 days	AMS-15	<p>Non compliant (based on exceedances)</p> <p>Recommendation: Seek clarification from the EPA regarding the use of AS 3580.9.3 for TSP sampling rather than AS 2724.3 (AM-15) as specified by this Condition.</p>	Noted	<p>Exceedances were recorded during this audit period and are discussed in Appendix A.</p> <p>AS 3580.9.3 is not listed within the EPA publication, <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> however it is noted AS3580.9.6 has superseded AS 2724.3-1984 and the EPA publication has not been reviewed since January 2007.</p>
Pollutant	Units of measure	Frequency	Sampling Method																						
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Pollutant	Units of measure	Frequency	Sampling Method																						
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CCL 764	2	<p>Environmental Harm</p> <p>The proponent shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or rehabilitation of the development.</p>	<p>Non Compliant</p> <p>Recommendation: As per specific recommendations made throughout the report.</p>	Noted and addressed throughout the action plan																					
CCL 764	5	<p>The EMR must:</p> <ul style="list-style-type: none">- report against compliance with the MOP- report on progress in respect to rehabilitation completion criteria;- report on the extent of compliance with regulatory requirements, and- have regard to any relevant guidelines adopted by the Director-General;	<p>Non compliant</p> <p>Recommendation: Include a review (comment) on compliance with the MOP in the AEMR.</p> <p>Recommendation: Define rehabilitation completion criteria and report on rehabilitation progress annually in the AEMR.</p>	Noted. A review (comment) on compliance with the MOP to be included in the AEMR.	Not addressed. Included as a recommendation in this IEA.																				
CCL 764	18	<p>Prevention of Soil Erosion and Pollution</p> <p>Operations must be carried out in a manner that does not cause or aggravate air pollution, water pollution (including sedimentation) or soil contamination or erosion, unless otherwise authorised by a relevant approval, and in accordance with an accepted Mining Operations Plan. For the purpose of this</p>	Non compliant	<p>Site of erosion noted by the auditors was fixed immediately.</p> <p>Erosion controls continue to inspected and upgraded as</p>	The rock lined channel has been extended for approximately 10m. After this, verification that the site of erosion identified in 2012 had been fixed could not be																				

Title	Condition No	Requirement	2012 IEA Compliance/ Recommendations	Newstan Action (as reported in Action Plan to DP&E 2012)	Status in 2015
		condition, water shall be taken to include any watercourse, waterbody or groundwaters. The lease holder must observe and perform any instructions given by the Director-General in this regard.		required.	undertaken as access to the site was not granted (as it was on land not owned by Newstan). Refer to main report for photos.
ML1452	33	Catchment areas - (a) Operations shall be carried out in such a way as not to cause any pollution of the Lake Macquarie Catchment Area. (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. (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.	Non compliant (on basis that some aspects of the EPL were not complied with and pollution events reported)	Noted. These issues are addressed within the EPL conditions above.	Refer to Appendix A for assessment during this audit period.

Status of close out of indeterminate conditions and recommendations of previous IEA (URS, 2012)

Title	Condition No	Requirement	Compliance/ Recommendations	Action	Status
Development Consent DA-73-11-98 MOD4	3.4 (cont)	<p>(b) Deleted</p> <p>(c)The Applicant shall not disturb the <i>Tetratheca juncea</i> population within the area identified as common in figure 7 of the species impact statement, which is close to the northern reject emplacement area boundary.</p> <p>(d) The Applicant shall implement the ameliorative measures for <i>Tetratheca juncea</i>, Squirrel Glider, and Threatened Bat Species identified in sections 11.1 and 11.2 of the species impact statement.</p> <p>(e) Any fencing of native vegetation which is to be retained shall not consist of barbed wire fencing.</p>	<p>(c) Compliant</p> <p>(d) Compliant</p> <p>(e) Indeterminate</p> <p>Recommendation: Determine the extent of barbed wire fencing used internally within the site (i.e. excluding boundary fencing) and investigate alternatives to barbed wire so as to minimise potential impacts on native fauna.</p>	Noted	It was reported that most of the fencing used on site is barbed wire boundary fencing to deter unauthorised access onto the site. It was reported that native vegetation to be retained is generally not fenced. The extent of the use of barbed wire fencing was not able to be determined during the audit site inspection.
Development Consent DA-73-11-98 MOD4	4.1	<p>Water Management</p> <p>The Applicant shall:</p> <p>prior to the commencement of construction of each of the new surface facilities at Newstan Colliery, and prior to first workings within the LEA, prepare water management plans for the relevant developments, in consultation with DWE, EPA, LMCC, and DRE and to the satisfaction of the Director-General, which shall include, but not be limited to, the following matters:</p> <p>(refer to Appendix A for complete requirements of condition)</p>	<p>(a) Indeterminate</p> <p>Recommendation: Continue to work towards obtaining DP&I approval of the RWMP.</p> <p>Recommendation: Opportunities for improvement to the RWMP include:</p> <ul style="list-style-type: none"> -include a program for specifically assessing and reporting against the effectiveness of the water management system and performance against RWMP objectives and EIS objectives. - With regards to monitoring in the vicinity of natural watercourses and longwall mining areas, the RWMP should be more specific about what type of monitoring is undertaken and at what frequency. <p>Refer also to recommendations under CoA</p>	RWMP to be reviewed in 2013 and will endeavour to include the recommendations	<p>The RWMP was not revised during the audit period.</p> <p>The recommendations from the previous IEA are still considered relevant and have been included as recommendations in this IEA.</p> <p>Refer to assessment of adequacy in main report.</p>

Title	Condition No	Requirement	Compliance/ Recommendations	Action	Status
			8.2 and in main section of report relating to adequacy of management plans.		
Development Consent DA-73-11-98 MOD4	4.1 Cont	c) obtain a license with DWE under part 5 of the Water Act (1912) prior to construction of all new excavations, test bores and production bores (including dewatering bores) that intersect the groundwater.	(c) Indeterminate) Recommendation: Continue to work with NOW to resolve groundwater extraction licence relinquishment and additional licence application.	Communication with NOW on going regarding this matter	During this audit period, the licence application was re-submitted on the 16.10.13. A meeting was held with NOW on the 15.02.15 at which Newstan was requested to provide additional information. Newstan was continuing to work with NOW to resolve groundwater extraction licence relinquishment and additional licence application.
Development Consent DA-73-11-98 MOD4	5.3	Waste Receiving or Disposing of Waste (a) Except as expressly permitted in a licence, waste must not be: received at the premises for storage, treatment, processing, reprocessing or disposal; or disposed of at the premises. Hazardous and industrial waste (b) Hazardous or industrial waste must be stored and disposed of in a manner that will minimise the wastes impact on the environment including appropriate segregation for storage or disposal and transportation by a waste transporter licensed by the EPA.	(a) Indeterminate Refer to assessment of compliance with EPL Condition L4.1 for recommendations.	Refer to assessment of compliance with EPL Condition L4.1 for comments	This Condition was revised by variation dated 17.12.14 to allow for non-scheduled waste and general or specific exempt waste to be permitted to be received at the premises
EPL 395	L2.5	Exceedance of the concentration limits specified in condition L3.3 at Point 2 is permitted only if rainfall recorded on the premises exceeds 47 millimetres over any one (1) hour period during the 24 hours immediately prior to commencement of the discharge.	Indeterminate Recommendation: Seek clarification from the EPA as the condition referred to (L3.3) does not exist.	Complete. This condition has been removed from the licence since the October variation was received	Removed by 15.10.12 licence variation
EPL 395	R4.2	The licensee must retain a copy of each report required by Condition O4.4 for 3 years from the date each record is made.	Indeterminate Recommendation: Seek clarification from the EPA as the condition referred to (O4.4) does not exist.	Complete. This condition has been removed from the licence since the October variation was received	Removed by 15.10.12 licence variation

Title	Condition No	Requirement	Compliance/ Recommendations	Action	Status
CCL 764	3	<p>Mining Operations Plan</p> <p>(a) Mining Operations must not be carried out otherwise than in accordance with a Mining Operations Plan (MOP) which has been approved by the Director-General of the Department of Primary Industries.</p> <p>(b) The MOP must:</p> <ul style="list-style-type: none"> - Identify areas that will be disturbed by mining operations; - detail the staging of specific mining operations; - identify how the mine will be managed to allow mine closure; - Identify how mining operation will be carried out on site in order to prevent and or minimise harm to the environment; - reflect the conditions of approval under: <ul style="list-style-type: none"> - the Environmental Planning and Assessment Act 1979 - the Protection of the Environmental Operations Act 1997; - and any other approvals relevant to the development including the conditions of this lease; and - have regard to any relevant guidelines adopted by the Director-General. <p>(c) The titleholder may apply to the Director-General to amend an approved MOP at any time</p> <p>(d) It is not a breach of this condition if:</p> <p>i) the operations constituting the breach were necessary to comply with a lawful order or direction given under the Mining Act 1992, the Environmental Planning and Assessment Act 1979, Protection of the Environmental Operations Act 1997 or the Occupational Health and Safety Act 2000; and</p> <p>ii) the Director- General had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.</p> <p>(e) A MOP ceases to have affect 7 years after the date of approval or other such period as identified by the Director-General. An approved amendment to the MOP under condition 5 does not constitute an approval for the purpose of this paragraph unless otherwise identified by the Director-General.</p>	<p>Compliant (general)</p> <p>Indeterminate (requirements of MOP approval with regards to the security deposit review).</p>	Noted. Historical non-compliance	<p>A revised MOP for the period 2014 to 2020 was approved by DRE by letter dated 10.06.14.</p> <p>A revised MOP was approved by the DRE on 5 August 2015.</p> <p>This was not reviewed as part of the audit as it was outside the audit period.</p>



Appendix C

Consultation with NSW Trade and Investment Division of Resources and Energy



OUT15/22861
MCV 14/537#5

Michael Woolley
MCW Environmental Consulting Pty Limited

By Email: mcwenvironmental@bigpond.com
Cc: nerida.manley@centennialcoal.com.au

Dear Michael

NEWSTAN INDEPENDENT ENVIRONMENTAL AUDIT

The Division of Resources and Energy (DRE) acknowledges receipt of your email dated 17 August 2015 in relation to an Independent Environmental Audit of Newstan Mine as required by Development Consent DA 73-11-98. MCW Environmental Consulting Pty Limited have requested DRE provide comment on the environmental performance of Newstan Mine.

DRE comments on environmental performance are limited to matters relating to rehabilitation and mine closure. DRE encourage Newstan Mine to:

- Continue to improve rehabilitation standards.
- Complete a topsoil and subsoil material balance to verify availability of material for rehabilitation. Evaluate soil and growth medium requirements for the site and develop a soil amelioration methodology.
- Review and modify rehabilitation methodologies based on performance of existing rehabilitation.
- Continue to develop and refine performance indicators and quantifiable completion criteria in the Mining Operation Plan.

DRE have undertaken extensive consultation with Centennial Newstan Pty Limited throughout the development of a Mining Operations Plan which includes detailed performance indicators and quantifiable completion criteria. The current MOP was approved by DRE on 5 August 2015.

If you require additional information on this matter please contact the undersigned office on (02) 4931 6603.

Catherine Lewis
Senior Inspector Environment
Environmental Sustainability Unit
Date: 27 August 2015