



15 November 2018

Ms Jessie Evans
A/Director
NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Jessie,

RE: Newstan Colliery Modification 8 (DA 73-11-98) Response to Submissions

Set out below is Centennial Newstan's response to matters raised following public exhibition of the DA 73-11-98 Modification 8 Environmental Assessment (EA). A formal response to matters raised was requested by the Department of Planning and Environment (DP&E) in correspondence dated 26 October 2018.

Centennial Newstan lodged an application and supporting EA to modify DA 73-11-98 pursuant to Section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act) under the savings provisions for former Part 3A projects and eligible Part 4 mining projects. The application is seeking to extend the approval life of DA 73-11-98 for a further 12 months to 6 July 2021 and undertake first workings within the West Borehole seam utilising continuous miner development. The proposed first workings would not have any measurable surface related subsidence and have been designed to be stable in the long term.

The application and supporting EA were placed on public exhibition from 8 October 2018 to 22 October 2018. Nine government agency submissions (including Lake Macquarie City Council) and 1 public submission were received. **Attachment 1** summarises each submission (Section 1) and responds to matters raised (Section 2).

I can be contacted on (02) 4935 8901 or via email iain.hornshaw@centennialcoal.com.au should DP&E have any queries regarding this Response to Submissions Letter Report.

Yours sincerely

Iain Hornshaw
Approvals Coordinator

Encl: Attachment 1: Summary and Response to Submissions
Attachment 2: Revised EA Figure 2-6
Attachment 3: Presentation Slides from the Northern Holdings ACHMP Sub-Committee on 9 May 2018

Attachment 1: Summary and Response to Submissions

1. Submissions Summary

1.1 Summary of Government Agency Submissions

Raised By	Summary of Issue
NSW Dept of Industry – Lands & Water and Dept of Primary Industries	The department has reviewed the proposal and has no comments.
NSW Division of Resources and Geoscience	Following a review of the proponent's EA, the Division considers the Project mine plan to adequately recover coal resources and provide an appropriate return to the State within the mine footprint, giving due consideration to the constraints of the location.
	A Resource & Economic Assessment undertaken by the Division detailing the resource utilisation and economic benefits is appended as Attachment A.
	The Division has determined that identified risks or opportunities can be effectively regulated through the conditions of mining authorities issued under the Mining Act 1992.
NSW Environment Protection Authority	Given the potential interactions of the proposed modification and the proposed Eraring Power Station Ash Dam Expansion (Mod 1 MP 07_2284) on the Awaba and Eraring seeps, the EPA considers that a cumulative expert assessment of potential impacts to groundwater hydrogeology be carried out. There is significant community concern about leachate from the ash dam entering mine workings and making its way to Lake Macquarie. It is important to understand how both projects may impact (adversely or beneficially) the existing Awaba and the Eraring seeps. A key concern is management at the surface of potentially acidic and saline mine water to prevent impacts to Lake Macquarie and impacts to power station infrastructure from changes to hydrology.
	<p>Water Treatment System Details</p> <ul style="list-style-type: none"> • Details of the design and operation of the treatment plant. The EA indicates that a water treatment plant operates at the Newstan Colliery Surface Site (NCSS). • Clarification of whether transfers to and from other sites, such as Hawkmount Quarry and Cooranbong Entry Site, affect discharge quantity and quality at LDP001 and LDP017.
	<p>Information Related to Licensed Discharge Point (LDP001)</p> <ul style="list-style-type: none"> • Assessment of the potential impacts of discharges from LDP001 on LT Creek, including considering potential chronic and acute impacts associated with all pollutants present at nontrivial levels, with reference to: <ul style="list-style-type: none"> ○ the average annual discharge frequency and volume; ○ the discharge quality in terms of the typical and maximum concentrations; the Australian and New Zealand Guidelines for Fresh and Marine

	<p>Water Quality (2018) guideline values and, where relevant, any benchmark values for acute toxicity;</p> <ul style="list-style-type: none"> ○ the characteristics of the receiving waterway (e.g. environmental values, flows; ambient water quality). <ul style="list-style-type: none"> • where relevant, consider measures to mitigate impacts. • confirmation that the limits of reporting are sensitive enough to detect pollutants at levels that allow comparison to relevant guideline values (where available), in the context of the available analysis methods and technology. • review of the selenium results (as the reported median concentration is potentially less than the reported maximum). • details of the sampling design to ensure the characterisation is representative of the full range of operational conditions. • consideration of macroinvertebrate and ecotoxicological monitoring that is required by the EPA under condition E1 of Environment Protection Licence (EPL) 395 in relation to discharges from LDP001. • clarification of the inconsistencies in the number of samples analysed for different pollutants. For example, EPL 395 requires the same monitoring frequency for electrical conductivity, pH and turbidity, however, Table 5-4 indicates these results are based on differing numbers of samples.
	<p>Information Related to Licensed Discharge Point (LDP017)</p> <ul style="list-style-type: none"> • Assessment of the potential impact of discharges from LDP017 on Stony Creek, with reference to: <ul style="list-style-type: none"> ○ the discharge frequency and volume; ○ the discharge quality in terms of the typical and maximum concentrations of all pollutants potentially present at concentrations that pose a risk of non-trivial harm to human health or the environment; ○ the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2018) guideline values and, where relevant, any benchmark values for acute toxicity; ○ the characteristics of the receiving waterway (e.g. environmental values, flows; ambient water quality); • where relevant, consider measures to mitigate impacts. • confirmation that the limits of reporting are sensitive enough to detect pollutants at levels that allow comparison to relevant guideline values (where available), in the context of the available analysis methods and technology. • characterisation of the quality, and assessment of the potential impact of, discharges from LDP017.
	<p>Groundwater Impact Information</p> <ul style="list-style-type: none"> • further evidence to define the predicted negligible

	<p>impacts to groundwater aquifer connectivity.</p> <ul style="list-style-type: none"> • a detailed cross section demonstrating the depths and elevations of all existing subsurface coal extraction workings, fracture zones, the local geology, and the overlying alluvial systems and Groundwater Dependant Ecosystems (GDE's). • an accompanying plan view map of the proposed first working area, the Awaba Longwall panels, GDE's, creek lines and alluvial. • schematic diagrams showing a cross section of the proposed workings, the existing overlying workings, and geological strata and formations, to support conceptualisation of the connective pathways (if any) across the project area.
Lake Macquarie City Council	There does not appear to have been any formal consultation between the applicant Centennial Coal or its consultants and Council in relation to the proposal.
	Land owned by Lake Macquarie City Council is partly within the project area. This land is described as Lot 463 DP 1138964 and is incorrectly shown in the environmental assessment (Figure 2-6) as being owned by the NSW Aboriginal Land Council. This land is known as the Awaba Biodiversity Conservation Area and is a biodiversity offset site managed for the protection of biodiversity in accordance with the Awaba Biodiversity Conservation Area – Plan of Management 2015. Council consulted with Centennial Coal in the preparation of this plan and Centennial Coal was made aware of the biodiversity significance of the site at that time.
	The mining lease holder advised Council in 2015 that in the event of future underground mining, surface disturbance to the land may be required.
	The Awaba Biodiversity Conservation Area is also subject to consent requirements for the Awaba Waste Management Facility under the terms of the Environment Protection and Biodiversity Conservation Act 1999. These restrictions applying to the land are not identified in the project environmental assessment.
	The majority of the proposed area of mining is located within the proposed Awaba Conservation Area that has been identified as a proposed conservation reserve since 1995. The proposed mining should avoid any adverse biodiversity or environmental impacts on this area.
	The project environmental assessment has included no data to indicate that the matters identified above [water quality and natural hydrology] have been adequately considered. The assessment assumes that there will no impact on the surface, even though there will be minor subsidence and changes to groundwater conditions, and past experience from underground mining within the Lake Macquarie LGA has shown that unanticipated impacts do occur.
	In addition the implications of processing of additional coal and reject material at Newstan Colliery do not appear to

	<p>have been addressed. For example, the existing approved arrangements for reject emplacement should be reviewed, as to their adequacy for enabling the proposal to proceed in an environmentally satisfactory manner.</p>
	<p>The report includes recommendations in accordance with the Northern Holdings ACHMP, which require a 3-phase monitoring program to be implemented for the identified sites. The recommendations of the report should be adopted as conditions of consent.</p>
	<p>Council requests all ecological information collected including the plot data for biodiversity surveys be provided.</p>
	<p>Council expresses its concern about any impacts from mining that may adversely affect biodiversity on its land. Notwithstanding the comments made in the project environmental assessment, Council is not satisfied that mining would not affect surface and groundwater flows on its land, and cause consequent impacts on surface and groundwater dependent ecosystems downstream, including endangered ecological communities. The environmental assessment does not consider the requirement under the Biodiversity Conservation Act 2016 for impacts on biodiversity to be avoided. This matter should form a key part in the environmental assessment of the project.</p>
	<p>Whilst the environmental assessment indicates that there will be no surface disturbance, previous advice given by Centennial Coal to Council indicates that surface disturbance may be required, either for exploration activities or for ventilation purposes.</p>
	<p>It is noted that the Council land affected by the proposed development contains identified priority <i>Tetratheca juncea</i> habitat as shown in the Awaba Biodiversity Conservation Area – Plan of Management 2015. This plant species is a matter of national environmental significance listed under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999. The environmental assessment erroneously concludes that there is no likelihood of occurrence (Appendix C of the Proposed Newstan Modification 8 Biodiversity Thresholds Test (RPS 24 August 2018), yet this is a significant matter for consideration in the application. The incorrect statement in the Appendix that “Likelihood of Occurrence: None. Suitable formation level vegetation habitat surrogates are absent from the study area. Species incidence is not expected and, if present, would represent atypical habitat usage” should be corrected.</p>
	<p>It is unreasonable to extend the existing mining lease by a further 12 months when it has already operated for around 20 years, and is not supported by any justification within the environmental assessment. This should be assessed as part of the Newstan extension project that is subject to a separate approval process. Furthermore, legislative changes now place a responsibility on project proponents to avoid impacts on biodiversity and this is inconsistent with a lease extension.</p>

	<p>If the development were to proceed, Council would require the following consent conditions to be imposed on any modified consent:</p> <ol style="list-style-type: none"> 1. Centennial Coal is to undertake a program of surface and groundwater monitoring within the Kilaben Creek catchment to determine baseline conditions and post mining changes to the satisfaction of Lake Macquarie City Council. Monitoring data is to be made available to the Council. 2. Centennial Coal is to undertake a program of biodiversity monitoring, on that part of Lot 463 DP 1138964 as is affected by the proposal, to the satisfaction of Lake Macquarie City Council, consistent with monitoring required in the Awaba Biodiversity Conservation Area – Plan of Management 2015. 3. The project applicant is to enter into a legal agreement with Lake Macquarie City Council to indemnify the Council against any loss or damage to its land, or biodiversity, or any management cost that may arise from disturbance to the land. The agreement is to provide for financial security to adequately cover potential losses or damage. 4. In the event that any surface disturbance to Lot 463 DP 1138964 results from the development, the project applicant agrees to find and make all necessary arrangements to secure additional biodiversity offsets to compensate for that surface disturbance, to the satisfaction of the Lake Macquarie City Council, the NSW Minister for Planning, and the Commonwealth Department of Environment and Energy.
NSW Rural Fire Service	<p>The NSW Rural Fire Service has reviewed the modifications proposed and would like to seek a copy of the current colliery's bush fire management plan to verify if the modifications proposed can comply with <i>Planning for Bush Fire Protection 2006</i> and/or subsequent edition.</p> <p>Based on the location of the modification which is totally surrounded by Forest, but has access roads to the north, east and west and an easement to the south, there is no real objection to the proposal. No APZ requirements are required, as already mentioned access can comply since a haul road is available to the north and west of the site, public road access is available from the east and an easement is available from the south if a fire were to occur in the area.</p> <p>The NSW RFS has reviewed the information provided and advises it has no objection to the proposed development subject to the colliery's bush fire management plan (N-BMP-001) being updated to reflect the development.</p>
NSW Office of Environment and Heritage	<p>Details of consultation with the Aboriginal stakeholders for Modification 8 should be provided, including minutes of meetings held.</p> <p>OEH recommends that site condition monitoring of the Scar Tree AHIMS Sites 45-7-0318 and 45-7-0319 be undertaken as outlined in Section 6.5.2 of the Centennial Coal</p>

	Aboriginal Cultural Heritage Management Plan: Northern Region (September 2016).
	The Centennial Coal Aboriginal Cultural Heritage Management Plan: Northern Region (September 2016) be updated to show the current location of AHIMS Site 38-4-1374.
	OEH recommends that if the project causes greater subsidence impacts than predicted, the impact is quantified by use of the Biodiversity Assessment Method (BAM), and that those impacts are offset in accordance with the NSW Biodiversity Offsets Policy for Major Projects.
	The development should ensure that the proposed works do not adversely impact flood behaviour on any property not owned by the proponent.
Resources Regulator	The Resources Regulator advises that the Newstan/Awaba area is prone to the development and/or reactivation of sinkholes. Appropriate management and mitigation measures to minimise the potential for any residual or re-activation of impacts associated with the proposed modification would be required with the Mining Operations Plan (MOP) required under the conditions of the mining authority.
	The Resource Regulator has determined that sustainable rehabilitation outcomes can be achieved as a result of the project and that any identified risks or opportunities can be effectively regulated through the conditions of the mining authorities under the Mining Act 1992.
Subsidence Advisory for NSW	Subsidence Advisory NSW has no objection to the modification however it should be noted that areas of the Newstan Coal Mine are defined as non-active under the Coal Mine Subsidence Compensation Act 2017 (the Act). Subsidence Advisory intends to redefine the area as active mining area.
	Subsidence Advisory NSW is responsible for managing and compensating subsidence claims from non-active areas, generally non-active areas were mined prior to enactment of the Act on 1 January 2018. Mine operators are financially liable for subsidence damage in active mining areas. Subsidence Advisory NSW note there are no predicted subsidence impacts from the proposed mining, however, should in the unlikely event subsidence occur, Newstan Colliery will be liable for the damage.
WaterNSW	The proposal is located outside WaterNSW's area of operations and consultation should instead occur with Hunter Water.
	WaterNSW requests the Department continue to consult with WaterNSW on proposals that have the potential to impact on our land, assets and infrastructure, or that may require a water licence or flood approval under the Water Management Act 2000.

1.2 Summary of Public Submissions

Raised By	Summary of Issue
Five Bays Sustainable Neighbourhood Group	Modification 8 is within the boundaries of the proposed Awaba Conservation Area and crosses the south- western corner of the Awaba Biodiversity Conservation Area (ABCA). LMCC has identified ABCA as an important and significant biodiversity high value area. Please find the ABCA Plan of Management in the attachments. On Page 13 of the Environmental Assessment, land ownership is incorrect for Lot 463 DP1138964
	On page 11, figure 2-4, projected fault lines and water courses are shown. Kilaben Creek and a projected fault line is in the ABCA. While these are first workings, Five Bays SNG requests that Centennial Coal works closely with LMCC in ensuring the integrity of Kilaben Creek and surrounding ecosystems.
	Page 37 discusses Aboriginal community engagement and in 2010 Centennial Coal sent requests to particular Registered Aboriginal Parties. Since 2010, it is my understanding that with Biraban Local Aboriginal Land Council (LALC) as had a change of executive management at least three times in the last two years. It is also my understanding that Biraban LALC has put forward land claims within the Awaba Conservation Area. Five Bays SNG request that Centennial Coal approach the new CEO of Biraban LALC to renew the appropriate channels of dialogue and communications.

2. Response to Submissions

2.1 Government Agency Submissions

2.1.1 NSW Dept of Industry – Lands & Water and Dept of Primary Industries

Submission matter: The department has reviewed the proposal and has no comments.

Response: Noted.

2.1.2 NSW Division of Resources and Geoscience

Submission matter: Following a review of the proponent's EA, the Division considers the Project mine plan to adequately recover coal resources and provide an appropriate return to the State within the mine footprint, giving due consideration to the constraints of the location.

Response: Noted.

Submission matter: A Resource & Economic Assessment undertaken by the Division detailing the resource utilisation and economic benefits is appended as Attachment A.

Response: Centennial Newstan has no issues with the information presented by the Division in Attachment A.

Submission matter: The Division has determined that identified risks or opportunities can be effectively regulated through the conditions of mining authorities issued under the Mining Act 1992.

Response: Noted.

2.1.3 NSW Environment Protection Authority

Submission matter: Given the potential interactions of the proposed modification and the proposed Eraring Power Station Ash Dam Expansion (Mod 1 MP 07_2284) on the Awaba and Eraring seeps, the EPA considers that a cumulative expert assessment of potential impacts to groundwater hydrogeology be carried out. There is significant community concern about leachate from the ash dam entering mine workings and making its way to Lake Macquarie. It is important to understand how both projects may impact (adversely or beneficially) the existing Awaba and the Eraring seeps. A key concern is management at the surface of potentially acidic and saline mine water to prevent impacts to Lake Macquarie and impacts to power station infrastructure from changes to hydrology.

Response: The existing Awaba workings in the Great Northern seam are located above the northern and central parts of the proposed first workings area in the West Borehole seam. The proposed first workings in the West Borehole seam are not expected to reactivate the existing Awaba workings (including pillar run) due to the very low levels of predicted movement (i.e. vertical subsidence of less than 20 mm), the interburden thickness between the workings (i.e. 140 m to 210 m) and the high factors of safety for the proposed pillars (i.e. 2.11 to 3.4). The development of the proposed first workings is not expected to change the potential for the longer-term subsidence above the existing Awaba workings. Consequently, the modification will have no impact on the Awaba and Eraring seeps and as such a cumulative assessment of potential impacts to groundwater hydrogeology is not considered justified by this modification.

Submission matter: Water Treatment System Details

- *Details of the design and operation of the treatment plant. The EA indicates that a water treatment plant operates at the Newstan Colliery Surface Site (NCSS).*
- *Clarification of whether transfers to and from other sites, such as Hawkmount Quarry and Cooranbong Entry Site, affect discharge quantity and quality at LDP001 and LDP017.*

Response: Water levels in Newstan Colliery's Fassifern Underground Storage are managed by transferring water to the Newstan Colliery Surface Site (NCSS) Clean Water Plant (CWP), which commenced operation in late 2013. The CWP utilises coagulation, flocculation, sedimentation, filtration and ultraviolet treatment to reduce the concentration of total suspended solids and metals in water that were previously transferred directly from the Fassifern Underground Storage to LDP001. The CWP was designed, commissioned and is operated to treat at least 11 ML per day of water prior to discharge from Newstan Colliery's LDP001 in accordance with the requirements of the Pollution Reduction Program (Condition U3) imposed on Newstan Colliery's EPL 395 by the EPA on 15 October 2012. Water treated by the

CWP is either used to supply mining processes and the Coal Preparation Plant or discharged through LDP001 in accordance with EPL 395.

A site water and salt balance model was developed for Northern Coal Services as part of the Northern Coal Logistics Project to quantify water transfers within the site under existing and approved operational conditions using various rainfall patterns. This model included Newstan Colliery, Mandalong Mine, NCSS, Cooranbong Entry Site and Hawkmount Quarry. A subset of this model was used to assess the impact on the water and salt balance at Newstan Colliery and discharges to LT Creek and Stony Creek as licensed by EPL 395. From the water and salt balance modelling undertaken by GHD in the Water Resources Impact Assessment (Appendix G to the EA), the modification is predicted to have a small change on the amount of water and salt discharged from LDP001 however this was interpreted as being negligible. As mine water is treated at the CWP prior to discharge via LDP001, there is no change to water quality in LT Creek predicted as the change is within the operational allowances of the CWP. The proposed modification is predicted to result in no change on the likelihood of discharges through LDP017 to Stony Creek. As any discharges through LDP017 are in response to heavy rainfall, any change to the water quality of LDP017 is predicted to be negligible.

There are no transfers of water from the Cooranbong Entry Site into the Newstan Colliery Water Management System. Water Management at the Cooranbong Entry Site is managed in accordance with the Northern Coal Logistics Project SSD-5145 and the Mandalong Mine EPL 365. As such, the operations of the Cooranbong Entry Site will have no impact on water quality discharged through Newstan Colliery's LDP001 on EPL 395.

No water is currently transferred from the Hawkmount Quarry into the Newstan Colliery Water Management System. The Hawkmount Quarry is owned and managed by Lake Macquarie City Council. Although Centennial has approval to operate the Hawkmount Quarry as a reject emplacement area in accordance with the Northern Coal Logistics Project SSD-5145, operation of this site as a reject emplacement area has not yet occurred. As such, the operations of the Hawkmount Quarry will have no impact on water quality discharged through Newstan Colliery's LDP001 on 395.

Submission matter: Information Related to Licensed Discharge Point (LDP001)

- *Assessment of the potential impacts of discharges from LDP001 on LT Creek, including considering potential chronic and acute impacts associated with all pollutants present at nontrivial levels, with reference to:*
 - *the average annual discharge frequency and volume;*
 - *the discharge quality in terms of the typical and maximum concentrations; the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2018) guideline values and, where relevant, any benchmark values for acute toxicity;*
 - *the characteristics of the receiving waterway (e.g. environmental values, flows; ambient water quality).*
- *where relevant, consider measures to mitigate impacts.*
- *confirmation that the limits of reporting are sensitive enough to detect pollutants at levels that allow comparison to relevant guideline values (where available), in the context of the available analysis methods and technology.*
- *review of the selenium results (as the reported median concentration is potentially less than the reported maximum).*

- details of the sampling design to ensure the characterisation is representative of the full range of operational conditions.
- consideration of macroinvertebrate and ecotoxicological monitoring that is required by the EPA under condition E1 of Environment Protection Licence (EPL) 395 in relation to discharges from LDP001.
- clarification of the inconsistencies in the number of samples analysed for different pollutants. For example, EPL 395 requires the same monitoring frequency for electrical conductivity, pH and turbidity, however, Table 5-4 indicates these results are based on differing numbers of samples.

Response:

- The assessment was prepared and submitted prior to the release of the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2018) guideline values*. It is acknowledged that there are interim working levels for a number of other toxicants. However, none of these have been adopted as they are low reliability guideline values. Considering the 2018 guidelines:
 - The default guideline values for cobalt and molybdenum would exceed the maximum observed value for LDP001 discharge, but the median was below the default guideline values.
 - For antimony, iron and tin, the default guideline values do not exceed in any of the LDP001 samples.
 - The default guideline values for beryllium and silver are less than the LOR for the standard sampling that is undertaken at Newstan, however neither parameters have ever been detected.
- The proposed modification will have negligible impact on the volume of water discharged through LDP001 approved by the Northern Coal Logistics Project SSD-5145 and the Newstan Colliery EPL 395.
- The proposed modification will have no impact on the quality of water discharged through the LDP001 under EPL 395.
- Water quantity and quality monitoring is undertaken in accordance with the requirements of the Newstan Colliery EPL 395 and reported annually in the Annual Review.
- Centennial Newstan implemented a macroinvertebrate and ecotoxicological monitoring program in accordance with the Pollution Reduction Program (Condition U2) imposed on Newstan Colliery's EPL 395 by the EPA on 17 December 2014. Outcomes of the modification with respect to this Program were discussed in Section 6.5.1 of the Water Resources Impact Assessment (Appendix G to the EA).
- The Water Treatment Plant and hence LDP001, under EPL 395, must be operated within the toxicology limit conditions for specified test organisms detailed in L5.1. The modification will not result in a change to LDP001 quality and hence the limits of L5.1 will not require review.
- Reporting to the EPA on the results of this monitoring program was completed in accordance with the requirements of the Pollution Reduction Program.
- As the proposed modification will have no impact on the quantity or quality of water discharged through the Newstan Colliery LDP001, no further macroinvertebrate or ecotoxicology assessments are considered justified.

On review of the water quality guidelines values against ANZECC (2000) the following outcomes have been determined:

- EC, total nitrogen and total phosphorus guideline values are comparable to NSW coastal lowland rivers, rather than lowland rivers, which generally have lower guideline limits to that noted in the report. As each of these parameters (with the exception of total phosphorus) were shown to be elevated beyond the guideline

value defined, the further reduction in guideline concentration value does not result in a change of outcome in the assessment. Specifically with respect to conductivity, it was determined following the joint expert review for the Newstan Colliery EPL in 2015 that conductivity values for upland rivers are not applicable for a short creek that is tidally influenced. It was agreed that a conductivity limit of 3250 $\mu\text{S}/\text{cm}$ be adopted in the EPL considering a weight of evidence approach, where ecotoxicology monitoring and aquatic ecosystem health assessments be undertaken to identify adverse impact in the current discharges. Where discharge activities remain generally in accordance with the existing conditions, no additional macroinvertebrate or ecotoxicology assessments specifically for this modification's assessment are considered justified.

- Selenium limit of reporting was found to vary over the monitoring data assessed. This was due to data being collected and sampled by different laboratories. The maximum value identified over the assessment period was identified through an ultra-trace laboratory testing ($<0.0002 \text{ mg/L}$) compared with the majority of other samples which had a standard limit of reporting of $<0.01 \text{ mg/L}$.
- Mercury and selenium should consider 99% species protection values as these metals can bio-accumulate. Regardless, sampling provided at LDP001 has not resulted in exceedances for the 99% species protection values.
- Default guideline values for silver should consider 0.00005 mg/L however silver has not been detected at LDP001, where a limit of reporting of 0.001 mg/L has been considered.
- It is acknowledged that the ammonia default guideline value we have used is the toxicant value. The $20 \mu\text{g/L}$ value that the EPA has referred to is for ammonium (NH_4^+ - ionised ammonia) and is from Table 3.3.2 for lowland rivers in south-east Australia. The stressor value for lowland coastal rivers in NSW is actually $15 \mu\text{g/L}$ from Table 8.2.7 (ANZECC 2000). Given that total ammonia as N (i.e. the sum of ionised and unionised) is monitored as part of the surface water quality monitoring program, the default guideline value of 0.9 mg/L for ammonia as a toxicant has been used.

Submission matter: Information Related to Licensed Discharge Point (LDP017)

- *Assessment of the potential impact of discharges from LDP017 on Stony Creek, with reference to:*
 - *the discharge frequency and volume;*
 - *the discharge quality in terms of the typical and maximum concentrations of all pollutants potentially present at concentrations that pose a risk of non-trivial harm to human health or the environment;*
 - *the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2018) guideline values and, where relevant, any benchmark values for acute toxicity;*
 - *the characteristics of the receiving waterway (e.g. environmental values, flows; ambient water quality);*
- *where relevant, consider measures to mitigate impacts.*
- *confirmation that the limits of reporting are sensitive enough to detect pollutants at levels that allow comparison to relevant guideline values (where available), in the context of the available analysis methods and technology.*
- *characterisation of the quality, and assessment of the potential impact of, discharges from LDP017.*

Response:

- The assessment was prepared and submitted prior to the release of the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2018) guideline values*. Refer to the response above for further detail of the how

the consideration of the 2018 guideline will not have any impact on the outcomes of the water quality assessment undertaken for this modification.

- Water Management undertaken at NCSS is designed to minimise the potential for discharges through LDP017. Management of underground storage volumes is managed through real-time monitoring and site based trigger action response plans.
- No discharges have occurred from LDP017 since June 2015.
- Any discharges from LDP017 are monitored in accordance with the Newstan Colliery EPL 395.
- The modification is not predicted to have any change in the likelihood or quality of water discharged through LDP017. Discharge volumes have increased compared with previous predictions due to changes in the modelling method and data considered in addition to changes in the management approach to underground water levels. The predicted discharge volume remains within the management capabilities of the infrastructure constructed and the EPL conditions applicable at LDP017.

Submission matter: Groundwater Impact Information

- *further evidence to define the predicted negligible impacts to groundwater aquifer connectivity.*
- *a detailed cross section demonstrating the depths and elevations of all existing subsurface coal extraction workings, fracture zones, the local geology, and the overlying alluvial systems and Groundwater Dependant Ecosystems (GDE's).*
- *an accompanying plan view map of the proposed first working area, the Awaba Longwall panels, GDE's, creek lines and alluvial.*
- *schematic diagrams showing a cross section of the proposed workings, the existing overlying workings, and geological strata and formations, to support conceptualisation of the connective pathways (if any) across the project area.*

Response: The EA presented a Subsidence Predictions and Impact Assessment report which concluded that *"The development of the first workings in the West Borehole Seam is not expected to reactivate the existing Awaba workings (including pillar run) due to the very low levels of predicted movement (i.e. vertical subsidence of less than 20 mm), the interburden thickness between the workings (i.e. 140 m to 210 m) and the high factors of safety for the proposed pillars (i.e. 2.1 to 3.4)".* Additionally a geotechnical report on the expected height of fracturing (HoF report) associated with the first workings was completed and incorporated into the EA. The HoF report predicted the proposed first workings to be stable, with any potential caving being confined to the immediate roof. As the interburden thickness between these workings and the flooded Awaba workings is greater than 140 metres, the risk of caving creating a pathway for water from the Awaba workings into the proposed workings was classified as negligible. As further evidence and to provide additional confidence a peer review of the HoF report, which was undertaken by Dr. Ismet Canbulat of the University of New South Wales, Sydney. The peer review confirmed that the overall risk associated with fracture connectivity between the proposed workings and overlying Awaba workings is insignificant. The HoF report and peer review were included as Appendix G to the EA.

The proposed workings are not predicted to result in any drawdown of alluvial groundwater. Therefore the predicted impacts on alluvial groundwater within the proposed first workings area are expected to be less than the Level 1 minimal impact considerations from the NSW Aquifer Interference Policy and are therefore considered to be acceptable. No impacts on GDEs are predicted.

The information currently presented in the EA by qualified technical experts is considered to be sufficient to demonstrate the predicted negligible impacts to groundwater aquifer connectivity.

2.1.4 Lake Macquarie City Council

Submission matter: There does not appear to have been any formal consultation between the applicant Centennial Coal or its consultants and Council in relation to the proposal.

Response: As noted in section 7.3.1 of the EA, the modification was presented to the Newstan and Awaba Community Consultative Committee (CCC) on two occasions being 12 April 2018 and 26 July 2018. Lake Macquarie City Council (LMCC) is a member of the Newstan and Awaba CCC and had a representative present at the 26 July 2018 meeting when the modification was presented. It is noted that no LMCC delegates were present at the 12 April 2018 meeting. Centennial Newstan proposes to meet with LMCC to discuss future surveys and information sharing associated with the Newstan Mine Extension Project.

Submission matter: Land owned by Lake Macquarie City Council is partly within the project area. This land is described as Lot 463 DP 1138964 and is incorrectly shown in the environmental assessment (Figure 2-6) as being owned by the NSW Aboriginal Land Council. This land is known as the Awaba Biodiversity Conservation Area and is a biodiversity offset site managed for the protection of biodiversity in accordance with the Awaba Biodiversity Conservation Area – Plan of Management 2015. Council consulted with Centennial Coal in the preparation of this plan and Centennial Coal was made aware of the biodiversity significance of the site at that time.

Response: Centennial Newstan acknowledges this error on Figure 2-6 and has subsequently amended the figure. A copy is attached to this letter report as Attachment 2.

Submission matter: The mining lease holder advised Council in 2015 that in the event of future underground mining, surface disturbance to the land may be required.

Response: No surface disturbance works form part of the proposed modification.

Submission matter: The Awaba Biodiversity Conservation Area is also subject to consent requirements for the Awaba Waste Management Facility under the terms of the Environment Protection and Biodiversity Conservation Act 1999. These restrictions applying to the land are not identified in the project environmental assessment.

Response: Centennial Newstan acknowledges Condition 9 of EPBC approval 2012/6432. The Subsidence Predictions and Impact Assessment report (Appendix C of the EA) predicts that the vertical subsidence of the proposed first workings in the West Borehole Seam will be less than 20 mm and the predicted strains will be less than 0.1 mm/m. The natural and built features are predicted to experience vertical subsidence of less than 20 mm due to the development of the first workings. At these very low levels of vertical subsidence, the surface features are not predicted to experience measurable tilts, curvatures or strains. It is not expected that visible surface deformations (i.e. tensile cracking or compression heaving) nor irregular (i.e. anomalous) ground movements would occur. The natural and built features therefore are not expected to experience adverse impacts due to the development of the first

workings in the West Borehole Seam. Specifically, no impacts are expected to occur to the Awaba Biodiversity Conservation Area as a result of this modification.

Submission matter: The majority of the proposed area of mining is located within the proposed Awaba Conservation Area that has been identified as a proposed conservation reserve since 1995. The proposed mining should avoid any adverse biodiversity or environmental impacts on this area.

Response: As outlined above regarding negligible subsidence, no impacts are expected to occur to the proposed Awaba Conservation Area as a result of this modification.

Submission matter: The project environmental assessment has included no data to indicate that the matters identified above [water quality and natural hydrology] have been adequately considered. The assessment assumes that there will no impact on the surface, even though there will be minor subsidence and changes to groundwater conditions, and past experience from underground mining within the Lake Macquarie LGA has shown that unanticipated impacts do occur.

Response: Centennial Newstan refers LMCC to the Water Resources Impact Assessment (Appendix G to the EA) which presents surface water and groundwater quality and volume data to support the EA's conclusions. Specifically the Water Resources Impact Assessment presents the following which is summarised in section 9.4 of the EA:

- A review of existing assessments and data relevant to the modification.
- Establish the existing conditions for surface water and groundwater environments.
- Quantifies the potential impacts to surface water and groundwater environments.
- Presents an assessment of the potential impacts of the modification on:
 - water and salt balance;
 - surface water quality;
 - groundwater levels and quality, and
 - stream health (aquatic ecology and geomorphology).

Submission matter: In addition the implications of processing of additional coal and reject material at Newstan Colliery do not appear to have been addressed. For example, the existing approved arrangements for reject emplacement should be reviewed, as to their adequacy for enabling the proposal to proceed in an environmentally satisfactory manner.

Response: As outlined in Section 3 of the EA, Newstan Colliery is integrated with the Northern Coal Logistics Project, under which Northern Coal Services Pty Ltd (Northern Coal Services) provides the coal handling, processing and transport facilities to deliver coal from Mandalong Mine and Newstan Colliery to domestic and export markets. These activities are approved under State Significant development consent SSD-5145. Coal handling (including reject emplacement) and distribution activities at the Newstan Colliery Surface Site will continue to be undertaken as part of the Northern Coal Logistics Project in accordance with SSD-5145. There will be no changes to the approved maximum coal production, coal handling, reject emplacement, coal transportation or water management managed by the Northern Coal Logistics Projects under SSD-5145.

Submission matter: The report includes recommendations in accordance with the Northern Holdings ACHMP, which require a 3-phase monitoring program to be implemented for the identified sites. The recommendations of the report should be adopted as conditions of consent.

Response: The Northern Holdings Aboriginal Cultural Heritage Management Plan was developed in consultation with the NSW Office of Environment and Heritage (OEH), LMCC and the Registered Aboriginal Parties (RAPs). The Northern Holdings Aboriginal Cultural Heritage Management Plan was approved by the Department of Planning and Environment on 10 October 2017. The Northern Holdings Aboriginal Cultural Heritage Management Plan is regularly reviewed and updated as required to ensure the Management Plan remains current and relevant. The three-phase monitoring program will be implemented for AHIMS #45-7-0318, AHIMS #45-7-0319 and AHIMS #38-4-1375 in accordance with the monitoring program detailed within the approved Northern Holdings Aboriginal Cultural Heritage Management Plan. No further conditions regarding the monitoring of Aboriginal cultural heritage sites are considered necessary.

Submission matter: Council requests all ecological information collected including the plot data for biodiversity surveys be provided.

Response: Centennial Newstan proposes to meet with LMCC to discuss the proposed surveys and information sharing.

Submission matter: Council expresses its concern about any impacts from mining that may adversely affect biodiversity on its land. Notwithstanding the comments made in the project environmental assessment, Council is not satisfied that mining would not affect surface and groundwater flows on its land, and cause consequent impacts on surface and groundwater dependent ecosystems downstream, including endangered ecological communities. The environmental assessment does not consider the requirement under the Biodiversity Conservation Act 2016 for impacts on biodiversity to be avoided. This matter should form a key part in the environmental assessment of the project.

Response: As outlined in Appendix D of the EA and summarised in section 9.2, the proposed modification does not exceed any of the thresholds for the three biodiversity threshold tests that were applied in accordance with the Biodiversity Conservation Act 2016 (BC Act). On this basis, it is considered that no habitat regarding threatened species or ecological community would be impacted by the proposed modification. The proposed modification is unlikely to result in a significant impact of BC Act or EPBC Act listed threatened species, ecological communities or their habitats. Participation in the Biodiversity Offset Scheme under the BC Act is therefore not required for the proposed modification.

Submission matter: Whilst the environmental assessment indicates that there will be no surface disturbance, previous advice given by Centennial Coal to Council indicates that surface disturbance may be required, either for exploration activities or for ventilation purposes.

Response: No surface disturbance works form part of the proposed modification. Specifically, the modification is not seeking approval for exploration activities or ventilation purposes.

*Submission matter: It is noted that the Council land affected by the proposed development contains identified priority *Tetratheca juncea* habitat as shown in the*

Awaba Biodiversity Conservation Area – Plan of Management 2015. This plant species is a matter of national environmental significance listed under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999. The environmental assessment erroneously concludes that there is no likelihood of occurrence (Appendix C of the Proposed Newstan Modification 8 Biodiversity Thresholds Test (RPS 24 August 2018), yet this is a significant matter for consideration in the application. The incorrect statement in the Appendix that “Likelihood of Occurrence: None. Suitable formation level vegetation habitat surrogates are absent from the study area. Species incidence is not expected and, if present, would represent atypical habitat usage” should be corrected.

Response: Centennial Newstan acknowledges this is an error, however, it only appears in the one table in Appendix C of the Biodiversity Thresholds Test and does not affect the overall assessment. Importantly, the other tables in the body of the report which quote the erroneous table in Appendix C state that it actually has a ‘moderate’ of greater likelihood of occurrence as listed in Table 5 (Section 3.1.1) and Table 15 (Section 4.3.2) of the same report (i.e. the other tables were quoting it as known to occur).

The below text should replace the erroneous text in Appendix C:

Known. Habitat values generally consistent with description provided in the OEH TSPD. Habitat is located within known 'extent of occurrence' and 'area of occurrence' (i.e. standard grid size of 2x2km (IUCN 2001). The species is likely to depend on the habitat it occurs within for important life cycle processes; however, the importance of this habitat would depend on additional factors (e.g. size and extent of local population). Species recently observed in the locality (NSW BioNet records).

Submission matter: It is unreasonable to extend the existing mining lease by a further 12 months when it has already operated for around 20 years, and is not supported by any justification within the environmental assessment. This should be assessed as part of the Newstan extension project that is subject to a separate approval process. Furthermore, legislative changes now place a responsibility on project proponents to avoid impacts on biodiversity and this is inconsistent with a lease extension.

Response: Centennial Newstan is seeking a 12 month extension to its existing Development Consent only and not any mining tenements. Section 10.1 of the EA Modification justification and alternatives contains a clear rationale for the modification. Overall, the proposed modification ensures optimised resource recovery while providing ongoing direct and indirect employment opportunities. It would also provide a number of positive flow-on effects to the local, regional and state economies. Any future extensions would be subject to separate applications and determined on their own merit.

Submission matter: If the development were to proceed, Council would require the following consent conditions to be imposed on any modified consent:

- 1. Centennial Coal is to undertake a program of surface and groundwater monitoring within the Kilaben Creek catchment to determine baseline conditions and post mining changes to the satisfaction of Lake Macquarie City Council. Monitoring data is to be made available to the Council.*
- 2. Centennial Coal is to undertake a program of biodiversity monitoring, on that part of Lot 463 DP 1138964 as is affected by the proposal, to the satisfaction of Lake Macquarie City Council, consistent with monitoring required in the Awaba Biodiversity Conservation Area – Plan of Management 2015.*

3. *The project applicant is to enter into a legal agreement with Lake Macquarie City Council to indemnify the Council against any loss or damage to its land, or biodiversity, or any management cost that may arise from disturbance to the land. The agreement is to provide for financial security to adequately cover potential losses or damage.*
4. *In the event that any surface disturbance to Lot 463 DP 1138964 results from the development, the project applicant agrees to find and make all necessary arrangements to secure additional biodiversity offsets to compensate for that surface disturbance, to the satisfaction of the Lake Macquarie City Council, the NSW Minister for Planning, and the Commonwealth Department of Environment and Energy.*

Response: Given the negligible impacts to water resources and biodiversity as a result of the proposed modification, Centennial Newstan does not believe the conditions proposed by LMCC are justified. Centennial Newstan is however in the process of collecting environmental baseline data in relation to the Newstan Mine Extension Project which will encompass Lot 463 DP 1138964. Centennial Newstan proposes to meet with LMCC to discuss the proposed monitoring and information sharing. Centennial Newstan notes that mine operators are financially liable for subsidence damage in active mining areas under the *Coal Mine Subsidence Compensation Act 2017*.

2.1.5 NSW Rural Fire Service

Submission matter: The NSW Rural Fire Service has reviewed the modifications proposed and would like to seek a copy of the current colliery's bush fire management plan to verify if the modifications proposed can comply with Planning for Bush Fire Protection 2006 and/or subsequent edition.

Response: A copy of Centennial Newstan's Bushfire Management Plan (BMP) was provided to the NSW Rural Fire Service on 25 October 2018 as requested. Whilst no feedback has been received to date, it's noted that the BMP does reference *Planning for Bush Fire Protection 2006*.

Submission matter: Based on the location of the modification which is totally surrounded by Forest, but has access roads to the north, east and west and an easement to the south, there is no real objection to the proposal. No APZ requirements are required, as already mentioned access can comply since a haul road is available to the north and west of the site, public road access is available from the east and an easement is available from the south if a fire were to occur in the area.

Response: Noted.

Submission matter: The NSW RFS has reviewed the information provided and advises it has no objection to the proposed development subject to the colliery's bush fire management plan (N-BMP-001) being updated to reflect the development.

Response: Centennial Newstan will review and if necessary update its Bushfire Management Plan to reflect the modification.

2.1.6 NSW Office of Environment and Heritage

Submission matter: Details of consultation with the Aboriginal stakeholders for Modification 8 should be provided, including minutes of meetings held.

Response: Section 6 and Appendix C of the Aboriginal Cultural Heritage Impact Assessment (Appendix F of the EA) provides the details of consultation undertaken with the Registered Aboriginal Parties (RAPs) associated with Centennial Newstan. The RAPs were identified in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW, 2010) (ACHCRs) with ongoing consultation and engagement undertaken in accordance with the Northern Holdings Aboriginal Cultural Heritage Management Plan (ACHMP). The Modification was discussed with the RAPs during a meeting of the Northern Holdings ACHMP – Sub-Committee on 9 May 2018. Whilst the minutes aren't made public due to them containing sensitive information such as payments, the three identified sites were discussed in the context of the modification and a subsequent inspection undertaken between Centennial and the RAPs. The relevant text from the 9 May 2018 meeting minutes is reproduced below with the presentation slides included as Attachment 3.

Newstan Mod 8. Identified that within the Mod 8 boundary there are three identified sites (2 x scar tree and 1 x isolated find). Newstan to identify several dates for sinkhole and Mod 8 area inspection.

The site visit occurred on 26 June 2018. The draft Aboriginal Cultural Heritage Impact Assessment (ACHIA) was issued to the RAPs for the 28 day review in accordance with section 4.4.3 of the ACHCRs. One RAP, being Wonn1, provided feedback that they were generally in agreement with the contents and recommendations within the draft ACHIA and would like to be involved in the continued monitoring of the three sites as detailed both in the Environmental Assessment and the ACHMP.

Submission matter: OEH recommends that site condition monitoring of the Scar Tree AHIMS Sites 45-7-0318 and 45-7-0319 be undertaken as outlined in Section 6.5.2 of the Centennial Coal Aboriginal Cultural Heritage Management Plan: Northern Region (September 2016).

Response: Noted.

Submission matter: The Centennial Coal Aboriginal Cultural Heritage Management Plan: Northern Region (September 2016) be updated to show the current location of AHIMS Site 38-4-1374.

Response: Centennial Newstan will incorporate this recommendation into the ACHMP as requested by OEH.

Submission matter: OEH recommends that if the project causes greater subsidence impacts than predicted, the impact is quantified by use of the Biodiversity Assessment Method (BAM), and that those impacts are offset in accordance with the NSW Biodiversity Offsets Policy for Major Projects.

Response: The requirement to implement the BAM should the modification result in greater subsidence impacts than predicted is noted by Centennial Newstan. The proposed first workings in the West Borehole seam are not expected to reactivate the existing Awaba workings (including pillar run) due to the very low levels of predicted movement (i.e. vertical subsidence of less than 20 mm), the interburden thickness between the workings (i.e. 140 m to 210 m) and the high factors of safety for the proposed pillars (i.e. 2.1 to 3.4).

Submission matter: The development should ensure that the proposed works do not adversely impact flood behaviour on any property not owned by the proponent.

Response: No measureable surface deformations are predicted as a result of the project (MSEC 2018). As such, there are no predicted impacts to flows or water quality in the creeks which transect the proposed first workings area (Stony Creek, Kilaben Creek and Stockyard Creek). The proposed modification does not pose any adverse flood risks to property not owned by Centennial Coal.

2.1.7 Resource Regulator

Submission matter: The Resources Regulator advises that the Newstan/Awaba area is prone to the development and/or reactivation of sinkholes. Appropriate management and mitigation measures to minimise the potential for any residual or re-activation of impacts associated with the proposed modification would be required with the Mining Operations Plan (MOP) required under the conditions of the mining authority.

Response: Sinkholes have been previously observed above the existing Awaba workings. In each case, the sinkholes have developed where the depths of cover are very shallow (less than 30 m), are above total extraction areas and are along the alignments of the streams. The depth of cover above the proposed first workings in the West Borehole Seam varies between 180 m and 270 m. Sinkholes have not been previously observed above existing workings at the colliery at these higher depths of cover. The streams located above the proposed first workings in the West Borehole Seam comprise Stony Creek, Kilaben Creek, Stockyard Creek and tributaries to these creeks. The section of Stony Creek above the proposed first workings area in the West Borehole Seam is also located above first workings only in the existing Awaba workings. The sections of Kilaben and Stockyard Creeks above the proposed first workings area are located outside the extents of the existing Awaba workings. The development of the proposed first workings in the West Borehole Seam is not expected to result in the potential for sinkholes due to the high depths of cover and due to the larger streams being located above areas of first workings only in both the Great Northern and West Borehole Seams. The Mining Operations Plan (March 2018 to July 2020) has existing management and mitigation measures to minimise the potential for any residual or re-activation of impacts associated with sinkholes.

Submission matter: The Resource Regulator has determined that sustainable rehabilitation outcomes can be achieved as a result of the project and that any identified risks or opportunities can be effectively regulated through the conditions of the mining authorities under the Mining Act 1992.

Response: Noted.

2.1.8 Subsidence Advisory for NSW

Submission matter: Subsidence Advisory NSW has no objection to the modification however it should be noted that areas of the Newstan Coal Mine are defined as non-active under the Coal Mine Subsidence Compensation Act 2017 (the Act). Subsidence Advisory intends to redefine the area as active mining area.

Response: Noted.

Submission matter: Subsidence Advisory NSW is responsible for managing and compensating subsidence claims from non-active areas, generally non-active areas

were mined prior to enactment of the Act on 1 January 2018. Mine operators are financially liable for subsidence damage in active mining areas. Subsidence Advisory NSW note there are no predicted subsidence impacts from the proposed mining, however, should in the unlikely event subsidence occur, Newstan Colliery will be liable for the damage.

Response: Noted.

2.1.9 WaterNSW

Submission matter: The proposal is located outside WaterNSW's area of operations and consultation should instead occur with Hunter Water.

Response: Noted, no submission has been received from Hunter Water.

Submission matter: WaterNSW requests the Department continue to consult with WaterNSW on proposals that have the potential to impact on our land, assets and infrastructure, or that may require a water licence or flood approval under the Water Management Act 2000.

Response: Noted.

2.2 Public Submissions

2.2.1 Five Bays Sustainable Neighbourhood Group

Submission matter: Modification 8 is within the boundaries of the proposed Awaba Conservation Area and crosses the south- western corner of the Awaba Biodiversity Conservation Area (ABCA). LMCC has identified ABCA as an important and significant biodiversity high value area. Please find the ABCA Plan of Management in the attachments. On Page 13 of the Environmental Assessment, land ownership is incorrect for Lot 463 DP1138964.

Response: Centennial Newstan acknowledges this error on Figure 2-6 and has subsequently amended the figure. A copy is attached to this letter report as Attachment 2.

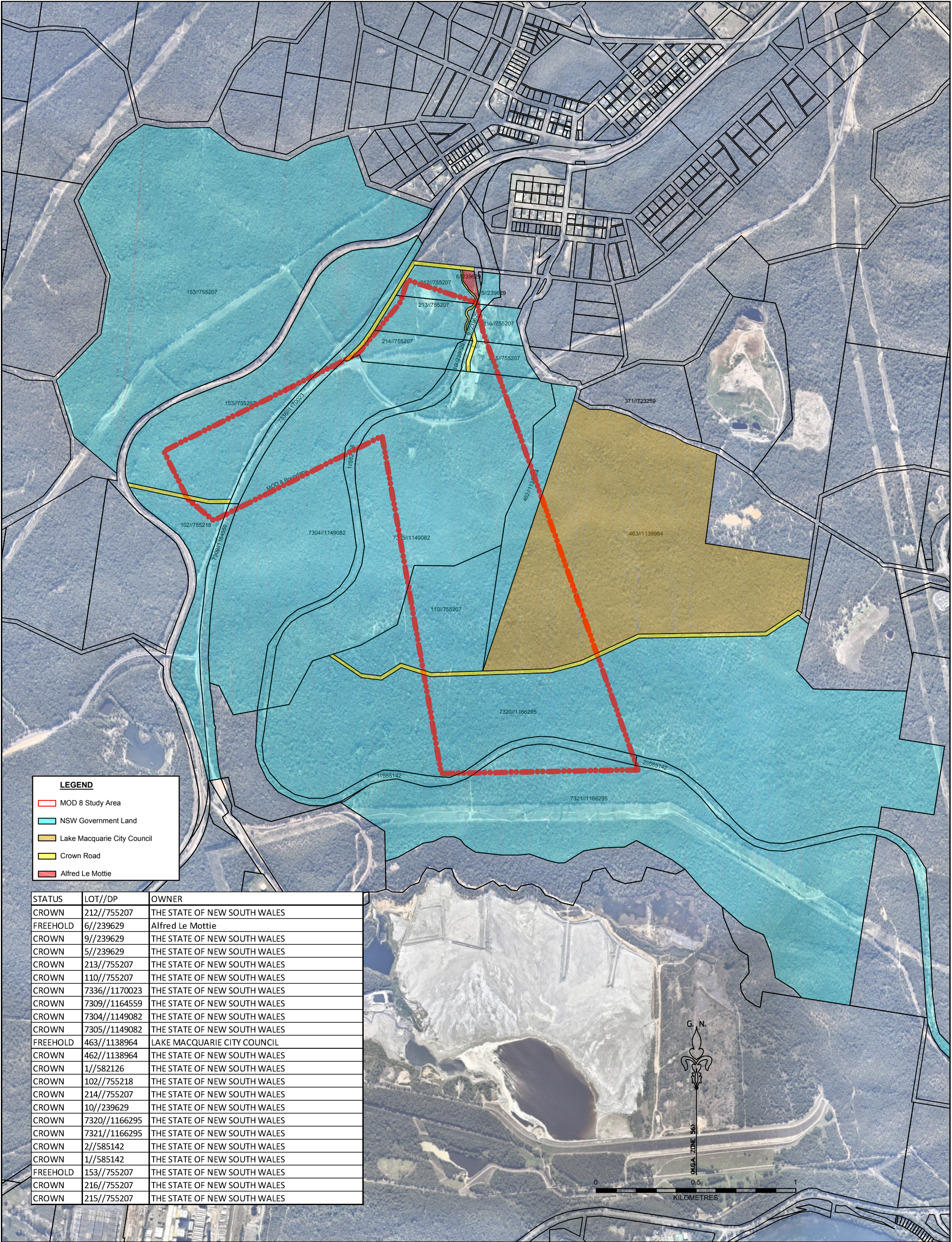
Submission matter: On page 11, figure 2-4, projected fault lines and water courses are shown. Kilaben Creek and a projected fault line is in the ABCA. While these are first workings, Five Bays SNG requests that Centennial Coal works closely with LMCC in ensuring the integrity of Kilaben Creek and surrounding ecosystems.

Response: Centennial Newstan will continue to engage with Lake Macquarie City Council through the Newstan and Awaba Community Consultative Committee.

Submission matter: Page 37 discusses Aboriginal community engagement and in 2010 Centennial Coal sent requests to particular Registered Aboriginal Parties. Since 2010, it is my understanding that with Biraban Local Aboriginal Land Council (LALC) as had a change of executive management at least three times in the last two years. It is also my understanding that Biraban LALC has put forward land claims within the Awaba Conservation Area. Five Bays SNG request that Centennial Coal approach the new CEO of Biraban LALC to renew the appropriate channels of dialogue and communications.

Response: Centennial Newstan will continue to engage with all Registered Aboriginal Parties including the Biraban Local Aboriginal Land Council through the Northern Holdings ACHMP Sub-Committee in accordance with the approved Northern Holdings Aboriginal Cultural Heritage Management Plan.

Attachment 2: Revised EA Figure 2-6



LEGEND

MOD 8 Study Area

NSW Government Land

Lake Macquarie City Council

Crown Road

Alfred Le Mottie


STATUS	LOT//DP	OWNER
CROWN	212//755207	THE STATE OF NEW SOUTH WALES
FREEHOLD	6//239629	Alfred Le Mottie
CROWN	9//239629	THE STATE OF NEW SOUTH WALES
CROWN	5//239629	THE STATE OF NEW SOUTH WALES
CROWN	213//755207	THE STATE OF NEW SOUTH WALES
CROWN	110//755207	THE STATE OF NEW SOUTH WALES
CROWN	7336//1170023	THE STATE OF NEW SOUTH WALES
CROWN	7309//1164559	THE STATE OF NEW SOUTH WALES
CROWN	7304//1149082	THE STATE OF NEW SOUTH WALES
CROWN	7305//1149082	THE STATE OF NEW SOUTH WALES
FREEHOLD	463//1138964	LAKE MACQUARIE CITY COUNCIL
CROWN	462//1138964	THE STATE OF NEW SOUTH WALES
CROWN	1//582126	THE STATE OF NEW SOUTH WALES
CROWN	102//755218	THE STATE OF NEW SOUTH WALES
CROWN	214//755207	THE STATE OF NEW SOUTH WALES
CROWN	10//239629	THE STATE OF NEW SOUTH WALES
CROWN	7320//1166295	THE STATE OF NEW SOUTH WALES
CROWN	7321//1166295	THE STATE OF NEW SOUTH WALES
CROWN	2//585142	THE STATE OF NEW SOUTH WALES
CROWN	1//585142	THE STATE OF NEW SOUTH WALES
FREEHOLD	153//755207	THE STATE OF NEW SOUTH WALES
CROWN	216//755207	THE STATE OF NEW SOUTH WALES
CROWN	215//755207	THE STATE OF NEW SOUTH WALES

LOCATION	COLLIERY
SEAM	YWA
DRAWN	C.P.T.
CHECKED	I.H.
APPROVED	P.C.D.
SCALE	N.T.S.

Newstan Colliery

Plan Showing Land Ownership

Within The MOD 8 Study Area



Centennial Coal

Fassifern

DATE 13-09-2018

PC6858

Attachment 3: Presentation Slides from the Northern Holdings ACHMP Sub-Committee on 9 May 2018

Newstan Extension Project: Modification 8

A modification (modification 8) is being sought to enable first workings to proceed ahead of the Newstan Extension Project State Significant Development application.

Additionally, the first workings are required to determine the presence, throw and strike of the major fault projected from the historic Newstan workings. Due to the consent expiry date of 6 July 2020, the modification is additionally seeking to extend the life of DA 73-11-98 for a further 12 months to 6 July 2021.

Whilst the modification application has been submitted and accepted by DP&E, an Environmental Assessment has been requested to be lodged by 1 September 2018. This Environmental Assessment is currently being drafted and will be supported by relevant technical assessment reports.



Newstan Extension Project: Modification 8



Proposed Mod 8 Boundary



Centennial Coal

Newstan Extension Project: Modification 8

An initial gap analysis has identified that the proposed modification area has been previously subject to archaeological assessments.

Three Aboriginal heritage sites are located within the modification area. Two being scarred trees and one being an isolated find.

Predicted subsidence levels are negligible and the risk to Aboriginal heritage site is nil.

Consultation with the Registered Aboriginal Parties will be undertaken as per the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010) and in accordance with Centennial's Northern Region Aboriginal Cultural Heritage Management Plan.

