



WALLARAH 2 COAL PROJECT

Amendment to Development Application SSD-4974 Public Hearing 2 Response

for
Wyong Areas Coal Joint Venture
April 2017

**WALLARAH 2 COAL PROJECT
AMENDMENT TO
DEVELOPMENT APPLICATION SSD-4974**

PUBLIC HEARING 2 RESPONSE

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For:

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1 INTRODUCTION

1.1 BACKGROUND

The Wyong Areas Coal Joint Venture (WACJV) is seeking development consent under Division 4.1 of Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) for the Wallarah 2 Coal Project (the Project). The Project is located north-west of Wyong in the Central Coast Local Government Area (LGA) in NSW.

The key features of the Project are shown on Figure 1 and include:

- A deep underground longwall mine extracting up to 5 million tonnes per annum (Mtpa) of export quality thermal coal for up to 28 years;
- Tooheys Road Site (including drift), Buttonderry Site and Western Ventilation Shaft Site infrastructure facilities;
- Transportation of product coal to the Port of Newcastle by rail; and
- An operational workforce of up to 300 full time employees (including contractors).

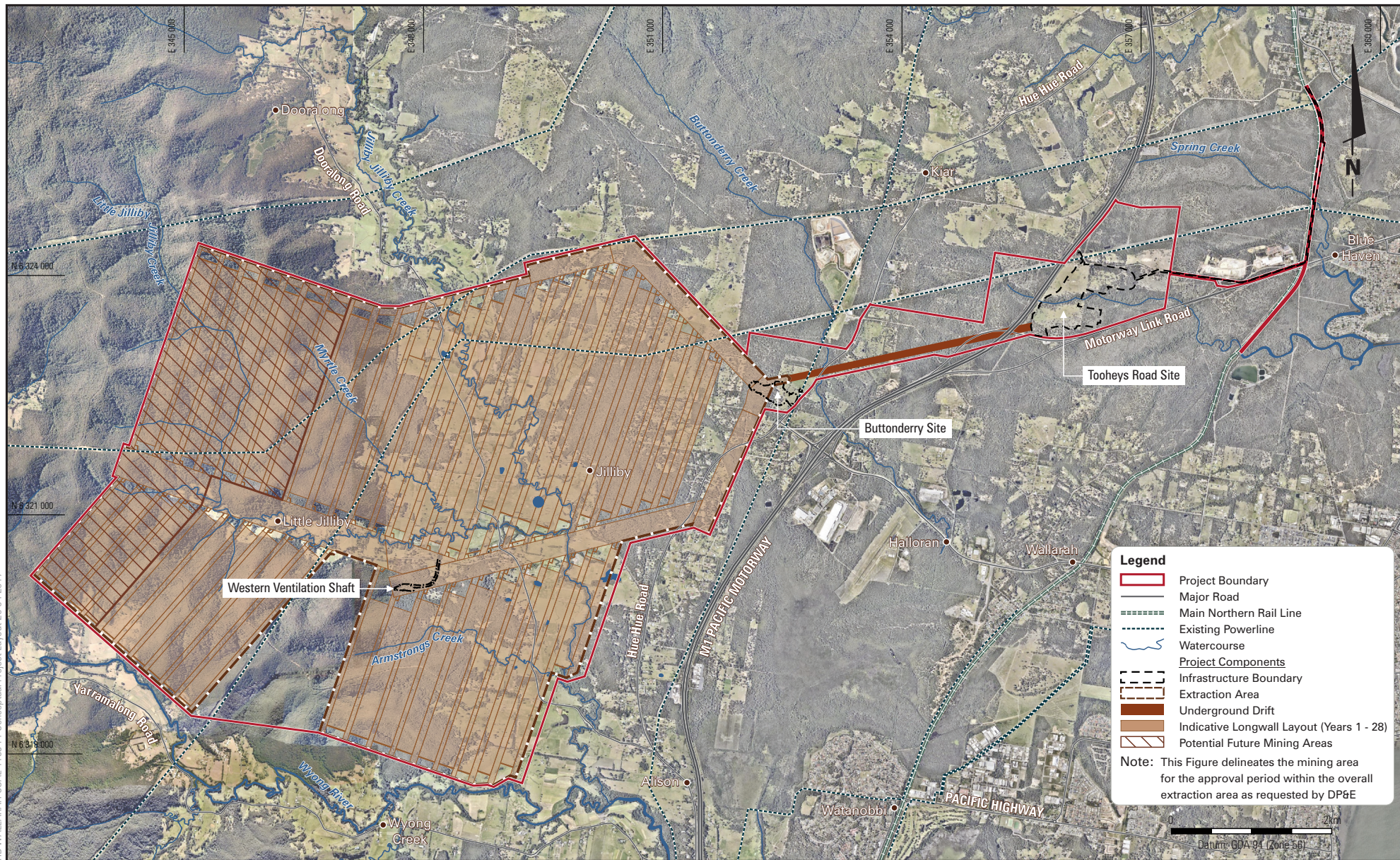
The Project is the subject of a Development Application (DA) (SSD-4974) for State Significant Development. Environmental Assessment Requirements (EARs) were issued on 12 January 2012 and Supplementary EARs were notified on 11 July 2012.

WACJV prepared an Environmental Impact Statement (EIS) in accordance with the EARs and Supplementary EARs. The EIS was placed on public exhibition from 26 April 2013 to 21 June 2013. WACJV prepared a Response to Submissions (RTS1) to respond to the 748 submissions received.

1.2 ASSESSMENT

On 7 February 2014, the Director-General published the Environmental Assessment Report (EA Report) for the Project. The Environmental Assessment Report concluded that *“the project’s benefits outweigh its potential impacts and it is therefore in the public interest”* (DP&I, 2014).

On 16 January 2014, the Minister for Planning directed the Planning Assessment Commission (PAC) to review the merits of the Project as a whole (PAC 1). The PAC1 published its Review Report (PAC1 Report) in June 2014 which concluded that: *“If the recommendations concerning improved strategies to avoid, mitigate or manage the predicted impacts of the project are adopted, there is merit in allowing the project to proceed”*.



WALLARAH 2 COAL PROJECT

Conceptual Project Layout

FIGURE 1

Following the review by the PAC1, the Project was the subject of legal proceedings in the NSW Land and Environment Court (LEC) (NSWLEC, 2014) initiated by the Darkinjung Local Aboriginal Land Council (DLALC). The LEC held that insofar as the DA (SSD-4974) is made in respect of Lot 195 DP 1032847 (which is owned by DLALC), the DA could not be determined without the consent of the NSW Aboriginal Land Council.

Despite WACJV's efforts to negotiate an agreeable outcome, the NSW Aboriginal Land Council has not given its consent under clause 49(3A) of the *Environmental Planning and Assessment Regulation 2000* (NSW) (EP&A Regulation).

1.3 AMENDMENT

The Project was re-designed to avoid land owned by DLALC. The particulars of the changes to the Project (the Amendment) include:

- Removal of the previously proposed rail loop;
- Relocation of the previously proposed rail spur to the eastern side of the Main Northern Rail Line, thereby avoiding land which requires the consent of the NSW Aboriginal Land Council Land under clause 49(3A) of the EP&A Regulation;
- Relocation of the train load out facility to the eastern side of the Main Northern Rail Line;
- A conveyor system to deliver product coal from the stockpile to the new location of the train load out facility; and
- Realignment of the sewer connection.

WACJV sought an amendment to the DA under clause 55 of the EP&A Regulation. The Minister for Planning accepted the amendment on 20 July 2016.

The 'Wallarah 2 Coal Project Amendment to Development Application SSD-4974' (Hansen Bailey, 2016) (Amendment Document) provided a comprehensive assessment of the Amendment. The Amendment Document was placed on public exhibition from 22 July 2016 to 5 September 2016.

A Response to Submissions (RTS2) document was prepared on 4 November 2016 to respond to the public submissions received by the Department of Planning and Environment (DP&E) during the public exhibition period for the Amendment Document.

The Terms of Reference for PAC2 were issued on 7 February 2017 and included:

- “1. Carry out a review of the Wallarah 2 Coal Project, by:
 - a) considering the amended development application and accompanying written particulars, the issues raised in submissions, the formal response to submissions, the Department of Planning and Environment’s addendum report on the development application, and any other information provided on the development during the course of the review or as part of the public hearings;
 - b) considering the likely economic, environmental and social impacts of the amended development application in the locality, in the region and for the State;
 - c) assessing the merits of the amended development application as a whole, having regard to all relevant NSW Government policies and guidelines;
 - d) considering the Department of Planning and Environment’s responses to the Commission’s previous review of the development; and
 - e) providing recommendations on any additional reasonable and feasible measures that could be implemented to avoid, minimise and/or manage the potential impacts of the development;*
- 2. Hold a public hearing during the review as soon as practicable after the Department of Planning and Environment provides its addendum assessment report to the Commission; and*
- 3. Submit its final report on the review to the Department of Planning and Environment within 8 weeks of receiving the Department’s addendum assessment report, unless otherwise agreed with the Secretary of the Department.”*

DP&E’s Addendum Report was released on 24 February 2017 which reviewed the Amendment and PAC1’s recommendations, and concluded:

“The Department remains satisfied that the project as amended would provide major economic and social benefits for the Central Coast Region and NSW as a whole. ... The Department remains satisfied that that project is, on balance, in the public interest and considers it to be approvable, subject to the draft conditions of consent.”

A site visit was held by PAC2 on 4 April 2017 and public hearing conducted on 5 April 2017.

1.4 DOCUMENT PURPOSE

This Response has been prepared to respond to PAC2 queries from the site inspection on 4 April 2017 (and subsequent queries) and the public hearing on 5 April 2017. A full list of speakers is provided in **Appendix A**.

Input from specialist consultants and WACJV has been included in this response, as required.

1.5 DOCUMENT STRUCTURE

This document is structured as follows:

- **Section 1** provides a background summary of the Project and Amendment;
- **Section 2** provides a summary of documents referred to in this Response to assist with references in Section 3 and 4 and it does not include all documents prepared on the Project;
- **Section 3** provides responses to information and clarification requests from PAC2;
- **Section 4** provides responses to presentations made at the public hearing;
- **Section 5** tabulates abbreviations used in this Response; and
- **Section 6** lists references used in this Response.

2 RESPONSES TO DATE

Table 1 provides a summary of documents referred to in this Response to assist with references in **Section 3** and **4**.

Some of the documents listed in Table 1 below are available on the DP&E website at http://majorprojects.planning.nsw.gov.au/page/project-sectors/mining--petroleum---extractive-industries/mining/?action=view_job&job_id=4974. Those not available on this website are reproduced in appendices to this document.

Table 1
Document Summary

Ref	Date	Title	Abbreviated Name	Location
1	April 2013	Wallarah 2 Coal Project Environmental Impact Statement	EIS	DP&E website
2	September 2013	Wallarah 2 Coal Project Response to Submissions	RTS1	DP&E website
3	10 April 2015	Mediation Wyong Coal Final Offer	WACJV Final Offer	Appendix B
4	17 April 2015	Darkinjung's final offer to Wyong Coal	DLALC Final Offer	Appendix C
5	13 May 2016	Letter to WACJV from DP&E seeking comment on attached Chalk & Fitzgerald (C&F) correspondence dated 22 April 2016	C&F Letter to DP&E	Appendix E
6	2 June 2016	Wyong Areas Coal Joint Venture (Wyong Coal) Wallarah 2 Coal Project (Project) development Application SSD 4974 Amendment of SSD 4974 (Amendment Application)	Wyong Coal Letter to DPE	Appendix D
7	15 June 2016	Letter to C&F concerning matters raised by DLALC about potential amendments to the development application for the Wallarah 2 Coal Project	DP&E Response Letter to C&F	Appendix F
8	7 July 2016	Wallarah 2 Coal Project Amendment to Development Application SSD-4974	Amendment Document	DP&E website
9	7 September 2016	Meeting Minutes Wyong Coal / DLALC	Minutes	Appendix R
10	4 November 2016	Wallarah 2 Coal Amendment Development Application SSD-4974 – Response to Submissions	RTS2	DP&E website
11	19 December 2016	Response to DPE Queries – Coastal SEPP and Crown Lands Act	DP&E Response 1	DP&E website
12	16 January 2017	Amendment to DA SSD-4974 Response to DP&E – Water, DLALC, Heritage and socio-economics	DP&E Response 2	Appendix G

Ref	Date	Title	Abbreviated Name	Location
13	19 January 2017	Response to Department of Primary Industries (DPI)-Water Queries	DPI Response	Appendix H
14	10 February 2017	Response to Environment Protection Authority (EPA) Queries	EPA Response	Appendix I
15	February 2017	Addendum Report State Significant Development Wallarah 2 Coal Project (SSD 4974)	DP&E Addendum Report	DP&E website
16	February 2017	Response to DPE – Department of Health	Email	Appendix J

3 PAC2 INFORMATION REQUEST

This section provides a response to queries from the PAC2 at the site visit on 4 April 2017 and subsequent email of 7 April 2017. Queries from the PAC2 are summarised in **Table 2** and a response provided below where not addressed elsewhere in this report.

Table 2
PAC2 Queries Summary

Query	Where Addressed
Confirmation of area of disturbance for the Tooheys Road Site.	3.1
Have NSW Health issues been closed out.	3.2
How have we considered the economic costs of the DLALC development?	3.4
Which is the closest receptor to the transfer point.	3.6.1
What is the decibel reduction from the noise wall?	3.5
What is the current unemployment rate (overall and youth)?	3.7
Provide landownership figure with contours around the Tooheys Road Site and location of Cross property on Bushells Ridge Rd.	3.6.2
Provide figure showing CCWS catchment and longwall mining area.	3.8
Provide details on continued access for DLALC to Nikko Road.	4.2.6
What is the Amendment biodiversity offset ratio.	3.2
Please provide details in terms of your community engagement methods and records or a consultation register in relation to the amended application.	Appendix N
At the Public Hearing, speakers expressed their views in relation to the risk of water contamination of Spring Creek as a result of the rail facility including transfer station and loading area. Spring Creek flows adjacent to the Blue Haven residential area and is used by some residents for recreational purposes (swimming, fishing). Please advise whether potential water quality impacts on Spring Creek have been assessed and what are the measures to mitigate/avoid impacts on the quality of the water, if any.	3.10
Please provide a drawing(s) to show the predicted angle of draw which will apply to the longwall panels.	3.11.1
Central Coast Council raised concerns about the potential subsidence impact on the Buttonderry Waste Management Facility.	3.11.2
Speakers at the Public Hearing pointed out that the Hue Hue Road Mine Subsidence Area only allows first workings. Please comment.	0
Central Coast Council expressed concerns that the area is a major growth area and road connectivity is an important issue.	3.12
The proposed closure of Nikko Road and Tooheys Road may impact on future road network planning.	
Have other options been considered to maintain these roads open and public?	
Speakers also raised that the Asset Protection Zones (APZ) should be provided on the applicant's land and not rely on adjacent land. Please advise whether the proposed rail loading facility includes an APZ, if required?	4.7.4
The Australia Institute's submission as presented at the Public Hearing is forwarded with this email. The Commission would like your further comments on the submission in relation to the operating costs and financial viability of the project.	4.11
The Commission would like your further comments on the Environmental Justice Australia submission as presented at the Public Hearing, forwarded with this email.	4.32

3.1 TOOHEYS ROAD DISTURBANCE

The Amendment will reduce the disturbance associated with the Tooheys Road Site from 89 ha to 63 ha, which represents a reduction of 29%. As a consequence, the Amendment avoids impacts to approximately 11.1 ha of native vegetation.

The amended total area of disturbance for the Project is 76.4 ha which is a reduction of 27 ha (or 26%) as listed in Table 11 of Section 6.5.3 of the Amendment Document.

3.2 BIODIVERSITY OFFSET RATIO

Section 6.5.4 of the Amendment Document provides a detailed discussion on biodiversity offsets of the Original Project compared to the Amendment. **Table 3** summarises the revised offset ratios for the revised Project (including the Amendment) taken from Table 12 in Section 6.5.4 of the Amendment Document.

Table 3
Biodiversity Offset Ratio Summary

Vegetation Community	Original Project			Amended Project		
	Impact Area (ha)	Offset Area (ha)	Offset Ratio	Impact Area (ha)	Offset Area (ha)	Offset Ratio
Wet Sclerophyll Forests	7.6	16.9	2.2	7.1	16.9	2.4
Dry Sclerophyll Forests	50.1	180.2	3.6	41.7	179.5	4.3
Forested Wetlands	2.9	10.6	3.7	0.6	10.6	16.8

3.3 NSW HEALTH ISSUES

NSW Health's residual comments were provided via email from DP&E on 20 January 2017 and included:

- Source control for noise impacts to P14-P17 and the DLALC proposed development;
- Clarifications around assumptions in noise modelling; and
- Confirmation on EPA's acceptance on amenity noise classifications and application of the 'Voluntary Land Acquisition Management Policy' (VLAMP) (DP&E, 2014).

An email response resolving all of these residual issues was provided to DP&E and is reproduced in **Appendix J**).

3.4 ECONOMIC COSTS OF DLALC DEVELOPMENT

Economic impacts on DLALC's proposed residential development were responded to in the RTS2. Relevant parts of Section 6.6.13 of RTS2 are reproduced below:

"The proposal from the DLALC is to rezone land currently zoned IN1 – General Industrial and RU6 – Transition, to R2 – Low Density Residential.

The land zoned IN1 and RU6 is valued by the Valuer General at around \$10,000/ha and \$5,000/ha, respectively (based on NSW Globe Valuer Generals valuations for 2015).

Undeveloped land immediately to the north of the rezoning proposal that is zoned R2 is valued by the Valuer General at around \$55,000 per ha (NSW Globe). Thus rezoning would result in an uplift of around \$50,000/ha.

The Project is estimated to impact 9.8 ha of land that is the subject of the entire rezoning application (not all of which is proposed to be residential) and 3.3 ha of land identified in the rezoning application as...” conceptual “... residential lots ...” should they be approved and dependent upon final design. “... However, as the boundaries of the ...” conceptual “...residential land have not been finalised, nor has pre-rezoning consultation been undertaken by the Central Coast Council (as directed by DP&E) with the WACJV, Boral or other surrounding existing or proposed industrial developments, a significant potential exists for the design to be adjusted to avoid any impacts without loss of land allocated to residential.

This is further supported by written advice to the Wyong Shire Council (now Central Coast Council) dated 2 May 2016 from Monica Gibson from DP&E regarding the rezoning proposal who stated “The gateway allows the proposal to proceed to the next stage but given the need for further investigation and consultation, it is not possible to commit to a particular development footprint or planning provisions at present. Further investigations and consultation should be used as the basis for determining the appropriateness of the proposed planning provisions and the location of zone boundaries”.

Notwithstanding, if it were assumed that the maximum 9.8 ha of future residential land is impacted and that rezoning occurred now, the economic value of the impact would be \$0.5 M. However, the probability of the rezoning being successful is not 100%. The risk weighted impact of the Project on the DLALC Proposed Residential Development at different probabilities of rezoning success is provided in Table 13...” (refer Table 4 below) “... and range from \$0 M to \$0.5 M. These impacts are lessened the further into the future that any rezoning occurs. Further discussion regarding DLALC’s proposed residential development is included in Section 5.1.6.”

Table 4
Impact of the Wallarah 2 Project on Land Proposed to be Rezoned

Probability of Rezoning	0%	20%	50%	80%	100%
Impact on Darkinjung Land (\$M)	\$0.0	\$0.1	\$0.2	\$0.4	\$0.5

“Even with substantial changes in the assumed land values, the omission of this impact from the Economic Impact Assessment does not materially affect the net social benefits of the Project to NSW and certainly does not “serve to heavily understate the costs of the Project at a local level” as suggested by TAI.”

WACJV also notes that DLALC submitted a singular multisite rezoning application over five sites to CCC (not five applications) (see **Appendix K**).

The DLALC's Proposed Residential Development's Gateway Determination's (DP&E, 2015) three pages of conditions (see **Appendix L**) requires CCC to consider impacts of proposed residential development on the Project as follows:

“Prior to undertaking community consultation Council is to update the planning proposal to ...

- *Clarify the encroachment of proposed residential development on the proposed Wallarah 2 underground coal mine and rail spur...”*

In summary there is material uncertainty as to what way, shape, or form that the rezoning application may be progressed. Further, there is ample opportunity for any development in the area in question, if indeed a rezoning is successful, to be designed such that it is compatible with the Project.

3.5 NOISE

Atkins Acoustics advises that the height of the proposed noise wall is 4.5 m. The locomotive noise sources include the exhausts, and engine breakout via the side louvres. The noise reduction from this barrier for the locomotive would be in the order of 5-8 dBA.

With reference to enquires from PAC2 associated with noise attenuation qualities of various cladding materials, Atkins Acoustics indicates that standard cladding provides for an approximate 4dBA reduction in noise when applied to fully enclosed transfers, conveyors and train loads out. Modelling included the use of standard cladding.

An additional attenuation of up to 4dBA may be achievable using “Hushpak” cladding and similar products. Atkins further advised however that the primary noise source within the Nikko Road infrastructure areas is locomotive based, and as such the application of additional noise reduction measures using cladding will not materially reduce noise impacts further.

3.6 RECEPTORS

3.6.1 Transfer Station

Section 6.1.1 of the Amendment Document describes the nearest component of the Amended Project to Blue Haven as the transfer station near the Motorway Link Road. This transfer station is approximately 320m west of Blue Haven. The transfer station is visually and topographically separated from Blue Haven by the elevated road formation of the high traffic load Motorway Link Road.

The Train Load Out Facility is located approximately 1.1 km to the north-west of Blue Haven. The nearest residences in Blue Haven are separated from the transfer station and Train Load Out Facility by dense vegetation and the elevated Motorway Link Road.

WACJV recognises the need to maintain the existing amenity for residents in Blue Haven. The coal transportation infrastructure for the Amended Project has been designed specifically to minimise the potential for air quality, noise and visual impacts on Blue Haven.

Figure 20 from the Amendment Document illustrates the Amendment's location with respect to Blue Haven reproduced as **Figure 3**.

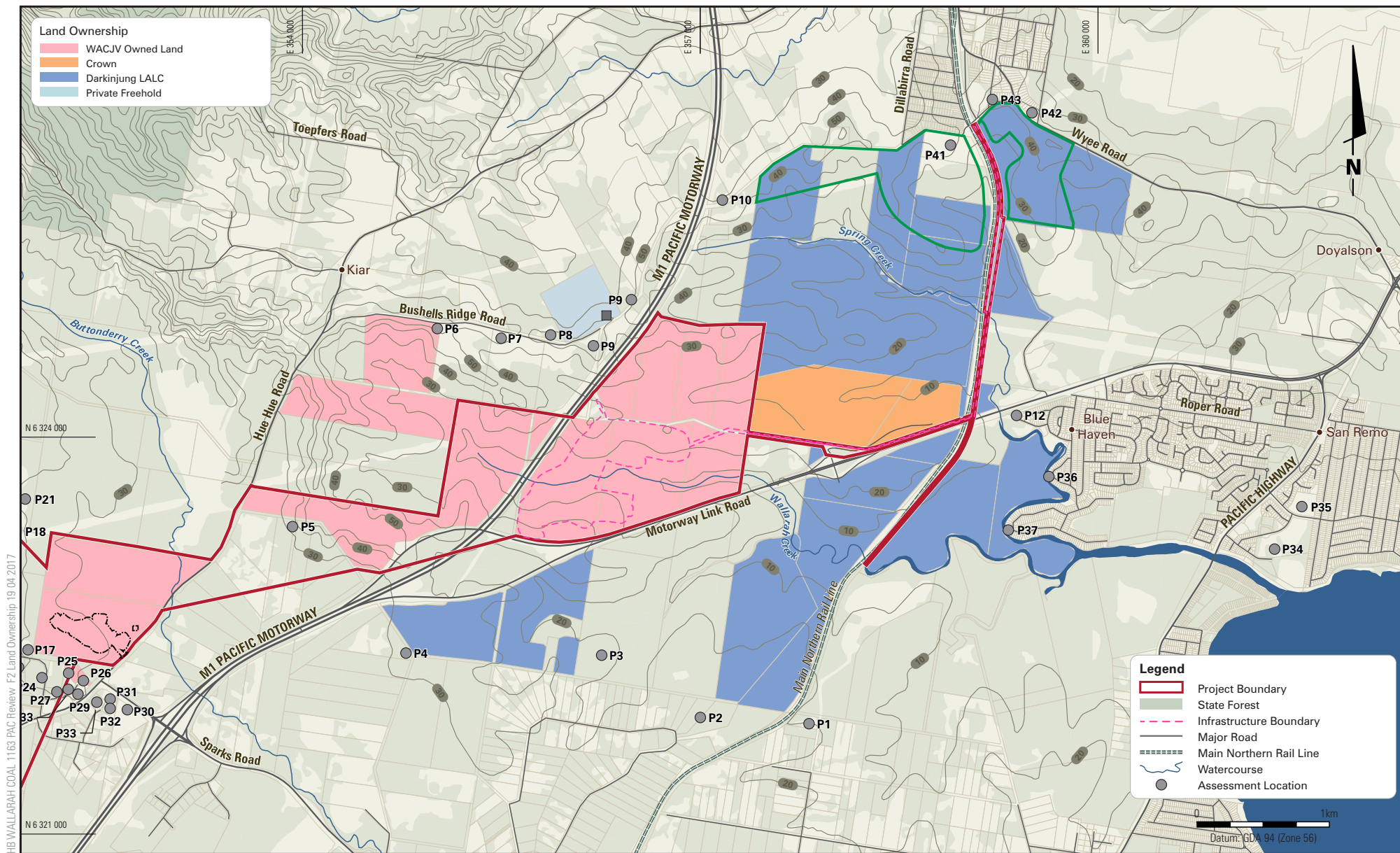
P14 at Thomson Vale Road is 526 m from the transfer station.

3.6.2 Tooheys Road Site

Figure 2 illustrates landownership with contours around the Tooheys Road Site and location of the B&J Cross property on Bushells Ridge Road as Property 63. Further, WACJV notes that B&J Cross raised the emergency access on Tooheys Road at a Doyalson consultation session.

At the same session Ken and Sue Drake (also Bushells Ridge Road residents) requested that more of Tooheys Road be closed because of the prevalence of burnt out cars and illicit drug taking at the M1 underpass.

Tooheys Road is the access to the Projects Tooheys Road site. The Tooheys Road site will be manned 24/7. Important, there is no intention to remove the road. It is however proposed to be gated to prevent through traffic for security reasons. Emergency services will have gate access.

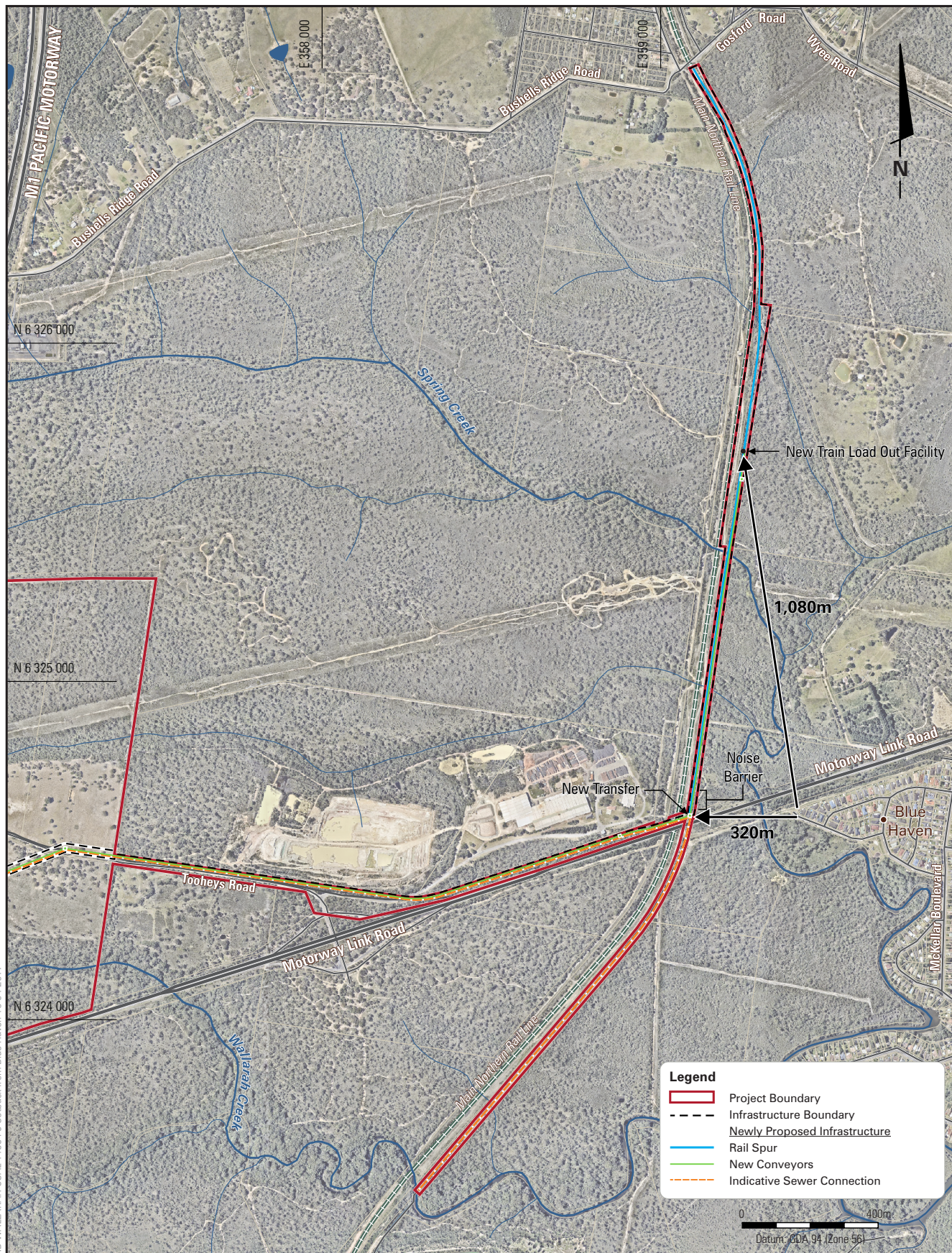


WALLARAH 2 COAL PROJECT

Land Ownership

FIGURE 2

HB WALLARAH COAL 1163 F3 Setback from Blue Haven 19 04 2017



WALLARAH 2 COAL PROJECT

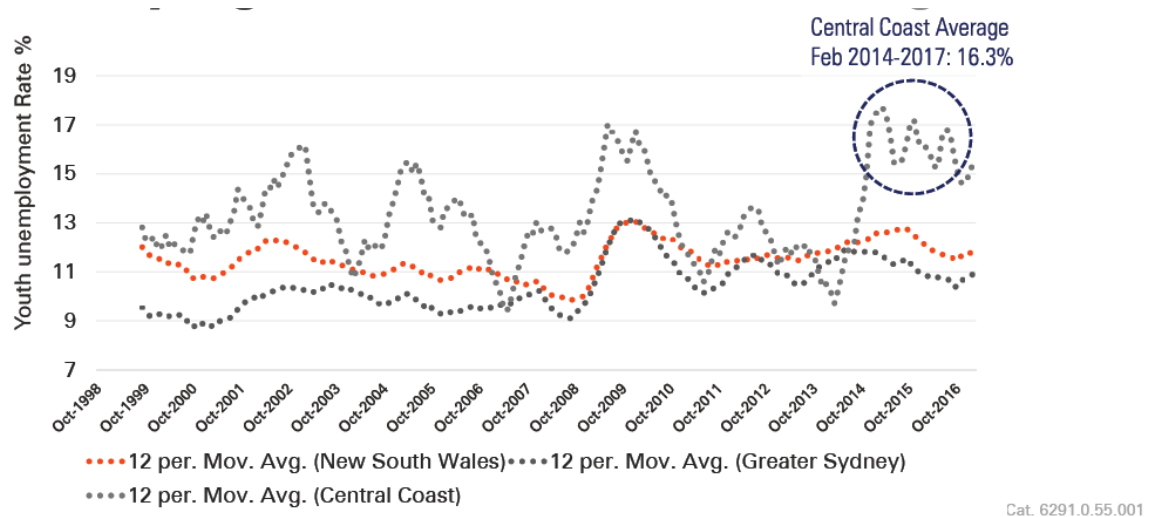
Setback from Blue Haven

FIGURE 3

3.7 UNEMPLOYMENT RATES

As discussed in **Appendix M**, in August 2015, Central Coast figures for all four labour force indicators were worse than NSW and Greater Sydney figures: annual employment growth and the participation rate were lower; and the total and youth unemployment rates were higher (NSW Parliamentary Research Service, 2015). Over and above this fact a high proportion of the gainfully employed workforce have to travel outside of the Central Coast LGA to work.

As shown in **Graph 1**, the overall unemployment rate for the Central Coast is 5.3% with a youth employment rate of 15.6% (Department of Employment, 2017). When compared with NSW, overall unemployment is higher by 0.1%, however youth employment is almost 4% higher (Population Experts, 2017).



Graph 1
Youth Unemployment Rate Central Coast

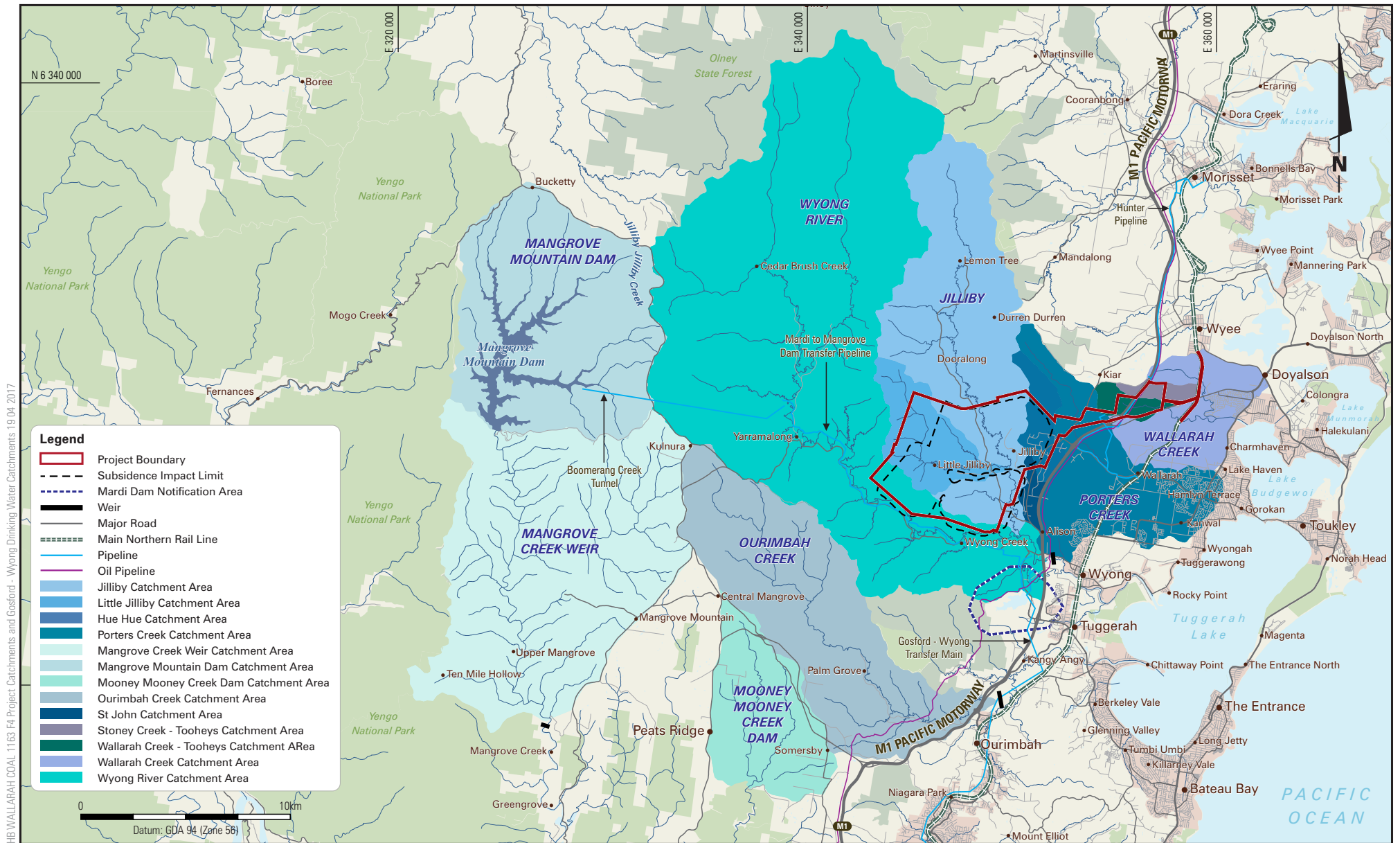
3.8 LONGWALL MINING PLAN RELATIONSHIP TO CCWS

Figure 4 shows the Project's 28 year underground longwall mining area and its relationship to the total surface area of the Central Coast Water Supply (CCWS) Catchment, adapted from Section 2.3.2 of the EIS.

Of the 72,700 ha of surface land catchments which supply the CCWS, the Subsidence Impact Limit (SIL) has been conservatively estimated for the 28 years of mining at 3,440 ha (down from 4,088 ha for the original 42 year Project). As such underground longwall mining will occur deep beneath less than 4.7% of the surface lands constituting the CCWS.

3.9 CONSULTATION

Appendix N includes an update on consultation undertaken for the Amendment. Consultation specifically with DLALC is included in DP&E Response 2.



WALLARAH 2 COAL PROJECT

Project Catchment and Gosford - Wyong Drinking Water Catchments

FIGURE 4

3.10 SPRING CREEK

At the Public Hearing, speakers expressed their views in relation to the risk of water contamination of Spring Creek as a result of the rail facility including transfer station and loading area.

Spring Creek flows adjacent to the Blue Haven residential area and is used by some residents for recreational purposes (swimming, fishing).

Please advise whether potential water quality impacts on Spring Creek have been assessed and what are the measures to mitigate/avoid impacts on the quality of the water, if any.

Water quality impacts on Spring Creek were assessed in the Amendment Document and mitigation proposed.

Section 2.3.2 of the Amendment Document describes the interactions of the Amendment with Spring Creek and its tributaries:

“The rail spur will cross over Spring Creek and its tributaries. The creek crossings for the rail spur will be immediately adjacent and downstream of the corresponding bridges along the Main Northern Rail Line. The creek crossings for the rail spur will be designed so that there is minimal impact on the flood regime of Spring Creek.

The re-design of the rail infrastructure has resulted in fewer interactions with watercourses and riparian vegetation. The rail loop and spur for the Original Project required four crossings of Wallarah Creek (and its tributaries) and three crossings of Spring Creek (and its tributaries). The rail spur for the Amended Project only requires three crossings of Spring Creek (and its tributaries), which are located directly adjacent to the existing crossings for the Main Northern Rail Line.”

Section 6.1 of the Amendment Document presents the Spring Creek Flood Impact Assessment which assesses the potential flooding impacts of the Amendment, specifically the re-location of the re-located rail spur. The re-located rail spur will require crossings of Spring Creek and its tributaries. It notes that *“The Amendment will not result in any measurable changes to flood flows in the Spring Creek catchment. The potential impacts of the Amendment would occur through the impediment of flow, rather than changes to flow volumes.”*

Section 6.1.4 of the Amendment Document concludes:

“The predicted increases in flood levels during a 1% AEP flood are very minor, and will not result in inundation of the railway line. The freeboard to the existing rail infrastructure is sufficient to accommodate these minor increases in flood levels. As such, measures to manage flood levels are not considered necessary. Re-grading or lining of the stream can be implemented (if necessary) to counterbalance the potential minor increases in flood levels. ...”

During significant rainfall events, untreated sediment laden runoff from the adjoining Sydney Trains corridor and nearby unsealed access tracks enters uncontrolled into Spring Creek as observed during the recent PAC site tour.

WACJV also notes that current vehicular access as used by DLALC, Sydney Trains and others often involving the need to wade vehicles across Spring Creek which has a potential to deposit grease, oils and other hydrocarbon products into the Creek.

Nevertheless *"... WACJV will implement appropriate erosion and sediment controls during construction and operation of the proposed rail infrastructure. Diversion bunds and swales will be installed so that all runoff is directed to sediment basins and pollution control devices. This will ensure that there are no opportunities for untreated discharges to Spring Creek..."* associated with operations within Nikko Road.

"A detailed Erosion and Sediment Plan will be included in the Water Management Plan to be prepared for the Project."

It is highly likely that the implementation of the erosion and sedimentation controls proposed (associated with the WACJV works) may capture runoff from some of the existing disturbed areas thus leading to an overall improvement in water quality downstream.

Section 6.5.3 also states, in relation to ecology:

"No threatened or protected aquatic species have been recorded in the locality of the Project. The lower reaches of Spring Creek, including at the location of the proposed rail spur, are mapped as key fish habitat. ... The re-design of the rail infrastructure has resulted in fewer interactions with watercourses and riparian vegetation. This avoids impacts to 0.5 ha of riparian vegetation along the reaches of Spring Creek west of the railway line. Crossings of Spring Creek would need to be established on the eastern side of the railway line."

A Biodiversity Management Plan will be prepared for the Project.

Section 6.10 also notes:

"ANZECC provides low risk trigger values for the protection of 80-99% of aquatic species. The trigger values that should be adopted are dependent on the health of the receiving aquatic ecosystem. Due to the proximity of agricultural activities, main roads and railway lines to Spring Creek, the trigger values for protection of 95% of freshwater species were deemed to be suitable for this assessment. The assessment criteria for water samples are outlined in detail in Appendix L. ..."

The results of the water samples indicate that background contaminant levels in Spring Creek are greater than the criteria for certain analytes. These results provide a baseline for assessing the impacts of the Project. ..."

The water and sediment samples collected for this assessment provide useful baseline data. Water and sediment sampling in Spring Creek will continue to be undertaken on a six-monthly basis and compared to the baseline data."

Sampling will be conducted upstream and downstream of the proposed rail spur to determine the impacts of the Project (if any). This monitoring commitment will be detailed in the Water Management Plan.”

Further discussion is provided in **Section 4.30**.

3.11 SUBSIDENCE

3.11.1 Angle of Draw

Appendix H ‘Subsidence Predictions and Impact Assessments’ of the EIS (MSEC, 2013) states:

“A line has been shown in Figs. 1.1, 1.3 and 2.1 and Drawings Nos. MSEC515-01 to MSEC515-20 that defines the General Study Area for the Project, which is based upon either the 26½ degree angle of draw line or the predicted total 20 mm subsidence contour, whichever extends further from the proposed Extraction Area.”

Figure 2.1 from Appendix H of the EIS is reproduced below as **Figure 5**. Longwall panels as shown in **Figure 1** as “Potential Future Mining Areas” do not form part of the current application.

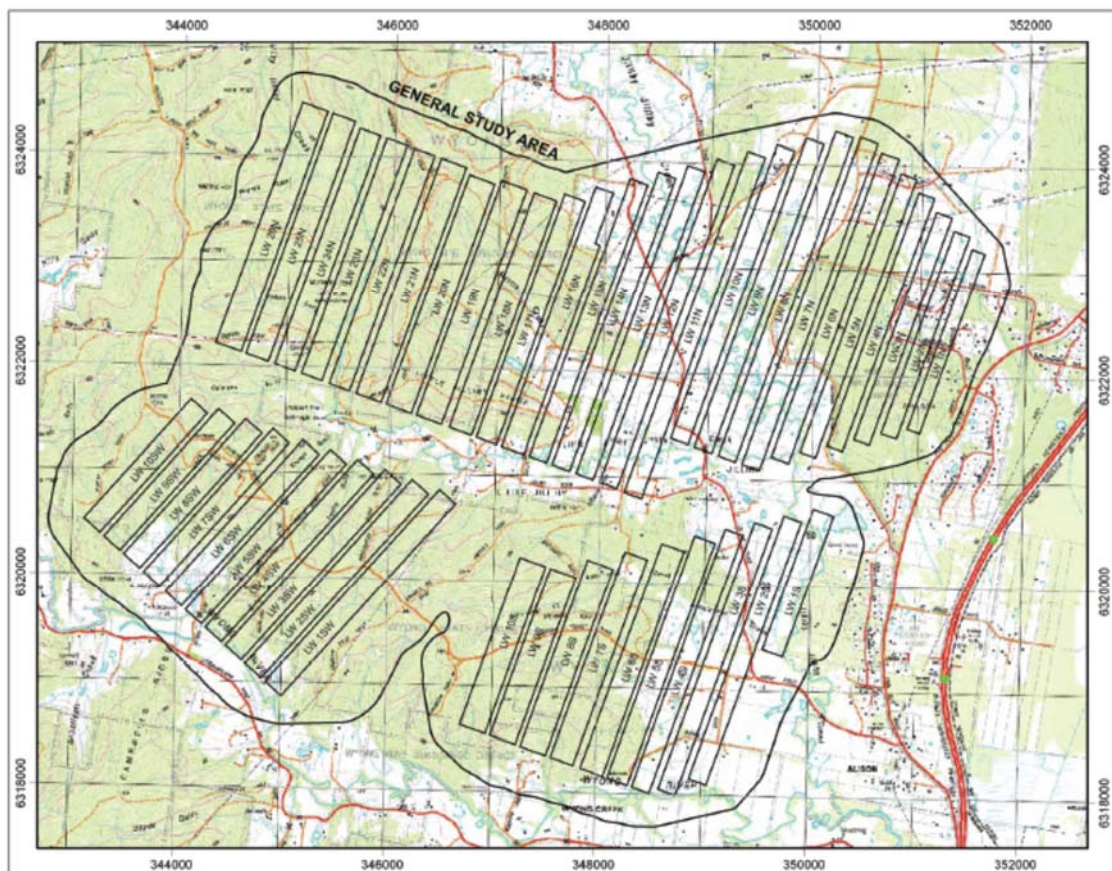


Figure 5
Subsidence Assessment General Study Area (2013)

3.11.2 Buttonderry Waste Facility

CCC raised concerns about the potential subsidence impact on the Buttonderry Waste Management Facility. Section 3.27.8 of the RTS1 responds to this issue in detail and states:

“The proposed Buttonderry Site surface facilities occur between Sparks Road and the Buttonderry Waste Management Facility. This facility will include (at least) the main personnel access to the mine, main ventilation facilities, offices and employee amenities.

The longwall panels in the Extraction Area are located over 1 km from the Buttonderry Waste Management Facility. Each of the Waste Management Facility and the Buttonderry Surface Facilities area are located outside the SIL and as such interactions between the waste site and coal extraction are considered highly unlikely.

Section 3.5 of the EIS also notes that WACJV will continue to evaluate the viability of co-ordinated gas management and usage opportunities with WSC and other stakeholders. WACJV will also regularly consult with WSC during the Project life, including the sharing of monitoring data, where practical.”

Subsidence studies included all interactions with the Buttonderry Waste facility including those associated with the placement of waste and impacts associated with proximity of longwall panels.

3.11.3 Hue Hue Mine Subsidence Area

Speakers at the Public Hearing pointed out that the Hue Hue Mine Subsidence Area only allows first workings. Please comment.

This viewpoint indicates a misinterpretation of the technical design requirements relevant to the Hue Hue Mine Subsidence District (MSD). There is no such restriction to limit mining in the Hue Hue MSD to first workings. The proponent is of the view that the Project mine plan is compliant with the relevant guidelines and criteria. Further, the DRE has scrutinised the mine plan and are supportive.

Section 3.1.7 of the RTS1 responds to comments in relation to mine subsidence districts as follows:

“Of the 245 houses that have been identified within the SIL, there are a total of 88 houses identified within the Hue Hue Mine Subsidence District. The Hue Hue Mine Subsidence District was proclaimed on 31 December 1985 and notified on 31 January 1986.”

Further 3.17.1 states “The Extraction Area is located entirely within two Mine Subsidence Districts (MSDs). The Project has been designed to manage subsidence implications and to satisfy the subsidence criteria for these MSDs. Since the proclamation of the MSDs, all new residential development in these areas is required to meet certain structural standards.

Any impact on existing or new houses due to mine subsidence is remedied by the Mine Subsidence Board (MSB) using funds obtained from a Mine Subsidence Levy on the coal mining industry.”

Further, EIS Appendix H states:

“Numerous variations on the mine plan for the Project were considered by the WACJV team throughout the planning process and further variations can be applied if monitoring indicates it is required. For example, narrow longwall panel widths and lower extraction heights have been proposed in the Hue Hue Mine Subsidence District in order to comply with the Mine Subsidence Board requirement that final tilts at houses in the Hue Hue Mine Subsidence District did not exceed 4 mm/m.”

Further, **Appendix O** includes a copy of the ‘Hue Hue Mine Subsidence District Proclamation’ (DRE, 1985) which does not include any restrictions on underground coal mining being limited to first workings only.

3.12 ROAD CLOSURE

CCC expressed concerns that the area is a major growth area and road connectivity is an important issue. The proposed closure of Nikko Road and Tooheys Road may impact future road network planning. Have other options been considered to maintain these roads open and public?

3.12.1 Nikko Road

A detailed response to the closure of Nikko Road is provided in Section 3.13 and 3.14 of the DP&E Response2 as reproduced in **Appendix G**. Access is described in detail in Section 3.15.

Section 3.21.1 of the DP&E Reponse2 further responds to road network planning as follows:

“Figure 6 digitises the “Potential New Roads (subject to further planning and funding)” in the vicinity of the Amended Project from map 2 from the NWSP. It does not align with Nikko Road and is conceptually located running north-south approximately 1 km to the west of the Main Northern Rail Line. Nikko Road is not discussed in the NWSP.

The Amended DA is not contrary to the potential new road in the vicinity as shown on map 2.”

Section 3.15 of DP&E Response2 states:

“(b) The section of Nikko Road to be used for the rail loading facility is largely dense bush for the most part. The 300m of existing dirt track is only accessible through ... locked gates or via access from the rail corridor through locked gates. Therefore, there is no practical public access to the road.

WACJV does not intend to remove the existing access, but improve it as described at (c) below and replace the relevant part of the Crown road with an easement to secure ongoing access for DLALC, other adjoining landowners, service providers and agencies (and their invitees, subject to the terms of the easement as addressed in (a) above).

(c)(d) DLALC's current access points to Nikko Road will not be changed unless DLALC requests changes to access (e.g. the road constructed for the Amended Project will upgrade the current dirt track and extend a road through what is currently dense bush and potentially be accessed from DLALC's Lot 204 which is currently the subject of a rezoning application for residential development); ..."

WACJV understands that DLALC's current access to the small section of Nikko Road that is trafficable is from their lands to the west of the Main Northern Rail Line.

This access follows Spring Creek under the Main Northern Rail Line:

- It is impassable when the creek is in high flow; and
- It is not known what access arrangement DLALC has in place with Sydney Trains.

WACJV will make vehicular connection from the bed of Spring Creek to the all-weather elevated Nikko Road within the confines of the Nikko Road corridor should this access be preferable to DLALC and other stakeholders. Conceptually, access to Nikko Road from this location could be achieved via a ramp as discussed on site with the PAC on 4 April 2017.

A ramp configuration may not be the optimal access, however WACJV is not currently in a position to suggest alternatives that may be in conflict with DLALC arrangements with Sydney Trains or which may encroach on land that WACJV does not have access to (i.e. Kerry Mountain or DLALC land). WACJV will consult with the relevant landowners and other stakeholders to determine the most appropriate access configuration in the detailed design stage of the construction of the Project. Access from Wyee Road and Lot 204 appears to be a logical all weather option as it does not require the traversing of Spring Creek.

WACJV also consulted closely with DPI Crown lands during development of the Amendment. Following extensive investigation of the Nikko Road site required for the project, DPI Crown Lands indicated that this section of road does not form a part of the future road networks plan for this locality. As a result of that consultation, DPI Crown Lands encouraged WACJV to make application to close Nikko Road.

WACJV also consulted extensively with the Central Coast Council during development of the amendment which included detailed discussions of the proposal to close a defined section of Nikko Road. Throughout that consultation, Council did not raise issue, express concerns or provide advice contradictory to WACJV's proposed future use of either Nikko Road.

Consultation included meetings with Council's Administrator, CEO, Group Leader Environment and Planning, and Group Leader Assets, Infrastructure and Business and were held on:

- 6 January 2016;
- 29 February 2016;
- 6 April 2016;
- 20 July 2016;
- 21 December 2016; and
- 13 February 2017.

3.12.2 Tooheys Road

WACJV consulted closely with DPI Crown Lands during development of the DA Amendment which included the proposal to partially close Tooheys Road, keeping it trafficable for emergency egress and access for locals from Bushells Ridge. As a result of that consultation, DPI Crown Lands encouraged WACJV to make application to close Tooheys Road. WACJV also consulted extensively with the CCC during development of the amendment which included detailed discussions of the proposal to close defined sections of Tooheys Road. Throughout that consultation, Council did not raise issues, express concerns or provide advice contradictory to WACJV's proposed future use of Tooheys Road. Consultation included meetings with Council's Administrator, CEO, Group Leader Environment and Planning, and Group Leader Assets, Infrastructure and Business and were held on:

- 6 January 2016;
- 29 February 2016;
- 6 April 2016;
- 20 July 2016;
- 21 December 2016; and
- 13 February 2017.

During consultation held at Doyalson RSL on 4 August 2016, discussions were held regarding the closure of Tooheys Road for security purposes with Bushells Ridge residents Bruce and Jenice Cross. At the same session Ken and Sue Drake (also Bushells Ridge Road residents) requested that more of Tooheys Road be closed (including the section of road which passes under the M1) because of the prevalence of burnt out cars and illicit drug taking at the M1 underpass.

At that consultation, WACJV committed to ensuring emergency egress would be maintained for nearby residents and that further consideration would be given to extending the closure application to include the section of road which includes the M1 underpass. Both resident couples indicated they were happy with this outcome. Should Tooheys Road be closed to the general public, Emergency Services will have gate access as will residents of Bushells Ridge Road. Given that gates will be monitored remotely and enabled for both manual and remote operation, both the security needs of the operation and emergency egress for residents will be equally maintained.

4 PAC2 PUBLIC HEARING ISSUES

*This section provides a response to issues raised in the 35 presentations on 5 April 2017. **Appendix A** includes the full list of speakers referenced below. Where issues have been previously responded to in detail, a reference to where the issue has been addressed is provided, rather than duplicating the response.*

Table 1 provides a tabulated list of responses and documentation which are referenced below.

4.1 TANYA O'BRIEN AND BILEEN NEL – CENTRAL COAST COUNCIL (1)

4.1.1 Development Consent Conditions

CCC referred to recommended changes to development consent that it would discuss further with PAC2 tomorrow.

Noted.

4.1.2 Pells Review

CCC referred to its specialist review of groundwater conducted by PSM (Pells) and maintained it has residual issues in relation to water impacts from the Project. It noted that the EIS “underestimates impact on groundwater” and that mitigation measures are not clearly articulated.

The issues raised by Pells Consulting relate to the Original Project rather than the Amendment. Nevertheless, Kalf and Associates has provided a detailed response as part of RTS2 (Appendix D) to the issues raised and ongoing technical errors purported by Pells Consulting.

This issue has been comprehensively considered in various assessment reports and reviews: EIS, RTS1, DPE report 2014, and PAC1 report findings. Exhaustive reviews by DPE and other agencies including NSW Office of Water (now DPI-Water) and the Commonwealth Government's Independent Expert Scientific Committee (IESC) supported by expert peer review (Dr Kalf) confirmed that the subsidence, groundwater and surface water studies were robust and that the impacts were appropriately assessed. There is no basis to conclude that groundwater impacts are underestimated.

4.1.3 EES Review

CCC referred to its specialist review of the EIS conducted by Earth Systems and maintained it has residual issues in relation to impacts from the Project from 2013.

It indicated concern that the subsidence predictions are understated and uncertainties remain as to how subsidence monitoring will be “fed back to council”.

Wyong Shire Council (now CCC) engaged Earth Systems to review the Original Project and provided further comment following closure of the EIS exhibition period in November 2013.

WACJV provided a comprehensive response to these issues which do not relate to the Amendment but in any account is reproduced in **Appendix P**.

4.1.4 Management Plans

CCC notes it has concerns with management plans.

Response

Comprehensive management plans and Extraction Plans are required to be prepared as part of the draft development consent, many of which are required to be prepared in consultation with relevant regulators (including CCC).

4.1.5 Buttonderry Waste Facility

CCC indicated it has a concern in relation to the mass of waste product storage at its waste facility impacting nearby mine workings associated with the Project resulting in potential leachate and methane extraction infrastructure issues from the waste cells.

See response in **Section 3.11.2**.

4.1.6 Central Coast Water Supply

CCC indicated it has ongoing concerns in relation to the Project's potential impacts on the Central Coast's water supply. It noted that an increase of 70,000 persons was indicated in the Central Coast Regional Plan 2036 (DP&E, 2016) (Regional Plan 2036) and that Project may affect CCC's ability to supply water to this population.

See response in **Section 3.8**.

4.1.7 Remediation at Closure

CCC indicated it suggested that the remediation conditions suggested by DP&E were "light on".

Section 5.12.5 of the RTS2 responds to this issue and states:

"Condition 29 under Schedule 4 of the Recommended Development Consent requires the preparation of a Rehabilitation Management Plan in consultation with the appropriate regulatory authorities.

In addition, mining leases issued under the Mining Act 1992 (NSW) require the establishment of a rehabilitation bond, which is released once suitable mine closure outcomes have been achieved."

4.1.8 Site Suitability

CCC indicated that the project area was "predominantly a rural residential area". CCC representatives do not believe the Project is suited to the area.

Further it indicated that it had concerns with maintaining access to the properties in the Hue Hue Road and Valleys following subsidence impacts and flooding.

The area subject to the Amendment is largely zoned industrial as described in Section 3.3.4 of the Amendment Document. It is not a predominantly rural residential area. It is located adjacent the Boral Montoro clay quarry, the Main Northern Rail Line, powerlines and between the M1 and Motorway Link Rd. Discussions in relation to existing and proposed conceptual residential areas are discussed in Section 3.6.1, 4.30 and 4.32.8; and Section 4.2, respectively.

Maintenance of access during floods to properties in Hue Hue Road and Valleys is responded to extensively in Section 3.2.7 of RTS1. Key commitments are reproduced below:

“... While it might not be possible to flood-proof all public roads in the region, mitigation options will aim to ensure that no property will suffer longer interruptions to access than under current conditions. Where possible, mitigation measures will also aim to improve emergency access relative to existing conditions. ...

Detailed assessment of potential flood mitigation measures will be undertaken after the grant of Development Consent. This assessment will satisfy any mitigation criteria and objectives established in the course of consultation with WSC and the community during the development of Subsidence Management Plans.”

4.1.9 Wyong River

CCC expressed concern in relation to impacts to the Wyong River as it is the “last user of the Wyong River”.

No Project coal extraction will occur beneath the Wyong River. Two short stretches of the Wyong River are located slightly within the southern extent of the SIL adjacent to the nominal southern limits of the longwall panels. It should be noted however that whilst the southern extent of those longwall panels is in proximity to the Wyong River, panel length and configuration has been designed specifically to avoid impacts on it.

Nevertheless, final longwall panel limits will be based upon the collection and evaluation of empirical data from previous and active panels, providing ultimate flexibility to adjust panel layout should deleterious impacts be predicted.

See **Appendix Q** for PAC2 Response.

4.1.10 Water Licensing

CCC indicated concern around water licensing and stated that “town water supplies are the priority”.

A detailed response to water licensing is provided in Section 5.2.1 of RTS2 in response to a request from DPI – Water to update water licencing requirements for the Project (following the Amendment Document's exhibition).

Section 3.3.8 of the RTS1 notes:

“The results of the water balance modelling show that the maximum external water requirement is 52 ML/year in Year 1. It is proposed to obtain this water, as well as all potable water required for the site (approximately 10 to 20 ML/year) from the Gosford-Wyong Councils Water Authority (GWCWA) town water system. It is noted that after Year 4 of the Project, the mine is expected to have excess water and will rely on the town water system only for potable water for the Buttonderry Site.

The maximum external water requirement (52 ML/year) represents a very small fraction (0.14%) of the current licensed town water supply volume under the Central Coast Unregulated Water Source WSP (approximately 36,750 ML/year) and will have a negligible impact on water availability in the GWCWA town water system. As stated in Clause 28 of the WSP, the long term average annual extraction limit of 36,750 ML/year is based on 2013 drought demand. Therefore, the impact of the Project on town water supplies is negligible even in drought conditions.”

4.1.11 Hue Hue Traffic

Hue Hue Road traffic impacts have not been resolved.

Traffic impacts on Hue Hue Road were assessed as part of the EIS. The RTS1 (Appendix F) responded further by providing detailed performance data on Sparks Road/Hue Hue Road.

4.1.12 Planning Factors

Concerns regarding rezoning proposals are 240m from proposed rail facility.

See response in **Appendix E** and **Appendix F**.

4.2 SEAN GORDON - DARKINJUNG LOCAL ABORIGINAL LAND COUNCIL (2)

Three detailed responses have been provided by WACJV to DLALC issues. One prior to lodging the Amendment Document (Table 1; Ref 5) and two more following exhibition of the Amendment Document which respond to all issues in this section and **Sections 4.7** and **4.17**:

- Section 6.1, 6.2 and 7.14 of RTS2; and
- Section 3 of DP&E Response2.

4.2.1 NSW Aboriginal Land Rights Act

Darkinjung Local Aboriginal Land Council (DLALC) indicated that the Amendment would prohibit its ability to ensure the economic development of its lands in proximity to the Project.

The Amendment will not prohibit DLALC's ability to ensure the economic development of its lands in proximity to the Project. Specifically, Section 6.1.13 of RTS2 states:

“The ALR Act enables an Aboriginal Land Council to make a claim for ‘claimable Crown lands’, as defined under section 36 of the Act. The infrastructure associated with the

Amendment will be located on land that is either private freehold (owned by WACJV) or part of the Boral Montoro Quarry, a road reserve or a rail corridor.

None of these lands satisfy the definition of “claimable Crown lands”. Therefore, the Amendment does not impede the provision of land to Aboriginal Land Councils.

Furthermore, the Amendment will not impede access to any lands that were previously granted to DLALC under the ALR Act or which remain under claim (see Section 5.1.2). Indeed, the DA for the Original Project did affect land claimed and obtained by DLALC under the ALR Act. However, the Amendment has removed such land from the Amended Project.

As a result, the Amendment is not contrary to the objects and purposes of the ALR Act.”

4.2.2 Limiting Development of Available Lands

The presenter indicated it is the largest landholder on the Central Coast, however only 10% of these lands are “developable”.

Noted.

4.2.3 Conceptual Residential Development

DLALC indicated the impacts of the Amendment on its conceptual residential development land has not been considered. The speaker indicated that negative impacts of \$8.7 million (\$10k per block) plus issue of dust that would result from the Amendment and that prospective purchasers would not buy near a mine.

See response in **Section 3.4**

4.2.4 North Wyong Shire Structure Plan

DLALC indicated that it had worked to ensure the 2036 Plan ensured consideration of DLALC’s development aspirations and that the Amendment would negatively affect this.

WACJV maintains that the DLALC proposed residential development and the Amended Project can successfully coexist.

This issue has been responded to in detail in Section 5.1.6 of RTS2 including:

“... Figure 6 of the Regional Plan identifies the employment zone of Bushells Ridge and the site of the Amended Project. The Regional Plan does not identify land proposed for the DLALC’s proposed residential development, nor list the area as a site of a potential future housing development.

However, the Regional Plan does identify that there may be pockets of land available on the urban fringe that are suitable for development and discusses the development of land owned by DLALC...”

Page 51 of the RTS2 further states:

“Potential Interactions with DLALC’s Proposed Development

WACJV has considered the potential amenity impacts to the proposed residential land (as presented in the Planning Proposal). ...

*As shown in **Figure 16**, the Amended Project will not result in any exceedances of the regulatory air quality criteria over the proposed residential land. ...*

*Approximately 9.8 ha of the land subject to the rezoning proposal is expected to experience noise levels greater than the amenity criterion of 50 dBA. Approximately 3.3 ha of this land is within the area that is proposed for residential development (see **Figure 17**). This represents approximately 1.1% of the land subject to the rezoning proposal. ...*

*It should be noted that the areas where the noise exceedances are predicted to occur are situated near the southern extent of the proposed residential land and near the Main Northern Rail Line (see **Figure 17**). The Planning Proposal states:*

“Portions of both sites are also expected to be rezoned to E2 Environmental Conservation to offset development impacts. Proposed zone boundaries will be subject to further refinement and will need to be supported by further investigations”.

Given that there is scope for the proposed zone boundaries to be modified, DLALC’s proposed developed [sic] can be re-designed so that the potentially noise affected areas are reserved for Zone E2 (Environmental Conservation). Conversely, the proposed residential areas can be relocated to other parts of the site that are not predicted to be affected by noise. ...

There are still substantial regulatory requirements that must be satisfied before DLALC’s proposed residential development can proceed. Given that the noise criteria are only predicted to be exceeded over 3.3 ha of land that is proposed for residential development, DLALC will only need minor amendments to the proposed development to avoid potential noise impacts to its proposed development.”

4.2.5 Unviability of the Project

DLALC indicated that the requested 1% of FOB Newcastle made the Project unviable as stated by WACJV, then the Project is not viable at present.

In total, DLALC’s final offer following mediation included (also see **Appendix C**):

A Sign-on fee:

a. WC is to pay Darkinjung \$1,000,000.00 within 7 days of the date on which NSWALC advises the Minister for Planning & Environment and WC that it consents to the lodgement of the W2CP development application.

An Annual fee pending first coal:

a. WC is to pay Darkinjung \$1,000,000.00 per annum (indexed) from the first anniversary of the Agreement's execution up to the date on which coal produced from the mine is transported on the rail spur (the first coal date). Payment for the year in which the first coal date occurs shall be calculated pro-rata.

An Access fee per tonne of coal transported after first coal:

- a. After the first coal date and subject to (b) below, the access fee will be calculated as 1% of the FOB Newcastle value for every tonne of coal transported across Darkinjung's land and paid on a quarterly basis.
- b. WC is to pay Darkinjung a minimum access fee of \$2,000,000 (indexed) per annum (in quarterly instalments) after the first coal date, regardless of the actual annual volume of coal transported, with any necessary adjustments determined at the annual anniversary.

In total, Wyong Coal's final offer following mediation included a package of benefits with an assessed value of approximately \$215M (see **Appendix B**).

In consideration of the small area of DLALC land required by the WACJV, the known land value and comparative compensation packages for Non Native Title and Non Mining occupation, WACJV considers that the compensation sought by DLALC was unreasonable and disproportionately high, and therefore failed to meet the Value Added Threshold.

4.2.6 Nikko Road Closure

DLALC indicated that closure of Nikko Road by the Amendment is not allowable as it is not an immediate neighbour to other land.

Further, DLALC stated that Amendment restricted access to its lands.

Section 3.14 of the DP&E Response2 (see **Appendix G**) discusses this issue in detail and concludes:

"... Roads Act does not prevent an application for closure and purchase from being made by other than an adjoining landowner. The application also includes a section of Tooheys Road which directly adjoins land owned by Wyong Coal Pty Limited."

See detailed response in **Section 3.12.1** in relation to access to DLALC lands.

4.2.7 Negotiation of Benefits

DLALC stated that they do not need jobs, procurement opportunities or land, alternatively the Aboriginal community needs proper commercial negotiations for cash payment.

Noted.

4.3 MARTIN HODGSON – HODGSON QUARRIES AND PLANT (3)

The supportive presenter noted the opportunity for employment and local businesses if the Project is positively determined. He stated that in his business dealings with Wyong Coal he considered Wyong Coal to be professional and fair.

Noted.

4.4 LAURIE EYES (4)

4.4.1 Water Impacts

As a turf farmer adjacent to the Project, the presenter had concerns with impacts to the Wyong River and Jilliby Creek which supplies the Mardi Mangrove pipeline. The speaker stated that Wallarrah 2 requires harvesting of high and flood flows of Jilliby Creek.

The Project is not mining under the Wyong River or the Mardi Pipeline as described in **Section 4.1.9**. Further, the Project will not “harvest” flood flows directly from Jilliby Creek. Predicted impacts to Jilliby Creek are described in RTS2:

“The Water Sharing Plan for the Central Coast Unregulated Water Sources 2009 (Central Coast Unregulated WSP) was amended on 1 July 2016 to include the Jilliby Jilliby Creek Water Source, which was formerly the subject of a separate WSP. The amendment also expanded the definitions of the water sources to include groundwater contained within alluvial sediments. Accordingly, the alluvial aquifers associated with Jilliby Jilliby Creek and Wyong River are subject to the Central Coast Unregulated WSP. WACJV will be required obtain the appropriate WALs to account for the predicted seepage from these alluvial aquifers as a result of mining.”

4.4.2 Health Risks to Residents

The presenter was concerned in relation the significant health risks to residents from the Project. He further noted concern at the stress to residences from potential subsidence.

See response in **Section 4.32**.

4.4.3 Subsidence Impacts to Residences

The presenter was concerned that impacts to residences and flooding from Project-induced subsidence would render them “useless”. He further noted that agriculture (farms) would never recover from flooding impacts.

Section 3.17.1, 3.18.15 and 3.19.6 of the RTS1 assessed impacts to the turf farm in detail:

“The only impact on agricultural land identified in the EIS was in relation to the proposed offset areas and the potential for minor subsidence impacts on a turf farming operation, which may, but are very unlikely to result in a temporary loss of production while subsidence effects are remedied. These agricultural impacts were considered minor in the EIS. ...

At any point on the surface of the turf farm, subsidence will generally occur in four episodes over four years, with each episode occurring over approximately six weeks. The first episode of subsidence will occur when the longwall panel preceding the panel directly under the specific point is mined. ...

WACJV will consult closely with the turf farmer prior to (during the preparation of the PSMP), during and following planned subsidence to ensure turf farming can proceed without interruption. ...

WACJV will prepare an Extraction Plan to manage the consequences of subsidence, including impacts on the turf farm. The Extraction Plan process will involve the development of PSMPs for each affected property before mining commences under a property. The PSMPs will be developed in consultation with property owners and will outline measures for managing and remediating impacts to assets on that particular property.”

4.4.4 Regional Plan

The presenter noted that any approval of the Project was not consistent with the “Regional Plan”.

Goal 2 - Protect the natural environment and manage the use of agricultural and resource lands of the Regional Plan 2036 includes:

“The region’s mineral and energy resources, including sand, sandstone, gravel, clay, hard rock and coal deposits, are valued at in excess of \$180 million per annum. The continued development of these resources will support major infrastructure projects, industries and agricultural businesses. Collectively, these activities are generating employment across the region and supporting the construction industry.”

Further Direction 10 of the Regional Plan 2036 is to “

“Secure the productivity and capacity of resource lands” including actions (but not limited to) to: ...

10.2 Ensure that longer term extractive resources are not sterilised and minimise impacts on communities and the environment.

10.3 Ensure development in the north of the region takes account of the extraction of coal, clay and gravel resources.”

The Project is consistent with Goal 2 and Direction 10 of the Regional Plan 2036.

4.4.5 EL Buyback

Referenced Caroon buyback by NSW Government due to impacts, however stated that W2 ELs not legitimate and should be stripped.

WACJV considers this issue is not relevant.

4.5 KELIA KEOGH (5)

The presenter was concerned in relation to the future for “mother earth”, ecology and her children due to potential impacts from the Project.

Noted.

4.6 MATHEW STIDOLPH (6)

The supportive presenter noted the opportunity for employment and local businesses if the Project is positively determined. He further noted the high unemployment rate on the Coast at 8.5% and need for employment opportunities that the Project would generate.

Noted.

4.7 LYNNE HAMILTON – DLALC SPEAKER 2 (7)

The presenter claimed that the Amendment is actually a “new development” not Amendment and is located on land not the subject of the original EIS.

The presenter further claimed that the DA should be refused and is not permissible under legislation due to large scale of changes.

This issue is responded to in detail in Section 6.1.1 of RTS2 which states:

“... The submission from DLALC suggests that the power to amend a DA does not apply if the proposed alterations are substantial. Clause 55 does not, by its terms, contain any such limitation. The only pre-requisites for the amendment of a DA prior to it being determined are the “agreement of the consent authority” and, if the amendment results in a change to the proposed development, sufficient written particulars indicating the nature of the change is required.

In respect of the first pre-requisite, the proposed amendment was accepted by the Minister’s delegate on 20 July 2016 (as required by clause 55(1)).

In respect of the second pre-requisite, the Amendment Document provides a detailed description of the Amended Project (as required by clause 55(2)).”

A response from WACJV is provided in **Appendix D**.

4.7.1 DGRs

The presenter suggested the DGRs do not cover the activities described in the amendment and as such have not been addressed.

The Amendment Document assesses all environmental and social impacts of the Amended Project. The Amendment Document was publicly exhibited with issues from relevant regulators and the community responded to.

Section 3.3.1, 3.2, 3.3.2, 3.4, 3.5, 3.6.2, 3.6.3, 3.11, 3.13, 3.17 and 3.21.2 of the DP&E Response2 replies to this issue and concludes:

“WACJV has met the requirements of the DGRs for both the EIS and the Amendment Document “

4.7.2 Amendment Components not Addressed

The speaker suggested that the crossing of Sydney-Newcastle Rail Line had not been considered, neither had Nikko or Gosford Road traffic been assessed. Further, the speaker suggested legal and practical access would be restricted by the Project.

Extensive consultation including Project Registration with Sydney Trains/RailCorp was conducted throughout the amendment process. Consultation specifically aimed to inform Transport Agencies of WACJV's proposed infrastructure development proposal and to discuss issues associated with interface interactions.

This consultation allowed the WACJV to understand obligations, future agreement requirements and risk related issues associated with interactions with the Main Northern Rail Line. The issues addressed during that consultation were fed directly into both the rail report and the amendment documentation in general including noise, visual and dust related impacts and interactions with both rail and the surrounding locality.

See response in **Section 3.12.1** for Nikko and Tooheys Roads.

4.7.3 Consultation

The presenter stated that inadequate consultation had been conducted with DLALC. The speaker added that the 7 September meeting was cut short by WACJV, before DLALC offered the alternative rail option to the South of link road.

Significant consultation has been undertaken with DLALC as listed in Table 12 of RTS2 and Appendix D of DP&E Response2.

Further, **Appendix R** includes minutes from DLALC Meeting which illustrates conflict with the statements around the 7 September meeting.

A detailed response in relation to options is provided in Section 3.1 of DP&E Response2 including *“... We note that at the meetings of 22 September and 17 October, DLALC advised that this option, of reverting to the original proposal, was no longer available and would be not considered by DLALC under any circumstances – accordingly WACJV maintains the need for the Amended Application; ...”*

Further, **Appendix R** includes minutes from the DLALC / Wyong Coal meeting of 7 September. Point 12 of page 3 states: *“Sean Gordon stated that as a result of the projects in train since the original DA there may be an opportunity to revisit the original rail spur and that the Department of Planning had suggested such an action may be in the best interests of both parties”.*

The above statement recorded within the meeting minutes illustrates conflict with the statements made by Lynne Hamilton around the 7 September meeting indicating that DLALC offered an alternative rail option to the South of link road at that meeting.

4.7.4 Bushfire Risk and APZs

The speaker noted that bushfire risks of the Amendment had not been assessed.

This issue is responded to in detail in Sections 3.5 in relation to Asset Protection Zones (APZ) and over 6 pages in Section 3.6 in relation to bushfire risk of the DP&E Response2 and notes:

“Under section 79BA of the EP&A Act a SSD is not required to conform to the specifications and requirements of ‘Planning for Bush Fire Protection’ (NSW Rural Fire Services, 2006).

Further, under section 89J(1)(f) of EP&A Act, a bush fire safety authority under section 100B of the Rural Fires Act 1997 is not required. These issues are addressed under the DGRs. However, in accordance with the DGR’s, consideration has been made to “Hazards – paying particular attention to public safety, and including bushfires”.

A detailed assessment was included as Appendix AB to the EIS and relevant consideration given to bushfire in the Revised Risk Assessment in Appendix F of the EIS with the methodology applied accepted by DP&E and the PAC.”

Further, since this time, WACJV has held an independently facilitated Risk Assessment / Fault Tree Analysis on bushfire risk from the Amendment with representatives from WACJV, Downer Engineering, ARA Fire, Roads and Maritime Services, Sydney Trains, GHD and AMS in attendance. This is reproduced in full in **Appendix S** and concluded that:

“Whilst a considerable number of ignition sources were identified, the workshop assessed that with the planned controls that are to be implemented, (including; safety in design principles, procurement standards and a comprehensive safety management system) the likelihood of the ignition sources resulting in a material fire is mostly rare to improbable, with the notable exceptions being a bush fire that propagates from neighbouring land or a lightning strike. ...

Further, management of Wallarah 2 Coal Project plan to develop a Principal Fire Hazard Management Plan that incorporates the appropriate controls including a Trigger Action Response Plan (TARP) in the event a fire does occur. The TARP includes a trigger for consultation with external emergency response providers. “

4.8 CRAIG DUNSHEA – CS TRADE (8)

The supportive presenter noted the opportunity for employment and local businesses if the Project is positively determined. The speaker further noted the benefits of the mining industry from practical experience of over 20 years.

Noted.

4.9 KEN GREENWALD (9)

The presenter stated that the benefits of the Project do not outweigh the impacts to water resources, including water needs of 330,000 people. He expressed concern in relation to potential impacts to the pipeline which had been an expensive state asset, as well as Wyong River potential impacts.

The speaker noted that “Coast” has changed since 1995 when the EL was granted and it is a different environment in 2017.

The speaker is also concerned about Project impacts on Wyong River and the Mardi Pipeline.

In relation to potential water impacts on the CCWS, see detailed discussion in **Section 3.8**.

Although the “Coast” has changed, the Regional Plan 2036 still clearly notes the promotion of coal mining is a Goal as discussed in **Section 4.4.4**.

4.10 ALAN HAYES – AUSTRALIAN COAL ALLIANCE (10)

4.10.1 Water Catchment

The speaker referred to the “Water Plan 2050” and need to maintain supply. The speaker asked “Where will the water come from?” if the Project negatively impacts the water supply.

In August 2007, Gosford City and Wyong Shire Councils formally endorsed WaterPlan 2050, a long-term blueprint for managing the Central Coast’s water resources over the next four decades. Work has commenced on implementing most of the key actions outlined in the plan (Wyong Shire Council, 2007).

The Amendment does not impact the WaterPlan 2050 in relation to impacts on the CCWS as discussed in detail in **Section 3.8**.

4.10.2 Subsidence

The speaker referenced the “Pell’s” comments on subsidence, particularly referencing conflicting information, need for comparison of data to Mandalong results and previous comments on subsidence predictions being underestimated.

He further queried the WACJV’s knowledge on the “Awaba Tuff”.

In relation to the properties and behaviour of Awaba Tuff unit, WACJV has conducted extensive drilling, aeromagnetic survey and seismic testing of its exploration licence areas and especially the proposed mining area. This has included in-seam testing as well as a variety of rock core testing. The WACJV technical professionals associated with the survey and interpretation of all geological units as well as mine planning had extensive practical experience with exploration and mining in the district where Awaba Tuff occurs. As such WACJV is highly informed about the Awaba Tuff and other geological units in its area of proposed operations.

4.10.3 OEH Concerns

The speaker referred to a 2013 response from OEH in relation to panel orientation under creeks.

This 2013 EIS query by OEH which related specifically to the Jilliby SCA has been resolved. A detailed risk assessment was undertaken and is presented in Section 3.26 of RTS1. Further, since that time the mine plan has been confirmed to be 28 years of mining only (removing most longwall mining beneath the Jilliby SCA from the current application).

4.10.4 ESD and Intergenerational Enquiry

The speaker stated the Project had not considered Ecologically Sustainable Development (ESD) or Intergenerational Equity principles.

ESD has been considered in relation to the Project. Section 3.28.3 of the RTS1 states:

“The principles of Ecologically Sustainable Development (ESD) are defined under section 6 of the Protection of the Environment Administration Act 1991. The Project is consistent with the principles of ESD as discussed in Section 9 of the EIS”.

4.10.5 Development Consent Condition Inadequacy

The speaker noted that as most of the conditions are unachievable.

WACJV confirmed to the PAC on the day of the site visit that all DP&E revised recommendations for conditions of approval have been carefully reviewed by the proponent and, although onerous, have been deemed to be achievable, measurable and enforceable. .

4.10.6 Kores International Reputation

The speakers suggested that internationally, Kores’ reputation is “appalling”. He referred to Rapu Rapu and Philippines projects where media reports suggested the company “does not care”.

Wyong Coal manages the Wallarah 2 Coal Project on behalf of WACJV which is 95% Korean and 5% Japanese. Kores and SK Networks have been part of the WACJV since its inception in 1996. Kores has a long term objective for investment in Australia and has been present since 1994.

Kores has a stake in various coal mines with responsible environmental records in both New South Wales and Queensland.

Rapu Rapu is a small mine in the Philippines which has produced copper, zinc, gold and silver since 2005. The mine was originally operated by an Australian company called Lafayette. Lafayette was a 74% major shareholder with Kores and LG jointly owning the remaining 26%. The mine operation was suspended in October 2005 when two environmental accidents occurred whereby two ponds overflowed, releasing cyanide into a stream and the coast of Barangay Binawasan.

The mine resumed its operation in late 2008 under its new ownership after new owners invested a significant amount of capital into the mine which comprised LG 42%, Kores 28%, Malaysia Smelting Corporation 30%. Significant efforts were made by the new operators to ensure best environmental practice was employed at the operation.

In November 2010, the mine received the “2010 Titanium Achievement Award” by the Secretary of the Department of Environment & Natural Resources of the Philippines government in recognition of its satisfactory environmental, safety and health management and community development in the conduct of its operation.

In April 2011, the mine received the “Mother Nature Award” by the Pollution Control association of the Philippines in recognition of its outstanding initiative and a steadfast implementation of an effective Environmental Management system, with excellent Pollution Control and Environmental Care in its area of operation.

In November 2012, the mine won three major awards during the 59th Annual Mine Safety conference of the Philippine Mine Safety and Environment Association (Philippine Daily Enquirer, 2011).

4.10.7 Health Risk Assessment

The speaker referred to the 2013 Health Risk Assessment conducted for the Project and noted that the risks indicated are not acceptable.

A Health Risk Assessment was prepared as part of the EIS and is included as **Appendix M** to that document.

A detailed response to submissions on the health risk assessment is provided in Section 3.7 of the RTS1. Air quality impacts from the Amendment are less than that predicted for the EIS.

4.10.8 Public Opposition

The presenter stated there was “overwhelming public opposition” to the Project.

From the extensive consultation undertaken over the Project, WACJV does not agree with this statement. It is noted that there were only 35 speakers registering at the PAC public hearing on 5 April 2017, of which 14 were supportive of the project.

Further, Section 3 of RTS2 describes that following public exhibition of the Amendment Document, 708 submissions were received. Of the 708 public submissions, 588 were objections, 116 were in support of the Amended Project and four provided comments.

The majority of the objections were “form” letters listing a range of generic issues (i.e. identical pre-populated typed submissions lodged by multiple persons) whereby the sender was only required to copy part or all of the information from the form letter into their own submission. Form letter submissions were made up of nine form letter types. For example, one form letter was submitted by many members of the public.

Of the 116 supporting submissions, none were in a form letter format.

4.11 ROD CAMPBELL – THE AUSTRALIA INSTITUTE (11)

4.11.1 NPV Reduction in Revised Economic Assessments

The presenter discussed the 2008, 2015 and 2016 assessments and stated the Project's NPV has reduced from \$1.5 b to \$485 m in the most recent assessment.

A detailed response to these issues was provided in Section 6.6 of RTS2, however a further response is provided by Gillespie Economics in **Appendix T**.

4.11.2 DP&E's Peer Reviewer Incorrect

The presenter stated the independent Peer Review conducted by DP&E by CIE is wrong and that the actual project value is zero.

A detailed response to these issues was provided in Section 6.6 of RTS2, however a further response is provided by Gillespie Economics in **Appendix T**.

4.11.3 Operating Cost Assumption Incorrect

The presenter suggested that the operating cost for the Project is wrong. The presenter calculated the Project's operating cost at US\$40/tonne and stated that it is their opinion that this "small, greenfield, underground mine" "in difficult country and politically sensitive" would cost far more to operate. The presenter stated that "it would be one of the most expensive in the country in reality".

The presenter further stated that it is the cheapest mine to run in everything in the Hunter Valley and Queensland and is therefore incorrect.

A detailed response to these issues was provided in Section 6.6 of RTS2, however a further response is provided by Gillespie Economics in **Appendix T**.

4.11.4 Water Value Incorrect

The presenter asserted that effective value of \$0 impact to water resources in the economic model was incorrect.

See a detailed response by Gillespie Economics in **Appendix T**.

4.11.5 Future of Coal

The presenter asserted that the market for coal in 2040 would be half that of now and there would be not a market for the Project.

The authoritative current sources for international energy and resource consumption trends and forecasts include the International Energy Agency's World Energy Outlook 2016 and the US Energy Information Administration's International Energy Outlook 2016.

Both publications note the significant rise in seaborne steaming coal trading since the turn of this century (more than tripling between 1997 and 2014), largely as a result of dramatically increased coal consumption for electricity generation in China and India using imported coal from producing countries such as Australia.

The trends indicate a continued gradual shift in the global steaming coal consumption from the USA and Europe to Asia. Steaming coal consumption will increase especially in Non-OECD Asia and will be led by India, however China will remain a major user of coal for electricity at levels close to current consumption in 2040 despite coal fuel becoming a reducing share of total electricity generation.

The US EIA forecasts that Australia will export 16% more coal to Asia in 2040 than it did in 2012, a much greater tonnage increase than any other exporting country.

Whereas the share of coal in the global power generation mix will drop, coal consumption is not forecast to decline due to the ever-increasing need for reliable electricity generation across the globe. Australia is predicted to supply an increasing volume and share of the international steaming coal trade due to its high quality and high-energy rating coal which is increasingly demanded by its trading customers.

A further response is provided by Gillespie Economics in **Appendix T**.

4.12 PAUL ROBERT BURTON – OUR LAND OUR WATER OUR FUTURE (12)

The presenter noted recent ICAC Inquiries, PFC potential contamination at Williamstown and NSW legislation in relation to trespass.

These issues are not relevant to the Project and as such are not responded to.

4.13 ABIGAIL BOYD – CENTRAL COAST GREENS (13)

4.13.1 Global Demand for Coal

The presenter questioned the ongoing demand for coal with various Asian markets not buying coal and are diversifying their energy sources.

They further stated that coal mine closures were increasing and coal companies going bankrupt.

The speaker further discussed abandoned mines and their concern for rehabilitation of mine sites. Isaac Plains coal mine sale for \$1 was raised as example to avoid rehabilitation liabilities.

The future of coal is discussed in detail in **Section 4.13.1**.

See response in relation to NSW rehabilitation liability bonds discussed in **Section 4.11**.

Isaac Plains was sold for \$1 to Stanmore Coal, however it also is responsible for the \$32 million rehabilitation obligation associated with the mine which will reduce over time as rehabilitation activities are undertaken (Stanmore Coal, 2015).

WACJV notes that it is also important to recognise that whilst many mining companies including Anglo American and Rio Tinto regularly review their investment strategies, divesting from one commodity and entering into others, before reinvesting in areas where they have previously divested, they are not going bankrupt or closing mines.

4.13.2 Economics

The speaker stated the royalties were grossly overestimated.

See response in **Section 4.11**.

4.13.3 Water Impacts

The speaker suggested that “Salty brine” would be discharged to Wallarah Creek from the Project.

Water will only be discharged to Wallarah Creek via a Water Treatment Plan (WTP) as described in detail in Section 7.3.3 of the EIS which states in relation to a worst-case water treatment assessment scenario:

“For the remainder of the Project life, the WTP will produce a brine by-product, which will be disposed of in the underground voids of the extracted longwalls. The impacts of the disposal of the brine are further assessed in Section 3.2.7.

Brine is produced as a by-product of the Reverse Osmosis (RO) process, which is utilised to reduce the salinity of mine water. In the first 14 years of the Project, a Brine Treatment Plant will be operated to substantially dewater the brine, producing a partly dried salt mixture. The Brine Treatment Plant is needed in the first 14 years to reduce the volumes of salty by-products that require disposal.

Post year 14, there is sufficient underground void space for the disposal of the brine, which is less concentrated relative to the salt mixture. Nevertheless, WACJV will retain the option of continuing the brine treatment process beyond Year 14 of the Project.”

No brine will be disposed of directly into Wallarah Creek. Underground brine disposal is discussed in detail in the EIS and RTS1 Section 3.2.7 for purposes of the worst-case water treatment assessment scenario as follows:

“WACJV proposes to store brine and salt mixture in the underground workings. During the first 14 years of the Project, a partly dried salt mixture will be generated as a by-product of the water treatment process. The salt mixture will be sealed in dedicated development headings located to the east of longwall LW1, as shown in Figure 8.”

4.13.4 Residential Impacts

The speaker suggested that Wyee was 400 m from the site and would be impacted by dust and noise.

The presenter further stated that coal wagons should be covered consistent with the “2013 Senate Inquiry”.

The closest property on Wyee Road to the load out bin is 1,220 m. No predicted exceedances of dust or noise criteria at predicted at residences in Wyee.

The justification to not cover coal wagons is discussed in detail in **Section 4.32.13**.

4.14 STEVE PHILIPS – LOCK THE GATE (14)

4.14.1 Merit Appeal Rights Extinguished

The speaker noted that merit appeal rights were extinguished following the public hearing and the Project “cannot be taken to court”.

Noted.

4.14.2 Water Impacts

The speaker referenced drought conditions on the Central Coast in the 2000s and stated the project’s impacts on water resources were unacceptable.

See response in **Section 3.8**.

4.14.3 Health Impacts

The speaker stated that PM2.5 air quality particulates are “carcinogenic” and will give people cancer. The presenter further stated that the Department of Health’s issues had not been resolved.

See response in **Section 4.32**.

4.14.4 Economics and Future of Coal

The presenter stated the economics of the project were on \$32 million benefit. He further stated that the social costs of carbon had not been allowed for. The presenter further asserted that “thermal coal is over” as renewables were cost-competitive.

See detailed response in **Section 4.11**.

4.15 MIKE CAMPBELL – COMMUNITY ENVIRONMENT NETWORK (15)

4.15.1 Inadequate Consultation

The speaker stated that inadequate consultation had been conducted as no open meetings had been held.

See response in **Section 3.9**.

WACJV strongly refutes this or any claim of inadequate consultation. WACJV also notes that this Speaker and other environment interest groups lodged submissions and encouraged others to do so. MC made no such claim of inadequate consultation in his submission to the DA Amendment.

4.15.2 Subsidence Impacts

The speaker stated that there was not a mine subsidence district over the entire mining area.

Further concern was raised in relation to chain pillars not yielding as the Project subsidence assessment assumed.

The presenter further stated the PAC1 report was contradictory at page 14 where they are satisfied that pillars will yield, however on next page indicates a risk to yielding.

Section 3.11.3 confirms the entire extraction area is covered by mine subsidence districts.

See further response in **Section 4.15.4**.

4.15.3 Consent from Minister for OEH Required

The presenter referred to correspondence from WACJV and DP&E in relation the consent from the Minister of OEH required to facilitate mining in the Jilliby SCA.

Noted.

4.15.4 Historical Documentation

The presenter referred to various 1980-90 regulator's documentation which stated mining is not permitted; or only partial extraction permitted in the Hue Hue Road area to control tilts and strains.

The presenter is incorrect in his interpretations of the requirements for the Hue Hue MSD. The Project mine plan is in full accordance with the relevant criteria and reflects the longwall and pillar design for partial extraction.

The PAC1 report in 2014 (page 19) acknowledged the suitability of the mine plan in the Hue Hue MSD area by noting:

"The restricted mining parameters (narrower longwalls and reduced seam height) were designed to keep subsidence within the limits set for the Hue Hue Mine Subsidence District (MSD)".

Further reference was made to correspondence to PAC1 Chair Neil Shepherd correspondence on "uncertainties" in relation to integrity of yielding pillars (as per the speaker's original submission).

PAC1 fully explored the technical issues of pillar behaviour and noted that WACJV's response to PAC's concerns expressed in correspondence to WACJV was noted as being "comprehensive" and dealing adequately with the matters (refer PAC1 2014, page 18).

PAC1 2014 report concluded:

"Based on this information from the Proponent, the Commission is now satisfied that the pillars will yield" [as planned].

PAC1 further noted the insignificance of the timing aspects of pillar yielding (PAC1 2014, page 19):

"...the consequences of variation in timing [of pillar yielding] are not likely to have significant consequences for any surface features".

Section 4.15.2 responds to yielding pillars.

4.16.5 Second Workings

The speaker noted that WACJV intended to undertake secondary workings which were not assessed in the EIS.

The Project seeks approval for longwall mining which is a form of secondary workings. The EIS assessed subsidence and resulting environmental impacts from longwall mining.

A brief summary of first and secondary underground mining is provided below for the benefit of stakeholders, taken from Wollongong University (undated).

Following development of the drift to gain access to the seam from the surface, workings are developed by mining a series of roadways which comprise tunnels within the seam.

The roadways are connected at intervals by cut-throughs, thus forming areas of coal pillars. Roadways need to be stable for extended periods and in most mines this means supports need to be installed to reinforce the roof and in many mines, the sides (referred to as ribs) and sometimes even the floor strata. This process is referred to as "first workings" (or development). Provided the pillars remain stable, this type of mining will not give rise to subsidence at the surface.

Other methods of mining have been developed to remove large blocks of coal between areas of first workings, methods which require minimal "permanent" support or which use temporary, reusable supports. Usually the coal from these large blocks is extracted while retreating from a boundary back to the main mine access and the roof strata is allowed to collapse into the cavity formed, such an area of collapsed roof being known as a goaf.

This stage of mining is known as second workings (or pillar extraction). Longwall mining is one method of pillar extraction, now the most common method in use in Australia, and probably worldwide.

4.16 ROB MONTEATH – NEWCASTLE PROGRESS ASSOCIATION (16)

The supportive presenter discussed the history of mining in NSW and ongoing need for electricity generation, supported by coal.

Noted.

4.17 TINA WEST – DLALC SPEAKER 3 (17)

The speaker noted the Aboriginal Land Rights Act has enabled the regeneration of community and self-reliance. The presenter stated that DP&E has been discriminatory of DLALC in its assessment. The speaker noted a further meeting with the PAC tomorrow.

Noted. See response in **Section 4.2.1**.

4.18 BRUCE CROSS (18)

The speaker is a resident of Bushells Ridge Road and claimed the coal "stack" is 400 m from his home.

The speaker stated that he had concerns in relation to coal dust in his water tank from the Project and asked who would clean them.

The speaker further stated that when particular traffic accidents occur, Tooheys Road is an emergency egress and the Project would render it unavailable.

See **Figure 2** which illustrates this resident's proximity to the Tooheys Road Site. The residence is 851 m north of the Project's product coal stockpile across a ridge. It should also be noted that the M1 Motorway effectively separates the residence from the Tooheys Road site and the coal stockpile.

Section 5.12.5 of RTS2 provides a comprehensive response to the purported issue of dust in water tanks and concludes:

"The predicted dust deposition levels for the Amended Project are an order of magnitude below the relevant criteria. Based on the predicted dust deposition levels and the aforementioned studies, the Project is not expected to give rise to any risks associated with contamination of water collected in rainwater tanks."

Access in relation to Tooheys Road is discussed in **Section 3.12.2**.

4.19 MICHAEL CLARK (19)

The supportive speaker discussed the potential employment opportunities, particularly in relation to engineering. He further discussed the importance of local experience and recent downturn in the mining industry which has affected his colleagues. He further noted that the Project can coexist with the Community.

Noted.

4.20 BRUCE GIBBS – NSW JUSTICES ASSOCIATION (20)

The supportive speaker noted the economic benefits of the Project including the existing financial assistance WACJV has provided to the Association which has increased the number of available JPs in the Wyong region.

Noted.

4.21 TONY SAGER (21)

The supportive speaker discussed the potential economic and employment benefits of the project which provides small businesses confidence to employ additional personnel.

Noted.

4.22 WAYNE DIEMAR – HUNTER NET (22)

The supportive speaker discussed the opportunity for employment and for business from the approval of the Project. He also discussed WACJV targets for local employment and Indigenous employment.

Noted.

4.23 MARK JONES (23)

The supportive presenter discussed the need for ongoing social involvement with the community and local job creation and described the benefits of mining to areas such as Mudgee and QLD.

Noted.

4.24 BRUCE MCDONALD AM – MCDONALD GROUP (24)

The supportive presenter described his opinion that the Project and DLALC developments could operate with “no real impediment”. He provided additional options of alternate uses of adjacent lands in line with the Terms of Reference item 1e.

Noted.

4.25 ANDREW THOMSON (25)

The speaker is an adjacent resident who stated he had been misled in relation to the Project. He noted he is unsure of the subsidence in his area and has concerns in relation to water pollution and coal dust impacts.

The presenter was further concerned in relation to global warming; and that WACJV employees do not live in the area.

The Thomson property is represented as property 243 in Table 4 and Figure 7 of the EIS. The property is located above the longwall mine panel layout; and 890 m from the Buttonderry site, 4,450 m from the Tooheys Road site and 8,500 m from the Train Load out bin.

Air quality criteria due to impacts from the Project are not predicted to be exceeded at property 243 (which is located west of the M1 Motorway) and are discussed in detail in **Section 4.32**.

Water impacts are discussed in **Sections 3.10** and **4.1.10**.

Climate change is discussed in detail in Section 9.4 of the Amendment Document’s revised Air Quality and Greenhouse Gas Assessment (AQGGA).

WACJV’s employment targets for local employees is discussed in **Section 4.30**.

4.26 RON SOKOLOWSKI (26)

This speaker did not attend.

4.27 MATT HARDING – MHARDING EARTHMOVING AND MAINTENANCE (27)

This positive speaker discussed economic and work opportunities for local business owners such as his own, should the Project be approved.

Noted.

4.28 STUART DURIE – CENTRAL COAST GROUP TRAINING (28)

This positive speaker discussed the need for local economic and work opportunities, particularly youth. He further noted that WACJV has sponsored 24 participants of the apprenticeships program.

Noted.

4.29 ROBERT STACY (29)

The presenter is a small farm owner in the Yarramalong Valley who has provided two formal submissions in 2013 and 2016 and received no acknowledgement of receipt.

He further expressed concern over the Project in relation to risks to contamination of the water supply and aquifer and provision of potential water to affected residents.

Responses to the 2013 and 2016 submissions from the presenter are provided in the RTS1 and RTS2.

A detailed response to potential impacts to water are presented in **Section 4.1**.

4.30 IAN HAYES (30)

As a Blue Haven resident who moved to the area 5 years ago, the Presenter was not aware of the Project until August 2016. The speaker has concerns in relation the “poisoning” of Spring Creek by the Project and his family swimming and fishing in it.

The presenter was also concerned in relation to air quality impacts to the two daycare centres and a high school several kilometres away.

The presenter stated the coal loader was 200-300 m from him with a direct line of sight.

The presenter was further concerned that the jobs would not go to local people, rather to qualified miners from QLD and WA.

See **Section 4.32** for a detailed response to air quality impacts from the Amendment.

See response to Spring Creek impacts from the Amendment is included at **Section 3.10**.

A newsletter was distributed to 12,000 people including Blue Haven residents. Amendment Consultation is detailed in **Appendix N**.

The closest residence at Blue Haven is over 230 m from the transfer station and is separated by the intervening Motorway Link Road and its elevated topographic profile.

The coal loading bin is located adjacent the existing Main Northern Rail Line, over 1,080 m from the closest residence at Blue Haven and also across the Motorway Link Road. Both are illustrated on **Figure 3** (reproduced and amended from the Amendment Document).

The Project has an employment goal of 70% local employees and 10% Indigenous employees and will endeavour to meet these targets.

4.31 GRANT ROACH – HARDY BROTHERS MINING AND CIVIL (31)

The supportive presenter is a local business owner who discussed recent difficulties in securing local work and having to travel significant distances to work on coal projects. The speakers discussed the need for local jobs and need for zero harm.

Noted.

4.32 JAMES WHELAN – ENVIRONMENTAL JUSTICE AUSTRALIA (UNLISTED)

Judith Cox prepared the AQGGAA. She holds a BEng (Hons) Engineering Environmental Studies and has almost 20 years of experience as an air quality consultant. She has extensive experience in emission inventory development, analysis of air pollutant and meteorological monitoring data, and dispersion modelling.

Judith has significant experience in the preparation of emission inventories for use in air quality impact assessments for the extraction industry and has been extensively involved in the provision of advice on the practicality of dust abatement measures for coal mines in the Hunter Valley, including ongoing community consultation.

Additionally, between 2011 and 2014 Judith was Project Manager for an Australian Coal Association Research Program (ACARP) grant (C20023) which introduced to Australia the concept of mobile sampling which can be used to measure dust emissions in real time from unsealed road surfaces.

Judith's assessment work for the AQGGIA builds upon previous work undertaken for the Project by Dr Nigel Holmes and Dr Kerry Holmes of Holmes Air Sciences.

James Whelan's PhD "investigated how community members participated in environmental activism and how they learnt to exercise political power" (Griffith University, undated). As far as can be publicly ascertained, he does not hold any Science or Engineering Degree and is not an air quality modeller and as such cannot be regarded as an "expert" in air quality matters as purported in the media. He holds the following tertiary qualifications: PhD (Griffith University), M.Ed (UNE), Dip Ed (QUT) and B.A. (UQ) (The Conversation, undated).

4.32.1 EPA Air Quality Monitoring

The NSW EPA conducts no independent air pollution monitoring in the Central Coast region, despite the region being home to two of the state's largest coal-fired power stations.

Pacific Environment notes that this statement is incorrect. Ambient air quality in NSW is monitored by NSW Office of Environment and Heritage (OEH) at several locations in the Newcastle/Central Coast area:

- Wyong;
- Beresfield;
- Newcastle;
- Wallsend;
- Carrington; and

- Mayfield Stockton.

4.32.2 Wallarah 2 Incomplete Data

The Wallarah (sic) 2 EIS 'Air Quality and Greenhouse Emissions' report refers to air pollution monitoring conducted in the region by Wyong Areas Coal Joint Venture since 1996. Coarse particle PM_{10} concentrations have been monitored every 6 days, except from 2003 to late 2006 (p.17). The EIS notes that the data is incomplete, with only 66-79% of data available and that there is no continuous PM_{10} data for the area (p.39). Even the limited company monitoring data is not available to stakeholders from the project website or upon request from the company.

The submission received by NSW EPA made no comment regarding the validity of the assumptions regarding background air quality levels, suggesting that the EPA are satisfied that the data are representative.

Notwithstanding this, the validity of the data were discussed at Section 5.13.1 of the RTS2 and showed that the assumed background levels using the data from the HVAS located closer to the site were higher than the averages from the closest OEH monitor at Wyong, and therefore considered conservative.

4.32.3 Unreliability of Self-Monitoring

Elsewhere in NSW, self-monitoring of air pollution by coal mining companies has been found to be entirely unreliable (e.g. SMH 24/8/16 'Wildly in Error' <http://www.smh.com.au/environment/wildly-in-error-dodgy-coal-pollution-data-fans-demand-for-independent-control-20160818-ggvhat>).

It is not possible to directly comment on the contents of the media article cited as the author does not have access to the data to which this article refers and therefore is unable to verify its' content.

Regardless, should the amended Project be approved, the Proponent will comply with the air quality monitoring requirements within the Conditions of Consent. Relevant monitoring undertaken by the Proponent would be made publicly available through monitoring reports and Annual Reviews.

Such reports would also be provided to relevant government agencies, with the content of the reports/monitoring results and overall performance against the development consent, management plan, EPLs, mining lease and other documents and approvals subject to review by the Department and by independent environmental audits at a frequency determined by the approval body.

4.32.4 EIS Modelling Speculative

Without independent data to identify baseline pollution concentrations (i.e. pre coal mine), it is not possible to reliably assess the cumulative air pollution concentrations during the mine's construction or operation. The modelling conducted for this EIS is highly speculative.

As detailed in the response above to Comment 3, the data used to determine baseline conditions are considered representative and have been subject to monitoring for the majority of the time since the late 1990s.

4.32.5 PM10 Emissions

The project proponents estimate that PM_{10} emissions during construction will represent no more than 48% - less than half - the anticipated emissions during operation (Air Quality and Greenhouse Gas Assessment p.v). During construction, the project will cause 27,669kg of PM_{10} and during operation it will cause 57.212kg per annum (p.26-27). This estimate appears without basis and contrary to observations of coal mine operation elsewhere in NSW. Removal, transportation and mounding of over-burden are intensely polluting activities.

Pacific Environment notes that this statement is false.

The AQGGAA details the assumed construction activities at Table 6.1, and as detailed at Section 6.11.1 of the RTS2, as the Project is an underground mining operation with no coal washing proposed, the emission inventories would be expected to be different from other coal mining operations, many of which are open cut mining operations with far more extensive coal handling and preparation activities.

4.32.6 Coal Mining Largest Coarse Particulate Emitter

Coal mining is the largest single source of coarse particle pollution (PM_{10}) in NSW. Coal stockpiles, conveyors, loading and unloading facilities including load-out facilities are all major sources of particle pollution. Diesel vehicles and engines required for the proposed mining operation are a major source of fine and ultrafine particles ($PM_{2.5}$ and PM_1) which can be deeply inhaled and contribute to premature death and a range of cardiovascular and respiratory ailments. Diesel emissions have been listed by the World Health Organisation as carcinogens.

As stated at Section 6.11.1 of the RTS2, particulate releases from underground mining activities contain a smaller fraction of fine particulate and a higher proportion of relatively inert (crustal) coarse material.

The modelling predictions presented in the AQGGAA indicate that the predicted incremental PM_{10} concentrations at the closest residential receivers will be below the relevant criteria.

Diesel emissions were also considered in the AQGGAA. The AQGGAA predicted that $PM_{2.5}$ concentrations resulting from the Project will be within the relevant criteria. It should be noted that diesel use at the Project will be limited to underground transport vehicles and stockpile management plant.

4.32.7 Flaring Impacts

The proposed mining operation entails continuous flaring (burning) of coal seam methane. The flaring process will create elevated concentrations of oxides of nitrogen (NOx) in the vicinity. According to the National Pollutant Inventory, "low levels of oxides of nitrogen can irritate eyes, nose, throat and lungs, possibly leading to coughing, shortness of breath, tiredness and nausea. Exposure can also result in a build up of fluid in the lungs for 1-2 days after exposure. Breathing high levels of oxides of nitrogen can cause rapid burning, spasms and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation of tissues, a build up of fluid in the lungs, and maybe even death" (<http://www.npi.gov.au/resource/oxides-nitrogen-O>).

As stated at Section 6.11.1 of the RTS2, emissions of NOx were assessed in the Air Quality and Greenhouse Gas Assessment (Appendix L of the EIS) for the Original Project. These impacts are not affected by the Amendment.

As detailed in Section 3.5.8 of RTS1, the proposed gas capture and management system will involve pre-drainage (to reduce the methane content of the coal seam prior to mining) and post drainage (to extract gas left behind in the goaf after mining).

Gas drainage will occur via in-seam and surface to in-seam drainage holes (pending access to private land). A proportion of the methane will be released via the mine ventilation shaft (in very low concentrations).

Most of the gas will be flared in an enclosed structure. However, there may be free venting of methane under emergency conditions that prevent the operation of the flare. Venting of methane does not present a risk to health as a pollutant in ambient air, and would be controlled and managed in accordance with the AQMP to be prepared for the Project.

4.32.8 Blue Haven Impacts

The proposed mine site is less than 4 kilometres from a densely populated suburban area. During winter months, the prevailing wind blows from the proposed mine site towards Blue Haven.

As stated at Section 6.11.1 of the RTS2, and detailed in Section 4.1.2 of the AQGGAA, a full year of empirical meteorological data (8,760 hours) was relied upon for the dispersion modelling undertaken. This takes account of all wind directions experienced and as shown in Section 7 of the AQGGAA, all predicted suspended particulate concentrations at the sensitive receptors will comply with the relevant criteria.

4.32.9 Incorrect Criteria Used in Assessment

The EIS uses the wrong standards to interpret maximum pollution levels. Australia's nine environment ministers, including NSW Environment Minister Mark Speakman, committed to a new annual standard for PM10 (coarse particle) concentrations in December 2015. This stricter standard of 25 micrograms per cubic metre is not used in EIS (pages 8, 9). Instead, the project proponents refer to a NSW DEC guideline of 30ug/m³.

The new national standards PM_{2.5} (fine particles) will become somewhat stricter in 2025, shifting to a 24 hour average of 20ug/m³ and annual average of 7ug/m³. This is not acknowledged in the EIS.

This statement is incorrect.

As stated at Section 6.11.1 of the RTS2, the dispersion modelling has been completed in accordance with NSW DEC (2005) “*Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales*” (Approved Methods) and assessed against the impact assessment criteria for TSP, PM₁₀ and dust deposition contained in that document.

On 20 January 2017, NSW EPA released an update to the Approved Methods (EPA, 2017) to make the cumulative impact assessment criteria for PM₁₀ and PM_{2.5} equivalent to the Ambient-Air NEPM. There was no change to the impact assessment criterion for 24-hour average PM₁₀.

The impact assessment criterion for annual average PM₁₀ has been updated from 30µg/m³ to 25 µg/m³, however, the impact assessment criteria for annual average PM_{2.5} (8 µg/m³) and 24-hour average PM_{2.5} (25 µg/m³) now included in the updated Approved Methods are equivalent to the Ambient-Air NEPM as assessed for the amended Project.

It is noted that NSW EPA has stated that the updated Approved Methods only apply to any planning application submitted on or after the gazettal date of the updated Approved Methods (20 January 2017³), and as such do not apply to the amended Project. Notwithstanding the non-applicability of the new impact assessment criterion for annual average PM₁₀ concentrations, the predictions for privately-owned residences/receivers in the AQGGAA (Table 7.2) demonstrate the amended Project would easily satisfy the new annual average PM₁₀ criterion with a maximum cumulative annual average PM₁₀ concentration of 19.1 µg/m³.

With respect to annual average PM_{2.5} concentrations, the Ambient – Air NEPM sets a long-term (10-year) target for annual average of 7 µg/m³ and a 24-hour average of 20 µg/m³. These are not assessment criteria. It is also important to note that the Ambient-Air NEPM is a national monitoring and reporting protocol and is not designed for use in the assessment of SSD Development Applications.

4.32.10 Background PM10 Monitoring

Annual PM₁₀ concentrations in the area have exceeded the state and national standards in recent years (p.17). Annual average PM₁₀ concentration reached 38ug/m³ in 2002 and 31ug/m³ in 2006 - well above the new national standard of 25ug/m³. At both reference monitoring sites, 24 hour average PM₁₀ concentrations have exceeded the national standard of 50ug/m³ (p18). The mine is predicted to increase PM₁₀ concentrations by as much as 29.5ug/m³ (p.32).

As detailed in Section 4.2.1 of the AQGGAA (the page numbers of which are referred to in the submission above), the 2002 annual average PM_{10} of $38 \mu\text{g}/\text{m}^3$ was based on data for only two months of the year (November and December). Both these months were heavily impacted by bushfires, and as less than a year of data were available, it is not valid to compare them to the assessment criterion.

Section 4.2.1 of the AQGGAA also discusses the exceedance in 2006 ($31 \mu\text{g}/\text{m}^3$) and explains that per information from DECC (now EPA) that a large number of nearby regions experienced an increase in the number of exceedances of the 24-hour average PM_{10} criterion, which have been attributed to bushfires.

As discussed in the response to Comment 9 (refer Section 4.32.9), the correct impact assessment criterion for annual average PM_{10} is $30 \mu\text{g}/\text{m}^3$, not $25 \mu\text{g}/\text{m}^3$.

Experience shows that exceedances of the 24-hour average PM_{10} criterion are typically the result of regional and beyond events such as bushfires and dust storms from a local concentration of domestic/wood burning heaters.

Whilst the **maximum** 24-hour average PM_{10} is $29.5 \mu\text{g}/\text{m}^3$ at P11, it is noted that P11 is the closest receptor to the proposed operations and there are 364 days when the predicted 24-hour average PM_{10} concentration at this location is below this. This is demonstrated in the cumulative assessment (see Figure 7.7 of the AQGGAA) that clearly shows when incorporating existing background levels, that the Project is unlikely to result in any additional exceedances of relevant impact assessment criteria at neighbouring receivers.

4.32.11 PM_{2.5} Monitoring

Fine particle pollution in the vicinity is already at the national standard. There has been no fine particle ($PM_{2.5}$) monitoring conducted within 40km of the proposed mine site. With no data to back up their methodology Pacific Environment make the extraordinary 'guestimate' that background (no mine) $PM_{2.5}$ concentrations in the region are already $7\mu\text{g}/\text{m}^3$ (p.22).... This is the long-term (2025) standard set by ministers in December 2015.

There is no safe level of exposure to fine particle pollution and adverse health impacts are caused at levels well below $7\mu\text{g}/\text{m}^3$.

This statement is false.

As stated in Section 4.2.3 of the AQGGAA, the $PM_{2.5}$ concentrations were calculated based on ratio of $PM_{2.5}$ to PM_{10} at the closest OEH air quality monitoring station that measures both located at Beresfield. In the absence of site-specific data, this is an accepted approach. The data are freely available for download from the OEH website.

As presented in Table 7.2 of the AQGGAA, all receptors are predicted to comply with the relevant assessment annual average $PM_{2.5}$ criterion of $8 \mu\text{g}/\text{m}^3$.

4.32.12 Best Practice Control Measures

The EIS recommends a range of coal dust control measures described as Best Practice Management (BPM), citing a Katestone report published by Donnelly et al 2011. The implementation of many of these measures is still not going to keep particle concentrations below the national standards.

As stated at Section 6.11.1 of the RTS2, full details of dust management measures will be provided in an Air Quality Management Plan (AQMP) which the proponent will prepare in accordance with the conditions of the development consent for the Project. The AQMP will describe all best practice dust control and monitoring measures to be implemented, including the measures required by the EPA.

All measures will be quantifiable, auditable, measurable and enforceable. The AQMP will include Key Performance Indicators for determining compliance with the plan and conditions of development consent.

The dispersion modelling undertaken for the AQGGAA indicates that when the proposed dust controls are implemented, the dust concentrations at private residences are predicted to be within the relevant criteria.

4.32.13 Covering Coal Wagons

Coal wagons will not be covered. The Katestone 'Best Practice' report identifies covering coal wagons as best practice, but this is not proposed. Despite noting that recent studies including the Chief Scientist's report have found that unloaded coal wagons are a more significant source of particle pollution than loaded wagons, Kores propose to simply spray and profile wagons. Citizen science conducted by community groups in Newcastle has identified significant ongoing coal dust and associated coal loss and fugitive pollution despite spraying and profiling coal wagons that use the Hunter coal corridor.

This statement is incorrect. As discussed in Section 5.12.4 of the RTS2, since the completion of the AQGGAA, the NSW Chief Scientist has released the “*Final Report on the Independent Review of Rail Coal Dust Emissions Management Practices in the NSW Coal Chain*” (NSW Government, 2016).

The report concluded that it is not possible to recommend any additional mitigation measures as there is currently insufficient knowledge and data about the amount and distribution of coal emissions in the coal rail corridor.

As explained in Section 8 of the AQGGAA, TSP emissions from the train movements associated with the Project would account for less than 0.5% of total Project emissions and as a result, any changes in ground level concentrations due to this source would be extremely immaterial.

It should also be noted that covering of coal wagons in NSW is not common practice and that given that effectiveness of the proposed mitigation measures, the WACJV considers expenditure on wagon covers to be beyond the threshold of diminishing returns.

4.33 BARRIE TOEPFER (32)

This speaker did not attend.

4.34 PAUL DOUGHLES (33)

This speaker did not attend.

4.35 JOANNE CROSS (34) (RELATED TO BRUCE CROSS)

The presenter indicated she lives 400 m from the coal mine. Asked how the Project would replace tank water every 24 hours. The presenter further expressed concern in relation to potential impacts to water from the Project.

The presenter further referenced impacts from the 2010 EIS in relation to ecology and stated that it excluded species in a 2016 study for Lot 203 Tooheys Road DA recently submitted to Council.

The 2010 ecological assessment has been superseded by the 2013 and 2016 assessments as presented in the EIS and Amendment Documents, respectively. The resident's proximity to the Project and queries in relation to tank water and water impacts are responded to in **Section 4.18** which is the same property.

4.36 DOUG WILLIAMSON (35)

The presenter expressed concern in relation to subsidence impacts to the Wyong River and DLALC land Access.

The speaker stated the economic assessment ignores crowding out of other sectors in the region and did not include a valuation on the health effects of the Project.

Claimed air quality costs estimated at \$1.5 million per person mortality and \$8,000 per hospital visit which totals \$87.5 million.

The presenter further expressed concern around uranium in drinking water.

See responses to these issues in **Section 4.1.9, 4.2 and 4.11**. The Project will not produce Uranium and therefore has no capacity to cause its collection in drinking water.

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For

HANSEN BAILEY



Dianne Munro
Principal Environmental Consultant



James Bailey
Director

5 ABBREVIATIONS

Term	Definition
Amendment	Change to Project sought and accepted under clause 55 of the EP&A Act
AQGGA	Air Quality Greenhouse Gas Assessment
AQMP	Air Quality Management Plan
APZ	Asset Protection Zone
Approved Methods	<i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2005)</i>
BMP	Biodiversity Management Plan
CCC	Central Coast Council
DA	Development Application
dBA	Decibels
DLALC	Darkinjung Local Aboriginal Land Council
DP&E	Department of Planning and Environment (formerly DP&I)
DPI-Water	Department of Primary Industries - Water
EARs	Environmental Assessment Requirements
EA Report	DP&E's EA Report (Feb 2014)
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
ESD	Ecologically Sustainable Development
GWCWA	Gosford-Wyong Councils Water Authority
ha	Hectare
IESC	Independent Environmental Scientific Committee
LEC	NSW Land and Environment Court
LGA	Local Government Area
MSD	Mine Subsidence District
Mtpa	Million tonnes per annum
OEH	Office of Environment and Heritage
PAC1	Planning Assessment Commission held 2014
PAC2	PAC held 2017
PM	Particulate Matter
Project	Wallarah 2 Coal Project
RTS1	<i>Wallarah 2 Coal Project Response to Submissions</i>
RTS2	<i>Wallarah 2 Coal Project Amendment Response to Submissions</i>
SIL	Subsidence Impact Limit
SSD	State Significant Development
TARP	Trigger Action Response Plan
VLAMP	<i>Voluntary Land Acquisition and Mitigation Policy</i>
WACJV	Wyong Areas Coal Joint Venture
Updated Approved Methods	<i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2016)</i>

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Appendix A
Public Hearing Speakers List

Planning Assessment Commission Hearing

Wallarrah 2 Coal Project, Wyong

Date & Time: 9:00am, Wednesday 5 April 2017

Place: Wyong Golf Club, 319 Pacific Hwy, Wyong NSW 2259

Hearing Schedule	
9:00 am	Opening Statement from the Chair – Robyn Kruk AM
Registered Speakers:	<ol style="list-style-type: none"> 1. Tanya Obrien Unit Manager Development Assessments & Bileen Nel Senior Manager Water & Sewer (Central Coast Council) 2. Sean Gordon (Darkinjung Aboriginal Land Council) 3. Martin Hodgson (Hodgson Quarries & Plant) 4. Laurie Eyes 5. Kelia Keogh 6. Mathew Stidolph 7. Lynne Hamilton 8. Craig Dunshea (CS Trade PTY LTD) 9. Ken Greenwald 10. Alan Hayes (Australian Coal Alliance) 11. Roderick Campbell (The Australia Institute) 12. Paul Robert Burton (Our Land Our Water Our Future) 13. Abigail Boyd (Central Coast Greens)
11:15am Break	
<i>Continues Over Page</i>	

Please note

Speakers are allocated 5 minutes for an individual, or 15 minutes for groups. The hearing is open to the public, and as such not all parties present will speak. The Chair reserves the right to allow additional time if further technical material need to be provided.

The Commission has copies of all written submissions made to the Department of Planning and Environment (DP&E) on the proposal in response to its exhibition, so it is not necessary to restate those views. The purpose of this hearing is to hear views on the assessment report prepared by the DP&E with recommendation to approve the proposal subject to conditions, before the Commission makes a decision on the application.

No audio recording is permitted.

The assessment report and recommended conditions are available on the PAC website at www.pac.nsw.gov.au. If you have registered to speak but your name is not on the list, or if you have any other questions, please contact Aaron Brown or Philippa Vale on 9383 2100 or (pac@pac.nsw.gov.au).

14. Steve Philips (Lock The Gate Alliance)
15. Mike Campbell (Community Environment Network)
16. Robert Monteath (Newcastle Progress Association)
17. Tina West
18. Bruce Cross
19. Michael Clark (HATCH)
20. Bruce Gibbs (Pathfinders Ltd)
21. Tony Sager
22. Wayne Diemar (Hunter Net)
23. Mark Jones
24. Bruce McDonald AM (The McDonald Group)
25. Andrew Thomson
26. Ronald E Sokolowski (Did not speak but submitted presentation)
27. Matthew Harding
28. Stuart Durie (Central Coast Group Training a Community)
29. Robert Stacy
30. Ian Hayes
31. Grant Roach (Hardy Brothers Mining)
32. James Whelan (Environmental Justic Australia)
<i>Continues Over Page</i>

Please note

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33. Paul Doughles (Did not attend)
34. Joanne Cross
35. Doug Williamson
END

Please note

Speakers are allocated 5 minutes for an individual, or 15 minutes for groups. The hearing is open to the public, and as such not all parties present will speak. The Chair reserves the right to allow additional time if further technical material need to be provided.

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Appendix B
Wyong Coal Final Offer



Final Offer 10 April 2015

The Project cannot sustain a significant additional cost burden of a royalty equivalent of the value of the coal transported across the DLALC's land, to be calculated in the same manner as the State royalty on coal.

Instead Wyong Coal offers a package of benefits with an assessed value of approximately \$215M.

This package is in exchange for having the right to construct and use a rail spur on approximately 15ha of DLALC's land. The market value of this land is estimated by Wyong Coal as being within the range of \$15,000 - \$20,000 per hectare. In other words, Wyong Coal is offering a package of benefits with an assessed value of approximately \$215M, for the use of land which has a value within the range of \$225,000 to \$300,000.

The details of Wyong Coal's package are set out below.

1. Land compensation - In return for accessing DLALC land, Wyong Coal will:
 - (a) Transfer tenure of its Tuggerah commercial site (rateable value \$6m) to DLALC upon grant of a mining lease for the Project;
 - (b) Consider a leaseback arrangement for the facility from DLALC at a market rental;
 - (c) Transfer ownership of the Tooheys Road site (rateable value \$2m and approximate area 210 ha) to DLALC at the end of mining operations;
 - (d) Transfer ownership at DLALC's election, of all or any part of the mine surface infrastructure situated on the Tooheys Road site;
 - (e) Any infrastructure not transferred to DLALC to be removed and the area of the Tooheys Road site to be rehabilitated by Wyong Coal.
2. Social benefits – Guaranteed business opportunities for the indigenous community, inclusive of training and education, detailed below, totalling \$5 – \$6m per annum from Wyong Coal with additional benefit of supported regional expansion potential.
3. Minimising land impact - as requested by DLALC with a specific road easement for access to the CASAR Motorsport facility and areas north of the railway spur.

4. Access to Wyong Coal's enhancements:

- (a) DLALC has requested the right to take eventual possession of the rail spur on the DLALC land. This would be a rail facility without any turning or passing capability if it did not include the western most portion of the spur, which will be located on Wyong Coal's land. By offering the ability to take possession of the full rail spur and loop, the rail facility would be fully useable by the DLALC.
- (b) Access to power, water, sewage infrastructure, along with roads and buildings, potentially enhances the DLALC's ability to develop the area.

5. Business opportunities, training and education:

Business Opportunities during mine operation

- (a) Wyong Coal has identified up to \$6M pa of business opportunities that could be contracted to appropriately established indigenous companies for the purpose of conducting surface work, which includes coal stockpiles management, coal loading work, conveyor maintenance, rail maintenance, and general service functions around the mine's surface facilities. If these capabilities are developed, there will be potential for business growth opportunities beyond the Project, which would support business expansion and post mining business continuity.
- (b) DLALC does not need to reallocate its funds to establish these businesses. Wyong Coal has committed to pay for:
 - (i) Joint visits to investigate business establishment. These visits would comprise:
 - (A) operating mine sites to understand the types of business opportunities that will be available to indigenous companies during the construction and operation of the Project; and
 - (B) existing successful indigenous enterprises such as Ngarda Civil & Mining and the Indigenous Construction Resource Group.
 - (ii) Business establishment:
 - (A) Wyong Coal to facilitate appropriate advice and business coaching toward the establishment of indigenous companies that could provide services to the Project;
 - (B) Wyong Coal to cover the reasonable fees associated with consultants and advisors who are engaged in assisting in the establishment of the new businesses;
 - (C) Wyong Coal to cover the fees and charges associated with business registration or company incorporation;
 - (D) Wyong Coal to cover recruitment and training costs of operators, administrators and management; and
 - (E) Wyong Coal to provide an initial amount of seed capital to start-up businesses and fund initial operating expenses. This could relate to the cost of insurance, computers and administrative systems and leasing of equipment and the like. The initial amount would be

reimbursed later to Wyong Coal from the businesses' subsequent revenue.

- (c) Wyong Coal will commit to renewal options being contained in contracts with indigenous companies so that contract extension can be automatic upon achievement of nominated performance criteria. In this way, any start-up business will control its ability to prosper.

Employment and business opportunities during the construction phase

- (a) Wyong Coal will require principal contractors who are selected to undertake construction activities on the Project, to develop an indigenous employment, training and business initiative plan which includes:
 - (i) the engagement of a minimum specified number or percentage of indigenous employees;
 - (ii) the engagement of indigenous companies that have been established to provide ongoing services to Wyong Coal as prescribed sub-contractors.
- (b) Any existing indigenous companies nominated by DLALC, will be considered by Wyong Coal for identification as prescribed sub-contractors.

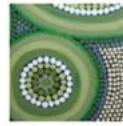
Youth and Adult Education

- (a) Wyong Coal will pay up to \$50,000 pa during the life of the Project to support Aboriginal youth education and cadetships.
- (b) Wyong Coal will pay up to \$120,000 pa during the life of the Project for indigenous adult training and development:
 - (i) Wyong Coal to engage a registered training organisation to facilitate the selection of indigenous participants and manage their training and development;
 - (ii) focus the initial training strategy on the development of operating competencies and core business management skills to support indigenous business enterprises that may be established to service aspects of the construction and operation of the Project;
 - (iii) Wyong Coal in consultation with DLALC, will work towards the establishment of an indigenous internship program.

Total Value to DLALC of Wyong Coal's final offer (excluding contracting during construction):

Business Opportunities 40 years @ \$5Mpa	\$200,000,000
Land value (rateable)	\$8,000,000
Youth Education 45 years @ \$50kpa	\$2,250,000
Apprenticeships 45 years @ \$120kpa	<u>\$5,400,000</u>
Total	<u>\$215,650,000</u>

Appendix C
DLALC Final Offer



Local Aboriginal Land Council
DARKINJUNG

168 Pacific Highway Watanobbi NSW
2259

PO Box 401 Wyong NSW 2259

Phone (02) 4351 2930

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ABN 99 583 297 167

Email darkinjung@dlalc.org.au

17 April 2015

Mr. Peter Allomby
Managing Director
Wallarrah 2 Coal Project
25 Bryant Drive
Tuggerah NSW 2259

Dear Peter,

Wallarrah 2 Coal Project (W2CP): SSD4974

Mediation Final Offer

In accordance with the directions made at the mediation on 10 April I write to set out Darkinjung's final offer to Wyong Coal (WC) in respect of the terms for access to its land at Bushells Ridge.

Before doing so, I make the following comments on WC's final offer.

Darkinjung appreciates that WC has endeavoured to present in good faith what it believes is an attractive offer. From Darkinjung's perspective, however, the offer does not address Darkinjung's principal needs or concerns. In particular:

- Darkinjung has its own economic development strategy as outlined in its Community Land & Business Plan¹, made pursuant to the NSW Aboriginal Land Rights Act 1983. That plan is heavily focused on Darkinjung making the most of its existing land assets to develop businesses and provide benefits to Aboriginal people on the Central Coast. The proposal by WC would involve a very substantial diversion of focus from that plan if the purported benefits of the WC offer were to be achieved.
- 93% of the WC offer depends entirely on Darkinjung establishing businesses which do not presently exist and which, for the most part would specialise in supplying services to the only proposed new coal mine in the Darkinjung area. The WC offer takes no real account of the likelihood of this occurring nor the risks which Darkinjung would be required to take on to make it effective.
- The WC offer contains no monetary compensation for the use of Darkinjung's land.

¹ <http://www.darkinjung.com.au/ContentFiles/Darkinjung/Documents/2012-2015%20Community%20Land%20and%20Business%20Plan%20FINAL.%20230811.pdf>

- The numbers used in WC's offer in respect of the amount of land required, the value of the WC offer and the value of Darkinjung's land or the financial impact of the proposal on Darkinjung are not accepted and in some cases are very seriously inflated, understated or distorted. For example, the land applied for under the mining leases is over to 2.5 times the amount stated in the WC offer as required for the rail line, without taking account of the sterilising effect it will have on parts of the balance of Darkinjung's land. The financial impact on Darkinjung's land of the rail spur has been assessed as between 18 and 40 times the figure suggested in WC's final offer, a figure more closely reflected in the value which CASAR has placed on acquiring its interest.
- Darkinjung seeks an outcome which is in line with international standards for resource companies dealing with Indigenous people and their lands. The offer set out in this letter is well within those standards for the reasons previously advised.
- Darkinjung would hope that WC would adopt best practice policies in relation to Indigenous employment and contracting regardless of whether Darkinjung's land was affected.

Darkinjung's Offer to WC

The terms on which Darkinjung is prepared to request that New South Wales Aboriginal Land Council (NSWALC) provide its written consent to the lodgment of WC's development application for the Wallarah 2 Coal Project (W2CP) are outlined below:

1. Support for lodgement of development application
 - a. On the basis of Darkinjung and WC entering a land access agreement that reflects the terms of this offer, Darkinjung shall request NSWALC to advise the Minister for Planning & Infrastructure that NSWALC agrees to the lodgement of WC's development application for the W2CP.
2. Waiver of right to compensation
 - a. Darkinjung shall waive all rights to compensation for the granting of a mining lease for rail infrastructure over Darkinjung's land, other than as provided under the land access agreement.
3. Condition Precedent – NSWALC consent to DA
 - a. All obligations are conditional on NSWALC giving its consent to the lodgement of the development application for the W2C.

4. Sign on fee

- a. WC is to pay Darkinjung \$1,000,000.00 within 7 days of the date on which NSWALC advises the Minister for Planning & Environment and WC that it consents to the lodgement of the W2CP development application.

5. Annual fee pending first coal

- a. WC is to pay Darkinjung \$1,000,000.00 per annum (indexed) from the first anniversary of the Agreement's execution up to the date on which coal produced from the mine is transported on the rail spur (the first coal date). Payment for the year in which the first coal date occurs shall be calculated pro-rata.

6. Access fee per tonne of coal transported after first coal

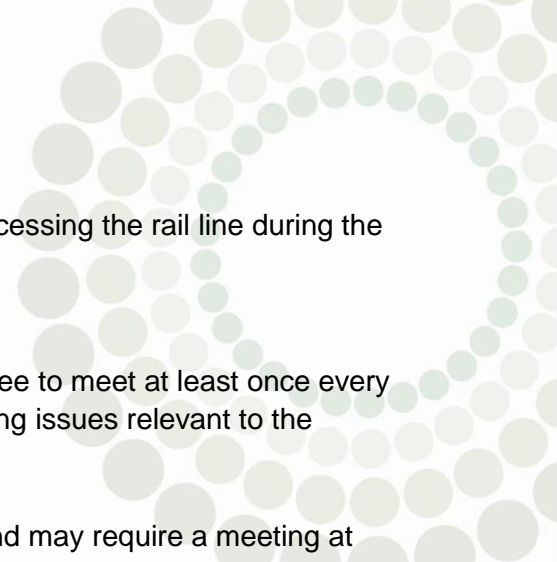
- a. After the first coal date and subject to (b) below, the access fee will be calculated as 1% of the FOB Newcastle value for every tonne of coal transported across Darkinjung's land and paid on a quarterly basis.
- b. WC is to pay Darkinjung a minimum access fee of \$2,000,000 (indexed) per annum (in quarterly instalments) after the first coal date, regardless of the actual annual volume of coal transported, with any necessary adjustments determined at the annual anniversary.

7. Access to records and auditing

- a. Darkinjung is to have full and timely access to all records necessary to verify coal shipments and payments relevant to the calculation of credited social benefit payments.

8. Alignment and width of rail corridor and access to the mining lease area

- a. Darkinjung requires that the width of the rail corridor across its land be kept to the minimum necessary (assuming around 20m) and that the alignment be agreed between the parties so as to ensure that Darkinjung's concurrent use of its retained land can be maximised.
- b. To avoid sterilisation of Darkinjung's land and to facilitate proposed uses such as the CASAR Motorsport facility, Darkinjung will require WC at its cost to provide permanent access for itself and others across the rail corridor at agreed points.
- c. The mechanism by which this is best achieved needs to be discussed.

- 
- d. Darkinjung is interested in having the option of accessing the rail line during the mine's life for its own industrial purposes.
9. Environmental monitoring and compliance
- b. WC and Darkinjung shall establish a joint committee to meet at least once every 6 months to consider any environmental or planning issues relevant to the operation of the mine.
 - c. The committee shall have equal representation and may require a meeting at which the manager for the mine and the CEO of Darkinjung is present.
10. Decommissioning of mine and infrastructure
- a. Upon the decommissioning of the mine, Darkinjung may elect to have WC transfer ownership of all or any part of mine infrastructure situated on Darkinjung land to Darkinjung or its nominee for nominal consideration.
 - b. Any infrastructure not transferred to Darkinjung or its nominee shall be removed and the area rehabilitated in accordance with the conditions of any development consent or mining lease.
 - c. WC shall assist Darkinjung, including by providing access to relevant information, in assessing whether it wishes to take ownership of the infrastructure.
11. Scope of agreement and assignment or novation
- a. Any conditions of any mining lease or development consent must be consistent with the terms of any access agreement reached between Darkinjung and WC. If there is any inconsistency between the terms of any access agreement and the conditions of any mining lease or development consent, WC shall be required to surrender its rights to the mining lease or the development consent.
 - b. WC agrees that irrespective of any other right it may hold or acquire, it shall not transport coal across Darkinjung's land other than in accordance with the terms of the land access agreement.
 - c. WC agrees that it shall not dispose of any interest which it holds in any mining lease or development consent connected with the W2CP without first securing the incoming party's agreement in favour of Darkinjung to be bound by the terms of any access agreement.
 - d. Darkinjung will retain rights to seek an injunction or order for the specific performance of any access agreement.

12. Costs of agreement

- a. WC shall meet all of Darkinjung's costs and expenses, including legal, economic and planning advice, in connection with the negotiation, drafting and execution of the land access agreement.

As mentioned above, Darkinjung believes that its offer is consistent with good mining agreements involving Indigenous land reached elsewhere in Australia and is within international standards. Any income received from such an agreement would be used to further the economic and social objectives of the land council and applied in accordance with the strategies set out in our Community Land & Business Plan and in accordance with the NSW Aboriginal Land Rights Act in the service of the Aboriginal people of the Central Coast.

Yours faithfully,



Mr. Sean Gordon
Chief Executive Office
Darkinjung Local Aboriginal Land Council

Appendix D
Wyong Coal Letter to DP&E

2 June 2016

25 Bryant Drive (PO Box 3039)
TUGGERAH NSW 2259

Mr Oliver Holm
Executive Director
Resource Assessments and Compliance
NSW Department of Planning and Environment

Email: info@walarah.com.au
Phone: (02) 4352 7500
Fax: (02) 4352 7599

Dear Sir

Wyong Areas Coal Joint Venture (Wyong Coal)
Walarah 2 Coal Project (Project) Development Application SSD 4974
Amendment of SSD- 4974 (Amendment Application)

Wyong Coal replies to your letter of 13 May 2016 and the enclosed letter dated 22 April 2016 from Chalk & Fitzgerald (C&F Letter), as the lawyers for the Darkinjung Local Aboriginal Land Council (DLALC), to the Minister.

1. Overview

Wyong Coal proposes to apply under cl.55 of the *Environmental Planning and Assessment Regulation 2000* (NSW) (EPA Regs) for the variation or amendment of SSD 4974 to change the coal transport arrangement for SSD 4974. The proposed changes ensure avoidance of the DLALC land included in the original application for SSD 4974. As a consequence of cl.49(3A) of the *Environmental Planning and Assessment Act 1979* (NSW) (EPA Act), development consent for SSD 4974 as proposed is not possible without the consent of the NSW Aboriginal Land Council¹ which has given rise to the need to change the development and to make the Amendment Application.

This reply addresses, as requested, the “*content in the (C&F) letter (by paragraph²)*” and provides “*a detailed justification as to its (Wyong Coal’s) position ...*”. The proposed Amendment Application will be lodged with the Department shortly supported by “*written particulars sufficient to indicate the nature of the changed development*”³ in a supplementary report on the proposed changes to SSD 4974.

The C&F Letter asserts that⁴:

- “(a) any application to amend SSD-4974” is outside power and that the amendment can only be authorised as “*a new project ... that requires a new development application ...*”; and that
- (b) DLALC must “*be given notice of the application and be provided with a reasonable opportunity to respond before a decision about ... acceptance is made.*”

The C&F letter asserts that the Amendment Application cannot be progressed as to do so would involve breach of ‘**Legal Principles**’, and would have unacceptable effects on ‘**Nikko Road**’ and its use.

¹ *Walarah 2 Coal Project: Environmental Impact Assessment*, April 2013 and Walarah 2 Land and Environment Court judgment [*Darkinjung Local Aboriginal Land Council v Wyong Coal Pty Ltd (No 2)* (2014) 202 LGERA 223].

² As requested by the DPE.

³ Clause 55(2) of the EPA Regs.

⁴ The last paragraph on page 1 of the C&F Letter.

The proposed Amendment Application is enabled, and with power for determination, by clauses 55(1) and (2) of the EPA Regs as provided therein and in accordance with s.89F of the EPA Act.

While maintaining that the proposed change to SSD 4974 will result in a net reduction in environmental impacts thus removing the requirement for public exhibition under s.89F(1) of the EPA Act, Wyong Coal is of the opinion that the Amendment Application should be notified as provided in s.89F(1) to remove any ambiguity. In addition, Wyong Coal will continue to liaise with all interested parties as part of its stakeholder engagement program.

1. Legal Principles

1.1 Amend or Vary

Clause 55 of the EPA Regs states that:

- “(1) A development application may be amended or varied by the applicant (but only with the agreement of the consent authority) at any time before the application is determined.*
- (2) If an amendment or variation results in a change to the proposed development, the application to amend or vary the development application must have annexed to it written particulars sufficient to indicate the nature of the changed development.”*

Clause 55 enables a development application (while extant) to be “amended or varied” “with the agreement of the consent authority”. If that “results in a change to the proposed development ... the application ... must have annexed to it written particulars sufficient to indicate the nature of the changed development”. The “change to the proposed development...” is required to be within the concept of “... an amendment or variation ...” to the development as proposed in the original application for consent.

There is considerable judicial consideration of the distinction between an “amendment or variation” of a development application as compared to a new development which would require a new development application.

“... questions of fact and degree do arise, and in turn, they are to be considered ... in the context of the surrounding circumstances of the development application and the category or character of the development”⁵

“the Court is not empowered to entertain amended plans which are so substantially different from the original plans that the development as proposed cannot be said to be substantially the same development as was the subject of the development application”⁶

“that the comparison must be between the development application as originally made and the amendments that are now sought.”⁷

In the Ebsworth case⁸ His Honour Talbot J stated⁹ that:

“The two criteria that could be helpful in considering whether a development application may be amended or varied are:-

- (i) whether the development as amended can be regarded as the same development as the one originally proposed in the context of the characterisation of the overall concept and the surrounding circumstance of the development application.*
- (ii) whether there are essential elements that are so altered in the context of a consideration under the EPA Act that they place the development in a different category for the purpose of assessment”.*

⁵ Urbis Pty Ltd v Sutherland Shire Council [2001] NSWLEC 147.

⁶ Dylam Developments P/L v Holroyd City Council [2001] NSWLEC 204.

⁷ Waite v Blacktown City Council [2004] NSWLEC 157.

⁸ Ebsworth v Sutherland Shire Council [2005] NSWLEC 603.

⁹ At paragraph 35.

In the Radray case¹⁰ Her Honour Jagot J expressed agreement with Talbot J in the Ebsworth case¹¹ and found that cl.55 should be given “the widest interpretation which its language will permit”.

When considered in the context of the clear wording of cl.55 as judicially applied the proposed change to SSD 4974 is clearly an “amendment or variation”. As such it is open to, and appropriate for, the consent authority to give its agreement to the proposed Amendment Application which will “have annexed to it written particulars sufficient to indicate the nature of the changed development”.

The judicial consideration of the term “amendment or variation” does not support the contention of C&F that “Any amendment of SSD-4974 to provide for a coal conveyor, rail, and coal loading infrastructure on Nikko Rd would be such a substantive variation to the project, the subject of SSD-4974, which it could not properly be regarded as an amendment, but would instead constitute a new development which requires the lodgement of a new development application”¹².

1.2 Variation Outside Boundary¹³

C&F assert that the inclusion of additional land into to SSD 4974 leads to the conclusion that the change is a new development requiring a new development application.

It is clear from the provisions of the EPA Act that the legislature intended that an extant application for consent should be capable of “amendment or variation” with the agreement of the consent authority to authorise a change to that for which consent had been sought and was in the process of being considered for determination.

His Honour Justice Preston in *Scrap Realty Pty Limited v Botany Bay City Council*¹⁴ when considering the comparable (but more restrictive) ‘substantially the same development’ test in s96 of the EPA Act found (at [18] and [19]):

“... The development and the land on which the development is carried out are indivisible. However, this does not preclude the consent being modified to extend the development approved by the consent to other land. This still entails a modification of the consent - it alters the description of the land to which the consent applies so as to permit the carrying out of development on that land as well.

As far as the condition precedent is concerned, the alteration is of “the development” - it expands the area on which development is carried out. There obviously will be questions of fact and degree in ascertaining whether the development before and after modification can be said to be substantially the same. Nevertheless, an expansion of the area on which development is carried out by adding land not the subject of the original consent is not inherently outside the concept of modification of the development under s 96.”

For similar reasons the change to the land the subject of development application SSD-4974 does not fall outside what can be considered “an amendment or variation” under cl.55 of the EPA Regs. The inclusion in the proposed SSD 4974 of quantitatively and qualitatively proportionately small area of different land does not support the conclusion drawn by C&F that a new development application is required.

1.3 Notice - Denial of procedural fairness and natural justice¹⁵

DLALC asserts an entitlement to procedural fairness and the application of natural justice by being provided with notice and a reasonable opportunity to make submissions before there is any agreement by the consent authority to an Amendment Application until which there is no Amendment Application.

It is settled law that the repository of a statutory power is obliged to afford procedural fairness to a person whose rights or interests may be adversely affected in “a direct and

¹⁰ Radray Constructions Pty Ltd v Hornsby Shire Council [2006] NSWLEC 155 - at paragraphs [8]-[10] and [16]-[18].

¹¹ The identified paragraphs are attached.

¹² The penultimate paragraph of page 2 of the C&F Letter.

¹³ Item (2) at the last paragraph on page 2 of the C&F Letter.

¹⁴ (2008) 166 LGERA 342.

¹⁵ Item (5) on page 3 of the C&F Letter.

*immediate way*¹⁶ by the exercise of the statutory power¹⁷. That is not the case in this situation.

Here the consent authority, when the Amendment Application is made, will be making a procedural decision as to whether to agree to the Amendment Application. That decision has not and will not have any impact on the rights or interests of the DLALC.

The EPA Act and the EPA Regs contain detailed and prescriptive requirements for the making, assessment and determination of applications for planning approvals. They provide specifically as to what and when notifications are to be given to other regulators, landholders and the public generally as well as providing rights and obligations for all concerned as to consultation. In this circumstance they do not apply until there is an application for an “*amendment or variation*” (which has not yet been made but is intended to be) and the Amendment Application has standing due to the consent authority consenting to the application.

Section 89F(1) of the EPA Act provides for the exhibition of applications that have standing.

Section 89F(4) provides that an application for an “*amendment or variation*” of an extant development application for consent stating (relevantly) that “*If:*

- (a) *a development application for State significant development is amended, ...before it has been determined by the Minister, and*
- (b) *the Secretary has complied with subsection (1) in relation to the original application, compliance with subsection (1) in relation to the amended,...application is not required, unless the Secretary determines that the amended application ... substantially differs from the original application and the environmental impact of the development concerned has not been reduced by the changes proposed in the amended ... application.”*

Wyong Coal notes that the proposed changes to SSD 4974 will reduce the disturbance footprint and the environmental effects of the development as currently proposed. Accordingly, s.89F(4)(b) could remove the need for the application of s.89F(1). However Wyong Coal does not seek the application of s.89F(4). When the Amendment Application is made and agreed to by the consent authority, the provisions of s.89F(1) regarding public exhibition will be applied.

2. Nikko Road

Nikko Road is 20.116 metres wide Crown road running north to south, from the north western corner of Lot 78 in Deposited Plan 755245 and (relevantly) ending at the south western corner of Lot 197 DP 1064536. It is bounded on the west by the Main Northern Rail Line¹⁸ and on the east by privately owned and Crown land.

Nikko Road is substantially unformed and overgrown with trees and other vegetation. There is a gravel track within some sections of the road reserve¹⁹ and otherwise located outside of the road reserve, including on land owned by Rail Corporation New South Wales (RailCorp) and the State of New South Wales. The section of Nikko Road that ‘overlaps’ with the Doyalson Motorway Link Road has been declared a “*controlled access road*” by the Minister for Roads under section 49 of the *Roads Act 1993* NSW.

The Amendment Application will propose mine infrastructure within part of Nikko Road being a rail spur, loading facility, service road and associated infrastructure to the north of Doyalson Motorway Link Road and a pipeline for waste water to the south. Wyong Coal

¹⁶ *Kioa v West* (1985) 159 CLR 550 at 584.

¹⁷ *M61/2010E v Commonwealth* [2010] 272 ALR 14 at [74].

¹⁸ Lot 4 in Deposited Plan 1191556 owned by Rail Corporation New South Wales.

¹⁹ South of a rail underpass adjacent to Lot 93 DP 755245 (Kerry Mountain Pty Ltd), being part adjacent to Lot 16 DP 1210468 (formerly part Lot 60 DP 755245) and to Lot 201 DP 1064536 and Lot 197 DP 1064536.

has lodged a mining lease application and Crown road closure application in respect of Nikko Road.

DLALC owns land adjoining Nikko Road to the east²⁰ and other land adjoining that land²¹ as coloured yellow on the attached plan. Wyong Coal understands that DLALC accesses the eastern side of the railway from the west via a gravel track and rail underpass, the location of which is approximately marked on the attached plan²². The route of access used by DLALC from the western side of the railway to the eastern side is marked in yellow on the separate plan attached.

From the rail underpass, a gravel track provides access to the south to Lot 16 DP 1210468²³ and then under the Doyalson Motorway Link Road to Lot 201 DP 1064536 and Lot 197 DP 1064536. That gravel track is located partly within the road reserve of Nikko Road and partly within the boundaries of adjoining land owned by DLALC,²⁴ RailCorp,²⁵ and the Crown²⁶. It is not known what arrangement (if any) DLALC has with RailCorp or the Crown²⁷ for use of the track on that land. To the extent that DLALC relies on access across the railway land, Nikko Road (alone) does not constitute legal access to the DLALC land.

Legal and practical access to Lot 204 DP 1117900 is via Wyee Road (formed bitumen Council road) and Thompson Vale Road (a formed gravel road). Legal and practical access to Lot 93 DP 755245 (owned by Kerry Mountain Pty Ltd) is via Thompson Vale Road (a formed gravel road). Legal access to Lot 16 DP 1210468 is via Spring Creek Road (a partly formed road). From this it is apparent that Nikko Road is not necessary to access DLALC and other adjacent lands to the north of the Doyalson Motorway Link Road.

The works proposed by the Amendment Application will greatly improve access to and along a material and practical portion of Nikko Road. Whilst the Amendment Application envisages the closing of and acquisition of Nikko Road by Wyong Coal and an application for the grant of a mining lease over it, Wyong Coal will propose in the Amendment Application that an easement be granted for access over that section of Nikko Road as is currently used by DLALC for improved all weather access to its land south of the Doyalson Motorway Link Road and to Lot 16DP 1210468.

The easement would commence adjacent to the rail underpass used by DLALC and proceed in a southerly direction, under the Doyalson Motorway Link Road to Lot 197 DP 1064536²⁸. The easement would benefit the relevant adjoining land (Lot 16 DP 1210468, Lot 201 DP 1064536, Lot 197 DP 1064536 and nearby Lot 196 DP 1064536 and existing registered easements in that land to enable continued access by DLALC and other third parties such as Ausgrid and Central Coast Council who may currently intermittently use the existing gravel track.

To the north of the Doyalson Motorway Link Road, the easement would coincide with the service road which Wyong Coal proposes to construct adjacent to its infrastructure. To the south of the Doyalson Motorway Link Road, the easement would be situated alongside the proposed pipeline. There is sufficient width in the road reserve to accommodate both Wyong Coal's infrastructure and the easement for access.

3. Paragraph by Paragraph Response

This section responds to identified quoted paragraphs in the C&F letter.

²⁰ Being Lot 204 DP 1117900, Lot 16 DP 1210468 and Lot 197 DP 1064536

²¹ Lot 197 DP 1064536 is bounded on the east by Lot 196 DP 10646536 owned by DLALC

²² Any arrangement between DLALC has (if any) with Rail Corporation NSW is not known.

²³ Formerly part of Lot 60 DP 755245.

²⁴ Lot 16 DP 1210468 and Lot 187 DP 1064536

²⁵ Lot 4 DP 1191556

²⁶ Lot 201 DP 1064536, owned by the State of New South Wales and administered by Department of Primary Industries – Lands

²⁷ Department of Primary Industries – Lands.

²⁸ Refer to the red line marked 'Proposed Easement' on plan.

Requirement for a New Development Application

- (1) *"Any amendment of SSD-4974 to provide for a coal conveyor, rail, and coal loading infrastructure on Nikko Rd would be such a substantive variation to the project, the subject of SSD-4974, which it could not properly be regarded as an amendment, but would instead constitute a new development which requires the lodgement of a new development application".*

Wyong Coal Response

The Amendment Application will be for an "amendment or variation" of SSD 4974 which is authorised to "be amended or varied" as envisaged by cl.55 of the EPA Regs. The change to be sought is properly characterised as an "amendment or variation" and not as a new and separate development.

The change will comprise a relatively small but integral part of the same mine development which is most appropriately authorised and regulated by a single consent of SSD 4974 one development and not two separate consents for what is one development.

- (2) *"The proposal the subject of SSD-4974 involves a project on specific identified land. Placing mine infrastructure on Nikko Rd is a project on different land which is substantially outside of the footprint of the project described in SSD-4974. Indeed, placing coal conveyors, rail, and coal loading infrastructure on Nikko Rd would involve locating that infrastructure over 2kms from where it was originally proposed and well outside the project boundary, and project infrastructure boundary identified in the development application".*

Wyong Coal Response

The relevant area is small related to the total area of SSD 4974 to which it is adjacent and contiguous. The distance between the originally proposed location and new location is not relevant. What is relevant is the location in the context of the whole mine development. By any measure the change to the proposed development is minor. Involving a small area outside the original boundary which does not affect the characterisation of the proposal as an "amendment or variation" of SSD 4974.

- (3) *"None of the stages of the planning approval process that has occurred to date have anticipated, or required consideration of, mine infrastructure being located in a different location, let alone on Nikko Rd. The Director General's Requirements were not issued on this basis. The Director-Generals requirements that were issued for SSD-4974 do not properly set a framework for the consideration of the issues that would arise from such a proposal".*

Wyong Coal Response

The application of s.89F(1) to the Amendment Application will address any concerns related to these issues and will be addressed in the "written particulars sufficient to indicate the nature of the changed development" required by cl.55(2) of the EPA Regs.

- (4) *"None of the environmental reports comprising the EIS considered the impacts of such a proposal. The variation would be so substantial that it would render irrelevant many of the reports which have been prepared in support of the project. The PAC assessments, and the Director-General's recommendation that have also occurred to date, would also be redundant".*

Wyong Coal Response

The EPA Act specifically envisages and provides for the "amendment or variation" of an extant development application and prescribes the processes to be followed and the issues to be addressed. The "written particulars sufficient to indicate the nature of the changed development" required by cl.55(2) of the EPA Regs will be provided and will address the EPA Act requirements which will be taken into account by the consent authority in determining the existing and varied development application.

- (5) *"Furthermore, affected land owners, public authorities, and members of the public have had no notice of, and have not had an opportunity to make submissions or to raise concerns in any of the public hearings that have occurred to date. In the absence of recommending the notice and objection processes, there will be a manifest denial of procedural fairness. The fact that those processes would need to be recommended highlights the substantive nature of the amendment and is itself reason for a new application to be required".*

Wyong Coal Response

There is presently no application and will not be until the Amendment Application is made and agreed to by the consent authority. Wyong Coal then proposes that notice and consultation will take place via public exhibition in accordance with s.89F(1) of the EPA Act.

- (6) *"The environmental and planning issues that would be raised by the construction of a coal conveyor, and rail and coal loading infrastructure along the narrow road corridor of Nikko Rd are substantial. In particular:*
- a. *A range of environmental issues are yet to be considered. Nikko Rd itself is variously zoned SP2 - Infrastructure (Road and Traffic Facility), RU6 - Transition and E2 - Environmental Conservation under the Wyong Local Environmental Plan 2013. A rail and coal loading facility is a prohibited development under each of those zonings. The area the subject of MLA 522 is also a coastal protection area for the purposes of SEPP 71 - Coastal Protection. The adjoining land is also variously zoned RU6 - Transition and E2 Environmental Conservation and is a coastal protection area for the purposes of SEPP 71 - Coastal Protection. Nikko Rd is classified as a bushfire buffer zone and is adjacent to Category 1 - Vegetation which Central Coast Council has identified as the most hazardous vegetation category.*
 - b. *If a coal conveyor, and rail and coal loading infrastructure was placed on Nikko Rd it would place that infrastructure within 400m of the residential suburb of Blue Haven, and would be immediately adjacent to E2 Environment Conservation land, and coastal protection land for the purposes of SEPP 71.*
 - c. *There are significant noise and dust issues which arise from both the coal conveyor and coal loading facility, both in terms of impact on nearby residential areas, and on land zoned E2 - Environmental Conservation.*
 - d. *There are significant road safety issues arising from the close proximity of a coal conveyor to major road infrastructure of the Doyalson Motorway Link Road. There are significant rail safety issues in moving coal across the Newcastle Sydney Rail Line by conveyor.*
 - e. *The narrow corridor of Nikko Rd is manifestly inadequate for major infrastructure associated with a coal mine. It has insufficient room for appropriate buffers away from the rail line. There is no room for adequate road access for maintenance along the rail line.²⁹ There is insufficient room for the proper construction of coal loading facilities as well as security, employee parking, and employee facilities. There is inadequate room for appropriate buffers or set-backs to protect the amenity of adjoining land, or to protect adjoining E2 - Environmental Protection land or to provide appropriate bushfire buffer zones. It would be inappropriate for a development application to proceed on the basis that other people's land provide a buffer for the project.*
 - f. *It will have a greater risk of impact on Wallarah Creek and Spring Creek, particularly as a result of pollution runoff in times of flooding.*
 - g. *As noted below, placing a coal conveyor and rail and coal loading infrastructure is premised on removing the only road access for Darkinjung and other parties to land and infrastructure located on Lots 196 and 197, and land locking their land and assets. This is itself a substantive and draconian alteration to the project which, if it is to be pursued, ought to be done through a new development application.*
 - h. *The socio-economic impacts on third parties would be different to those previously considered".*

Wyong Coal Response

The EPA Act envisages and provides for the "amendment or variation" of an extant development application and prescribes the processes to be followed and the issues to be addressed. These issues all relate to the environmental planning assessment and determination of the existing, and to be varied, development application and will be applied and considered by the consent authority in determining the application for development consent (SSD 4974).

The "written particulars sufficient to indicate the nature of the changed development" required by cl.55(2) of the EPA Regs will be provided and will address the EPA Act requirements. Following acceptance of the Amendment Application and the consultation process of s.89F(1) as is proposed by Wyong Coal, the application for development consent (SSD 4974) will be determined in accordance with the processes and requirements of the EPA Act.

- (7) *"The extent of the variations needs to be understood in the context that the project is not occurring in a remote location. It is occurring in close proximity to residential area that are part of a rapidly growing population centre, and where changes to the location of the project impact on a large number of people".*

Wyong Coal Response

The consent authority is required to consider the merits of the development application (SSD 4974) as amended by any accepted Amendment Application in accordance with the EPA Act.

- (8) *"The extent of these issues highlight that any application to amend SSD-4974 to allow for a coal conveyor, and rail and coal loading facilities on Nikko Rd is outside the scope of what can properly be regarded as an amendment and is in fact a new development that requires a new development application".*

Wyong Coal Response

The proposed Amendment Application will be for the “*amendment or variation*” of the application for consent to SSD 4974. It is not appropriate to be the subject of a new and separate development application under the EPA Act nor appropriate for the effective approval and regulation of the development.

Contrary to the Environmental Planning and Assessment Act

- (9) “*Because of the matters set out at paragraphs (1) - (7) above any amendment of SSD-4974 to enable the construction of a coal conveyor, rail and coal loading infrastructure on Nikko Rd, as against the lodgement of a new development application, would be contrary to the assessment procedures required to be followed for Part 3A Projects and would therefore be unlawful*”.

Wyong Coal Response

The application will be for the “*amendment or variation*” of an application for development consent to a ‘state significant development’ under Part 4 of the EPA Act and not a Part 3A process it having been repealed and is not unlawful.

Premised on Denying Public Access

- (10) “*A further objection to any proposal to construct a coal conveyor, and rail and coal loading facilities on Nikko Rd, is that it is clearly incompatible with the road corridor continuing to be used for road access, and it is therefore premised on depriving the public of use of Nikko Rd.*”

Wyong Coal Response

This is not the case. It is ultimately a matter for the consent authority in determining what will be an amended or varied application for consent to SSD 4974.

- (11) “*Nikko Rd is not a disused road. It is an existing road relied on by Darkinjung and other third parties as the only access to their land and infrastructure. Nikko Rd is important to Darkinjung as no other access is available to Lots 60, 197, 196 or 201. This is because the land is bounded by Spring Creek in the east and Wallarah Creek in the south. These are deep creeks which prevent road access. Lots 60, 196, 197 and 201 will become effectively land locked if the access by Nikko Rd becomes unavailable*”.

Wyong Coal Response

The status of Nikko Road and its current and potential use for access to DLALC land as well as the existence of other legal and practicable access is described above. Current access by DLALC to its land only partially involves the use of Nikko Road. Much of Nikko Road, particularly to the north of the Doyalson Motorway Link Road, is not currently able to be accessed by vehicle as discussed above. Wyong Coal will make ‘commitments’ in the Amendment Application to the grant of an easement over the relevant section of Nikko Road used by DLALC and other parties.

- (12) “*The fact that MLA 522 is confined to roads reveals a lack of regard for the essential functions of road reserves and the necessity for land owners to have access to their land. It should be manifestly apparent that as Wyong Coal owns none of the adjoining land, and because of the existence of deep creeks, Wyong Coal is incapable of providing alternative access*”.

Wyong Coal Response

This will be an issue for the consent authority in determining the modified or varied application for consent to SSD 4974. Refer (11) above.

- (13) “*Land set aside for road purposes is important public infrastructure that ensures that landowners have appropriate access to their land. Darkinjung believes that to allow amendment to SSD-4974 that is premised on the removal of public roads which results in land locking other people's land and depriving them of the beneficial use of it is draconian, inequitable and against public policy. The Minister should not allow an amendment to SSD-4974 that is premised on such an outcome*”.

Wyong Coal Response

Refer to the responses above including issue (11) above

Inconsistency with ALRA

- (14) “*Darkinjung maintains that any amendment of SSD-4974 that is premised on the removal of public access to Nikko Rd is inequitable, discriminatory, and inconsistent with the remedial and beneficial objects of the ALRA. Under the ALRA, land is transferred to Aboriginal land councils as a means of compensation for the past dispossession of Aboriginal*

people of their traditional lands and is intended to be an economic resource to assist Aboriginal communities to achieve economic self-sufficiency. It is inconsistent with that scheme for land to be transferred to Aboriginal land councils and then for the Government to remove legal access to the land by conferring interests on third parties".

Wyong Coal Response

Principles of the *Aboriginal Land Rights Act 1983* (NSW) are not relevant to the issues under consideration. The application for development consent to SSD 4974 as proposed to varied or amended is required to proceed and be completed in accordance with the EPA Act.

- (15) *"Furthermore, it is clear that the removal of access to Nikko Rd has primary impact on Darkinjung's land only. No other land owners will become land locked by the proposal. It treats Darkinjung's interests as expendable while carefully avoiding the interests of all other land owners, and in this regard it is inequitable and discriminatory. The Minister should not permit amendments to SSD-4974 that have that effect".*

Wyong Coal Response

As explained in the responses above including issue (11) above the amended application will not result in loss of access to DLALC's property. Ultimately this will be an issue for consideration by the consent authority in determining the varied or amended application for consent to SSD 4974. The application for development consent to SSD 4974 as proposed to varied or amended is required to proceed and be completed in accordance with the EPA Act.

Inappropriate Response to Court Decision in Wallarah No 2

- (16) *"Clause 49 of the Environmental Planning and Assessment Regulation 2000 provides that the consent of the New South Wales Aboriginal Land Council (NSWALC) is required prior to the making of a Development Application over land vested in an Aboriginal land council. SSD-4974 was lodged in complete disregard for that requirement and therefore defective".*

Wyong Coal Response

This issue is not relevant to the circumstances under consideration. Notwithstanding the defect in SSD 4974 it remains valid.³⁰ The defect can be cured at any time prior to the grant of development consent.³¹ SSD 4974 as proposed to be changed by the Amendment Application will not affect any land "vested in an Aboriginal land council".

- (17) *"On 12 June 2014, Darkinjung Local Aboriginal Land Council v Wyong Coal Pty Ltd (No 2) (Wallahrah No 2) [2014] NSWLEC 71 the Land and Environment Court made an Order declaring that insofar as SSD-4974 is made in respect of Lot 195, cl 49 of the Environmental Planning and Assessment Regulations 2000 requires the consent of the New South Wales Aboriginal Land Council "before any consent can be granted to the Application by the Minister or his delegate pursuant to s 89E of the Environmental Planning and Assessment Act 1979 (NSW) which would include consent to the proposed development in respect of the Land." Neither NSWALC nor Darkinjung have provided their consent to SSD-4974."*

Wyong Coal Response

The declaration of the Land and Environment Court only applies in respect of Lot 195 DP 1032847 or any land owned by an Aboriginal Land Council. The Amendment Application if agreed to by the consent authority, will result in the avoidance of development on land held by an Aboriginal Land Council. The determination of the court did not impugn the validity of the application for SSD 4974 which remains extant until withdrawn or determined.

- (18) *"In the context of a finding that SSD-4974 was defective because of the failure to get consent of NSWALC before the application was lodged, it would be an unjust and Inappropriate response for the Minister, rather than require the withdrawal of the Development Application, to instead permit an amendment to SSD-4974 which, if granted would remove existing legal access to 4 separate parcels of land for which Darkinjung is the owner. Such an approach would be a manifestly unreasonable way to attempt to remedy a defect in a development application, particularly where the requirement to obtain consent which led to the defect was a result of a requirement which arose under remedial and beneficial legislation".*

³⁰ Darkinjung Local Aboriginal Land Council v Wyong Coal Pty Ltd (No 2) [2014] NSWLEC 71 at [83].

³¹ Ironlaw Pty Ltd v Wollondilly Shire Council (No2) 197 LGERA 238 at [46] – [47].

Wyong Coal Response

The court found that development consent could not be granted without the consent of the NSW Aboriginal Land Council in respect of Lot 195 DP 1032847. The court did not find that the application for SSD 4974 was incapable of rectification. The application for the development of SSD 4974 remains extant until determined or withdrawn. There is no power for the Secretary to require Wyong Coal to withdraw the application for SSD 4974.

The principles of 'reasonableness' and 'natural justice' identified in the C&F letter are not relevant in these circumstances.

The approach taken by Wyong Coal in the Amendment Application is entirely consistent with the Land and Environment Court's decision.

As described above the Amendment Application does not contemplate the removal of legal access to the four parcels of land owned by DLALC. Aside from Nikko Road, there is existing legal and practical access to two of those parcels to the north of the Doyalson Motorway Link Road (being Lot 204 DP1117900, from both the north and south, and part of Lot 16 DP 1210468). For the remaining parcels of land to the south of the Doyalson Motorway Link Road Wyong Coal will maintain continued use of the DLALC's current access route (which is only partially located within the road reserve of Nikko Road) by grant of an easement with an improved all weather access track.

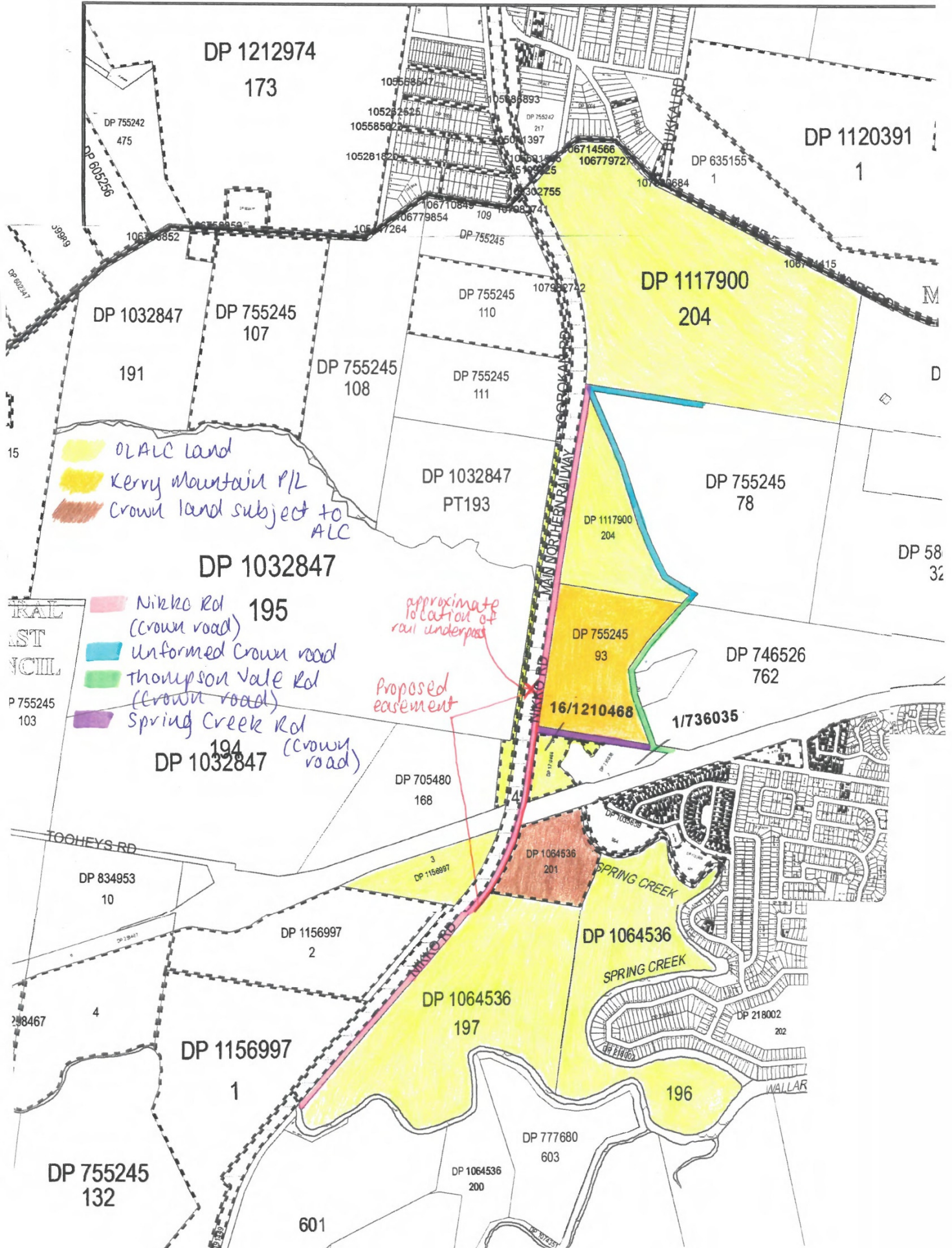
4. Conclusions

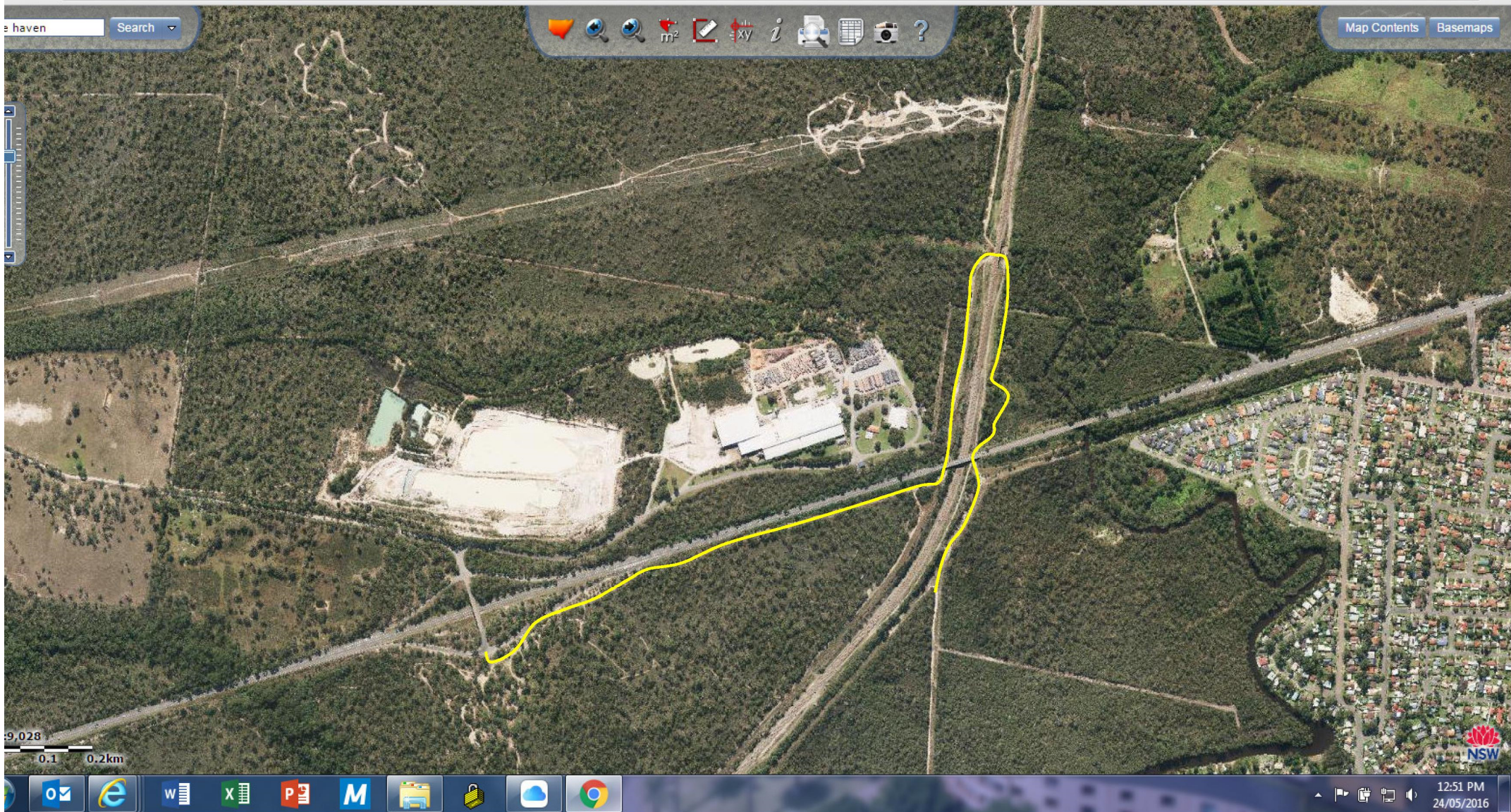
- 4.1 The EPA Act provides a 'code' for the processes and issues to be addressed when an application is made for development consent including as to the application, notification and consultation, environmental planning assessment, and determination. These will be required to be appropriately addressed in the assessment and determination of the application.
- 4.2 Provision is made in cl.55 of the EPA Regs for the amendment or variation of the application, at any time before it is either withdrawn or determined, with the agreement of the consent authority.
- 4.3 Clause 55(2) of the EPA Regs contains a requirement for "*written particulars sufficient to indicate the nature of the changed development*". The Amendment Application will propose a change to the development and accordingly will include such "*written particulars sufficient to indicate the nature of the changed development*". Those particulars will clarify the position and any misunderstanding that DLALC may have regarding the proposed development near its lands.
- 4.4 The C&F letter precedes the making of an Amendment Application, "*written particulars sufficient to indicate the nature of the changed development*" and the required "*agreement of the consent authority*".
- 4.5 There is no regulatory requirement for the consent authority to consult on its decision about whether there will be an "*agreement of the consent authority*". Accordingly the claims as to an entitlement to procedural fairness and natural justice are unfounded.
- 4.6 Until there is an Amendment Application with the "*agreement of the consent authority*" there is no provision in the regulatory regime for consultation and submissions.
- 4.7 Regardless of s.89F(4) Wyong Coal proposes that following the agreement of the consent authority to the Amendment Application the public exhibition provisions of s.89F(1) of the EPA Act should be applied to ensure compliance with the assessment requirements of the EPA Act.
- 4.8 The determination of any amended or varied application for development consent to SSD 4974 must be made by the consent authority in accordance with the requirements of the EPA Act and the EPA Regs.

Please do not hesitate to raise any issue.

Yours faithfully

Peter Allonby
General Manager
WALLARAH 2 COAL PROJECT





Appendix E
Chalk & Fitzgerald Letter to DP&E



Planning & Environment

Mr Peter Allonby
General Manager
Wyong Areas Coal Joint Venture
by email: PAllonby@wallarah.com.au


Dear Mr Allonby

The Hon Rob Stokes MP, Minister for Planning, has received correspondence (copy attached) from Chalk & Fitzgerald Lawyers & Consultants, on behalf of its client, the Darkinjung Local Aboriginal Land Council, concerning potential amendments to the development application for Wyong Coal's Wallarah 2 Coal Project (SSD 4974).

Given the detailed and technical nature of the matters raised, the Department is seeking careful consideration and formal comment from Wyong Coal. Wyong Coal should give strong consideration to the matters contained within Chalk & Fitzgerald's letter and provide a response outlining the company's position as to whether it accepts the content in the letter (by paragraph), or a detailed justification as to its position otherwise.

It is also the Department's view that a number of the matters raised by Chalk and Fitzgerald, in particular existing access from Nikko Road to adjoining properties and infrastructure and suitable arrangements regarding appropriate future access, should be considered and discussed within the amended development application and Environmental Impact Statement intended to be submitted by Wyong Coal.

Yours sincerely

 13/5/16
Oliver Holm
Executive Director
Resource Assessments and Compliance

CHALK & FITZGERALD
LAWYERS & CONSULTANTS

LEVEL 9
CURRENCY HOUSE
23 HUNTER STREET
SYDNEY NSW 2000
TEL: +61 2 9231 4544
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Our ref: 21137

22 April 2016

Cc. Caroline McNally, Secretary,
Department of Planning and
Environment

The Hon. Robert Stokes MP
Minister for Planning
52 Martin Place,
Sydney NSW 2000

Dear Minister,

**Amendment of Development Application SSD-4974 Wallarah 2 Coal Mine – MLA
522**

We write to you on behalf of the Darkinjung Local Aboriginal Land Council (**Darkinjung**) in relation to Development Application SSD-4974 (**SSD-4974**).

Darkinjung recently became aware that on 24 February 2016, Wyong Coal Pty Ltd (**Wyong Coal**) lodged Mining Lease Application 522 (**MLA 522**). A Public Notice for MLA 522 appeared in the Central Coast Express on 1 April 2016. MLA 522 appears to cover no land other than Nikko Rd, Tooheys Rd and part of the Doyalson Motorway Link Road corridor. A copy of that notice is attachment "A" to this letter.

After discussions with Wyong Coal, Darkinjung understands that the purpose of MLA 522 is for Wyong Coal to use the land for the construction of a coal conveyor and the construction of rail and coal loading infrastructure in conjunction with its proposed Wallarah No 2 mine which is the subject of SSD-4974.

Darkinjung is yet to be provided with adequate details of the new development, however it wishes to give notice of its objection to any amendment of SSD-4974 that involves the construction of mine infrastructure on Nikko Rd, and to raise concerns over the lawfulness of any such amendment.

For the reasons set out below, Darkinjung requests that:

- (a) any application to amend SSD-4974 to place a coal conveyor, and rail and coal loading infrastructure on Nikko Rd, be treated as a new project and one that requires a new development application to be lodged; and
- (b) in the event that an application to amend SSD-4974 is made, that Darkinjung be given notice of the application and be provided with a reasonable opportunity to respond before a decision about its acceptance is made.

00341939

Background

Interests of Darkinjung

Darkinjung is the registered proprietor of Lot 195 DP1032847 and Lot 1 DP 1192889, Bushells Ridge which are currently the subject of SSD-4974.

Darkinjung is also the registered proprietor of Lot 60 DP 755245, Doyalson (**Lot 60**), Lot 204 DP 1117900, Doyalson (**Lot 204**), Lot 197 DP 1964536, Charmhaven (**Lot 197**), Lot 196 DP1064536, Charmhaven (**Lot 196**). Darkinjung also has an undetermined claim over Lot 201 DP1064536 at Charmhaven (**Lot 201**) lodged pursuant to s 36(1) of the *Aboriginal Land Rights Act 1983* (NSW) (**ALRA**) being ALC 37185. ALC 37185 was lodged on 31 October 2014. The only access to this land is Nikko Rd.

Nikko Road

Nikko Rd is a formed dirt road that fronts Lots 60, 196, 197 and 204. It is the only road access to those parcels. Darkinjung is currently able to access Nikko Rd through Lot 1 DP 1192889, Bushells Ridge. Darkinjung accesses Lots 196 and 197 as part of its use and enjoyment of the land as well as to comply with environmental monitoring requirements imposed by Wyong Shire Council as a condition of a separate development consent.

Nikko Rd also forms an important access point for the maintenance of transmission lines located in an easement over Lot 196. The transmission lines are accessed and maintained by AusGrid. The vegetation clearing around these transmission lines is apparent from aerial imagery. The need to maintain vegetation clearing around these areas is not insignificant given the vegetated nature of the land and its proximity to the Blue Haven residential area.

Nikko Rd is also required for access to a rising sewer main which is located on Lot 196 which Darkinjung understands is Wyong Shire Council infrastructure maintained by the Environmental Protection Agency.

Objections to Amendment of SSD-4974.

Darkinjung gives notice that it objects to any amendment to SSD-4974 to cover the land the subject of MLA 522 or to place mine infrastructure on Nikko Rd, and takes issue with the legality of any such an amendment for the following reasons:

Requirement for a New Development Application

- (1) Any amendment of SSD-4974 to provide for a coal conveyor, rail, and coal loading infrastructure on Nikko Rd would be such a substantive variation to the project, the subject of SSD-4974, which it could not properly be regarded as an amendment, but would instead constitute a new development which requires the lodgement of a new development application.
- (2) The proposal the subject of SSD-4974 involves a project on specific identified land. Placing mine infrastructure on Nikko Rd is a project on different land which is substantially outside of the footprint of the project described in SSD-4974. Indeed, placing coal conveyors, rail, and coal loading infrastructure on Nikko Rd would involve locating that infrastructure over 2kms from where it was originally proposed and well outside the project boundary, and project infrastructure boundary identified in the development application.

- (3) None of the stages of the planning approval process that has occurred to date have anticipated, or required consideration of, mine infrastructure being located in a different location, let alone on Nikko Rd. The Director General's Requirements were not issued on this basis. The Director-Generals requirements that were issued for SSD-4974 do not properly set a framework for the consideration of the issues that would arise from such a proposal.
- (4) None of the environmental reports comprising the EIS considered the impacts of such a proposal. The variation would be so substantial that it would render irrelevant many of the reports which have been prepared in support of the project. The PAC assessments, and the Director-General's recommendation that have also occurred to date, would also be redundant.
- (5) Furthermore, affected land owners, public authorities, and members of the public have had no notice of, and have not had an opportunity to make submissions or to raise concerns in any of the public hearings that have occurred to date. In the absence of recommencing the notice and objection processes, there will be a manifest denial of procedural fairness. The fact that those processes would need to be recommenced highlights the substantive nature of the amendment and is itself reason for a new application to be required.
- (6) The environmental and planning issues that would be raised by the construction of a coal conveyor, and rail and coal loading infrastructure along the narrow road corridor of Nikko Rd are substantial. In particular:
 - a. A range of environmental issues are yet to be considered. Nikko Rd itself is variously zoned SP2 - Infrastructure (Road and Traffic Facility), RU6 - Transition and E2 - Environmental Conservation under the *Wyong Local Environmental Plan 2013*. A rail and coal loading facility is a prohibited development under each of those zonings. The area the subject of MLA 522 is also a coastal protection area for the purposes of SEPP 71 - Coastal Protection. The adjoining land is also variously zoned RU6 - Transition and E2 - Environmental Conservation and is a coastal protection area for the purposes of SEPP 71 - Coastal Protection. Nikko Rd is classified as a bushfire buffer zone and is adjacent to Category 1 - Vegetation which Wyong Council has identified as the most hazardous vegetation category.
 - b. If a coal conveyor, and rail and coal loading infrastructure was placed on Nikko Rd it would place that infrastructure within 400m of the residential suburb of Blue Haven, and would be immediately adjacent to E2 Environment Conservation land, and coastal protection land for the purposes of SEPP 71.
 - c. There are significant noise and dust issues which arise from both the coal conveyor and coal loading facility, both in terms of impact on nearby residential areas, and on land zoned E2 - Environmental Conservation.
 - d. There are significant road safety issues arising from the close proximity of a coal conveyor to major road infrastructure of the Doyalson Motorway Link Road. There are significant rail safety issues in moving coal across the Newcastle Sydney Rail Line by conveyor.
 - e. The narrow corridor of Nikko Rd is manifestly inadequate for major infrastructure associated with a coal mine. It has insufficient room for

appropriate buffers away from the rail line. There is no room for adequate road access for maintenance along the rail line.¹ There is insufficient room for the proper construction of coal loading facilities as well as security, employee parking, and employee facilities. There is inadequate room for appropriate buffers or set-backs to protect the amenity of adjoining land, or to protect adjoining E2 - Environmental Protection land or to provide appropriate bushfire buffer zones. It would be inappropriate for a development application to proceed on the basis that other people's land provide a buffer for the project.

- f. It will have a greater risk of impact on Wallarah Creek and Spring Creek, particularly as a result of pollution runoff in times of flooding.
 - g. As noted below, placing a coal conveyor and rail and coal loading infrastructure is premised on removing the only road access for Darkinjung and other parties to land and infrastructure located on Lots 196 and 197, and land locking their land and assets. This is itself a substantive and draconian alteration to the project which, if it is to be pursued, ought to be done through a new development application.
 - h. The socio-economic impacts on third parties would be different to those previously considered.
- (7) The extent of the variations needs to be understood in the context that the project is not occurring in a remote location. It is occurring in close proximity to residential area that are part of a rapidly growing population centre, and where changes to the location of the project impact of a large number of people.
- (8) The extent of these issues highlight that any application to amend SSD-4974 to allow for a coal conveyor, and rail and coal loading facilities on Nikko Rd is outside the scope of what can properly be regarded as an amendment and is in fact a new development that requires a new development application.

Contrary to the Environmental Planning and Assessment Act

- (9) Because of the matters set out at paragraphs (1) - (7) above any amendment of SSD-4974 to enable the construction of a coal conveyor, rail and coal loading infrastructure on Nikko Rd, as against the lodgement of a new development application, would be contrary to the assessment procedures required to be followed for Part 3A Projects and would therefore be unlawful.

Premised on Denying Public Access

- (10) A further objection to any proposal to construct a coal conveyor, and rail and coal loading facilities on Nikko Rd, is that it is clearly incompatible with the road corridor continuing to be used for road access, and it is therefore premised on depriving the public of use of Nikko Rd.
- (11) Nikko Rd is not a disused road. It is an existing road relied on by Darkinjung and other third parties as the only access to their land and infrastructure. Nikko Rd is important to Darkinjung as no other access is available to Lots 60, 197, 196 or 201.

¹ The current proposal anticipated a maintenance road on either side of the entire length of the rail corridor: see for example Figure 19, *Walarah 2 Coal Project: Environmental Impact Assessment*, April 2013, Vol.1, p.39.

This is because the land is bounded by Spring Creek in the east and Wallarah Creek in the south. These are deep creeks which prevent road access. Lots 60, 196, 197 and 201 will become effectively land locked if the access by Nikko Rd becomes unavailable.

- (12) The fact that MLA 522 is confined to roads reveals a lack of regard for the essential functions of road reserves and the necessity for land owners to have access to their land. It should be manifestly apparent that as Wyong Coal owns none of the adjoining land, and because of the existence of deep creeks, Wyong Coal is incapable of providing alternative access.
- (13) Land set aside for road purposes is important public infrastructure that ensures that landowners have appropriate access to their land. Darkinjung believes that to allow amendment to SSD-4974 that is premised on the removal of public roads which results in land locking other people's land and depriving them of the beneficial use of it is draconian, inequitable and against public policy. The Minister should not allow an amendment to SSD-4974 that is premised on such an outcome.

Inconsistency With ALRA

- (14) Darkinjung maintains that any amendment of SSD-4974 that is premised on the removal of public access to Nikko Rd is inequitable, discriminatory, and inconsistent with the remedial and beneficial objects of the ALRA. Under the ALRA, land is transferred to Aboriginal land councils as a means of compensation for the past dispossession of Aboriginal people of their traditional lands and is intended to be an economic resource to assist Aboriginal communities to achieve economic self-sufficiency. It is inconsistent with that scheme for land to be transferred to Aboriginal land councils and then for the Government to remove legal access to the land by conferring interests on third parties.
- (15) Furthermore, it is clear that the removal of access to Nikko Rd has primary impact on Darkinjung's land only. No other land owners will become land locked by the proposal. It treats Darkinjung's interests as expendable while carefully avoiding the interests of all other land owners, and in this regard it is inequitable and discriminatory. The Minister should not permit amendments to SSD-4974 that have that effect.

Inappropriate Response to Court Decision in Wallarah No 2

- (16) Clause 49 of the Environmental Planning and Assessment Regulation 2000 provides that the consent of the New South Wales Aboriginal Land Council (NSWALC) is required prior to the making of a Development Application over land vested in an Aboriginal land council. SSD-4974 was lodged in complete disregard for that requirement and therefore defective.²
- (17) On 12 June 2014, *Darkinjung Local Aboriginal Land Council v Wyong Coal Pty Ltd (No 2) (Wallaharah No 2)* [2014] NSWLEC 71 the Land and Environment Court made an Order declaring that insofar as SSD-4974 is made in respect of Lot 195, cl 49 of the *Environmental Planning and Assessment Regulations 2000* requires the consent of the New South Wales Aboriginal Land Council "before any consent can be granted to the Application by the Minister or his delegate pursuant to s 89E

² *Darkinjung Local Aboriginal Land Council v Wyong Coal Pty Ltd (No 2) (Wallaharah No 2)* [2014] NSWLEC 71 per Craig J at [83].

*of the Environmental Planning and Assessment Act 1979 (NSW) which would include consent to the proposed development in respect of the Land.*³ Neither NSWALC nor Darkinjung have provided their consent to SSD-4974.

- (18) In the context of a finding that SSD-4974 was defective because of the failure to get consent of NSWALC before the application was lodged, it would be an unjust and inappropriate response for the Minister, rather than require the withdrawal of the Development Application, to instead permit an amendment to SSD-4974 which, if granted would remove existing legal access to 4 separate parcels of land for which Darkinjung is the owner. Such an approach would be a manifestly unreasonable way to attempt to remedy a defect in a development application, particularly where the requirement to obtain consent which led to the defect was a result of a requirement which arose under remedial and beneficial legislation.

Conclusion

For the reasons set out above, Darkinjung requests that:

- (a) any application to amend SSD-4974 to place a coal conveyor, and rail and coal loading infrastructure on Nikko Rd, be treated as a new project and one that requires a new development application to be lodged; and
- (b) in the event that an application to amend SSD-4974 is made, that Darkinjung be given notice of the application and be provided with a reasonable opportunity to respond.

Yours faithfully,
CHALK & FITZGERALD



Jason Behrendt
Legal Executive

³ Wallarah No 2 per Craig J at [90].

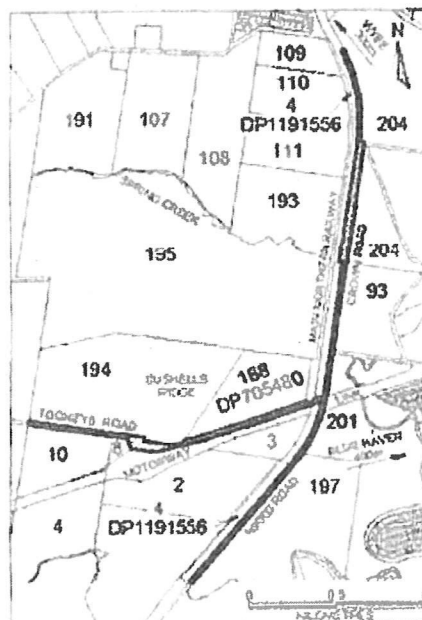
Attachment A

Notice of MLA 552 - Central Coast Express - 1 April 2016

MINING LEASE APPLICATION

NOTICE is hereby given in accordance with Section 51A of the Mining Act 1992 and Clause 25(2) of the Mining Regulation 2010, that Mining Lease Application No. 522 for mining purposes, has been lodged with the Department of Industry, Division of Resources and Energy (DRE) by Wyong Coal Pty Limited ABN 90 074 778 699, over an area of about 13.07 hectares which is located approximately 0.3 kilometres south-east of the town of Wyee and 0.4 kilometres west of the town of Blue Haven, in the Parish of Munmorah, County of Northumberland, as shown on the diagram below.

Information regarding this application can be obtained from Kenny Barry, Phone Number (02) 4352 7500. Information regarding landholder's rights is available from the Department's website: <http://www.resourcesandenergy.nsw.gov.au>.



Appendix F
DP&E Letter to Chalk & Fitzgerald



Mr Jason Behrendt
Legal Executive
Chalk & Fitzgerald
Level 9, Currency House
23 Hunter Street
Sydney NSW 2000

16/06464

Dear Mr Behrendt

I refer to my earlier letter to you, dated 17 May 2016, concerning matters raised by your client, Darkinjung Local Aboriginal Land Council, about potential amendments to the development application for the Wallarah 2 Coal Project (SSD 4974).

In my earlier letter, I indicated that the Department would seek comment from Wyong Coal on those matters. Wyong Coal's comments have now been received and carefully considered.

The *Environmental Planning and Assessment Regulation 2000* sets out a clear statutory process for the amendment of any development application while it is on foot, and the Department will ensure that that process is followed for the Wallarah 2 Coal Project. In this regard, I can inform you that Wyong Coal's response did not raise any concern that this statutory process is inappropriate or not applicable to the present circumstances of the Wallarah 2 development application.

I would like to repeat my previous assurance that, if an amended application and revised environmental impact statement are received and agreed to, then the Department would place the documents on public exhibition, and seek public and agency comments. This would provide your client with a clear opportunity to make detailed submissions as to its interests, which will be taken carefully into account.

I also note that you may wish to seek Wyong Coal's position on the matters you have raised directly from the company.

I trust this is of assistance.

Yours sincerely

Marcus Ray
Deputy Secretary
Planning Services

15/06/2016

Department of Planning & Environment

Appendix G
DP&E Response 2



WALLARAH 2 COAL PROJECT

Amendment to DA SSD-4974 Response to DP&E

for
Wyong Areas Coal Joint Venture
January 2017

**WALLARAH 2 COAL PROJECT
AMENDMENT TO
DEVELOPMENT APPLICATION SSD-4974**

**RESPONSE TO DEPARTMENT OF
PLANNING & ENVIRONMENT**

Prepared by:

HANSEN BAILEY
6 / 127 – 129 John Street
SINGLETON NSW 2330

January 2017

For:

WYONG AREAS COAL JOINT VENTURE
PO Box 3039
TUGGERAH NSW 2259

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WALLARAH 2 COAL PROJECT – AMENDMENT TO SSD-4974
RESPONSE TO DEPARTMENT OF PLANNING & THE ENVIRONMENT
for
Wyong Areas Coal Joint Venture

1 INTRODUCTION

This document responds to a letter dated 22 December 2016 from Department of Planning & Environment (DP&E) to Wyong Areas Coal Joint Venture (WACJV) in relation to the Wallarah 2 Coal Project (the Project). The letter noted that DP&E has reviewed the Amendment Response to Submissions (Amendment RTS) (Hansen Bailey, 2016a) and consulted with relevant government agencies.

In its letter, DP&E requested a consolidated response to the matters identified for additional information in its Attachment A.

This document provides a response to each issue in the DP&E's Attachment A. Inputs to the responses have been provided by technical specialists, where required.

2 WATER

2.1 BASEFLOW

The Planning Assessment Commission (the Commission) made a recommendation during its merit review of the original project that "given the sensitivity of the CCWS to drought, both temporary and permanent potential losses of baseflow are to be treated as potential impacts on the CCWS". The Department has reviewed the information provided in response to this recommendation and considers that further evaluation to periods of low flow should be provided.

It would be useful to gain an understanding of stream flows vs baseflows in periods of low flows and their respective quantitative amounts. In addition, the Department notes the predicted loss of 300 ML/Y of baseflow during average years. What consequence would this loss have on the CCWS during periods of low flow?

WRM has undertaken a further analysis to illustrate the impact of potential "worst case" water loss on both surface runoff and baseflow in the Wyong River catchment. The model was used to simulate the runoff and baseflow components of the catchment drainage to the Lower Wyong River Weir for two scenarios (for each of a dry year and very dry year) under:

- Existing conditions; and
- Existing conditions with an assumed total annual water loss of 300 ML/a due to impacts of the Project.

As shown in **Figure 1** in a dry year, the impact on flows is negligible during periods of surface runoff. The impact of flow loss during dry periods is apparent, but does not change the general character of flow which typically persists for an extended period after surface runoff, with some no-flow periods after extended dry weather. Within the resolution of the model, the impact on the number of no-flow days is **negligible**. In practical terms, it is unlikely that this flow volume loss could be detected.

Under a very dry year the total flow volume reduces by approximately 8%. Again, based on the model resolution, the impact on the number of no-flow days is **negligible**. In practical terms, it is unlikely that this flow volume loss (which represents an upper limit of potential impacts) could be detected.

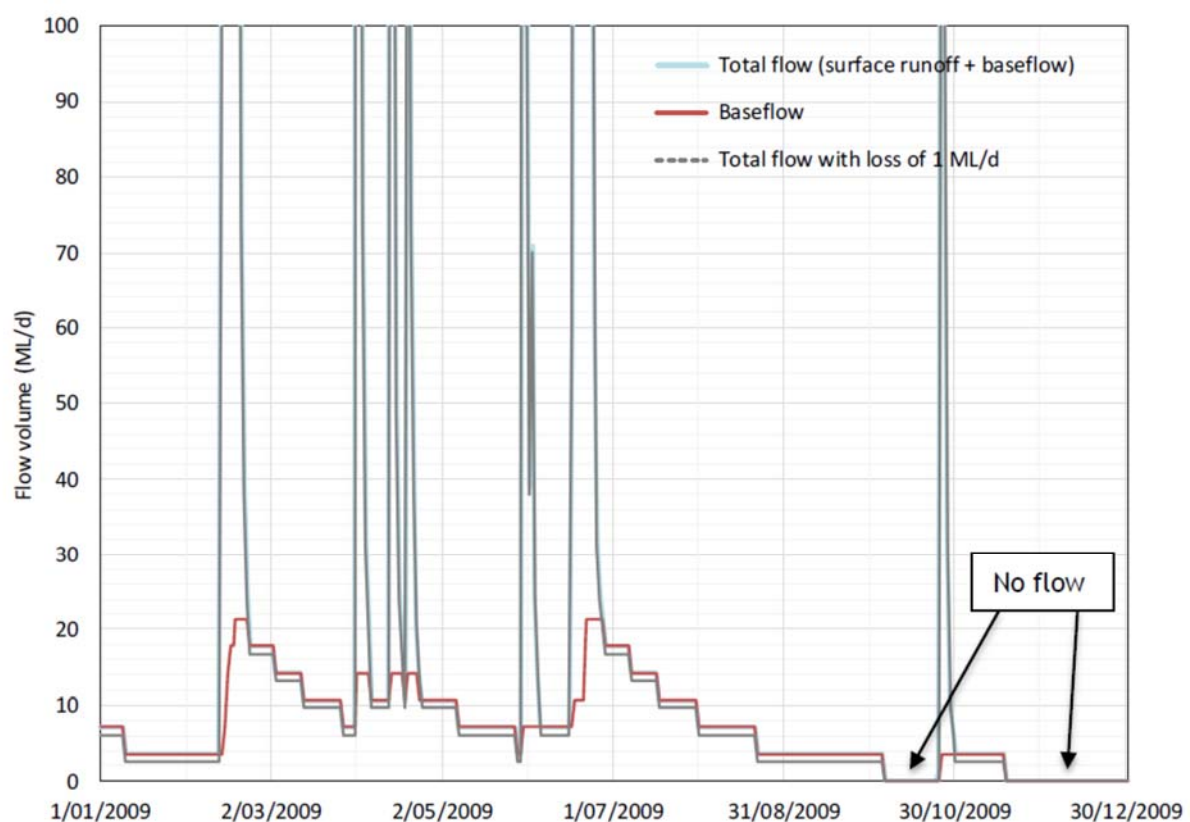


Figure 1 Time Series of Simulated Flow Lower Wyong River Weir

A detailed response to this issue is provided by WRM Environment in **Appendix A**.

2.2 COMPENSATORY MEASURES

The Commission also recommended that WACJV be required to "meet a no net performance outcome on catchment water resources during the life of the mine". The Department interprets this as WACJV being required to provide compensatory measures to compensate for its predicted 300ML/Y of baseflow loss to the CCWS. How does WACJV see this working in times of low flow?

Wyong Coal currently holds a 185ML water licence in the Jilliby Jilliby Creek Water Source, which was incorporated into the existing *Central Coast Unregulated Water Sharing Plan* in 2016. Wyong Coal's predicted take from the former Jilliby Jilliby Water Sharing Plan area is 270ML (which is the conservatively modelled worst-case temporary retention in alluvial sediments associated with subsidence) and as such a further Water Allocation Licence (WAL) for the volume of 85ML will be secured prior to such take occurring.

From the Wyong River alluvials, a further 30ML is required from the Central Coast Unregulated Water Sharing Plan which will also be secured through the purchase of additional WALs prior to such take occurring. It should be noted that there are sufficient WAL allocations in the relevant Water Sharing Plans available for WACJV to secure to cover the above required allocations.

With respect to the Planning Assessment Commission's (PAC) comments regarding a "No Net Impact performance criteria on catchment water resources during the life of mine" it suggested (Wallarah 2 Coal Project Review Report, page 37 (June 2014)) that:

"consideration be given to augmentation of the CCW'S by return of sufficient mine water treated to the required standards for raw water supply to compensate for estimated losses during the life of mine".

The PAC however also recognised a different approach prepared to be considered by (former) NSW Office of Water (NOW) (now DPI – Water) to compensate for the potential losses by bringing forward augmentation of future water supply scheme headworks.

The detail of this approach is outlined in NOW's *Response to the Commissions Questions (Undated Letter, Appendix 6, PAC Review Report June 2014)* and states;

"If the water losses are not replaced the eventual outcome for the urban water supply could be early augmentation of the water supply scheme headworks. Monitoring of the surface flows and groundwater after the mine is established, as well as the amount of water produced by the mine, would allow for informed estimates of the loss of flow and subsequent impacts on the water supply. It would then be possible to estimate the number of years that augmentation would need to be brought forward as a result of these water losses. At that time the cost of bringing the augmentation forward (not the whole cost of augmentation) could be transferred to the mine."

WACJV will establish a detailed water monitoring program capturing the data stipulated by NOW regardless of whether the compensatory mechanism is the return of treated mine water to the CCWS, the early augmentation of proposed future water supply scheme headworks, or the sole dependence on WALs..

As such, it is WACJV's opinion that flexibility in the development of the appropriate mechanism to achieve a "No Net Impact" outcome is achievable via either mechanism or a combination of mechanisms which also includes the utilisation of sufficient WAL shares which could potentially be provided to the Water Authority and banked to build credits to be applied during times of low flow. An appropriate consideration of water management options is best evaluated via a comprehensive options study. Taking account of feasibility and cost effectiveness of various opportunities, including possible provision of surplus water to nearby industrial users.

A properly constructed consent condition stipulating a flexible consultative approach would therefore promote development of a mechanism more likely to achieve a robust "No Net Impact" outcome.

A realistic timeframe is required to enable additional baseline monitoring and validation of subsidence modelling to be established and to continue during extraction to provide accurate data upon which any compensation is to be based.

3 DARKINJUNG LOCAL ABORIGINAL LAND COUNCIL

3.1 DP&E INTRODUCTION

On 9 December 2016, the Department received a further submission from Darkinjung LALC outlining its concerns following WACJV's submission of its amended project RTS. This submission largely reiterated the issues that were raised in the LALC's previous submissions, including not adequately addressing the Director-General's Requirements, bushfire risk, service connections, parking facilities, road closures, road access, water management, risk assessment, Negotiated Regional Planning Outcome, consultation with affected landowners and the Central Coast Regional Growth Plan 2036 (CCRGP).

Nevertheless, the Department notes that some new issues were raised that it considers require addressing. WACJV should carefully review the LALC's correspondence dated 9 December (as previously provided) and provide a detailed response to the matters raised, with a particular focus on any matters not previously addressed.

WACJV is disappointed that Darkinjung Local Aboriginal Land Council (DLALC) rejects WACJV's offers to meet and explain the project yet makes submissions raising issues that could have been explained and alleging a failure to consult. Reference is made to the DLALC letter of 27 October 2016 (which was copied to DP&E) and WACJV's response of 31 October 2016 (see **Appendix B**). WACJV notes:

- DLALC advised it was withdrawing from further discussions with WACJV.
- Wyong Coal advised that it:
 - Would like to continue to engage with DLALC on the Amended Development Application and to consider other options proposed by DLALC;
 - Would contact DLALC when its response to DLALC submission has been prepared and offer to take DLALC through the response to show that DLALC's concerns have been well considered and addressed in detail;
 - Would consider reverting to the original rail alignment once DLALC provides the commercial terms it proposes as offered by DLALC on 7 September 2016 and indicated whether it actually needs a rail connection for its industrial use. We note that at the meetings of 22 September and 17 October, DLALC advised that this option, of reverting to the original proposal, was no longer available and would be not considered by DLALC under any circumstances – accordingly WACJV maintains the need for the Amended Application; and

- Was doubtful that the DLALC's Negotiated Regional Planning Outcome (NRPO) can be achieved and particularly, in a timeframe that does not further negatively impact the economic viability of the Project but will however consider this further if DLALC:
 - Confirms the area under consideration;
 - Provides further information to allay Wyong Coal's concerns; and
 - Provides proposed commercial terms.
- WACJV has contacted DLALC three times during November 2016 offering further talks. Such talks could have accurately informed DLALC of the matters raised in its submission of 9 December 2016, however DLALC declined all offers. A further offer to meet was made on 20 December 2016, however DLALC were unavailable to meet.

Numbering in the italicised paragraphs are those from the DLALC letter of 9 December 2016.

A response to each issue raised is provided below.

3.2 DGRS

1. *In key respects the Amended DA still does not comply with the Director-General's Environmental Assessment Requirements – Section 78(8A) of the EP&A Act. The absence of an assessment complying with these requirements does to permit the Department or anyone else to undertake a proper assessment.*

WACJV has met the requirements of the DGRs for both the EIS and the Amendment Document (Hansen Bailey, 2016b).

Further comments in relation to bushfire are provided in **Section 3.6**.

3.3 RELEVANT DOCUMENTATION AVAILABILITY

3.3.1 DGRs

2. *The DGR's required that the "The EIS must include all relevant plans, architectural drawings, diagrams and relevant document required under Schedule 1 of the Environmental Planning and assessment Regulation 2000." It added that "these documents should be included as part of the EIS rather than as separate documents".*

The EIS included detailed drawings in Appendix E. In relation to the Amended Project, the Amendment document included design drawings at Appendix B at a relevant level for a SSD project to enable the DGRs to be met and public consultation to occur on the project.

All of these documents need to be taken together to form the assessment documentation for the Project. This is demonstrated by the fact the term "EIS" would be defined in any development consent issued for the Project to include the original EIS developed for the Project, the Amended Document and any other subsequent documentation that the determining authority deemed necessary (including any additional detail requested on existing drawings provided).

3.3.2 Appropriateness of Drawings

3. *The submission suggests that the EIS and Amended DA does not comply with this requirement. There are no appropriate drawings showing how Darkinjung's existing access will be maintained in relation to the construction of the bridges in the vicinity of Spring Creek or how that access will be maintained with the proposed changes in levels of the land.*
4. *It also suggests there is no site plan which shows "existing levels of the land in relation to buildings and roads" or "proposed finished levels of the land in relation to existing and proposed buildings and roads", "proposed methods of draining the land" or "proposed parking arrangement, entry and exit points for vehicles and provision for movement of vehicles within the site (including dimensions within the site)."*
- 5&6. *The submission suggests that plans are inconsistent between the Amended DA and in the "WACJV Response" which illustrates non-compliance with the DGRs and an inability for the Amended DA to be properly assessed.*

Clause 55(2) of the EP&A Regulation states that an application to amend a DA must be supported by "written particulars sufficient to indicate the nature of the changed development". The Amendment Document provides sufficient detail to enable a detailed assessment of Amended Project as required under clause 55(2).

The Amendment Document provides a detailed description of the Amended Project (as required by clause 55(2)) and is adequate to allow a proper assessment and the public to comment on the Amended Project. It is noted that the Amendment Document must be read together with all other documentation prepared for the Original Project.

Some additional project detail was provided in the Amendment RTS to respond to stakeholder queries, however none are inconsistent with the Amendment Document.

3.4 DESIGN DEFERRMENT

7. *In a number of respects, instead of undertaking an appropriate assessment as required by the DGRs', the Amended DA merely defers the assessment to a later date. The Amended DA advises that the WACJV will be required to enter into a Deed to allow use of land under the control of TfNSW. The WACV Response states that:*

"In addition, prior to construction and then again prior to operation of the Amended Project, WACJV will conduct constructability and operational risks assessments and put in place all subsequently identified safety measures to ensure the safety of the wider community, its workforce and its equipment. This risk based process is a requirement involving construction within 25 m of a rail corridor, which can only be undertaken with TfNSW consent."

8. *TfNSW is not the consent authority. The engineering issues and risk associated with constructing a coal loading facility in a narrow 20m corridor with no set-backs or asset protection zones are matters that were required to be identified and addressed in the EIS. They are significant and relevant to whether the project should proceed at all.*

WACJV has not stated that TfNSW is the consent authority. The use of “consent” in this context means consultation in the risk assessment process which will consider any relevant engineering constraints, with appropriate design, construction and access approval post-to be sought from TfNSW after the DA is approved.

This issue is the responsibility of TfNSW. In its submission to the Amended Document TfNSW stated *“TfNSW has reviewed the submitted information and has no further comment on the development application. TfNSW supports the continued engagement between the transport agencies and Wyong Areas Coal Joint Venture.”*

It should be noted that these requirements also pertained to the Original Project.

Finalisation of detailed infrastructure design necessarily occurs post approval and in detailed consultation with stakeholders, including relevant adjoining landowners. Similarly, detailed design of ancillary works will occur in concert with final infrastructure design.

Commercial-in-confidence work undertaken to date by accredited rail and civil construction providers promotes certainty regarding ability to construct and operate the facilities within the confines of Nikko Rd using the existing level of design.

A significant part of the design and construction process is the Constructability Risk Assessment. This risk assessment must address the hazards associated with all phases of the infrastructure’s life including design, construction, operation and decommissioning. The codes of practice related to the Safe Design of Structures clearly defines the requirements to be met for this type of infrastructure installation. The following are excerpts from the Work Cover - Safe Design of Structures Code of Practice.

Safe design means the integration of control measures early in the design process to eliminate or, if this is not reasonable practicable, minimise risks to health and safety throughout the life of the structure being designed.

The safe design of a structure will always be part of a wider set of design objectives, including practicability, aesthetics, cost and functionality. These sometimes competing objectives need to be balanced in a manner that does not compromise the health and safety of those who work on or use the structure over its life.

1.1 What is safe design?

Safe design begins at the concept development phase of a structure when making decisions about:

- The design and its intended purpose materials to be used;
- Possible methods of construction, maintenance, operation, demolition or dismantling and disposal; and

- What legislation, codes of practice and standards need to be considered and complied with.

3.3 Design development phase

In this phase the design concepts for the structure are converted into detailed drawings and technical specifications.

Control measures are decided and construction documentation is prepared. The design is completed and handed to the client.

Control measures for common hazards may be chosen from known solutions. For other new or complex hazards a risk assessment may be necessary to assist in determining the most effective control measures. The design development phase should involve:

- Developing a set of design options in accordance with the hierarchy of control;
- Selecting the optimum solution. Balance the direct and indirect costs of implementing the design against the benefits derived;
- Testing, trialling or evaluating the design solution; and
- Redesigning to control any residual risks.

Finalising the design, preparing the safety report and other risk control information needed for the structure's lifecycle.

The construction and operation of the infrastructure for the project must comply with these codes, the Australian Standards and relevant regulations that will result in a safe designed for purpose structure for the life of the project.

Further discussion on asset protection zones are provided in **Section 3.5**.

3.5 BUSHFIRE ASSET PROTECTION ZONES

3.5.1 Setbacks for Conservation Zoning

9. *The submission states the response ignores setbacks. The close proximity of vegetation with conservation zoning requires that there be provisions for setbacks. On the current design, the canopy of the trees on the DLALC owned Lot 204 DP 1117900 will be in close proximity to the coal loader.*
10. *The submission further contends a project should not be constructed without appropriate setbacks and that DLALC is concerned that WACJV will subsequently require DLALC to clear the vegetation on its land to provide protection for the coal loader. If adjoining land is to be used by way of an asset protection zone, it is required to be the subject of an easement and it should have been the subject of the Amended DA.*
11. *The submission notes if an asset protection zone is required to the east of the coal loader and conveyor, the Amended DA fails to address ecological impacts.*

12. *Apart from having appropriate set-backs for bushfire protection, adjoining land owners are entitled to have an appropriate set-back from their own properties for coal loading and rail infrastructure.*

See also response Item 18 in **Section 3.6.3**.

Development Application (DA) for SSD-4974 is made as a SSD under Division 4.1 of EP&A Act.

Under section 79BA of the EP&A Act a SSD is not required to conform to the specifications and requirements of 'Planning for Bush Fire Protection' (NSW Rural Fire Services, 2006).

Further, under section 89J(1)(f) of EP&A Act, a bush fire safety authority under section 100B of the *Rural Fires Act 1997* is not required. These issues are addressed under the DGRs.

However, in accordance with the DGR's, consideration has been made to "*Hazards – paying particular attention to public safety, and including bushfires*". A detailed assessment was included as Appendix AB to the EIS and relevant consideration given to bushfire in the Revised Risk Assessment in Appendix F of the EIS with the methodology applied accepted by DP&E and the PAC.

3.6 BUSHFIRE RISK

3.6.1 Property Access

13. *The WACJV Response does not adequately address the issue of bushfire risk or the need of the project design to have regard to basic standards. The coal loading facility if proposed in bushfire prone land and immediately adjacent to Category 1 Vegetation without any setbacks or "Asset Protections Zones". The project will be contained in a 20m corridor with the eastern side of the coal loader immediately adjacent to the canopy of the adjoining bushland. The 6 m access road will in some sections be fenced on one side. There is no room for appropriate turn around bays for emergency vehicles. It is not a defensible space in the event of a fire and will be fire trap.*

The 6m wide road does not require additional passing bays and is consistent with 'Planning for Bush Fire Protection 2006' Figure 4.5 (reproduced as **Plate 1**). The conveyor design has adequate space to have compliant fire-fighting infrastructure (i.e. reticulated water supply, hydrants and fire depots) providing a fire fighting capability for RFS well in excess of that currently provided by tanker trucks.

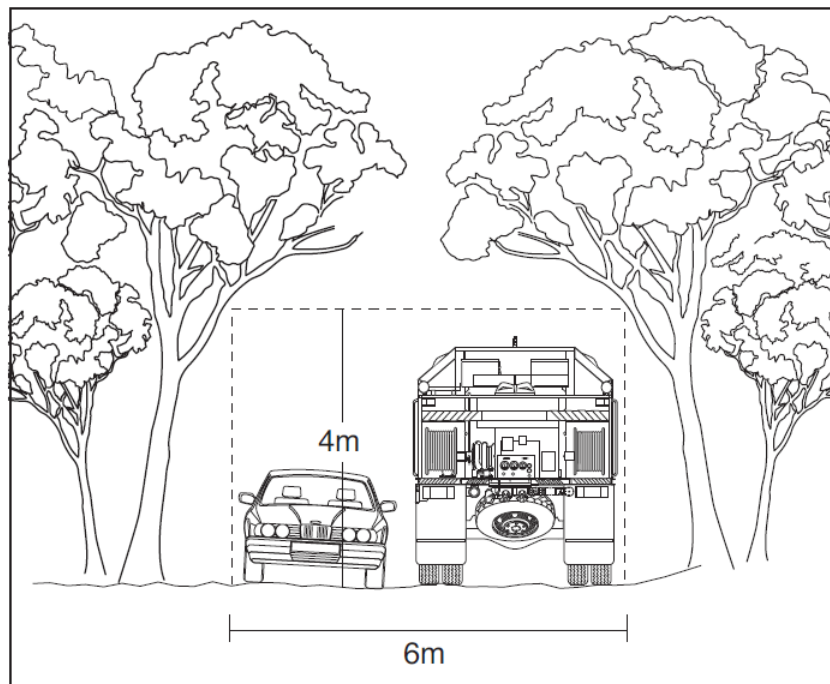


Plate 1
Property Access Road Requirements (Rural Areas)

3.6.2 Loading Facility

14. *The submission suggests that as the loading facility will be remotely operated with no staff on site, a response to a fire would be at least 20 minutes away.*
16. *WACJV Response refers to Condition 26 of the recommended development consent which requires “bushfire management measures to be implemented”. However such a requirement cannot address fundamental design defects where infrastructure is built without setbacks or asset protections zones which do not exist.*
17. *This section restates that commitments to conduct a bushfire risk assessment prior to construction are inadequate and does not meet the DGRs.*
19. *Darkinjung maintains that it is irresponsible for a facility of this kind to be constructed without any attempt to address bushfire risk associated with it.*

For item 17 also see response in **Section 3.4**.

The structures along Nikko Road will be constructed of non-flammable material (i.e. steel structure and steel cladding with minimal internal flammable components) which when considered in concert with the removal of vegetation in the 20m wide corridor, demonstrably eliminates a significant volume of potential fuel load in comparison to the current fuel level along Nikko Road.

The system will include fire detection and suppression systems consistent with Coal Mining Health and Safety legislation, the appropriate Australian Standards and requirements determined via a detailed design risk assessment conducted in consultation with the RFS.

The design elements noted are already consistent with RFS guidelines. Similar local structures (photographed from Ruttley's Road in the former Wyong Shire and Ruttley's Road in Lake Macquarie City as **Plate 1**, **Plate 2** and **Plate 3** below) demonstrate current practice for conveyors in proximity to bush land. These measures also protect adjoining landholders by reducing risks associated with any potential fire within the Nikko Road infrastructure area. It should also be noted that the conveyors in **Plate 1**, **Plate 2** and **Plate 3** are actually classed as buffers in both the Lake Macquarie City Council and Wyong Shire LGA 'Bush Fire Prone Land maps' (NSW Rural Fire Service, 2017).

The coal loading facility has always been proposed to be remotely operated from the Tooheys Road site (refer 3.9), therefore this risk level remains unchanged from the original project.

DLALC asserts at Item 16 and Item 17 that "such a requirement cannot address fundamental design defects whereby infrastructure is built without setback or asset protection zones" and "an after the event consideration of bushfire risks cannot address the design flaws of a project of this kind in a 20m corridor with no set-backs or asset protection zones".

WACJV maintains that there are no fundamental design defects and the pre-construction risk assessment referred to by DLALC at Item 17 will ensure that the facility is constructed with satisfactory management of bushfire risk.



Plate 2
Conveyor in close to bush in a narrow corridor viewed from Ruttley's Road



Plate 3
Conveyor gantry with enclosed conveyor close to bush from Ruttley's Road



Plate 4
Transfer station in close proximity to bush viewed from Ruttley's Road

3.6.3 Rail Line Surface Facility Fire Breaks and Mandalong Project

15. *The original risk assessment stated that bushfire would be addressed maintaining fire breaks around surface facilities. The 'Planning for Bush Fire Protection' has not been taken into account which is inconsistent with the DGRs.*
18. *The submission refers to the Mandalong Southern Extension SSD project where a separate bushfire risk assessment was undertaken for the project and the RFS Planning for Bushfire Protection was taken into account.*

Mandalong Southern Extension Project (Mandalong) did undertake a bushfire risk assessment which resulted in the establishment of asset protection zones. However, the DLALC fails to identify, discuss or demonstrate an understanding of the context of Mandalong's bushfire risk which is different to the Amended Project as follows:

- From Ecobiological (2013), one of the primary bushfire risks is "Stalling of mine production and/or damage to infrastructure assets, financially impacting Centennial Mandalong and local and regional commercial operations" (Section 10.15.2). This gives context to the establishment of asset protection zones for Mandalong:
 - The assessment focused on Mandalong's two surface infrastructure sites, being the existing Mandalong Mine Access Site and proposed Mandalong South Surface Site (Section 10.15). "A bushfire risk assessment addressing the Cooranbong Entry Site will be undertaken as part of the development application for the Northern Coal Logistics Project.";
 - For Mandalong Mine Access Site an APZ (10 – 20m) will be established around the gas drainage and ventilation management infrastructure (Section 10.15.3);
 - For Mandalong South Surface Site includes ventilation (upcast and downcast), storage and underground delivery of stone dust, hydrocarbon storage, electrical reticulation, water reticulation, water management and. The APZ will be 20 – 45m (Section 10.15.3); and
 - Difference in APZ size is based on terrain – Mandalong Mine Access Site is flat, Mandalong South Extension is on a hillock on Figure 2 of Ecobiological (2013).

WACJV regards the assets protected by these APZ's are clearly ones that are fundamental to an underground coal mine in the prevention of a catastrophic event (explosion), and essential for maintaining a safe underground working environment (ventilation, stone dust delivery, water reticulation and communications), maintaining environmental controls (water management) and sustain underground operations.

The bushfire threat to services and infrastructure identified for Mandalong Project risk assessment identifies matters directly applicable to mine safety and the continuity of safe underground operations. It does not address matters related to the protection of outside assets or those not considered to compromise safety within the mining context.

The referenced Bushfire Risk Assessment is therefore peculiar to the Mandalong site, but more importantly particularly peculiar to the protection of assets which if impacted by bushfire will directly affect the health and safety of people working in the underground environment and the continuity of underground operations.

Conversely, those safety-critical operational assets required by the Amended Project are located at the Tooheys Road and Buttonderry sites, and in later years at the proposed western ventilation shaft. Potential bushfire impact on those assets has been addressed within the risk assessment undertaken for the EIS and is considered to be of medium to low risk.

When considered in the context of safety and operational critical asset protection, WACJV advises that the infrastructure proposed within the Nikko Road site adjacent the Main Northern Rail Line (if it were to be impacted) may present disruption to raiing but does not prevent any overall safety issue for the Project as a whole. However, overall safety and mine production impacts do not occur due to the assets not affecting underground safety and production at the mine being able to continue due to the 50,000t ROM and 250,000t product stockpiles at Tooheys Road.

It is noted that the existing Main Northern Rail Line rail corridor is a buffer zone under Wyong Shire LGA – Bush Fire Prone Land Map. WACJV facilities to the north of the loading bin replace what is currently dense bush with a rail spur and a 6m wide all weather access road (refer to **Section 3.13**). This effectively increases the current buffer by 20m and provides a fire fighting access that currently does not exist.

From the Motorway Link Road Bridge to the loading bin the existing short section of dirt track of approximately 300m in length will be replaced by a 6m all weather road.

3.7 NOISE

20. *The issue of noise was raised in the submission from the EPA dated 5 August 2016. The lack of assessment of the impact of noise on land owned by DLALC and proposed residential developments was raised in the original DLALC submission. The WACJV response does not adequately address this issue. The classification of the DLALC land as “urban” noise amenity is not justified. DLALC maintains that the proper classification is “suburban”.*
21. *DLALC estimates that on this basis there would be approximately 147 lots with a > 45 dB noise level which represents a significant impact on the proposed development. A copy of an acoustics assessment commissioned by DLALC is included as Attachment 2.*

The appropriate regulator responsible for noise impact assessment in NSW is the EPA. The EPA in its letter dated 20 December 2016, confirms that issues raised by the EPA in its letter (dated 5 September 2016) were adequately addressed in the WACJV Response. This includes acceptance of the “Urban” criteria as the most appropriate receiver classification.

VLAMP only applies to the existing residential properties identified in the Amendment to the Development Application.

It is clear from the amenity assessment undertaken that the amenity of the DLALC land is appropriately maintained.

A detailed response to noise including DLALC's Attachment 2 is provided in **Appendix C**.

3.8 SERVICES

22. *The Amended DA does not properly identify how services will be connected to the part so the Project on Nikko Road (e.g. water connection for use at the loading facility for dust suppression).*
23. *The coal loading facility will be fitted with a water pipeline for fire-fighting which is able to be accessed by emergency services. The submission notes that the location of the pipeline is not identified and whether further easements are required. If from the town system, this has not been assessed.*

Services such as power and water for dust suppression (and fire fighting off-takes) will follow normal mining and industrial protocol of being fitted to the conveyor infrastructure. These services will originate from the Tooheys Road infrastructure site.

The volume of water required will be determined through a risk-based process during final design to ensure optimal volumes are available to meet operational and emergency requirements. Off take points allowing emergency services access to fire-fighting water will be developed in consultation with those services, and placed appropriately to meet Australian Standards. The reticulated system will utilise treated mine water as per general mining convention.

3.9 DISTURBANCE OUTSIDE PROJECT AREA

24. *It is clear from the Amended DA the Project is premised on the WACJV to undertake activities outside of the Infrastructure Boundary. DLALC is concerned that in the vicinity of Nikko Road it may also be outside the project boundary and outside the footprint of the Amended DA. The Amended DA confirms:*

"Minor disturbance outside the Infrastructure Boundary may be required for ancillary works such as firebreaks, boreholes, water diversion structures, minor contour banks, pipelines (and associated tracks and other services), power supply, security fences, environmental monitoring, and erosion and sediment control."
25. *The infrastructure Boundary is shown on Figure 19 and it is apparent that in the vicinity of Nikko Road, the Project Boundary is coextensive with the Infrastructure Boundary (i.e. there is no room for works described in Item 24.*
26. *As there are no proper sketches or descriptions of levels, drainage, bushfire management, ecology assessment, the Amended DA does not properly identify where the relevant works will be undertaken and the extent to which they will impact on adjoining land and as such cannot be properly assessed.*

The quotation provided above is taken from Section 2.1 'Overview of the Original Project' in the Amended DA. The reference to "Minor disturbance outside the Infrastructure Boundary

may be required for ancillary works such as firebreaks, boreholes, water diversion structures, minor contour banks, pipelines (and associated tracks and other services), power supply, security fences, environmental monitoring, and erosion and sediment control” does not refer to Nikko Rd, but rather areas previously identified within the EIS such as the Jilliby State Conservation Area to access and monitor the impacts associated with the underground aspects of the mining operation and to provide power to the western ventilation shaft.

All activities will occur generally accordance with the description within the EIS (and modifying documents) and within the Project Boundary. The majority of work will be undertaken within the EIS Disturbance Boundary and Amended DA Infrastructure Boundary.

Also, the EIS at Section 3.1 states “Outside the nominated Disturbance Area, additional minor disturbance associated with ancillary works may be required, including: firebreaks, water diversion structures, minor contour banks, pipelines and associated tracks and other services, power supply, powerlines, fences and sediment and erosion control structures. No such disturbance will occur prior to the completion of the Land Disturbance Protocol process as described in Section 7.9.” Assessment of impact was undertaken to the Project Boundary as part of this EIS will form part of any DA granted.

Further, WACJV’s accredited rail and civil construction advisors have indicated that it (and other contractors) regularly successfully complete rail infrastructure works in corridors tighter than the 20 m corridor at Nikko Road. Examples include Gosford passing Loops, Liverpool Turn-back, and Kingsgrove to Revesby Quadrupling). A brief discussion on each is provided below.

3.9.1 Gosford Passing Loops

WACJV advises that **Figure 2** shows the construction of the new Up Passing Loop in a cutting. This work involved the following:

- Widening of the existing cutting by 8.5m;
- Construction of retaining wall, (Rock Bolting, Shotcrete) including channel drain to the base of the retaining wall;

Installation of Signalling Gentries;

- Installation of new Track and associated signalling infrastructure;
- Installation of fencing above the embankment; and
- Sedimentation and Environmental Controls as required.

Examples of restricted rail corridor works are described below.

3.9.2 Kingsgrove to Revesby

Kingsgrove to Revesby Quadrupling involved 10 m widths, contiguous piled wall to existing rail track as shown in **Figure 3**. All were undertaken whilst trains were running.

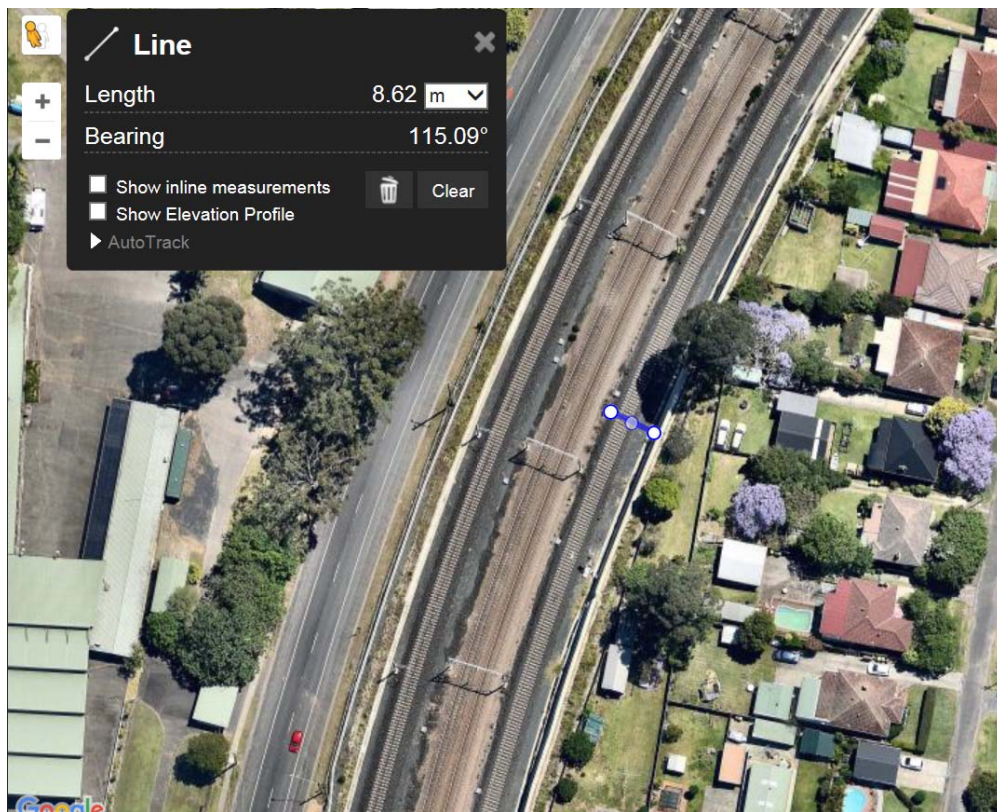


Figure 2 Constructability – Gosford Passing Loops

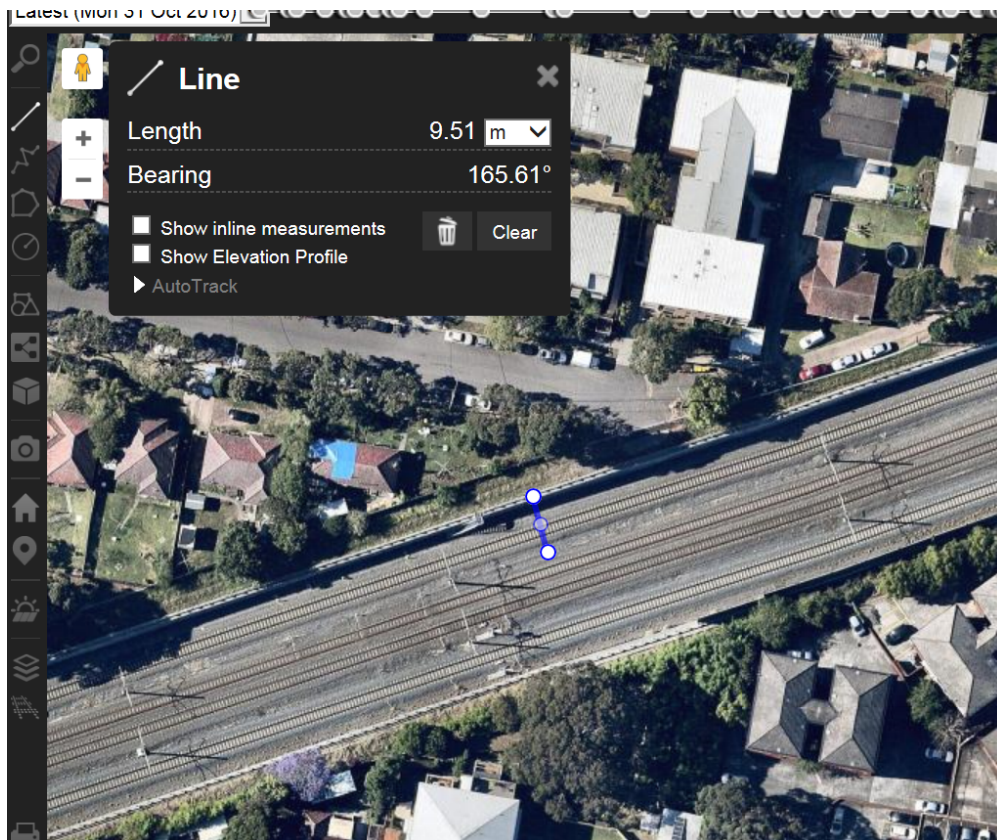


Figure 3 Constructability – Kingsgrove to Revesby Quadrupling

3.9.3 Liverpool Turn-back

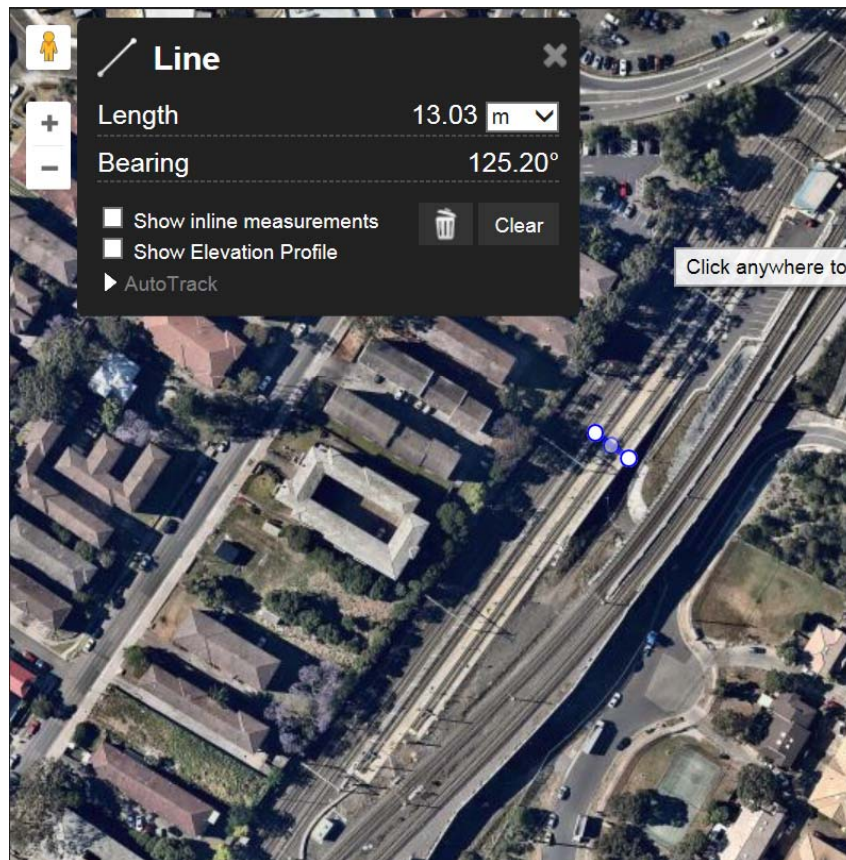


Figure 4 Constructability – Liverpool Turn-back

Liverpool Turn-back was constructed in-between two live running lines with a 13m width as generally shown as **Figure 4**.

3.10 AUTOMATED COAL LOADING

27. *There is a substantive alteration the proposed operation of the coal loading facility on Nikko Road.*
28. *The Amendment DA indicated there would be a “control room” attached to the loading facility and also stated the loading system will be able to be controlled locally and remotely.*
29. *The control room is not referred to the WACJV response and the plan does not proposed a control room. WACJV now states “no personnel will be permanently stationed at the facilities along Nikko Road”.*
30. *This late alteration adds to the inappropriateness of the project. The risks associated wither remote operation of a full automated coal loading facility have not been assessed. Security, fire response and emergencies are impacted. In an emergency, to get to the loading facility, a person at the main facility would have to travel from Tooheys Road to Bushells Ridge Road, then Gosford Road through two locked gates. This is irresponsible due to proximity to the rail Line and bushfire prone land in a residential area.*

The facility is not “now operated remotely with no staff on site” (item 14), and a “substantive alteration in the WACJV Response” (item 27) or a “late alteration” (item 53).

The control room is a room where control systems are located rather than a room where the system is operated from. Local operation is possible for maintenance purposes. All underground belt conveyors are controlled and operated in a similar manner.

Automated rail coal loading is an established technology used within the Australian mining industry and applied to the original application in 2013. This is acknowledged in Item 53 (**Section 3.19**).

The control room was identified in DA Amendment Appendix B Drawing No 22-17704-C205. RTS Appendix C Drawing No. 22-17704-C323 shows a reconfigured loading facility to reduce its footprint to permit an increase in access road width from 3 m to 6 m following consultation with DLALC on 7 September 2016. These activities will continue to be undertaken within the Project Boundary.

The identification of hazards and the controls for the automated loading system will be developed during the infrastructure design process and will include compliance with all relevant Australian Standards, industry regulations and industry best practice. The automated control system will provide a reliable and repetitive arrangement to present a low risk solution for the rail loading process.

Consultation will continue with the relevant statutory authorities throughout the process of design, construction and operation to ensure the relevant standards have been achieved and are maintained.

3.11 GOSFORD ROAD ACCESS

31. *Neither the EIS nor the Amended DA refers to the use of Gosford Road as an access point for the project. The first time it has been raised is in the WACJV response which highlights that this is a project which WACJV is “making up as it goes along”.*
32. *The DGRs require a detailed assessment of the project on the capacity, efficiency and safety of the local road network with particular regard to Wallarah Interchange, Motorway Link Road/Tooheys Road Intersection and Sparks Road/Hue Hue Road intersection. It also required a description of the measures that would be implemented to maintain or improve the capacity of the road and rail networks over the life of the project.*
33. *The DGRs do not refer to Gosford Road as it has never been part of the project. To the extent that Gosford Road is now the access point for the coal loading and rail facility, DLALC notes:*
 - a) *State rail land access gate is locked. Its current use is different to proposed. It is the only access point for the entire infrastructure to be placed on the land by heavy machinery and buses.*

- b) *Entry point for Gosford Road is narrow in close proximity to a narrow bridge across the railway. An existing concrete structure of the bridge would interfere with any redesign of the entry. Electricity poles on side of existing track restricting entry.*
- c) *Works will be required to ensure an entry which are not described or addressed. They are outside the project area and land subject of the Amended DA.*
- d) *Detailed assessments has not be undertaken to facilitate access from Gosford Road (particularly the local road network).*
- e) *No design plans for the entry on to Gosford Road.*
- f) *There has not been a proper public notification with the community or the relevant public authorities responsible for Gosford Road.*

Section 6.4.3 of the Amended DA states “To reduce potential road traffic noise during the construction phase, personnel will be transported to the site of the rail spur via bus, rather than commuting to the site individually.”

Section 6.1.7 of the Amendment RTS states “During the construction phase, all construction personnel undertaking works at the Tooheys Road Site will initially arrive via the main entry. The personnel that are allocated to the Nikko Road works will be transported to the Nikko Road site by bus, as described in Section 6.4.3 of the Amendment Document. This arrangement reduces the number of vehicle movements to and from Nikko Road. Preliminary constructability assessments by an accredited rail and civil constructor advise that access to the Nikko Road site will occur via Gosford Road and the adjoining rail corridor to the north of the proposed train load out loading facility.”

WACJV’s accredited rail and civil construction advisors also have indicated that it has previously accessed onto sites with much tighter access and restrictions (e.g. built up residential areas in Gosford and various Sydney Metropolitan Sites) through effective management such as:

- Traffic Control to control movements in/out of site;
- Implementation of temporary speed restrictions;
- Placing of concrete barriers;
- Construction of temporary deceleration / acceleration lanes (with removal if required at the end);
- Provision of Street Sweepers; and
- Delivery Drivers Inductions.

The above requirements and details discussed at Items 33 a) to f) will be determined through the Constructor’s Risk Assessment. Part of that Risk Assessment would include consultation with the Central Coast Council and Sydney Trains in relation to the use of the access road in their corridor. The constructor will obtain all licences, approvals and permits for construction.

3.12 PARKING FACILITIES

36. WACJV does not clarify how parking on Nikko Road would operate in such a narrow corridor.
37. The response in the Amendment RTS ignores the issue. There must be some spaces for parking, even if intermittently. Furthermore, larger vehicles for maintenance and emergency vehicle should have sufficient space, especially when being shared with the public.

The principal routine maintenance requirement at Nikko Road is the train loading mechanism and the conveyor drive. These are both located at the loading bin. The area of Nikko Road to the immediate North of the Coal Loading facility is 20.1 m wide and will be burdened only by the rail spur.

Preliminary measurements include a 3 m wide train with a 2 m clearance from fences either side (totalling 7 m) and a 6 m wide access road with a 1 m eastern side buffer with drainage control structures (totalling 7 m).

With 14 m of the road being utilised for rail and access purposes, an approximate 6 m width area located centrally at the northern end of Nikko road is available for parking (when required) and service vehicle access as conceptually shown in **Figure 5**.

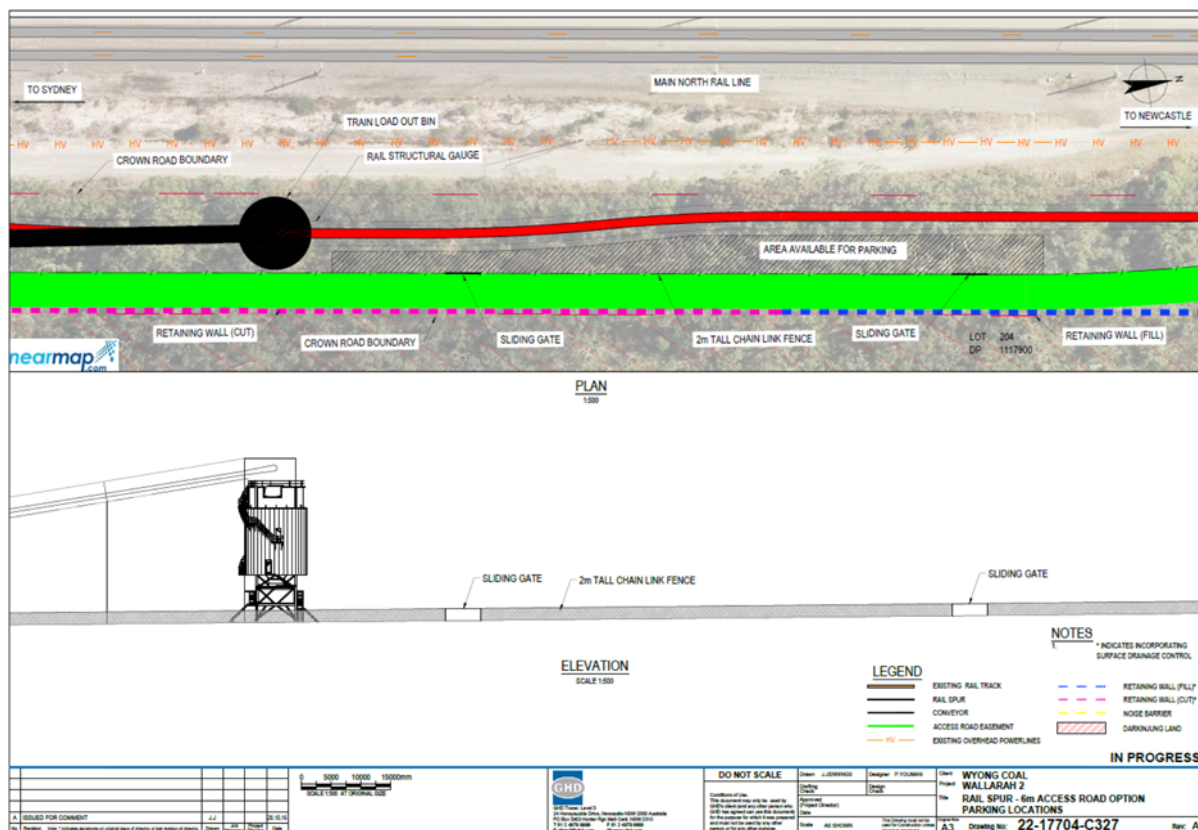


Figure 5 Conceptual Area Available for Parking at Nikko Road

3.13 ROAD CLOSURE APPLICATION

38. *A critical part of the Amended DA is the road closing application for Nikko Road (Closure Application W562973). WACJV has noted that the road closure application is not a relevant consideration in determining the DA for the Amended Project.*
39. *First, the entire project is premised on and assumes the closure of Nikko Road. If it is not closed, the project cannot proceed. Secondly, the DGRs require assessment of potential impacts of the project – the impacts from closing the road are relevant including the discriminatory nature of the road closure and impacts on adjacent landowners. Third, any approval of the application are matters for the Minister Administering the Roads Act. Neither DP&E nor the PAC can pre-empt the outcome of that decision. In those circumstances the assessment of the Amended DA is premature.*

The road closing application is not part of “Amended DA” as further described below. As WACJV has previously noted, the road closure application is not a relevant consideration in determining the development application for the amended Project.

In response to the three points raised in paragraph 39:

- As to the part after “First” - This statement is incorrect. Whilst it is WACJV’s preference to close Nikko Road via the process underway with DPI Lands, a decision not to grant closure does not block the project from proceeding or inhibit a decision by the PAC to grant approval to the DA. There are other alternatives available to secure the necessary tenure over the road should the road closure and purchase application not be successful.
- As to the part after “Secondly” - This statement is incorrect. As noted in DLALC’s submission, the road closure application and the planning assessment process are entirely separate. The potential impacts of closure of the road are a matter for assessment by DPI Lands in response to the closure application and not the consent authority for the development application.
- As to the part after “Third” - WACJV agrees that any approval of the road closure application and conditions of that approval are a matter for the Minister administering the Roads Act 1993 (Roads Act). This process is separate to and independent from the planning assessment process. As mentioned above, the carrying out of the Project does not depend on closure of the road.

The road closure application continues to be progressed with DPI Lands which is required to publicly advertise the application under the Roads Act and consult with adjoining landowners as part of the application assessment process.

WACJV advises that it is anticipated that these advertising and consultation processes by DPI Lands will occur during Q1 2017; however no confirmed timeframe has yet been advised by DPI Lands.

3.14 CLOSURE OF NIKKO ROAD

40. *DLALC sets out the discriminatory nature of the road closing in its previous response and maintains that position. DLALC maintains there is clear government practice of not closing roads and selling them to applications who are not the adjoining land owners. Reference is made to an email from the Department of Industry Lands to WACJV dated 28 June 2016.*
41. *This position is consistent with the Government's Fact Sheet in relation to road closures which assumes that the road closure application is made by the adjoining land owners. It further states that the first step for making an application is to discuss the proposal with adjoining neighbours.*
42. *WACJV represented in its Road Closure Application W562973 that it was applying to "close and purchase roads enclosed without or adjacent to my/our property".*

In response to the above paragraphs:

40. The email from DPI Lands dated 28 June 2016 is incorrect as a matter of law. The Roads Act allows a road closure application in respect of a road of the same type to be made by any person and does not prevent the sale of land within a closed road to other than an adjoining landowner. These issues are matters for due consideration by the relevant authority under the Roads Act.
41. WACJV has advised and consulted with directly adjoining land owners including DLALC and other nearby land owners both prior to and following the lodgement of the application with DPI Lands. Extensive consultation has been undertaken with DLALC as described in **Section 3.22**.
42. As mentioned above, the Roads Act does not prevent an application for closure and purchase from being made by other than an adjoining landowner. The application also includes a section of Tooheys Road which directly adjoins land owned by Wyong Coal Pty Limited.

3.15 ACCESS ON NIKKO ROAD

43. *DLALC's previous submission sets out a number of issues in relation to access that would arise in the event that Nikko Road is closed which are not satisfactorily addressed in the WACJV response. Additionally:*
 - a) *WACJV states it will create an easement but the terms are unknown and as such it is unknown whether the terms will ensure safe ongoing access.*
 - b) *WACJV states that the easement "is not intended to be used by the public" which highlights there is an intention to alter access which will impact adjoining DLALC.*
 - c) *There is no adequate plan showing the location of the easement and how it will connect with other access points and the existing access.*
 - d) *It is not clear whether the change in levels proposed will enable that access to be maintained.*

- e) *It is unclear what the proposal is. The Amended DA and attached plan shows a 3 m easement. The WACJV response shows a 6 m easement.*
- f) *Dust and noise impacts for people using the road are not addressed.*

In response to the above paragraphs:

- (a) The proposed creation of an easement upon closure of the road will be part of the assessment process of DPI Lands. It is likely that the easement would be in the standard terms of a right of carriageway under the Conveyancing Act 1919. However, as mentioned above the road closure application is separate and independent to the planning assessment process for the development application and the closure of the road and the terms of any easement are not relevant to the decision of the consent authority under the EP&A Act.
- (b) The section of Nikko Road to be used for the rail loading facility is largely dense bush for the most part. The 300m of existing dirt track is only accessible through DLALC's locked gates or via access from the rail corridor through locked gates. Therefore, there is no practical public access to the road. WACJV does not intend to remove the existing access, but improve it as described at (c) below and replace the relevant part of the Crown road with an easement to secure ongoing access for DLALC, other adjoining landowners, service providers and agencies (and their invitees, subject to the terms of the easement as addressed in (a) above).
- (c)(d) DLALC's current access points to Nikko Road will not be changed unless DLALC requests changes to access (e.g. the road constructed for the Amended Project will upgrade the current dirt track and extend a road through what is currently dense bush and potentially be accessed from DLALC's Lot 204 which is currently the subject of a rezoning application for residential development);
- (e) The width of the proposed easement was increased following direct consultation at a meeting with DLALC on 7 September 2016, where DLALC suggested an increase of what was then proposed to be a 3m wide access road. DLALC's minutes of that meeting note "Wyong Coal's designers have said that, in final design, it is likely that the rail line would relocate 3m to the west meaning there could be 6m available for the road". In response to this request, this was further investigated and Section 6.1.5 of RTS clearly says "Wyong Coal proposes to construct a 6m wide all weather access road for the full 1.5km length of Nikko Road to the north of the Motorway Link Road".
- (f) As mentioned above only a small section of the Crown road is currently used and there is no practical public access to the road. As such dust and noise impacts for users are not relevant.

3.16 CONSTRUCTION PLAN

44. *The WACJV response does not address DLALC's concerns in relation to lack of a construction plan. DLALC does not believe the construction can occur without encroachment on, or interference with its adjoining land.*
45. *WACJV response does not address how adjoining land is to be maintained whilst construction is occurring or how safety of other users of the road is to be ensured with concurrent use of Nikko Road whilst construction is occurring or while the mine is operational.*

The Amended Project will not encroach upon adjoining land. It will remain within the Project Boundary.

Conditions of the draft development consent require various management plans to be developed in consultation with relevant stakeholders. These documents will be required to be approved by relevant regulators prior to the commencement of construction, in accordance with any final development consent conditions issued.

Condition 23 of the draft development consent requires the preparation of a traffic management plan in consultation with RMS, WSC and TNSW which will address interactions with Nikko Road.

3.17 ALTERATION OF LEVELS

46. *There will be significant cut and fill along Nikko Road. Final levels and location and extent of cut and fill has not been identified.*
47. *The effects on surface water, water tables and soils have similarly not been assessed. Location of the project in relation to Spring Creek in a sensitive coastal location under SEPP 71 and vicinity to acid sulphate soils.*
48. *The Amended DA does not allow for impacts from these matters and there is an absence of the appropriate plans as required by the DGRs.*

The final design of the system will be completed post development approval. It is not normal practice to complete detailed design at this stage of a project. The rail, road and conveyor gradients will be identified at the final design stage with all relevant controls identified in the design risk assessment incorporated into the plan to ensure a safe and optimised design for all stakeholders. Also see response in **Section 3.9**.

The crossings of Spring Creek (and its tributaries) will be designed so that the impacts on flood regimes are within the predictions of the flood modelling. WACJV will consult with the appropriate regulatory authorities during the detailed design phase.

Conditions of the draft development consent require various management plans to be developed in consultation with relevant stakeholders. These documents will be submitted to relevant regulators prior to the commencement of construction, in accordance with any final development consent conditions issued.

3.18 WATER MANAGEMENT

49. *Significant use of water at the coal loading facility at Nikko Road including dust suppression. This has a potential to cause pollutants to be mixed with water and its not clear where this water will come from. How will this be managed in proximity to Spring Creek?*
50. *The Amended DA does not properly address how this waste water will be managed. The original EIS stated that the flow of water through sedimentation dams would reduce concentrations of suspected sediment which is not being implemented in relation to the coal loader.*
51. *The proponent has stated it will implement appropriate sediment and control measures. Bunds and swales to direct runoff will be detailed in an Erosion and Sediment Control Plan as part of the Water Management Plan.*
52. *However, there is no sketch with shows “proposed methods of draining the land” as required in the EP&A Regulations. How the water will be managed in a narrow corridor is unclear which will be exacerbated by the absence of details of the alteration of the levels of the land.*

See response in **Section 3.17**.

3.19 RISK ASSESSMENT

53. *The risk assessment is manifestly inadequate. The entirely remote nature of the loading facility is a change. This creates risks which have not been assessed (e.g. fire incident).*
54. *As there is no construction plan, there is no plan by which a risk assessment could be made, nor is there any bushfire risk assessment at a fully automated facility.*

See response in **Section 3.4, 3.5 and 3.6**.

3.20 PHOTOMONTAGES

55. *The photomontages do not accurately represent the project, particularly the coal loader and conveyors. These inaccuracies are not appropriate for a project of this scale. High voltage electricity towers in proximity to the proposed infrastructure could have been reproduced as reference points.*

The conceptual photomontages were produced to provide an indicative representation of the visual impact on the existing environment and are fit for purpose having been produced by appropriate experts.

3.21 REGIONAL PLANNING

3.21.1 North Wyong Shire Structure Plan Roads

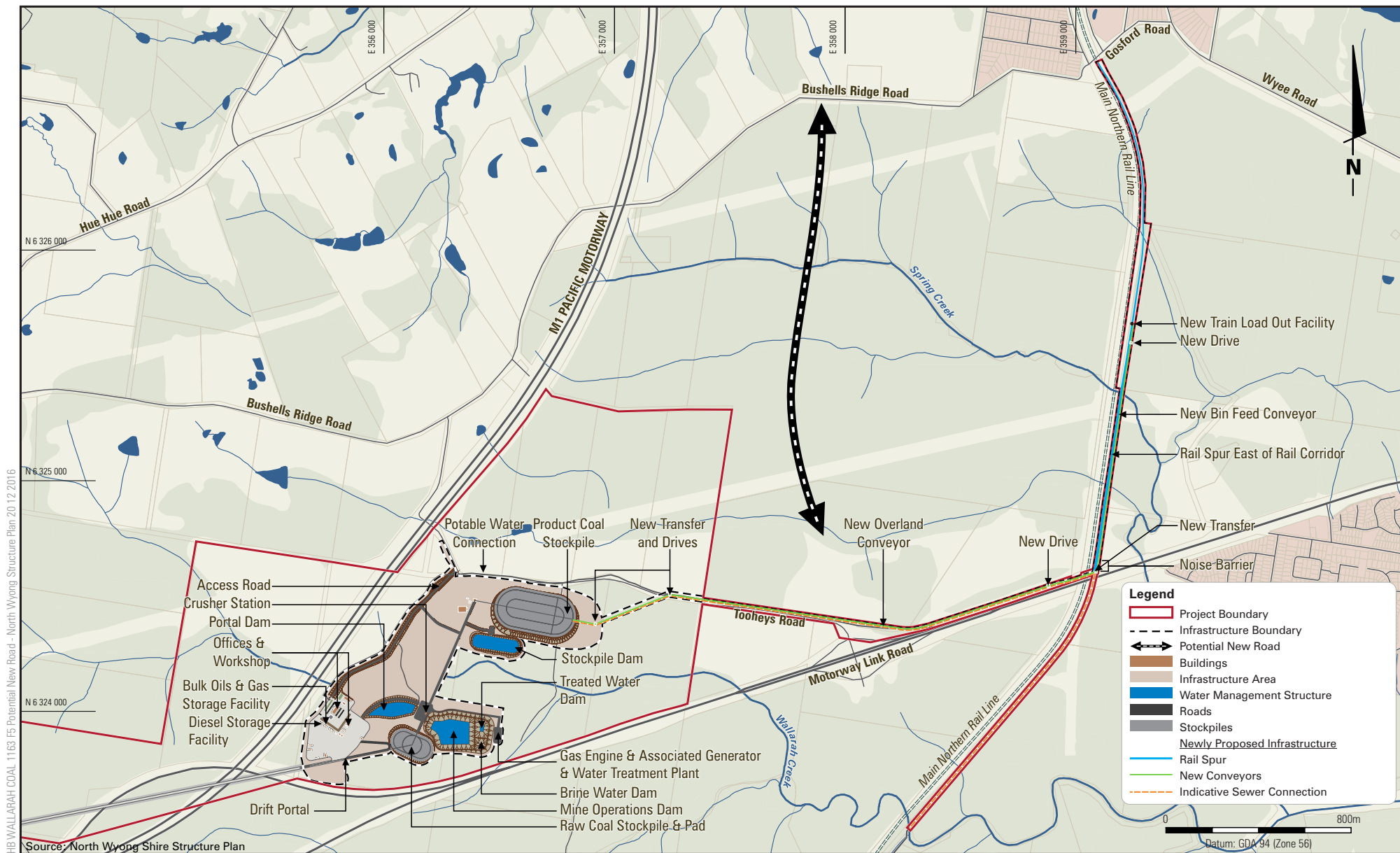
56. *The Amended Application, particularly the closure of Nikko Road reserve will deny the potential for a strategic road corridor linking the growing towns of Wyee and Warnervale. WACJV states the future need of this road reserve has not been identified in the Central Coast Regional Plan (CCRP) (2016). Closer examination of the North Wyong Shire Structure Plan 2012 (NWSP) reveals that potential new roads have been identified linking Wyee to the northern end of Wyong Shire (and also from Watanobbi towards the Warnervale Town Centre).*
57. *Prior actions of the CCRP including working with DLALC and Council to strategically assess its land holdings to identify priority sites and create a pipeline of potential projects and incorporate the assessment of DLALC landholdings into a revised North Wyong Shire Structure Plan. The Amended DA does not site comfortably with these priority actions.*

Figure 6 digitises the “Potential New Roads (subject to further planning and funding)” in the vicinity of the Amended Project from map 2 from the NWSP. It does not align with Nikko Road and is conceptually located running north-south approximately 1 km to the west of the Main Northern Rail Line. Nikko Road is not discussed in the NWSP.

The Amended DA is not contrary to the potential new road in the vicinity as shown on map 2.

The Amendment RTS at Section 5.1.6 ‘Central Coast Regional Plan 2036’ describes the CCRP in detail including land available on the urban fringe that are suitable for development and discusses the development of land owned by DLALC.

There are still substantial regulatory requirements that must be satisfied before DLALC’s proposed residential development can proceed.



WALLARAH 2 COAL PROJECT

Potential New Roads

FIGURE 5

3.21.2 Alternate Location

58. *Only through the continuing and detailed planning investigations by DLALC that the opportunities for strategic growth, including green corridors, provision of services and future road connects, are being better understood. DLALC has highlighted to the local DP&E and Central Coast Council the benefit and opportunities in retaining the Nikko Road reserve for the express purpose of a local traffic corridor between two growth areas.*

DLALC has raised the possibility for an alternate location for the coal loader to the south west of the current location which is within an existing buffer to the Charmhaven treatment plant and adjacent to proposed industrial land. This would not require the closure and development within the Nikko road corridor.

59. *DLALC maintains that the current proposal fails to adequately assess all alternate options as required under the DGRs.*

Point 98 of Darkinjung in its submission of 31 August 2016 states:

"Darkinjung has been working in partnership with a local company, Waste Enterprises over the past 18 months to prepare a Business Plan for a resource recovery facility to be located on the southern portion of lot 195 DP 1032847. The facility will (potentially) take waste from areas within a radius of 150 kilometres, sort it and sell it to waste recycling enterprises. An essential part of the plan is rail access to the development. The amended development application will remove future rail access to all Darkinjung land within Bushells Ridge."

At a meeting on 7 September 2016, DLALC requested WACJV to consider reverting to the original application to facilitate this resource recovery centre and this would be on commercial terms significantly lesser than previously sought.

On 22 September 2016, DLALC advised WACJV:

- Rail access for the Waste Recycling Process was now not necessary and that the Waste Facility had now been moved to the south of the M1 link road;
- The industrial land at Bushells Ridge was the largest parcel of undeveloped industrial land north of Sydney and putting in a siding would reduce its development potential;
- DLALC now wished a Negotiated Regional Planning Outcome (NRPO) for the area south of the Motorway Link Road and would like WACJV to participate in that process with a conveyor and rail loading facility as part of the plan; and
- DLALC Board had determined that the original spur was no longer an option that it would agree to under any circumstances. This position was restated at the meeting of 17 October 2016.

It was subsequently reported in the Central Coast Express Advocate of 2 November 2016 that DLALC's partner in the development proposal, Waste Enterprises went into external administration on 12 September 2016.

Wyong Coal raised concerns about the suitability of the area proposed for the NRPO as a functional solution and also the ability to resolve all of the planning and approval issues without causing further material delay to the Project. These concerns included:

- Possible restriction on train length;
- Impacts from moving the coal loader closer to Blue Haven without the effective-considered topographical relief that the Amended DA provides;
- Possible additional rail movement impacts on Wongarra and Warnervale;
- Ecological challenges with crossings of Wallarah Creek;
- Potential difficulty in achieving appropriate zoning for DLALC and WACJV developments;
- Area is currently subject to Native Title Claim from Guringai and Awabakal traditional owner groups;
- The amount of parties that could be involved would most likely be significantly more than just WACJV, Darkinjung and NSW Government as suggested by Darkinjung.
- Substantial additional time required to resolve the issues before a further Amended DA could be lodged and the assessment timing thereafter.

It is also noted that like the original application, this option will also require a commercial resolution between Wyong Coal and Darkinjung and the written support of NSW ALC.

A further meeting of 17 October 2016 failed to remove WACJV's concerns however it advised that it remained willing to explore this further with DLALC whilst WACJV completed its Amendment RTS, and DP&E assessed the project for referral to PAC.

On 27 October 2016 Darkinjung wrote to WACJV (cc. Secretary of DP&E) to advise that "Unfortunately Darkinjung's efforts have not been able to deliver an outcome that satisfies Wallarah 2 and I therefore inform you that Darkinjung must now withdraw from these discussions and focus on ensuring that its member's interests in their lands are protected".

Wyong Coal replied to Darkinjung on 31 October 2016 (cc. Secretary of DP&E) concluding:

- WACJV was willing to further consider reverting to the original alignment once DLALC provides the commercial terms it proposes as offered by DLALC on 7 September 2016. DLALC must also advise if it actually needs a rail connection for its industrial use. At the meetings of 22 September and again on 17 October 2016 DLALC advised that this option was no longer on the table and would be not considered by DLALC under any circumstances; and

- WACJV is doubtful that the NRPO can be achieved and particularly, in a timeframe that does not further negatively impact the economic viability of the Wallarrah 2 Coal Project. Wyong Coal will however consider this further if:
 - DLALC confirms the area under consideration;
 - Provides further information to allay Wyong Coal's concerns;
 - Provides proposed commercial terms; and
 - Advised that it remains available to meet to further explore options.

WACJV has since offered to meet DLALC on three occasions during November and further in December 2016.

Darkinjung's withdrawal from discussion in its letter of 17 October 2016 (**Appendix B**) and WACJV's willingness to continue discussions (response of 31 October 2016 in **Appendix B**) is clearly at odds with Item 69 of DLALC submission of 9 December 2016:

"69. Darkinjung has maintained a willingness to work with WACJV, the Department, and Stakeholders to achieve a negotiated regional planning outcome with greater net community benefit. Unfortunately WACJV has chosen not to enter into such discussions at this time."

3.22 CONSULTATION

60. *The WACJV response listed communications with DLALC which confirms the lack of consultation. Between February 2016 and July 2016, DLALC was consulted with on only two instances. This was during a period when opportunity was available for the proponent to better understand the issues and concerns of DLALC. It is during this period that WACJV had the opportunity but failed to consider other alternate options that would yield greater regional outcomes.*

61. *A distinction must be made between consultation with DLALC cultural heritage section and land management and operations section. The list of communications in Table 12 is selective and omits additional communications between the parties (see Attachment 1). Many of the items in Table 12 are requests for information and not "consultation".*

Consultation has been frustrating. If WACJV had fully, openly and appropriately consulted with DLALC in the first instance, the result of sub-optimal planning outcomes would not have occurred. Determination of the DA should not be subject to time pressures.

See response to **Section 3.1**.

An updated consultation log with DLALC is included in **Appendix D**.

3.23 CENTRAL COAST REGIONAL PLAN

62. *DP&E recently released the CCRGP which sets down six goals for growth of which number 4 is to support the DLALC in the strategic assessment of its landholdings. DP&E would contradict its own planning document if it were to approve the Amended DA which places several of DLALC's economic development opportunities at risk (e.g. Wyee Road and Bushell's Ridge Road subdivisions and Resource Recovery hub).*
63. *The CCRGP includes goal 6 and action 6.2 that will ensure that all local plans issued by Council will be developed and implemented to align with the Growth Plan. This would result in DLALC's proposals for economic development across North Wyong being reflected in planning documents. The Amended DA is at odds with such planning.*
64. *The Amended DA works directly against DLALC realising the potential of their land in the region by restricting their capacity to utilise the land to its highest capacity. WACJV fails to address the suggested alternate location of the coal loader south of the Motorway Link Road.*

CCRGP is one of a number of planning instruments that apply to the site and the Amended Project. These have been taken into account in respect of the Amended Project and it is considered that the Amended Project meets the state's planning objectives for the region.

Section 5.1.6 of the Amendment RTS discusses this issue in detail. The Amended Project will not result in any exceedances of the regulatory air quality criteria over the proposed residential land (if it is approved and eventually developed). As described in Section 3.7 of the Amendment RTS, less than 1% of the DLALC land which is the subject of the proposed conceptual residential development is predicted to experience noise levels greater than the amenity criterion.

See detailed discussion on alternate coal loader locations and discussions between DLALC and WACJV in **Section 3.1**.

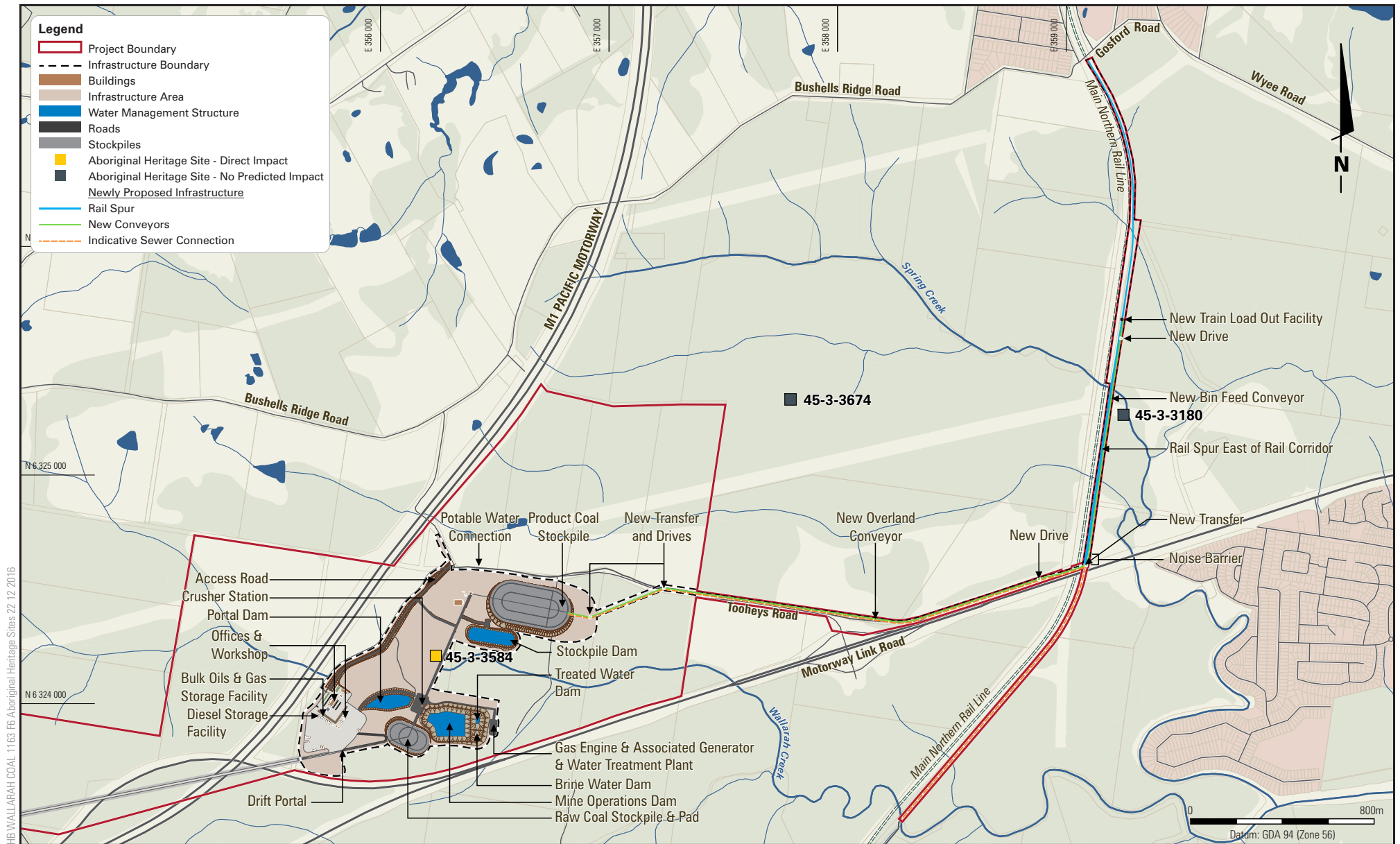
The CCRGP identifies the Bushells Ridge Employment Precinct (within which the Bushells Ridge Site is located) as a focus area to increase employment development over the medium to long term.

The approval of the Amended Project is consistent with surrounding land uses and the aims of the existing strategic plans.

4 HERITAGE

The Department would like to include a map which shows Aboriginal heritage sites and their location in relation to the proposed Tooheys Road surface facilities. The map provided does not show the surface facilities, only an outline around the proposed Tooheys Road surface facilities location.

See **Figure 7**.



WALLARAH 2 COAL PROJECT

Aboriginal Heritage Sites

FIGURE 6

5 SOCIO-ECONOMIC

The Department notes that WACJV has undertaken extensive consultation with Council over a proposed Voluntary Planning Agreement (VPA) that would benefit the Wyong LGA to a total value that may exceed \$4 million. Is there any update on the status of these negotiations?

The VPA has been finalised with both parties signing the final document on 7 July 2014. The total value of the VPA (when taking into account its various components defined in some items as Works In Kind, Monetary Contributions or a combination of both) is \$17 million.

A summary is provided in **Table 1** below.

Table 1
Terms of the Signed VPA

SCHEDULE 1 (Contributions Schedule)

Development Contribution and Timing of Payments
Voluntary Planning Agreement
Wyong Shire Council and Wyong Coal Pty Limited

Item No.	Contributions	Intended Use / Public Purpose	Timing/Payment details
1	<p>Works In Kind to complete the whole of the subject works OR,</p> <p>Monetary Contribution: \$4,000,000 minus the value of any Works In Kind to partially complete the subject works.</p>	Tooheys Road upgrade - to reconstruct the entire length to a sealed road standard (Commercial & Industrial "Other" Table 7.2 and other related requirements of the Wyong Shire Council Civil Works Design Guide) including an access intersection layout as shown in Figure 7.1 on page 112, Wallarah 2 Coal Project EIS – Appendix Q Traffic & Transport Impact Assessment.	In the case where a monetary contribution has been agreed by WSC, prior to the physical commencement of construction works for the development at the Tooheys Rd site.
2	<p>Works In Kind to complete the whole of the subject works OR,</p> <p>Monetary Contribution: \$700,000 minus the value of any Works In Kind to partially complete the subject works.</p>	Buttonderry access intersection upgrade as shown in Figure 7.2 on page 113, Wallarah 2 Coal Project EIS – Appendix Q Traffic & Transport Impact Assessment.	In the case where a monetary contribution has been agreed by WSC, prior to the physical commencement of construction works for the development at the Buttonderry site.
3	<p>Works In Kind to complete the whole of the subject works OR,</p> <p>Monetary Contribution: \$1,404,000 minus the value of any Works In Kind to partially complete the subject works.</p>	Brothers Forest Road/Little Jilliby Road intersection upgrade and upgrade of Brother Forest Road from the Little Jilliby Road intersection to the Ventilation Shaft site access to sealed road standard (Commercial & Industrial "Other" Table 7.2 and other related requirements of the Wyong Shire Council Civil Works Design Guide) as shown in Figure 7.3 on page 114, Wallarah 2 Coal Project EIS – Appendix Q Traffic & Transport Impact Assessment.	In the case where a monetary contribution has been agreed by WSC, prior to the physical commencement of ventilation shaft construction works (Current projections Yr 10).

Item No.	Contributions	Intended Use / Public Purpose	Timing/Payment details
4	Monetary Contribution: \$1,400,000 over the Life of the Project.	Contributions to ongoing road and public infrastructure affected by the proposed mine.	Payment on the following conditions: a. Payments would equate to \$50,000 per year for 28 years or for the life of the proposed project. b. Initial payment to be made on the 12 month anniversary of the road works, upgrades and infrastructure payment and thereafter on each anniversary of that date. c. Payments will not be required during any period in which operations at the proposed mine are suspended, discontinued or abandoned (including any period in which the operation is kept on a care and maintenance basis) in accordance with the provisions of the Coal Mines Health and Safety Act 2002 and associated regulations.
5	Works In Kind to complete the whole of the subject works OR, Monetary Contributions: \$3,170,000 minus the value of any Works In Kind to partially complete the subject works.	Provision of water infrastructure to the Buttonderry and Tooheys Road sites.	In the case where a monetary contribution has been agreed by WSC: a. \$1,000,000 for water supply to Buttonderry site b. \$2,170,000 for water supply to Tooheys Rd site Payment prior to completion of surface infrastructure as per accompanying plans "Water to Buttonderry" and "Water to Tooheys Rd" depicting proposed extent of works.

Item No.	Contributions	Intended Use / Public Purpose	Timing/Payment details
6	<p>Works In Kind to complete the whole of the subject works OR,</p> <p>Monetary Contributions: \$2,300,000 minus the value of any Works In Kind to partially complete the subject works.</p>	Provision of sewerage infrastructure to the Buttonderry site.	In the case where a monetary contribution has been agreed by WSC, payment prior to completion of surface infrastructure as per accompanying plan "Sewer to Buttonderry" depicting proposed extent of works.
7	Monetary Contribution Community and Environment: \$4,000,000.	<p>Community, social and cultural development infrastructure projects</p> <p>Environmental improvement projects being undertaken by Council</p> <p>Enhancement of water reuse, trade waste capacity and sustainability programs</p>	<p>Payment on the following conditions:</p> <p>a. \$600,000 upon WCPL making a decision to physically construct the Project.</p> <p>b. \$500,000 upon the physical commencement of construction.</p> <p>c. \$1,000,000 upon the railing of first coal.</p> <p>d. \$1,900,000 upon the completion of Longwall 1</p>

6 CONCLUSION

We trust this addresses your queries and please do not hesitate to contact the undersigned should you require anything further.

*

*

*

For
HANSEN BAILEY



Dianne Munro
Principal Environmental Consultant

REFERENCES

- Hansen Bailey (2016a). Wallarah 2 Coal Project Amendment to Development Application SSD-4974 Response to Submissions.
- Hansen Bailey, 2016b. Wallarah 2 Coal Project Amendment to Development Application SSD-4974.
- Ecological/Kleinfelder (2013). Centennial Mandalong – Bushfire Risk Assessment for Mandalong Mine - Mandalong Southern Extension Project. State Significant Development Application Number 5144.
- NSW Rural Fire Services (2006). Planning for Bush Fire Protection.
- NSW Rural Fire Service (accessed Jan 2017). Bushfire Prone Land <http://www.rfs.nsw.gov.au/plan-and-prepare/building-in-a-bush-fire-area/planning-for-bush-fire-protection/bush-fire-prone-land/check-bfpl>

Appendix A
Impact of Flow Losses

Memorandum

Date	16 January 2017	Pages	4
Attention	Dianne Munro		
Company	Hansen Bailey		
Job No.	0844-03-B3		
Subject	Wallarrah 2 Coal Project - Impact of low flow losses		

Dear Dianne,

As requested, we have undertaken further analysis to illustrate the impact of potential “worst case” water loss on both surface runoff and baseflow in the Wyong River catchment. Details of the methodology and results of the assessment are provided below.

Methodology

An AWBM rainfall-runoff model, which was calibrated to recorded streamflow data for Jilliby Jilliby Creek, was used to estimate the relative components of surface runoff and baseflow for the catchments draining to the Central Coast Water Supply System (CCWSS). Details of the model calibration are provided in Section 4.6.1 of the Surface Water Impact Assessment (WRM, 2013).

The model was used to simulate the runoff and baseflow components of the catchment drainage to the Lower Wyong River Weir (355 km²) for two scenarios:

- Existing conditions;
- Existing conditions with an assumed total annual water loss of 300 ML/a due to impacts of the Project.

The catchment to the Lower Wyong River Weir represents about half of the total catchment of the CCWSS.

The analysis was undertaken for two historical years; a dry year and a very dry year. 2009 was selected as being representative of a dry year. Rainfall for 2009 (obtained from SILO Data Drill) was 834 mm, which is close to the 10th percentile annual rainfall (90% of years will have higher rainfall). 1944, which was the driest year on record, was selected as the very dry year (annual rainfall of 597 mm). Mean annual rainfall in the region is approximately 1,180 mm.

The loss was subtracted from the total flow at a uniform rate each day. Taking into account the number of no-flow days, a daily loss of 1 ML corresponded to a total annual flow loss of 300 ML for 2009. For 1944, which had more no-flow days, a daily loss of 1.5 ML was subtracted.

Memorandum

Results - Dry year

Figure 1 shows the simulated time series of daily total flow volume at Lower Wyong River Weir for the two modelled scenarios for 2009.

For existing conditions:

- Surface runoff = 8,848 ML (77%);
- Baseflow = 2,588 ML (23%);
- Total flow (surface runoff plus baseflow) = 11,436 ML;
- Volumetric runoff coefficient = 4% (compared to average of 17% for Wyong River and 24% for Jilliby Jilliby Creek).

Including the daily flow loss, the total flow volume reduces to 11,134 ML; a reduction of 2.6%.

The impact on flows is negligible during periods of surface runoff.

The impact of flow loss during dry periods (eg. January, March, May and July-September in 2009) is apparent, but does not change the general character of flow which typically persists for an extended period after surface runoff, with some no-flow periods after extended dry weather. Within the resolution of the model, the impact on the number of no-flow days is negligible. In practical terms, it is unlikely that this flow volume loss could be detected.

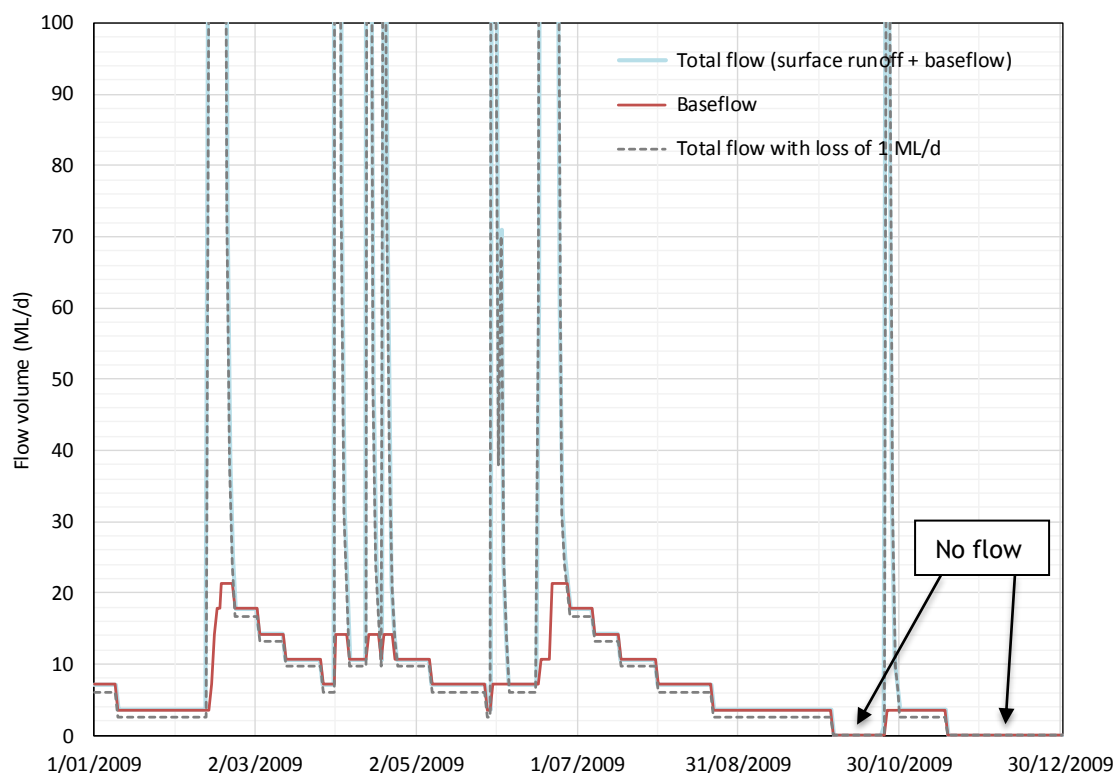


Figure 1 - Time series of simulated flow at Lower Wyong River Weir for 2009

Memorandum

Results - Very dry year

Figure 2 shows the results for 1944. For existing conditions:

- Surface runoff = 2,474 ML (66%);
- Baseflow = 1,260 ML (34%);
- Total flow (surface runoff plus baseflow) = 3,735 ML;
- Volumetric runoff coefficient = 2% (compared to average of 17% for Wyong River and 24% for Jilliby Jilliby Creek);
- There are two extended periods of no flow.

Including the daily flow loss, the total flow volume reduces to 3,433 ML; a reduction of 8%. Again, based on the model resolution, the impact on the number of no-flow days is negligible. In practical terms, it is unlikely that this flow volume loss (which represents an upper limit of potential impacts) could be detected.

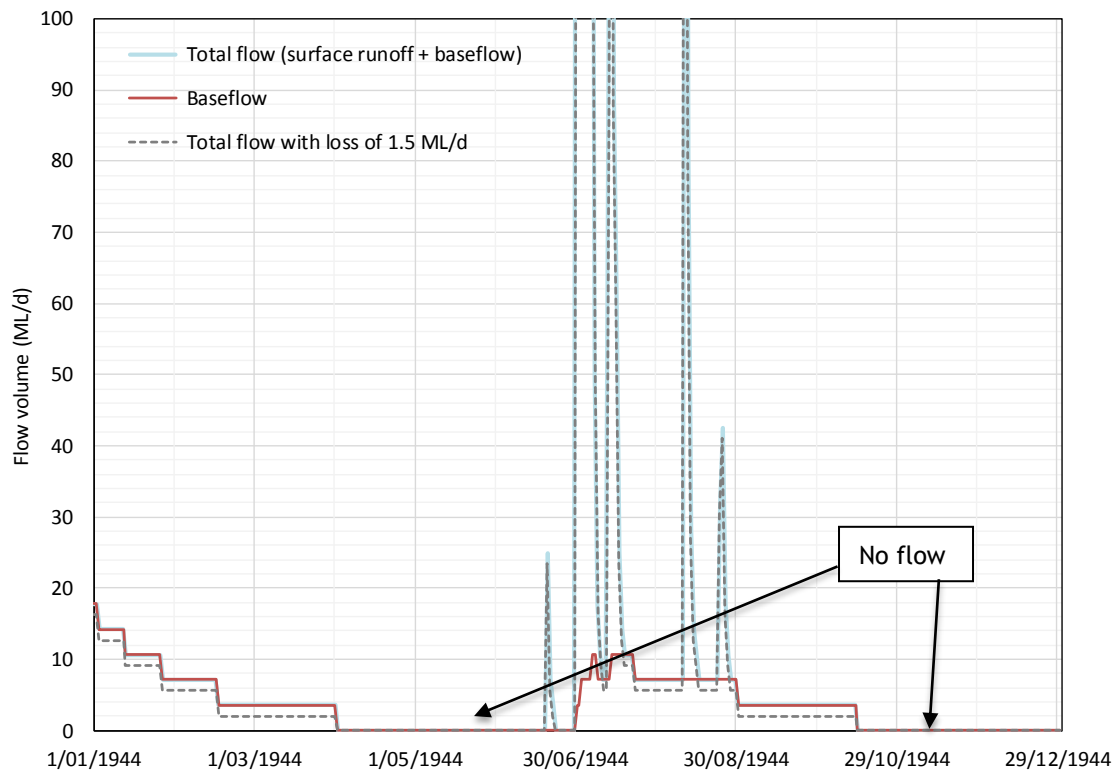


Figure 2 - Time series of simulated flow at Lower Wyong River Weir for 1944

Please do not hesitate to contact me if you require further information.

For and on behalf of

WRM Water & Environment Pty Ltd

David Newton

Director



Memorandum

References:

WRM, 2013 *'Wallarrah 2 Coal Project Surface Water Impact Assessment'*
Report prepared by WRM Water & Environment Pty Ltd, Ref.
0844-01-K, March 2013.

Appendix B
Correspondence

From: Allonby, Peter

Sent: Saturday, 29 October 2016 2:33 PM

To: 'Sean Gordon' <SGordon@dlalc.org.au>

Cc: carolyn.mcnally@planning.nsw.gov.au; marcus.ray@planning.nsw.gov.au; Howard Reed <howard.reed@planning.nsw.gov.au>; 'Tina West Board' <tina.west8@hotmail.com>

Subject: RE: Darkinjung's position to the W2 Amended DA

Dear Sean,

I thank you for your letter of 27 October 2016.

Wyang Coal acknowledges Darkinjung Local Aboriginal Land Council's (DLALC) efforts to deliver an outcome that satisfies both DLALC and Wyong Coal and comments as follows:

You raised "serious adverse impact" on DLALC lands:

1. Wyong Coal proposes to construct a 6m wide all weather access road for the full 1.5km length of Nikko Road to the north of the link road bridge. This replaces the current dirt track which is less than 300m in length. This road provides a connection between DLALC lands that does not currently exist. Access to the south of the Link Road Bridge will however remain restricted by the current envelop between the bridge supports.
2. Transport for NSW has advised that the construction of a rail loading facility to the east of the main north railway to does not preclude further rail connections to DLALC industrial land to the west of the railway. DLALC has recently proposed a return to the original alignment through DLALC industrial land or through the industrial land to the south of the Link Road so it is difficult to see how DLALC regards the Amended DA as having an adverse impact on its proposed industrial developments. With regard to proposed residential developments at Wyee Road and Bushells Ridge Road:
 - a. Application of the Industrial Noise Policy shows only 1.1% of the DLALC land area proposed for residential development is impacted. This issue will be discussed in detail within the *Response to Submissions*;
 - b. Photomontages being prepared as part of the *Response to Submissions* show minimal line-of-site impacts from proposed residences to Wyong Coal infrastructure; and
 - c. There is no dust impact.
3. These observations will be detailed along with responses to other issues raised by DLALC in Wyong Coal *Response to Submissions*. Wyong Coal will contact DLALC when its response to DLALC submission has been prepared and offer to take DLALC through the response.

At our meeting of 7 September 2016:

1. You advised that DLALC requested Wyong Coal consider reverting to the original application (which consisted of the originally proposed rail spur across DLALC land), with the addition a of a rail siding for a Waste Management Facility.
2. We talked about the difficulty of convincing Wyong Areas Coal Joint Venture (WACJV) to revert to the original arrangement and our inability to reach a satisfactory compensation agreement during previous negotiations, after which you spoke about a conceptual commercial arrangement based on an annual land rental

based upon land value. You further offered to provide details of that proposal in writing after discussing it with the DLALC Board. Tony Simpson then advised that Wyong Coal would have to write to DLALC first and then DLALC would reply. We did this on 8th of September, and have sent several further requests however that commercial proposal has not been forthcoming.

3. Discussions were had regarding the road closure application. Wyong Coal confirmed that it had challenged the release of documents under GIPA but only because some redactions were necessary for commercial-in-confidence and privacy reasons. This is recorded in the minutes of the meeting. Wyong Coal expects that information has now been released by Department of Primary Industries.

On 22 September 2016 we again met. In respect of this meeting:

1. Wyong Coal advised that it had considered reverting to the original alignment and that:
 - a. Legal advice was that Wyong Coal would have to submit a new amendment to re-instate the original rail spur;
 - b. It did not have any details of the proposed Waste Management Facility but if the DLALC siding could be moved south of Wyong Coal's original alignment it would have no interaction with Wyong Coal rail spur and would therefore pose no issue. Legally, for the amendment to revert to the original, it would have to be identical to that previously assessed, therefore any DALC rail connection would have to be subject to a separate arrangement and applied for post assessment of the Wallarah 2 Coal Project DA; and
 - c. Reverting to the original option therefore appeared feasible if commercial and logistics arrangements could be resolved.
2. DLALC then outlined that:
 - a. Rail access for the Waste Recycling Process was now not necessary and that the Waste Facility had now been moved to the south of the M1 link road;
 - b. The industrial land at Bushells Ridge was the largest parcel of undeveloped industrial land north of Sydney and putting in a siding would reduce its development potential;
 - c. DLALC now wished a Negotiated Regional Planning Outcome (NRPO) for the area south of the Motorway Link Road and would like Wyong Coal to participate in that process with a conveyor and rail loading facility as part of the plan. DLALC had discussed such a concept with the Department of Planning & Environment and Department of Premier and Cabinet. The area for the NRPO however was significantly expanded by DLALC at the meeting of 17 October 2016; and
 - d. DLALC Board had determined that the original spur was no longer an option that it would agree to under any circumstances. This position was restated at the meeting of 17 October 2016.

I also note that a commercial arrangement will also be required to access DLALC land under the NRPO.

Wyong Coal remains committed to engaging with DLALC in respect of our project and addressing DLALC's concerns regarding the planning merits of the proposal. Wyong Coal

remains willing to consider alternatives including reverting to the original alignment and considering the new option to the south of the Motorway Link Road, however Wyong Coal cannot delay the current DA amendment without the approval of Wyong Areas Coal Joint Venture.

Unfortunately time has beaten us with regard to holding our response to submissions for the amended DA, and this will be submitted at the end of October. We will however continue to consider other options in consultation with DLALC whilst the DP&E completes its assessment and the application proceeds in due course to the PAC. We note that DLALC has made it clear that does not intend to further discuss the amended DA with Wyong Coal (and will “fight it all the way”). Wyong Coal however would like to continue to engage with DLALC on these issues and to consider other options proposed by DLALC.

In summary:

1. Wyong Coal will contact DLALC when its response to DLALC submission has been prepared and offer to take DLALC through the response to show that DLALC’s concerns have been well considered and addressed in detail.
2. Wyong Coal is willing to further consider reverting to the original alignment once DLALC provides the commercial terms it proposes as offered by DLALC on 7 September. DLALC must also advise if it actually needs a rail connection for its industrial use. I note at the meetings of 22 September and 17 October you advised that this option was no longer on the table and would be not considered by DLALC under any circumstances.
3. Wyong Coal is doubtful that the NRPO can be achieved and particularly, in a timeframe that does not further negatively impact the economic viability of the Wallarah 2 Coal Project. Wyong Coal will however consider this further if:
 - a. DLALC confirms the area under consideration;
 - b. Provides further information to allay Wyong Coal’s concerns; and
 - c. Provides proposed commercial terms.

I remain available to meet to further explore options.

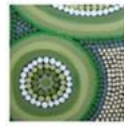
Regards

Peter

Peter Allonby

General Manager
Walarah 2 Coal Project
PO Box 3039 TUGGERAH NSW 2259
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Local Aboriginal Land Council
DARKINJUNG

168 Pacific Highway Watanobbi NSW
2259

PO Box 401 Wyong NSW 2259

Phone (02) 4351 2930

Fax (02) 4351 2946

ABN 99 583 297 167

Email darkinjung@dlalc.org.au

27th October 2016

Mr Peter Allonby
General Manager
Wallarah 2 Coal Project
PO Box 3039
TUGGERAH NSW 2259

Dear Peter,

I write to confirm that Darkinjung has attempted to work with Wallarah 2 on achieving an outcome in the North Wyong Region (Bushells Ridge) that would benefit both our organisations. Unfortunately Darkinjung's efforts have not been able to deliver an outcome that satisfies Wallarah 2 and I therefore inform you that Darkinjung must now withdraw from these discussions and focus on ensuring that its member's interests in their lands are protected.

We have since May 2016 been working diligently to understand the impact that proposed Wallarah 2 Coal Project's amended development application (amended DA) would have on our lands in the North Wyong region.

To date we have undertaken extensive work to assess the amended DA and, as outlined in our submission to the Department of Planning on the 31 August 2016, and have come to the conclusion that the path being proposed will have a serious adverse impact on the following lands;

1. Three of Darkinjung's land holdings on the eastern side of the rail line will be severely impacted and will have the potential to be land locked, preventing Darkinjung from having any proper access.
2. Darkinjung's proposed residential and industrial developments at Wyee Road and Bushells Ridge Road, which will be subject to environmental, social and commercial impacts.

Since April 2016 we have been requesting information from the Department of Planning and the Department of Industry on the proposed new path and have also undertaken a Government Information -Public Access (GIPA) request on correspondence between Wallarah 2 and the government to better understand the impact on Darkinjung's interests. Regrettably, to date, Wallarah 2 has obstructed the provision of that information.

Most importantly, in addition to the above requests Darkinjung has also reached out to Wallarah 2 by proposing the development of a Negotiated Regional Planning Outcome (NRPO) that considers all options available to support the co-existence of our respective development interests.

Darkinjung met with Wallarah 2 on the following dates to discuss a NRPO;

1. 7 September 2016 (Darkinjung Office)
2. 22 September 2016 (Tuggerah Business)
3. 17 October 2016 (Darkinjung Office)

Darkinjung notes that these meetings have not been able to deliver an outcome that allows for a NRPO and therefore confirm that Darkinjung must focus all its efforts on protecting its interest in its land at North Wyong.

In closing I reinforce our position on the following;

1. Darkinjung strongly object to the amended DA for a conveyor and rail siding which adversely impacts Darkinjung's interest in our lands.
2. Darkinjung are prepared to revisit the original DA, however this will be negotiated on commercial terms.
3. Darkinjung are open to developing a NRPO on our lands to the south of the Motorway Link Road to seek a balanced use of lands (see Central Coast Regional Plan 2036) in the immediate region of the mine and associated facilities.

Should you require any further information please do not hesitate to contact me.

Yours faithfully,



Sean Gordon, CEO

Cc; Carolyn McNally, Secretary - Department of Planning and Environment
Cc; Marcus Ray, Deputy Secretary - Department of Planning and Environment
Cc; Howard Reed, Director Resource Assessment - Department of Planning and Environment

Central Coast regional Plan 2036 - <http://www.planning.nsw.gov.au/~media/Files/DPE/Plans-and-policies/central-coast-regional-plan-2036-2016-10-18.ashx>

Appendix C
Acoustics - Response to DLALC Letter

Hansen Bailey
127-129 John Street
SINGLETON NSW 2330

Attention: Andrew Wu

13 January 2017

Postal Address
P.O. Box 432
Gladesville
N.S.W. 1675
AUSTRALIA
A.C.N. 068 727 195
A.B.N. 19 068 727 195
Telephone: 02 9879 4544
Fax: 02 9879 4810
Email: AtkinsAcoustics@bigpond.com.au

Atkins Acoustics and Associates Pty Ltd.

Consulting Acoustical & Vibration Engineers

ACOUSTICS

WALLARAH 2 COAL MINE

AMENDMENT to DEVELOPMENT APPLICATION SSD-4974

RESPONSE TO DARKINJUNG LETTER dated 9 DECEMBER 2016

This Response has been prepared to address noise issues raised by Darkinjung Local Aboriginal Land Council (Darkinjung) letter dated 9 December 2016 and its attached assessment by Spectrum Acoustics dated 28 November 2016.

Darkinjung claims that the WACJV Response dated November 2016 does not adequately address deficiencies in the Amended DA identified in their Submission dated 30 September 2016, including the following noise issues.

Issue

20. The issue of noise was raised in the submission from the Environmental Protection Agency dated 5 August 2016. The lack of assessment of the impact of noise on land owned by Darkinjung and the Wyee Road Residential Site and the Bushells Ridge Residential Site was raised in the Darkinjung Submission. The WACJV Response does not adequately address this issue. The WACJV Response premises its response on classifying Darkinjung's land as an "urban" noise amenity zone on the basis of "noise associated with heavy or continuous traffic". This classification is not justified. There is minimal traffic in this area. Table 1 of AA0716 describes the ambient noise environment in this location as "*Distant road traffic, rail traffic, localised domestic activities*". Table 1 in the Atkins Acoustics report, July 2016, gave ambient noise levels less than 40 dB(A), L_{90} at all times and L_{Aeq} levels less than 50 dB(A) at all times, depicting a relatively quiet ambient environment. Darkinjung maintains that the proper classification is "*suburban*"

Response

- 1.0 WACJV Response (November 2016) (RTS) refers to Atkins Acoustics and Section 2.2.2 of the INP “*Areas near noise generators (for example roads, railways and industry) would normally be considered to be urban-receiver type for the purpose of the amenity criteria*”.
- 2.0 Section 2.2.1 of the INP explains that ‘Urban’ areas “*may be located in either a rural, rural-residential or residential zone as defined on an LEP or other planning instrument*”.
- 3.0 RTS concluded for the purposes of noise assessment under the INP, “Urban” is the most appropriate receiver type for P13, P14 including the subject Darkinjung land.
- 4.0 The appropriate regulator responsible for noise impact in NSW is the EPA. The EPA in its letter dated 20 December 2016, confirms that issues raised by the EPA (5 September 2016) were adequately addressed in the RTS. This includes acceptance of the “Urban” criteria as the most appropriate receiver classification for the area.

Issue

21. Darkinjung estimates that on that basis there would be approximately 147 lots with a >45dB Noise Level. This represents a significant impact on Wyee Road Residential Site and the Bushells Ridge Residential Site. A copy of an independent acoustic assessment commissioned by Darkinjung is attached to this submission as Attachment 2.

Response

- 5.0 It is important to note with respect to this response that the Darkinjung proposed developments at Bushells Ridge and Wyee Road discussed in the Darkinjung Response are proposed. The current zoning does not allow residential development, the subdivisions are not approved and there are no residences on the land.
- 6.0 Darkinjung claims that noise levels >45dB represent a significant impact on the conceptual Darkinjung residential subdivision land.
- 7.0 With respect to noise exposure for the Darkinjung land, the WACJV Amended Development Application and RTS confirmed that the ambient noise environment in the area is controlled by existing rail traffic on the Main Northern Rail Line (MNRL).
- 8.0 Infrastructure SEPP (2007) Clause 87 refers to the requirement of consent authorities to be satisfied that new buildings for residential use in proximity to rail

corridors have appropriate measures to ensure that the following internal L_{Aeq} noise levels are not exceeded:

- in any bedroom in the building: 35dBA at any time 10.00pm to 7.00am
- anywhere else in the building (other than a garage, kitchen, bathroom or hallway): 40dBA at any time.

9.0 Assuming a 10dBA outside-to-inside noise reduction for non-acoustic treated residential building with doors/windows open (NSW Industrial Noise Policy (2.2.1)), this would suggest external screening noise limits of L_{Aeq} 45dBA Bedrooms (35+10) and L_{Aeq} 50dBA other rooms (40+10).

10.0 Rail studies reported for the MNRL at North Gosford (SLR June 2012) confirm predicted night time 2016 rail traffic noise levels of L_{Aeq} 9 hour 55dBA at approximately 60m from the closest rail line and L_{Aeq} 9 hour 52dBA at approximately 120m. Rail traffic volumes and noise exposure levels reported for the North Gosford section of the MNRL would be similar to those experienced at the subject Darkinjung land.

Attachment 2 – Spectrum Acoustics Letter (28 November 2016)

Spectrum Acoustics (SA) refers to Section 5.1.6 of the RTS and raises issues with respect to noise on Darkinjung lands.

Issue

It is apparent from the noise monitoring and the features of the area that the Darkinjung site currently satisfies the "rural" amenity classification, does not satisfy the "urban" classification and would, if the land was developed as proposed, satisfy the "suburban" classification by virtue of the presence of the development. As I have experience in the past, particularly at an Independent Hearing and Assessment Panel (IHAP) in which I was an expert witness, the subjectivity of noise amenity classification was highly contentious and led to the following *NSW Industrial Noise Policy* (INP) application note being produced by the EPA.

Response

11.0 See Response 4.0

12.0 The appropriate regulator responsible for noise impact in NSW is the EPA. The EPA in its letter dated 20 December 2016, confirms that issues raised by the EPA (5 September 2016) were adequately addressed in the WACJV Response. This includes acceptance of the "Urban" criterion as the most appropriate receiver classification for the area.

Issue

Our own monitoring 100m north west of AA0716 monitoring location P16 in 2015 found similar low levels of noise with minimal contribution from industrial or transport sources (see NM1 in Figure 1). Rail noise monitoring conducted by Spectrum Acoustics south of the site in Howarth Street Wyong within 50m of the rail line did not find levels sufficiently high to warrant glazing upgrades in a residential development when assessed against the Infrastructure SEPP (2007) and associated DPE guideline.

Response

13.0 With respect to building treatments referenced to rail traffic noise exposure and Infrastructure SEPP (2007), SA claims from their monitoring results within 50m of the MNRL, glazing upgrades for potential future residential development was not warranted. The noise monitoring results referenced by SA were requested by WACJV on 23 December 2016. At the time of preparing this response no data have been provided.

14.0 Infrastructure SEPP (2007) Clause 87 refers to the requirement of consent authorities to be satisfied that new buildings for residential use in proximity to rail corridors have appropriate measures to ensure that internal L_{Aeq} noise levels are not exceeded. See Response 8.0

- 15.0 Assuming nominal outside-to-inside noise reductions for non acoustic treated residential buildings a summary of equivalent external noise levels is presented in Table 1 for open and closed windows/doors.

Table 1. Summary of Equivalent External Noise Levels

Description	Noise Reduction dB	Recommended Internal Sound Pressure Levels		Equivalent External Sound Pressure Levels	
		LAeq, 9 hours	LAeq, 15 hours	LAeq, 9 hours	LAeq, 15 hours
Open windows/doors	10	35	40	45	50
Closed windows/doors	20	35	40	55	60

- 16.0 For assessing exposure of the Darkinjung land to rail traffic noise from the MNRL, the TfNSW Northern Sydney Freight Corridor Program, Gosford Passing Loops Project, Environmental Noise and Vibration Impact Assessment, date June 2012 (SLR) provides guidance in the absence of the Amended Project.

- 17.0 SLR (Appendix E) provides a summary of predicted operational rail traffic noise levels for various receptor locations adjacent to the MNRL. Of relevance for Darkinjung land, off-set distances referenced to SLR and Google Earth Pro have been established and summarised below (Table 2) with the predicted 2026 rail traffic noise levels. For the assessment of rail traffic noise it is normal practice to consider projected traffic growth over 10 years.

Table 2. Summary Predicted Operational Rail Traffic Noise Levels

(Reference SLR June 2012. Appendix E)

NCA	Reference Address	Off-Set m	Predicted Sound Pressure Level			
			L _{Amax} dBA	L _{Aeq} 24 hr dBA	L _{Aeq} 15hr dBA	L _{Aeq} 9hr dBA
NCA02U	24 Campbell Street. North Gosford	18	92	62	62	63
NCA02I	4 Campbell Street. North Gosford	50	84	55	55	56
NCA04D	87 Showground Road Narara	120	79	54	53	54

- 18.0 The predicted night time L_{Aeq} 9 hour levels in Table 1 show that the external trigger level of L_{Aeq} 9 hour 45dBA (35+10) is exceeded at an offset distance of 120m.
- 19.0 Reference to Table 1 compliance with the internal SEPP bedroom criterion (L_{Aeq} 9 hour 35dBA) at 120m would require the windows and doors to be closed, and air conditioning installed. This will be required whether W2CP proceeds or not.
- 20.0 Reference to Table 2 at 50m from the rail line with windows and doors closed assuming 20dB noise reduction across the composite building facade, the predicted internal noise level (L_{Aeq} 9 hour 36dBA) marginally exceed the SEPP internal criterion (35dBA). Depending on the final detailed design of the

conceptual Darkinjung subdivision plans, should dwellings be constructed, they will be exposed to the MNRL corridor and may require building noise control treatment, in addition to air conditioning and windows/doors closed in the absence of the Amended Project.

- 21.0 Assuming standard distance attenuation for rail traffic noise of 3dB per doubling of distance and a source noise level of $L_{Aeq\ 9\ hour}$ 56dBA @ 50m, the external noise trigger level of $L_{Aeq\ 9\ hour}$ 45dBA (35+10) with windows/doors open would be satisfied at distances greater than 800m from the rail line.

Issue

Table 2 quantifies the relevant noise categories (3 – 5) in Table 1 based on a night time criterion (PSNL) of 38 dB(A), $L_{eq(15minute)}$ established in AA0716 for their location P16 (see Figure 1) and the approximate number of affected lots within the re-zoning proposal. For Categories 3 and 4, residences were assumed to be at the centre of each Lot. Relevant noise contours for the SE wind scenario in AA0716 (Attachment 2-4) are approximated in **Figure 1**. Note that the AA0716 noise contours are in 5 dB increments, so the 41 dB(A) and 43 dB(A) contours have been estimated visually by interpolation. The final number of impacted Lots would require refining with the ENM model.

TABLE 2. Impacted Lots in re-zoning proposal for various VLAMP Noise Categories		
Noise Category	Project Noise Levels	Number of Lots (approximate)
3. Moderate	41-43 dB(A), $L_{eq(15minute)}$	36
4. Significant	>43 dB(A), $L_{eq(15minute)}$	240
5. Significant*	>45 dB(A), $L_{eq(night)}$ (suburban)	147

* Noise contours may overestimate the $L_{eq(night)}$ noise levels.

Response

- 22.0 The Darkinjung vacant land does not have any residences, therefore the appropriate assessment approach is that presented in the RTS.
- 23.0 SA (Table 2) refers to noise contour plots referenced to prevailing south-east wind to attempt to identify the number of property lots located within alleged defined noise zones referenced to VLAMP categories.
- 24.0 The Project Noise Levels (SA Table 2) referenced in the third and fourth rows refer to $L_{Aeq\ 15min}$ noise levels.
- 25.0 Referenced to the EPA response the Project Noise Level referenced in the fifth row (SA Table 2) 'Suburban' should be replaced with 'Urban' and the $L_{Aeq\ 9\ hour}$ >45dBA changed to $L_{Aeq\ 9\ hour}$ >50. This is the correct interpretation of the VLAMP and is consistent with the EPA's letter of 20 December 2016.

Issue

It is noted that the assessment of potential noise impacts in the RTS is based on its Figure 17 which shows worst case noise contours as $dB(A), L_{Aeq}$. It is evident from the assessment in AA0716 that these contours are for worst-case 15 minute periods when a train is being loaded and the loading facility is fully operational. The noise level averaged over a full night time period will include periods of little or no noise and will be significantly lower than the level considered in the assessment of impacts under VLAMP Category 5, resulting in a lesser degree of impact. Categories 3 and 4 are relative to intrusiveness ($L_{Aeq,(15minute)}$) criteria, however, and the assessment of impacts in Table 2 remains valid, subject to model confirmation of the number of impacted Lots.

Response

- 26.0 SA refers to the RTS (Figure 17) to reproduce SA Figure 1. Reviewing the SA noise contours it appears that the information was extracted from the Addendum Noise and Vibration Report (reproduced below at Addendum 2) not Figure 17 from the RTS (reproduced below at Addendum 1).
- 27.0 The RTS and SA noise contours are referenced $L_{Aeq, 15min}$ levels and represent noise modelling for train loading and conveyors operating.
- 28.0 As per Addendum Noise and Vibration Report three (3) coal trains could be loaded during the nighttime period (10.00pm to 7.00am). The projected time for each loading cycle including train arrival and departure is approximately 90 minutes. On the understanding that the total operating time for three (3) trains to access, load and leave the rail loading facility is 270 minutes or 4.5 hours, the equivalent $L_{Aeq, 9 \text{ hour}}$ noise contours would be 3dB less than the predicted $L_{Aeq, 15minute}$ levels.
- 29.0 For comparison and assuming one (1) coal train per night the equivalent $L_{Aeq, 9 \text{ hour}}$ noise contours would be 7-8dB less than the predicted $L_{Aeq, 15minute}$ levels.
- 30.0 Reviewing the $L_{Aeq, 15min}$ adjustment assuming three coal trains per night (-3dBA), the predicted $L_{Aeq, 9 \text{ hour}}$ 50dBA contour would not occur on any Darkinjung land shown on RTS Figure 17 (Addendum 1). This further demonstrates the conservative approach to noise modelling applied to the Amended Project.

Issue

TABLE 1. VLAMP Noise Categories and Recommended Actions		
Noise Category	Project Noise Levels	Recommended action
1. Negligible	0-2 dB(A) above PSNL	Not a discernible noise impact – no action required
2. Marginal	3-5 dB(A) above PSNL and project contributes less than 1 dB at residence	Mechanical ventilation and air conditioning
3. Moderate	3-5 dB(A) above PSNL and project contributes more than 1 dB at residence	Mechanical ventilation, air conditioning and facade upgrade
4. Significant	More than 5 dB(A) above PSNL at residence	Mechanical ventilation, air conditioning and facade upgrade, property acquisition
5. Significant	More than 5 dB(A) above amenity limit over 25% of land area	Property acquisition

Table 2 quantifies the relevant noise categories (3 – 5) in Table 1 based on a night time criterion (PSNL) of 38 dB(A), $L_{eq}(15\text{minute})$ established in AA0716 for their location P16 (see Figure 1) and the approximate number of affected lots within the re-zoning proposal. For Categories 3 and 4, residences were assumed to be at the centre of each Lot. Relevant noise contours for the SE wind scenario in AA0716 (Attachment 2-4) are approximated in **Figure 1**. Note that the AA0716 noise contours are in 5 dB increments, so the 41 dB(A) and 43 dB(A) contours have been estimated visually by interpolation. The final number of impacted Lots would require refining with the ENM model.

Response

31.0 See Response 22.0.

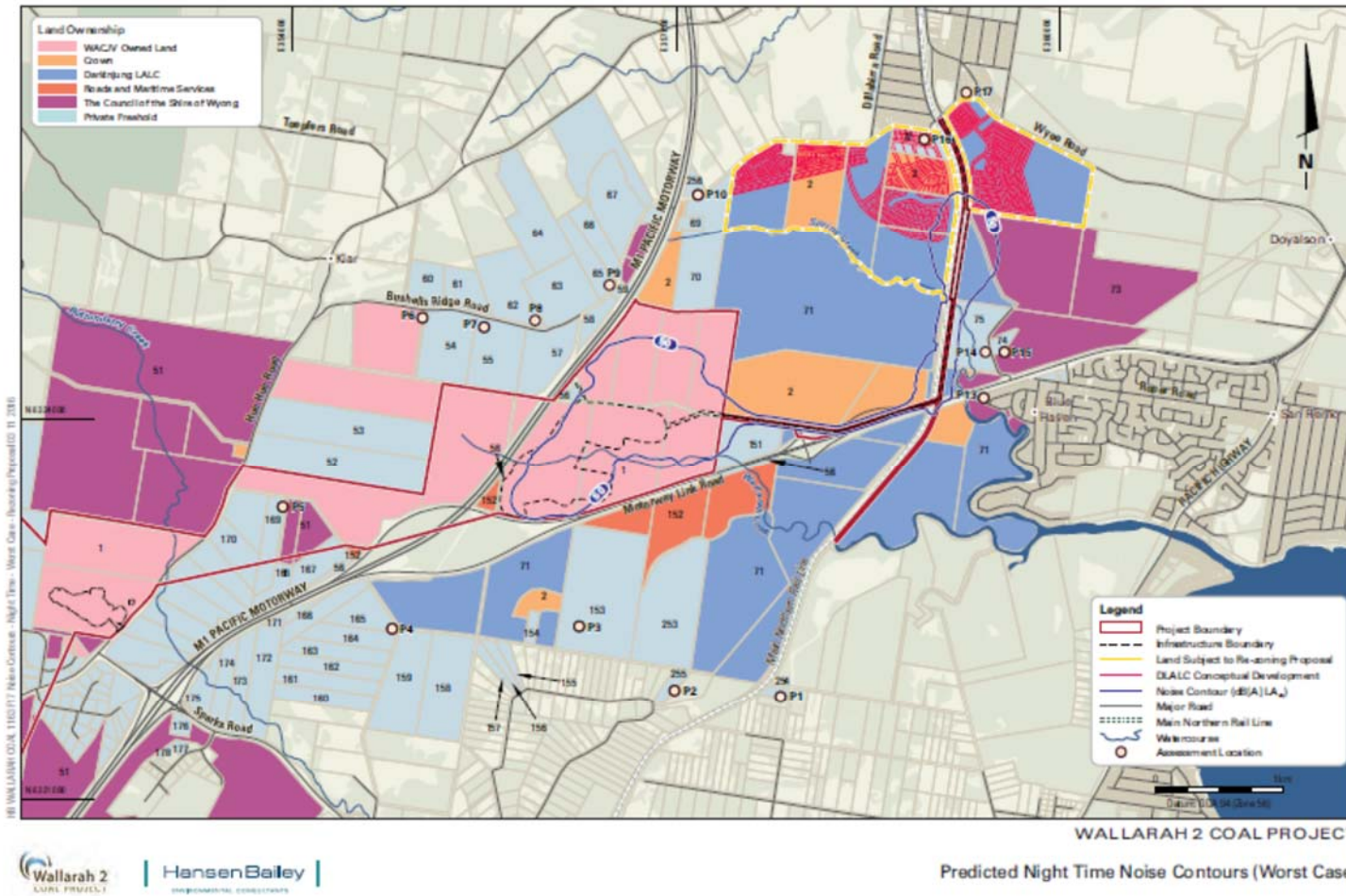
32.0 The SA interpretation of this part of the VLAMP is incorrect. The following Table exactly reproduces the relevant VLAMP noise assessment criteria and potential treatments for an existing residence. As such, these are not relevant to the Darkinjung vacant land at the time of the assessment.

Table 3 – Characteristics of noise impacts & potential treatments

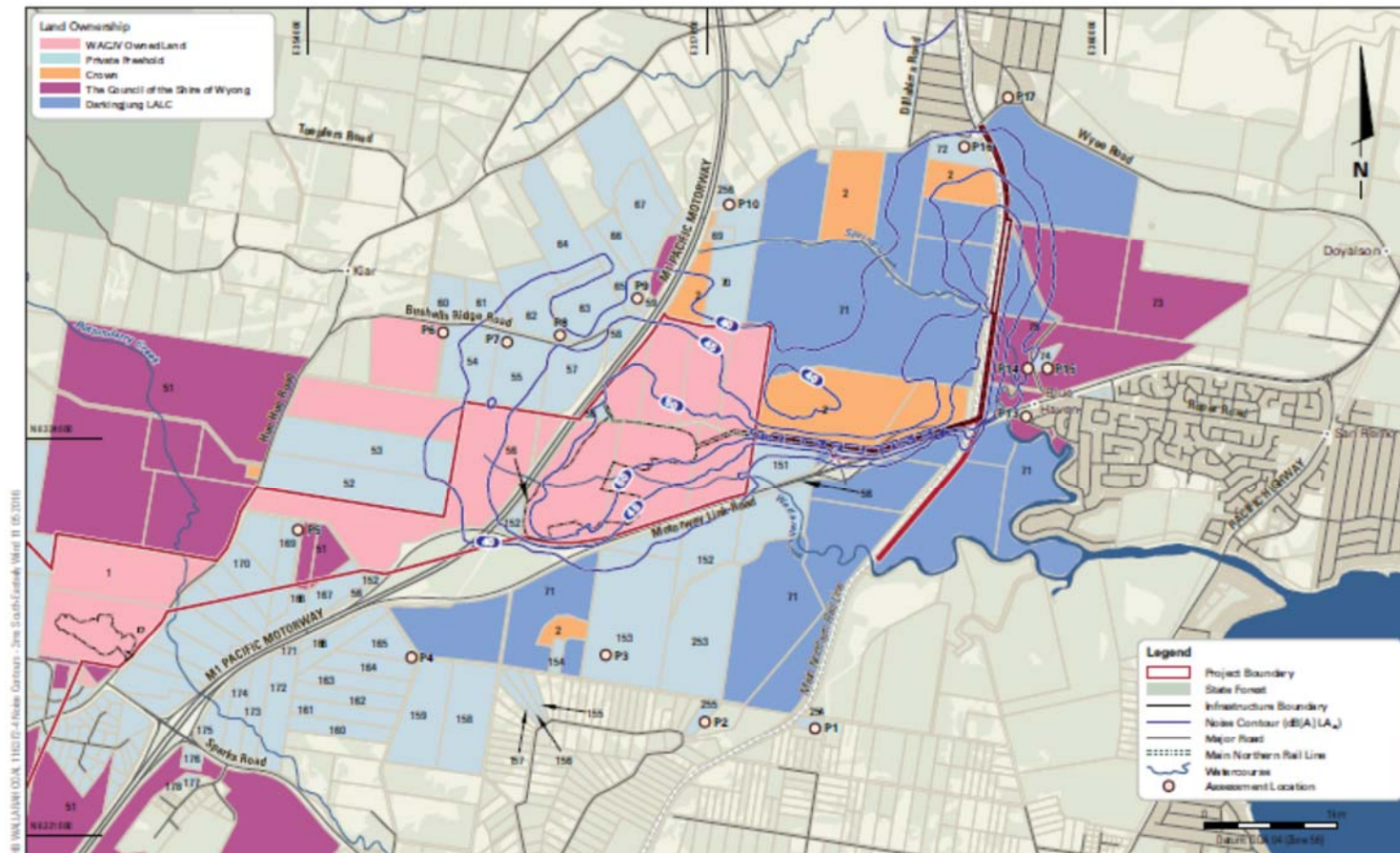
Residual noise exceeds INP criteria by	Characterisation of impacts	Potential treatments
0-2dB(A) above project specific noise level (PSNL).	Impacts are considered to be negligible	The exceedances would not be discernable by the average listener and therefore not warrant receiver based treatments or controls
3-5dB(A) above PSNL in the INP <u>but</u> the development would contribute less than 1dB to the total industrial noise level	Impacts are considered to be marginal	Provide mechanical ventilation/comfort condition systems to enable window to be closed without compromising internal air quality/amenity
3-5dB(A) above PSNL in the INP <u>and</u> the development would contribute less than 1dB to the total industrial noise level	Impacts are considered to be moderate	As a marginal impact but also upgrade facade elements like windows, doors, roof insulation etc, to further increase the ability of the building facade to reduce noise levels
>5dB(A) above the PSNL in the INP	Impacts are considered to be significant	Provide mitigation as for moderate impacts and see voluntary land acquisition provisions below.

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ADDENDUM 1: RTS (FIGURE 17)



ADDENDUM 2: ADDENDUM NOISE and VIBRATION REPORT (Reference: 46.6729.R2 dated 8 July 2016)



Appendix D
Updated DLALC
Consultation Log

Date	Contact	Issue	Response and comments
1 August 2016	Letter from: DLALC Planning Manager	Letter received requesting further information/plans for W2CP DA amendment to be provided by 14 August 2016	Provided by Wyong Coal 14 August 2016
14 August 2016	Email to: DLALC Planning Manager	Provision of information as requested	Plans SK200/SK201 showing infrastructure layout, proposed access easement and elevations. Provision of Crown Road Application (explaining text redactions due to privacy issues) and detailed marked up attachments. Email response acknowledging receipt from DLALC Planning Manager
15 August 2016	Email from: DLALC Planning Manager	Acknowledge receipt of information	Information provided as per written request of 1 August 2016
17 August 2016	Email from: DLALC via DPE	Wyong Coal advised of request made by DLALC to DP&E on Monday 15 August 2016 for further information.	Information not requested direct from Wyong Coal despite DLALC open invitation on 22 February 2016 DA amendment briefing.
17 August 2016	Telephone messages to: DLALC CEO and Planning Manager	Request from Wyong Coal to meet DLALC	DLALC CEO responded 17 August 2016
17 August 2016	Telephone message from: DLALC CEO	Response to meeting request from Wyong Coal	DLALC CEO unavailable for meeting
17 August 2016	Email to: DLALC	Request for meeting as per unavailability of CEO	No response
18 August 2016	Telephone message and emails to: DLALC Planning Manager	Further request for meeting with DLALC as per request for additional information via DPE for 19 or 20 August 2016.	DLALC Planning Manager returned call. Meeting offer rejected.
19 August 2016	Email from: DLALC	Advice from DLALC that they would contact to arrange meeting after 24 August 2016	No contact received from DLALC at COB 24 August 2016.
25 August 2016	Telephone message to: DLALC	Message left reiterated outstanding meeting request from Wyong Coal	No response
26 August 2016	Telephone contact from: DLALC	Meeting proposed for 7 September 2016	Wyong Coal accepts meeting date but requests DLALC reconsider an earlier meeting
29 August 2016	Email to: DLALC CEO	Email outlined that Wyong Coal had provided DLALC the information requested via DP&E	Information provided by Wyong Coal, however no opportunity provided by DLALC to meet to clarify and take questions. Wyong Coal again strongly urged DLALC to meet and discuss issues earlier than 7 September 2016. Email response from DLALC CEO 29 August 2016

Date	Contact	Issue	Response and comments
29 August 2016	Email from: DLALC CEO	Acknowledging receipt of information from Wyong Coal	Response failed to acknowledge request for earlier meeting
30 August 2016	Telephone and email to: DLALC	Follow-up on earlier meeting request	No response
31 August 2016	Telephone messages to: DLALC	Wyong Coal following up on request to arrange meeting	Further request to meet earlier than 7 September 2016. Requested DLALC for outlook invite. Response email 31 August 2016
31 August 2016	Email from: DLALC	Response to earlier meeting request.	Rejected earlier meeting, failed to forward outlook invite to Wyong Coal as requested
7 September 2016	Meeting: DLALC and Wyong Coal	Consultation and detailed discussions regarding information provided to DLALC, including plans showing improved access to Nikko Rd, design of infrastructure, access to site and ability to construct and operate without impinging on neighbouring allotments. Discussions regarding possible impacts on possible future residential areas which don't have current zoning approval, but which are proposed through a gateway and rezoning application. Noise and dust modelling methodology, requirements and outcomes regarding DLALC and surrounding land discussed. DLALC proposed reverting to original rail spur route on their land and offered to provide commercial terms upon written request from Wyong Coal.	Wyong Coal agreed to further consider DLALC request upon receipt of detailed information on proposal from DLALC
8 September 2016	Email to: DLALC CEO	Thank you for meeting	Wyong Coal written request as for commercial terms as offered by DLALC at meeting of 7 September 2016. Requested a written letter outlining DLALC's consideration on process steps and timing. No response to email
12 September 2016	Email to: DLALC CEO and Planning Manager	Reminder email	Repeated request by Wyong Coal for information and meeting request regarding DLALC rail requirements for Bushells Ridge as it had offered at 7 September 2016 meeting. Email response from DLALC CEO
12 September 2016	Email from: DLALC CEO	Response to email of reminder regarding repeated request by Wyong Coal for information and meeting request regarding DLALC rail requirements as per offer of 7 September 2016 meeting.	Email failed to respond to earlier requests sent by Wyong Coal. DLALC advised that it was waiting for minutes to be finalised (not a condition of 7 September 2016 meeting).
12 September 2016	Email to: DLALC CEO	Acknowledge reply to email from DLALC CEO	Waiting for minute completion
12 September 2016	Email from: DLALC Planning Manager	Response to tentative meeting request	Will respond when minutes accepted

Date	Contact	Issue	Response and comments
12 September 2016	Email to: DLALC Planning Manager and CEO	Request from Wyong Coal to set a tentative meeting date whilst finalising meeting minutes	No response from DLALC
13 September 2016	Email from: DLALC Planning Manager	Meeting minutes of 7 September 2016 attached	Receipt acknowledged by Wyong Coal and review timing advice provided
13 September 2016	Email to: DLALC Planning Manager	Minutes and audio	Acknowledge minutes receipt, request meeting audio
13 September 2016	Email from: DLALC Planning Manager	Audio request from Wyong Coal	Response, confidentiality agreement (CA)
14 September 2016	Telephone (TXT) to: DLALC Planning Manager	Meeting minutes matters	
14 September 2016	Email to: DLALC Planning Manager	Meeting minutes mark up	Email recalled
14 September 2016	Email to: DLALC Planning Manager	Meeting minutes mark up	Final minutes mark-up
15 September 2016	Email to: DLALC Planning Manager	Notation regarding marked up minutes of meeting 7 September 2016 returned to DLALC by Wyong Coal	Clarification of minutes version 1 - disregard
15 September 2016	Email to: DLALC CEO	Wyong Coal requested meeting for 21 September 2016	No response received.
15 September 2016	Email from: DLALC Planning Manager	Advice minutes accepted with minor changes	
15 September 2016	Email to: DLALC Planning Manager	Advice minute changes acceptable to Wyong Coal	
15 September 2016	Email to: DLALC Planning Manager	Wyong Coal request timing for meeting	Response from DLALC Planning Manager
15 September 2016	Email from: DLALC Planning Manager	Unable to meet until after 19 September 2016	
16 September 2016	Email from: DLALC Planning Manager	Final minutes of 7 September 2016 meeting distribution	Disseminated to Wyong Coal attendees

Date	Contact	Issue	Response and comments
16 September 2016	Email from: DLALC Planning Manager	Advice DLALC will contact Wyong Coal after Board Meeting of 19 September 2016	
16 September 2016	Email to: DLALC Planning Manager	Minutes of meeting 7 September 2016	Acceptance by Wyong Coal
19 September 2016	Email to: DLALC Planning Manager	Notification of signed minutes of meeting from Wyong Coal	Additional request for audio CA
19 September 2016	Telephone message from: DLALC CEO	Message from DLALC regarding media attention.	Wyong Coal responded to message 19 September 2016.
19 September 2016	Email and phone call to: DLALC CEO	Response to previous message from DLALC CEO and meeting request	Discussed media and request for meeting on 21 September 2016. DLALC CEO not available 21 September 2016, advised will contact Wyong Coal 22 September 2016 to make arrangements.
19 September 2016	Email from: DLALC Planning Manager	CA regarding audio	Response from DLALC Planning Manager to request for CA
22 September 2016	Telephone call from: DLALC CEO	DLALC CEO contacted Wyong Coal by telephone. Advised: <ol style="list-style-type: none"> DLALC had a meeting with Marcus Ray, DP&E the previous afternoon DLALC on the way to talk to Alan Blackman, Department of Minister and Cabinet about Wyong Coal/DLALC proposal (DPC) Arranged to meet at 12:30pm 	Wyong Coal agreed to meeting
22 September 2016	Email to: DLALC Planning Manager	CA regarding audio	Returning signed CA
22 September 2016	Meeting: DLALC and Wyong Coal	Issues: <ol style="list-style-type: none"> Reversion to rail spur on DLALC land Original route offer now removed by DLALC, replaced with another option on their land DLALC regional planning aspirations 	DLALC requested Wyong Coal consider its latest plan to use their land
26 September 2016	Email to: DLALC CEO	Wyong Coal seeks clarification from DLALC on changed position	Wyong Coal sought proposal in writing from DLALC for WACJV consideration. Reaffirmed timing constraints and amendment continuation. Response 27 September 2016
27 September 2016	Email from: DLALC CEO	Response to email of 26 September 2016	Response from DLALC confirming its preferred option location but without providing further detail as requested.

Date	Contact	Issue	Response and comments
28 September 2016	Email to: DLALC CEO	Wyong Coal responded to email from DLALC CEO of 27 September 2016	Request from Wyong Coal for DLALC to provide a written letter outlining their offer and thoughts on process steps and timing
28 September 2016	Email from: DLALC CEO	DLALC CEO response to email of 28 September 2016	Response failed to provide the requested information for WACJV consideration
28 September 2016	Email to: DLALC CEO	Wyong Coal response to DLALC CEO email	Further request for written proposal from DLALC as indicated at meeting 7 September 2016. No acknowledgement of this email was received.
4 October 2016	Email to: DLALC Planning Manager	Hansen Bailey (on behalf of Wyong Coal) requested access to DLALC Bushells Ridge land	Request to take photographs (for photomontages requested by DP&E to address matters raised by DLALC). Response from DLALC Planning Manager 5 October 2016
5 October 2016	Email from: DLALC Planning Manager	Hansen Bailey advised request forwarded to office for attention	Arrangements made to pick up key from DLALC administration
5 October 2016	Attend DLALC Office	Access to DLALC Land	Key picked up from DLALC offices on 5 October 2016 by Hansen Bailey and returned the same day
6 October 2016	Letter to: DLALC Planning Manager	Hansen Bailey (on behalf of Wyong Coal) requested DLALC to provide further information additional to that publicly available on its proposed Wyee Road Residential Site and the Bushells Ridge Residential site	Information requested to assist Wyong Coal in consultation with DLALC and to address a response to DLALC's submission to DA amendment. No response until letter from DLALC CEO 11 October 2016
6 October 2016	Unscheduled meeting/discussion: DLALC and Wyong Coal	Office of Central Coast Parliamentary Secretary – DLALC CEO requested for meeting by Wyong Coal	DLALC CEO indicated Wyong Coal would be contacted for meeting on the 10 October 2016
7 October 2016	Wyong Coal attend DLALC Office	Access to DLALC land	Key picked up from DLALC offices on 7 October 2016 by Wyong Coal and returned same day
11 October 2016	Letter from : DLALC CEO to Hansen Bailey (dated 10 October 2016)	Letter dated 10 October	DLALC CEO acknowledged information request for further information from Hansen Bailey of 6 October 2016. The provision of further information on its development plans is declined by DLALC. Letter provided by Hansen Bailey to Wyong Coal
11 October 2016	Email from: DLALC CEO	Letter regarding access to DLALC land	DLALC advised that access had been undertaken as facilitated by their Planning Manager and was now complete

Date	Contact	Issue	Response and comments
11 October 2016	Email to: DLALC CEO	No contact from DLALC on 10 October 2016 as offered at meeting of 6 October 2016.	Wyong Coal again request written detail of offer and request meeting with DLALC and its planners to consider proposal. DLALC response 13 October 2016
12 October 2016	Email to: DLALC CEO	Unavailable dates for meetings	
13 October 2016	Email from: DLALC CEO	Letter invite to meeting	Meeting planned for 17 October 2016
17 October 2016	Meeting: DLALC and Wyong Coal	Wyong Coal, DLALC and DLALC planners (ADW Johnson) meeting. Address Wyong Coal concerns regarding achievability of latest DLALC proposal	Wyong Coal advised that it has insufficient information for the WACJV to consider. Wyong Coal willing to continue to consider alternatives. Wyong Coal tabled DLALC issues as raised in submission to DPE. DLALC made it clear that it does not intend to further discuss the amended DA with Wyong Coal and will "fight it all the way". DLALC would only discuss matters associated with re-routing the Wallarah rail spur onto their land south of the Motorway link road
20 October 2016	Email to: DLALC CEO	Confirming Wyong Coal position and preferred option	Wyong Coal expresses willingness to further consult. Requested confirmation from DLALC of their latest plan. No response from DLALC
26 October 2016	Email to: DLALC CEO	Follow-up on email of 20 October 2016	Repeated request for information from DLALC. No response
27 October 2016	Letter from: DLALC CEO	Withdrawal of discussions	Letter informs Wyong Coal that DLALC now withdrawing from discussions, however open to commercial negotiations of original proposal. Response failed to answer Wyong Coal previous email questions
29 October 2016	Email to: DLALC CEO	Wyong Coal response to DLAC email of 27 October 2016.	No response received
5 November 2016	Email to: DLALC CEO	Advise to DLALC.	Wyong Coal advised that Response to Submissions complete, and offering meeting to guide DLALC through responses. No response received
15 November 2016	Email to: DLALC CEO	Email following DLALC media	Repeating offer to meet and guide DLALC through Wyong Coals Response to Submissions. Response from DLALC CEO 15 November 2016
15 November 2016	Email from: DLALC CEO	Acknowledge email offer from Wyong Coal	Advised DLALC will respond in due course. No request for meeting received by Wyong Coal
29 November 2016	Email to: DLALC CEO	Email again offering opportunity to consult	Further request from Wyong Coals to consult regarding Response to Submissions before 9 December 2016, or if unable, anytime thereafter with Project Manager.

Date	Contact	Issue	Response and comments
			Email acknowledged 29 November 2016
29 November 2016	Email from: DLALC CEO	Acknowledged email offer of further consultation	No request for meeting received by Wyong Coal
20 December 2016	Email to: DLALC CEO	Further offer to meet and discuss Wyong Coal response to Submissions, and further discuss matters raised by DLALC during recent correspondence with DPE	DLALC CEO responded 20 December 2016
20 December 2016	Email from: DLALC CEO	Response to meeting request from Wyong Coal	Unable to meet before Christmas, will be away until 16 January 2017
23 December 2016	Email to: DLALC CEO	Request for access to information by Wyong Coal Wyong Coal seeking to provide a considered response to the noise report by Spectrum Acoustics contained DLALC correspondence to Department of Planning and Environment. Wyong Coal seeks Darkinjung's permission to obtain the required data from Spectrum Acoustics. Alternatively the request could be facilitated via a written request through the Department of Planning and Environment DLALC CEO requested to provide some guidance on the matter before close of business today (23 December 2016)	No response received

Appendix H
DPI Response

19 January 2017

Resource Assessments, Planning Services
NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Michelle Kirkman

Dear Michelle,

WALLARAH 2 COAL PROJECT – RESPONSE TO DPI – WATER QUERIES

1. INTRODUCTION

This letter responds to a request from Department of the Environment (DP&E) on 18 January 2017 to address two issues raised in a letter from Department of Primary Industries (DPI) – Water dated 17 January 2017. These issues are responded to below.

1.1 ISSUE 1

The letter from DPI – Water states:

I refer to your email dated 6 December 2016 in relation to the Planning Assessment Commission's (PAC's) review on the Wallarah 2 Coal Project. As part of the PAC's review on the Wallarah 2 Coal Project, it made the following recommendations.

"Before submission of the project for determination the consent authority be provided with revised estimates by year for:

- (a) increased storage in the alluvium as a result of subsidence;*
- (b) losses to the alluvium from near-surface cracking of bedrock and movement of water into fracture zones;*
- (c) losses to the alluvium from leakage through the constrained zone to the zone of depressurisation;*
- (d) losses to baseflow from any changes to catchment flows (ie loss of catchment area) for streams potentially supplying the CCWS; and*

- (e) any other potential sources of loss of water from subsidence-induced changes to either the streams or the alluvial aquifers.

These estimates must indicate whether the losses are expected to be temporary or extend beyond the life of the mine. The estimates should also have been reviewed by NOW (now DPI Water)."

In response to the above, the Proponent has provided a table with estimated losses by year. However, it is not clear how these figures have been derived. The Proponent should provide detailed responses to each of the PAC recommendations outlined above from (a) through (e). Any modelling and data used in the determination of any figures presented should be provided for review.

1.2 RESPONSE TO ISSUE 1

Background

A brief history of consultation with the Planning Assessment Commission (PAC) and DPI – Water in relation to this issue is provided below to provide relevant background.

DP&E's Assessment Report (February 2014) describes meetings between NSW Office of Water (NOW) (now DPI – Water) and Wyong Areas Coal Joint Venture (WACJV) on 11 October 2013 and states that:

"NOW has accepted the additional information that WACJV provided in the Residual Matters Report, in relation to a 'minimal impacts' assessment under the Aquifer Interference Policy. It is satisfied that there is a low risk of vertical hydraulic connectivity and there is likely to be only minimal impacts to aquifers. Nonetheless, NOW has recommended conditions of consent requiring the development of a monitoring, response and mitigation strategy in the event that vertical leakage is greater than predicted. The Department has incorporated these recommendations into its recommended conditions of consent."

The PAC's review report (June 2014) required revised estimates for items a) to e), which were replicated in DPI – Water's letter of 17 January 2017. The issues in items a) to e) were discussed in two meetings involving the PAC, WACJV, Hansen Bailey and Dr Colin Mackie (groundwater expert) on 29 April 2014 and 30 May 2014. The outcomes of these discussions were reported in Section 2.2.1 of the *Wallarrah 2 Coal Project: Response to Planning Assessment Commission Review Report (Hansen Bailey, 2014)* (Response to PAC Report).

The Response to PAC Report included year by year estimates of the potential impacts on the Central Coast Water Supply Scheme (CCWSS) reproduced in **Appendix A**. These estimates were based on the results of the groundwater modelling and calculations undertaken for the *Wallarrah 2 Coal Project Groundwater Impact Assessment* (Mackie Environmental Research, 2013).

The Groundwater Impact Assessment was included as Appendix I of the Environmental Impact Statement (EIS). The EIS was placed on public exhibition from 26 April 2013 to 21 June 2013.

NOW reviewed the EIS, including the Groundwater Impact Assessment, and provided a submission on 8 July 2013 which included draft consent conditions.

On 8 December 2016, DP&E requested confirmation that the information in the Response to PAC Report has “addressed the PAC’s recommendation in its entirety”. DP&E acknowledged that WACJV understood the intent of the PAC’s issues. An email in reply (dated 8 December 2016) was provided to DP&E which clearly indicated where each issue was addressed in the Response to PAC Report (see **Appendix B**).

In response to DPI – Water’s letter of 17 January 2017, the following section outlines the information used as the basis for the statements in the Response to PAC Report at Section 2.2.1. Please note that all this information was contained in the documentation which was subject to stakeholder consultation (as described in the ‘Background’ section).

Potential Impacts to Water Supply Scheme

- a) The increased water storage in the alluvium was assessed using a shallow zone generic groundwater model. This model was used to assess the recovery of the water table within alluvial materials in subsided areas. The design and results of the shallow zone generic groundwater model were discussed in Appendix F of the Groundwater Impact Assessment.
- b) The predicted losses due to movement of water into shallow fracture zones were assessed by calculating the additional storage volume created by fracturing in the shallow hardrock. The size the cracking was calculated using the predicted maximum tensile strains. Mackie Environment Research (2013) determined that cracking would yield additional storage of approximately 0.9 kL per metre of longwall panel length. The assumptions used in these calculations are presented in Section 5.1 of the Groundwater Impact Assessment.
- c) The predicted losses due to leakage to the zone of depressurisation were assessed using a regional groundwater model. The design and results of the regional groundwater model were discussed in Appendix E of the Groundwater Impact Assessment.
- d) The predicted losses due to reduction in catchment areas were assessed in the Wallarah 2 Coal Project Surface Water Impact Assessment (WRM, 2013). The Surface Water Impact Assessment was provided as Appendix J of the EIS. Section 4.3 of the Surface Water Impact Assessment estimated the reduction in the catchment area of Buttonderry Creek due to construction of the Buttonderry Site. The corresponding reduction in runoff to Buttonderry Creek was calculated using runoff coefficients for that catchment. The reduction in runoff to Wallarah Creek was also determined. However, Wallarah Creek is not a stream that supplies water to the CCWSS.

In addition, WRM (2017) conducted an assessment to determine the potential impact of these losses on stream flow regimes during dry and very dry conditions. This assessment was provided as Appendix A of the *Amendment to DA SSD-4974 Response to DP&E* (Hansen Bailey, 2017) and reproduced as **Appendix C** to this letter.

1.3 ISSUE 2

The letter from DPI – Water states:

The Department of Primary Industries Water (DPI Water) is also concerned regarding the Proponent's proposed approach to fluvial geomorphological monitoring. It is not adequate to use visual observations alone to assess potential impacts of the mine on the geomorphology of the stream.

Surveyed cross-sections will need to be established at key locations prior to commencement of mining operations. Both the geomorphological and water quality monitoring programs will be subject to review and endorsement by DPI Water.

1.4 RESPONSE TO ISSUE 2

In relation to geomorphological monitoring, WACJV has committed to a stream stability monitoring and management program. This program includes baseline surveys of creek cross-sections.

Further details on the monitoring program are provided in Section 6.4.3 of the Surface Water Impact Assessment.

Schedule 3 Condition 5 of the draft conditions also states:

"The Applicant shall prepare and implement an Extraction Plan for all second workings on site to the satisfaction of the Director-General. Each extraction plan must:...

- (h) include a Water Management Plan, which has been prepared in consultation with EPA and NOW, which provides for the management of the potential impacts and/or environmental consequences of the proposed second workings on watercourses and aquifers, including: ...*
 - a program to monitor and report on stream morphology and stream flows, assess any changes resulting from subsidence impacts, including potential impacts on town water extraction availability under various climatic scenarios and remediate stream stability;"*

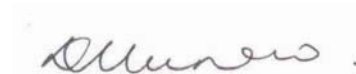
Should you have any queries in relation to this letter, please contact the undersigned on 02 6575 2000.

Yours faithfully

HANSEN BAILEY



Andrew Wu
Environmental Engineer



Dianne Munro
Principal

Appendix A
*Year by Year Estimates of the
Potential Impacts on the CCWS*

Table 1
Estimated Groundwater Impacts by Project Year

Project Year	Vertical leakage (ML)	Loss to crack storage (ML)	Shallow alluvial transfers (ML)
1 – Construction	0.00	0.00	0
2 – Construction	0.00	0.00	0
3 – Construction	0.00	0.00	0
4 – (Year 1 of Mining)	0.00	0.00	0
5	0.00	0.00	0
6	0.00	0.00	0
7	0.00	0.00	0
8	0.37	0.52	35
9	0.66	0.63	68
10	1.06	1.00	110
11	1.61	2.15	157
12	2.19	2.40	180
13	2.92	2.45	169
14	3.65	1.72	110
15	4.45	1.85	113
16	4.96	1.13	75
17	5.18	0.50	41
18	5.26	0.19	20
19	5.33	0.18	17
20	5.40	0.00	8
21	5.48	0.00	5
22	5.58	0.00	5
23	5.66	0.00	5
24	5.77	0.00	8
25	5.95	0.20	20
26	6.39	1.76	117
27	6.79	1.60	102
28	7.12	1.04	63

Appendix B

Email to DP&E 8 December 2016

From: Dianne Munro
Sent: Thursday, December 08, 2016 3:13 PM
To: 'Jessie.Evans@planning.nsw.gov.au' <Jessie.Evans@planning.nsw.gov.au>
Cc: 'Barry, Kenny' <KBarry@wallarah.com.au>; James Bailey <JBailey@hansenbailey.com.au>;
Andrew Wu <AWu@hansenbailey.com.au>
Subject: RE: Wallarah 2 PAC recommendations - revised estimates

Hi Jessie,

Thanks for your email.

A meeting was held with the PAC and Col Mackie on 29 April 2014 and 30 May 2014. The Response to PAC Report was prepared in response. All issues are addressed in Section 2.2.1 of that document as follows:

(a) increased storage in the alluvium as a result of subsidence;

Fourth column of Table 1.

(b) losses to the alluvium from near-surface cracking of bedrock and movement of water into fracture zones;

Third column of Table 1.

(c) losses to the alluvium from leakage through the constrained zone to the zone of depressurisation;

Second column of Table 1.

(d) losses to baseflow from any changes to catchment flows (ie loss of catchment area) for streams potentially supplying the CCWS; and

The loss of catchment area due to construction of the Buttonderry Site is addressed in the text in Section 2.2.1. The Tooheys Road Site will reduce the catchment area of Wallarah Creek. However, this impact has not been included in the discussion because Wallarah Creek does not supply water to the Central Coast water supply scheme.

(e) any other potential sources of loss of water from subsidence-induced changes to either the streams or the alluvial aquifers.

Further, there are no other impacts mechanisms that may affect volumes of water within the Central Coast water supply scheme.

Regards,
Dianne.

Appendix C
WRM Report

Memorandum

Date	16 January 2017	Pages	4
Attention	Dianne Munro		
Company	Hansen Bailey		
Job No.	0844-03-B3		
Subject	Wallarrah 2 Coal Project - Impact of low flow losses		

Dear Dianne,

As requested, we have undertaken further analysis to illustrate the impact of potential “worst case” water loss on both surface runoff and baseflow in the Wyong River catchment. Details of the methodology and results of the assessment are provided below.

Methodology

An AWBM rainfall-runoff model, which was calibrated to recorded streamflow data for Jilliby Jilliby Creek, was used to estimate the relative components of surface runoff and baseflow for the catchments draining to the Central Coast Water Supply System (CCWSS). Details of the model calibration are provided in Section 4.6.1 of the Surface Water Impact Assessment (WRM, 2013).

The model was used to simulate the runoff and baseflow components of the catchment drainage to the Lower Wyong River Weir (355 km²) for two scenarios:

- Existing conditions;
- Existing conditions with an assumed total annual water loss of 300 ML/a due to impacts of the Project.

The catchment to the Lower Wyong River Weir represents about half of the total catchment of the CCWSS.

The analysis was undertaken for two historical years; a dry year and a very dry year. 2009 was selected as being representative of a dry year. Rainfall for 2009 (obtained from SILO Data Drill) was 834 mm, which is close to the 10th percentile annual rainfall (90% of years will have higher rainfall). 1944, which was the driest year on record, was selected as the very dry year (annual rainfall of 597 mm). Mean annual rainfall in the region is approximately 1,180 mm.

The loss was subtracted from the total flow at a uniform rate each day. Taking into account the number of no-flow days, a daily loss of 1 ML corresponded to a total annual flow loss of 300 ML for 2009. For 1944, which had more no-flow days, a daily loss of 1.5 ML was subtracted.

Memorandum

Results - Dry year

Figure 1 shows the simulated time series of daily total flow volume at Lower Wyong River Weir for the two modelled scenarios for 2009.

For existing conditions:

- Surface runoff = 8,848 ML (77%);
- Baseflow = 2,588 ML (23%);
- Total flow (surface runoff plus baseflow) = 11,436 ML;
- Volumetric runoff coefficient = 4% (compared to average of 17% for Wyong River and 24% for Jilliby Jilliby Creek).

Including the daily flow loss, the total flow volume reduces to 11,134 ML; a reduction of 2.6%.

The impact on flows is negligible during periods of surface runoff.

The impact of flow loss during dry periods (eg. January, March, May and July-September in 2009) is apparent, but does not change the general character of flow which typically persists for an extended period after surface runoff, with some no-flow periods after extended dry weather. Within the resolution of the model, the impact on the number of no-flow days is negligible. In practical terms, it is unlikely that this flow volume loss could be detected.

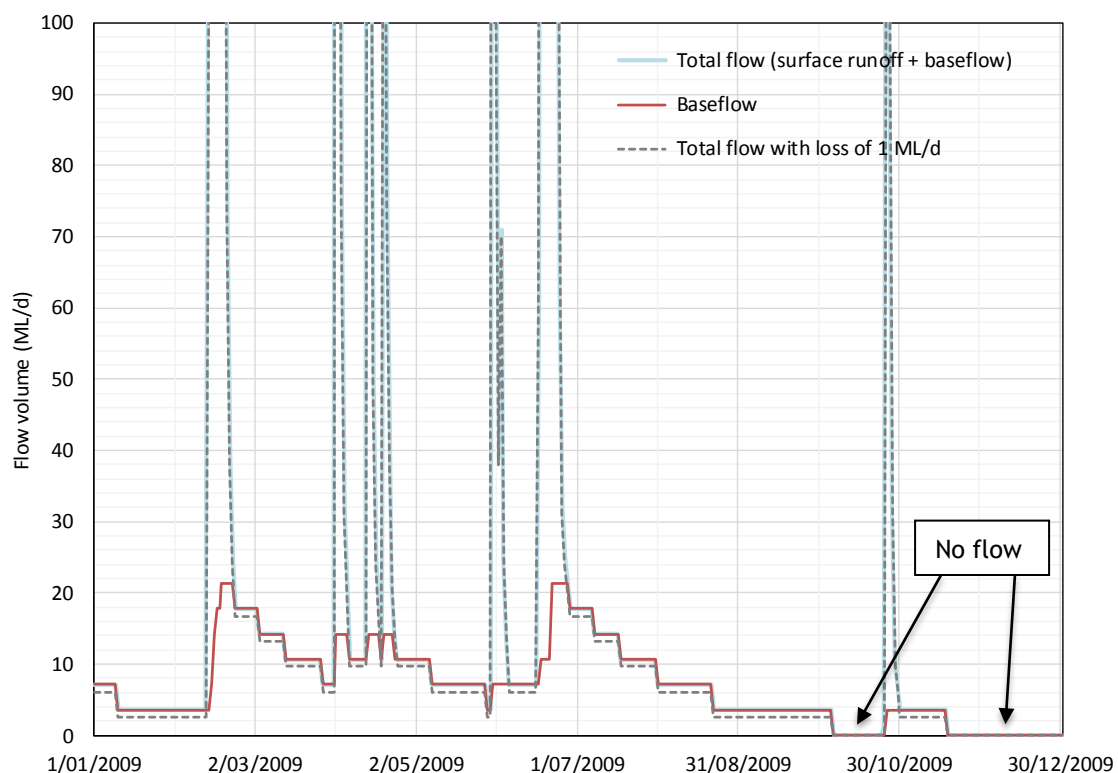


Figure 1 - Time series of simulated flow at Lower Wyong River Weir for 2009

Memorandum

Results - Very dry year

Figure 2 shows the results for 1944. For existing conditions:

- Surface runoff = 2,474 ML (66%);
- Baseflow = 1,260 ML (34%);
- Total flow (surface runoff plus baseflow) = 3,735 ML;
- Volumetric runoff coefficient = 2% (compared to average of 17% for Wyong River and 24% for Jilliby Jilliby Creek);
- There are two extended periods of no flow.

Including the daily flow loss, the total flow volume reduces to 3,433 ML; a reduction of 8%. Again, based on the model resolution, the impact on the number of no-flow days is negligible. In practical terms, it is unlikely that this flow volume loss (which represents an upper limit of potential impacts) could be detected.

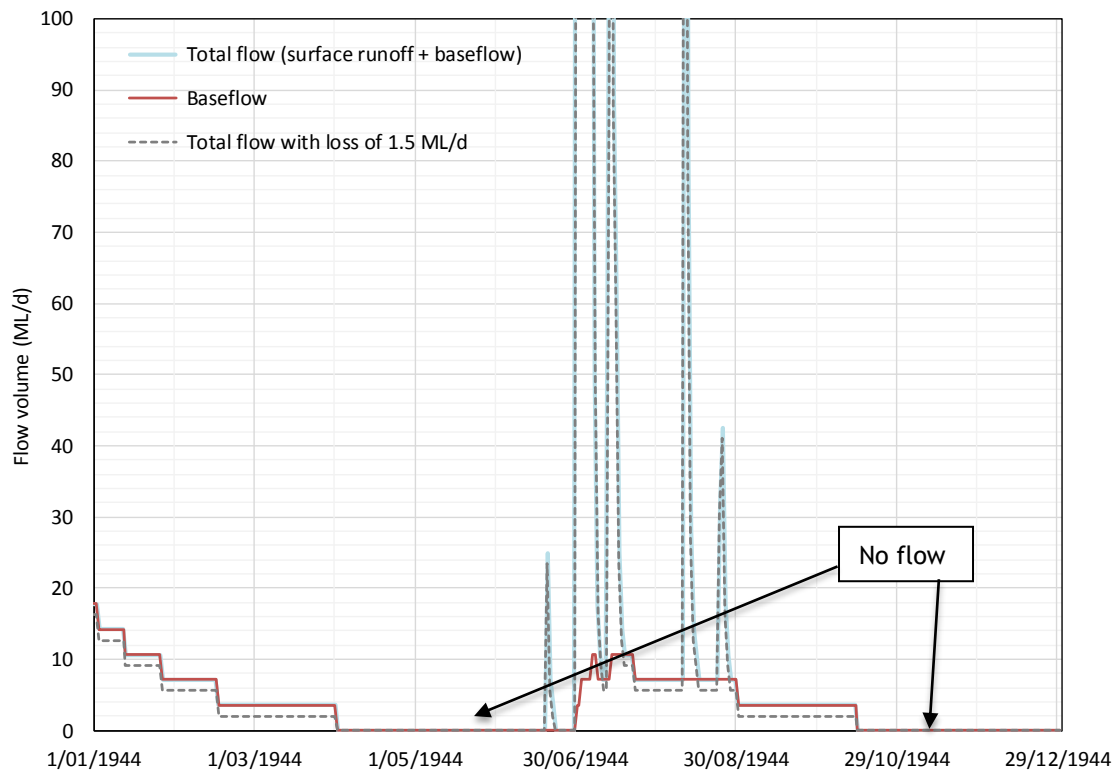


Figure 2 - Time series of simulated flow at Lower Wyong River Weir for 1944

Please do not hesitate to contact me if you require further information.

For and on behalf of

WRM Water & Environment Pty Ltd

David Newton

Director



Memorandum

References:

WRM, 2013 *'Wallarrah 2 Coal Project Surface Water Impact Assessment'*
Report prepared by WRM Water & Environment Pty Ltd, Ref.
0844-01-K, March 2013.

Appendix I
EPA Response

1 INTRODUCTION

This document responds to a query in relation to construction noise from the Planning Assessment Commission (PAC) to Kenny Barry at Wyong Areas Coal Joint Venture (WACJV) on 29 March 2017 in relation to the Walarah 2 Coal Project Amended (the Amendment).

It further responds to additional construction noise queries from Department of Planning & Environment (DP&E) to WACJV via email on 29 March 2017 in relation to the Amendment.

This document provides a response to each query from the PAC and DP&E. Input to the response has been provided by Atkins Acoustics.

2 PAC REQUEST

2.1 QUERY

K Barry spoke with the PAC on 29 March 2017 resulting in a request to provide a response in relation to construction noise – how does WACJV intend to address noise during construction of the Amendment.

2.2 RESPONSE

A Noise Management Plan (NMP) (including the out of hours noise protocol as required by Schedule 4 condition 2 of the draft development consent SSD-4974) will be prepared, implemented and updated as required to account for any changes in noise and vibration management strategies as part of the EMP.

The NMP will follow the approach outlined in the *'Interim Construction Noise Guideline'* (DECC, 2009) (ICNG) and would identify:

- All potential noise and vibration generating activities;
- All feasible and reasonable mitigation measures to be implemented;
- A monitoring program to assess performance against relevant noise and vibration management levels;
- Arrangement for consultation with affected noise receptors;
- Notification and complaints handling procedures;
- Staff and sub-contractor induction and training procedures and responsibilities, and
- Assessment and selection of quieter work methods and equipment.

Further, WACJV commits to offering short term alternate motel style accommodation to the relevant residences for any nights when the ICNG night time noise goal is predicted to be exceeded during the track possession construction period.

Whilst not anticipated other than during track possession (Work Stages 4 and 9) construction works will generally be scheduled for standard daytime hours as indicated in **Table 1**. Works during track possession include construction of the conveyor bridge over the Main Northern Rail Line (South) and the northern end track tie in works at the Main Northern Rail Line. However, some activities at other times may be required as requested by Sydney Trains.

Access and related activities during track possessions would be conducted within a 48 hour timeframe which is the standard track possession period set by Sydney Trains. Dependent upon Sydney trains projected maintenance schedules; there are three to four dedicated track possessions in this area each year. Sydney Trains also advises that unless absolutely necessary, the conduct of noisy works within the rail corridor during possessions is limited to standard daytime hours.

Table 27 in the Noise Impact Assessment (NIA) indicates predicted noise exceedances of up to 20 dBA above the Noise Management Levels (NML) for Work Outside Standard Hours (WOSH). .

It is important to note that during **Standard Hours** exceedances of up to 15dBA are predicted. During the preparation of the NVMP the Contractor would be required to investigate and recommend procedures and methods to minimise noise exposure for any sensitive receptors.

'AS436-1981 - Guide to noise control on construction, maintenance and demolition sites' (Section 6) and the ICNG (Section 6) provide guidance in noise control in respect to engineering construction and demolition works.

The measures include where practical the substitution of standard noisy plant with a selection of quieter plant, increased maintenance of equipment, screening of noisy activities with temporary screens, avoidance of the use of reversing alarms and temporary treatments at residences. For example, the noise reduction from closing of exposed windows/doors in a residence would be in the order of 10dB.

Further relevant discussion is provided in the DP&E response in **Section 3**.

Table 1
Standard Construction Hours

Monday to Friday	Saturday	Sunday / Public holiday
7:00 am to 6:00 pm	8:00 am to 1:00 pm	No work

3 DP&E – CONSTRUCTION NOISE

3.1 JUSTIFICATION

1. *Table 18 of the Noise and Vibration Impact Assessment shows construction stages and scheduling for the project. Please identify which activities in each construction phase need to be completed outside of standard work hours.*
2. *Please justify why any construction activity is required to be completed outside of standard work hours.*
3. *Identify any construction activity requiring separate approvals, justifying why this construction needs to take place outside of standard works hours.*

3.2 RESPONSE

Table 18 from the NIA is reproduced below as **Table 2**. All activities have been broken into one of 10 stages. Each stage has been assessed in the NIA as a worst-case scenario for both within standard hours and WOSH. Establishment and decommissioning will be undertaken in standard hours only.

Table 3 has been updated to demonstrate why construction activities are required to be completed outside of standard work hours and confirm if any require separate approvals are required.

3.3 CONSTRUCTION ACTIVITIES OUTSIDE STANDARD WORK HOURS

4. *Where construction is required to be completed outside of standard work hours, please detail the duration, frequency and predicted exceedance (e.g. 10 Saturday evenings for 3 hours).*
5. *Please clarify the locations used in Table 27 of the Noise and Vibration Impact Assessment.*

3.4 RESPONSE

Background

Table 3 reproduces Table 27 from the NIA. Predicted exceedances under worst case modelling scenarios for both 'standard hours' and WOSH are shown in the two last columns. The duration of the modelled activities has been added to **Table 2** (from Table 18 of the NIA).

It should be noted that during the 28 years of 24/7 operations of the Project (including the Amendment), P14 and P15 are predicted to have exceedances of the PSNC of up to 4dBA. As such, each has been afforded the application of mitigation by WACJV under Schedule 4 condition 3 of the development consent. Potential exceedances and mitigations have already been discussed with these residents during the consultation process. WACJV will continue to consult with these residents, and will implement these mitigations upon the request. It should be noted that this mitigation has not been included in the worst case modelling conducted to date.

P14 and P15 are located relatively close at 340 m and 430 m from the existing main northern rail line, respectively. The existing background noise levels at these locations are highly influenced by road traffic on the adjacent Motorway Link Road which is elevated above the properties, with measurements of 37/39/39 (day/evening/night) recorded.

Discussion

As can be seen from **Table 3**, at P13 (indicative of Blue Haven) no exceedances during standard hours are predicted. During WOSH no exceedances of the noise management levels are predicted under five scenarios. The two conveyor construction scenarios during WOSH are predicted to result in very minor and most likely indiscernible exceedances up to 1 dBA during the day and night.

At P13, bridge construction is predicted to contribute up to a 4 dBA exceedance at night and some bulk earthworks are predicted to contribute up to 10 dBA exceedance at night. Each are anticipated to be conducted for up to 6 and 9 months, respectively). With respect to the bulk earthworks as the site activities move to the north noise exposure for P13 will reduce. It should also be noted that the existing ambient noise at P13 is controlled by road traffic on the adjacent elevated Motorway Link Road.

At P14 no exceedances are predicted during site establishment. Small exceedances up to 1 dBA are predicted during conveyor construction during the day and night. Larger predictions of exceedance of up to 15 dBA for standard hours and 20 dBA for WOSH are predicated at P14 during the bridges construction, bulk earthworks and conveyor and track construction. WACJV is of the opinion that in consultation with the property owners, an early delivery of mitigations normally reserved for operational aspects would be beneficial to all parties.

At P15 no exceedances are predicted for site establishment or conveyors construction during standard hours or WOSH. Exceedances of up to 9 dBA and 14 dBA are predicted during standard hours and WOSH, respectively for bridge construction. Exceedances up to 12 dBA during standard hours and 17 dBA for WOSH are predicted for bulk earth works. Track construction is also predicted to impact up to 11 dBA and 16 dBA above noise management levels. WACJV is of the opinion that in consultation with the property owners, an early delivery of mitigation normally reserved for operational aspects, would be beneficial to all parties.

P16 is not predicted to have any exceedances during site establishment, conveyors construction or bridges construction. Minor exceedances up to 4 dBA are predicted during train load out construction and decommissioning. Exceedances of up to 14 dBA are predicted for bulk earthworks and track construction. WACJV is of the opinion that in consultation with the property owners, an early delivery of mitigation normally reserved for operational aspects, would be beneficial to all parties.

For P15 and P16, in the event that noise emissions during short-term unavoidable WOSH are still unacceptable to these two residences. WACJV commits to offering alternate motel style accommodation to these residents if so required.

Figure 1 shows indicative locations used in Table 27.

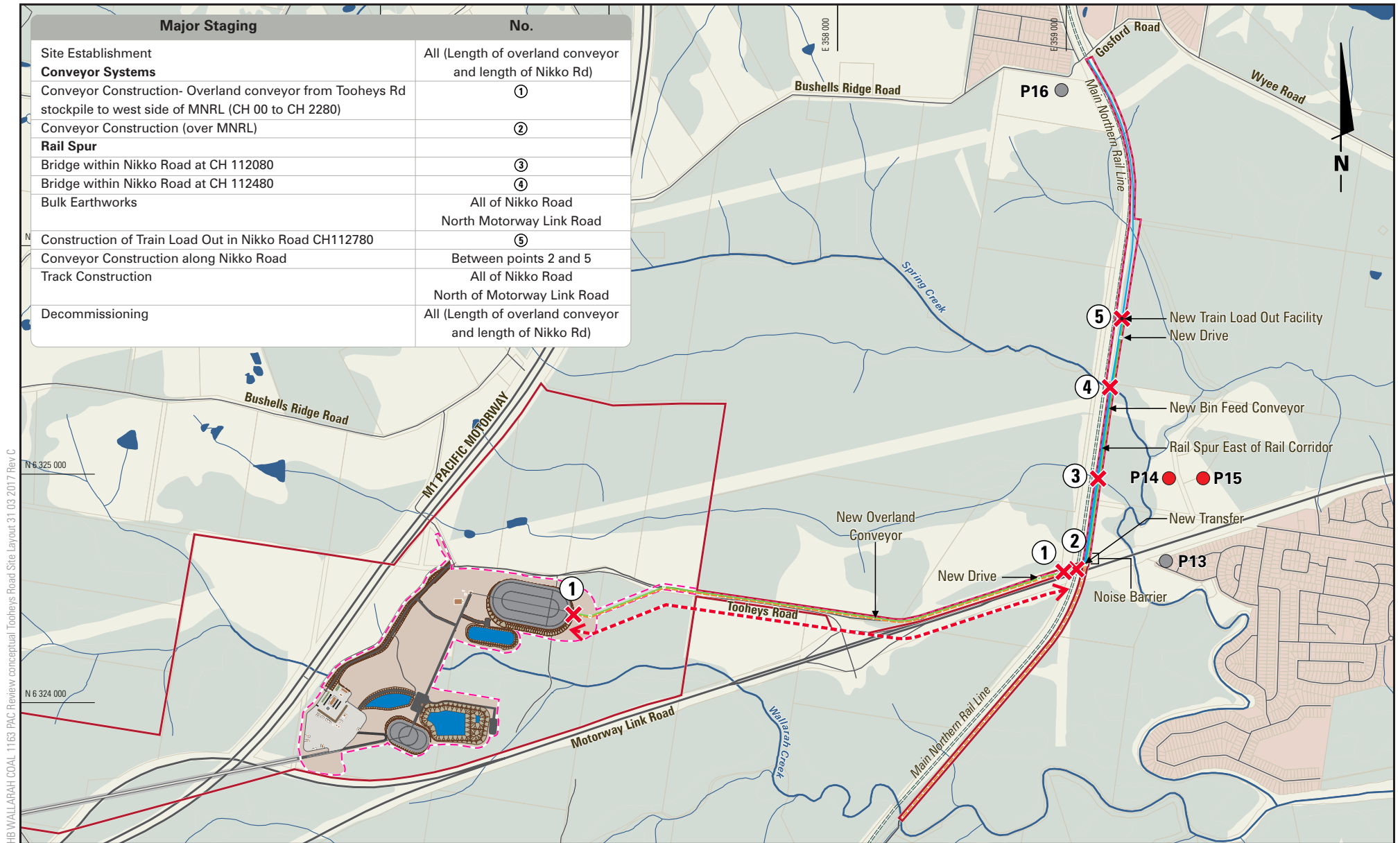
Table 2
Construction Staging for NIA and Details

Major Staging	Timing	Description	Figure Ref	Out of Hours Justification	Separate Approval Required	Duration, frequency and predicted exceedance
1. Site Establishment	Q3 2018 - Q4 2018	Clearing, mulching, fencing, access roads, compounds	N/A	Unlikely to be required	No	
Conveyor Systems						
2. Conveyor Construction (CH 00 to CH 2280)	Q1 2019 - Q3 2019	Footing preparation, concrete pours, steel and structure erection	1	May only be required where potential business interruptions to Boral require out of hours	Yes	
3. Conveyor Construction (over MNRL)	Q1 2019 – Q3 2019	Footing preparation, concrete pours, steel and structure erection	2	Needs to be completed in a track possession coordinated by Sydney Trains.	Yes	Likely during a 48 hour period on a weekend between 0200 Sat until 0200 Monday. Exact timing dictated by other works taking place by Sydney trains
Rail Spur						
4. Bridge at CH 112080	Q3 2019 – Q4 2019	Earthworks, footing preparation, steel preparation, concrete pours	3	Only require where required by Sydney Trains	Yes if required	
5. Bridge at CH 112480		Preparation, steel preparation, concrete pours	4	Only require where required by Sydney Trains	Yes if required	
6. Bulk Earth Works	Q4 2019 – Q1 2020	Cut and fill, drainage	All	Only require where required by Sydney Trains	Yes if required	
7. Construction of Train Load Out CH112780	Q4 2019 - Q12020	Footing preparation, concrete pours, steel and structure erection	5	Only require where required by Sydney Trains		
8. Conveyor Construction along MNRL	Q4 2019 – Q2 2020	Footing preparation, concrete pours, steel and structure erection	2-5	Only require where required by Sydney Trains	Yes if required	
9. Track Construction	Q2 2019 – Q2 2020	Ballast, sleeper and rail installation	N/A	Only require where required by Sydney Trains	Yes if required	
10. Decommissioning	Q4 2019 – Q2 2020	Removal redundant equipment, compounds and work areas	N/A	Unlikely to be required	Yes if required	

Table 3
Table 27 from NIA

Work Stage	Scenario	Reference Receiver	RBL Day/Evening/ Night	Construction Noise Management Level LAeq 15 min		Predicted Noise Level LAeq 15 min	Predicted Exceedance of Noise Management Level (dB)	
				Standard Day	WOSH	LAeq 15 min	Standard Hours Day	WOSH Day/Evening/Night
1	Site Establishment east MNRL	P13	49/45/39	59	54/50/44	13-38	-	-
		P14	37/39/37	47	42/44/42	14-42	-	-
		P15	37/39/37	47	42/44/42	13-40	-	-
		P16	33/39/33	43	38/44/38	12-16	-	-
2	Conveyor Construction (CH 00 to CH 2280)	P13	49/45/39	59	54/50/44	14-39	-	1/-/1
		P14	37/39/37	47	42/44/42	15-43	-	-
		P15	37/39/37	47	42/44/42	14-41	-	-
		P16	33/39/33	43	38/44/38	13-17	-	-/-/1
3	Conveyor Construction over MNRL	P13	49/45/39	59	54/50/44	45	-	1/-/1
		P14	37/39/37	47	42/44/42	43	-	-/-/1
		P15	37/39/37	47	42/44/42	42	-	-
		P16	33/39/33	43	38/44/38	17	-	-
4	Bridge at CH 112080	P13	49/45/39	59	54/50/44	48	-	-/-/4
		P14	37/39/37	47	42/44/42	58	11	16/14/16
		P15	37/39/37	47	42/44/42	56	9	14/12/14
		P16	33/39/33	43	38/44/38	28	-	-
5	Bridge at CH 112480	P13	49/45/39	59	54/50/44	44	-	
		P14	37/39/37	47	42/44/42	53	6	11/9/11
		P15	37/39/37	47	42/44/42	52	5	10/8/10
		P16	33/39/33	43	38/44/38	35	-	

Work Stage	Scenario	Reference Receiver	RBL Day/Evening/ Night	Construction Noise Management Level LAeq 15 min		Predicted Noise Level LAeq 15 min	Predicted Exceedance of Noise Management Level (dB)	
				Standard Day	WOSH	LAeq 15 min	Standard Hours Day	WOSH Day/Evening/Night
6	Bulk Earth Works	P13	49/45/39	59	54/50/44	28-54	-	-/4/10
		P14	37/39/37	47	42/44/42	57-62	10-15	20/18/20
		P15	37/39/37	47	42/44/42	56-59	9-12	17/15/17
		P16	33/39/33	43	38/44/38	25-49	6	11/5/11
7	Construction Train Load Out CH112780	P13	49/45/39	59	54/50/44	24	-	
		P14	37/39/37	47	42/44/42	47	-	5/3/5
		P15	37/39/37	47	42/44/42	47	-	5/3/5
		P16	33/39/33	43	38/44/38	39	-	1/-/1
8	Conveyor Construction along MNRL	P13	49/45/39	59	54/50/44	23-41	-	
		P14	37/39/37	47	42/44/42	41-54	7	12/10/12
		P15	37/39/37	47	42/44/42	41-51	4	9/7/9
		P16	33/39/33	43	38/44/38	17-28	-	
9	Track Construction	P13	49/45/39	59	54/50/44	27-48	-	-/-/4
		P14	37/39/37	47	42/44/42	44-61	14	19/17/19
		P15	37/39/37	47	42/44/42	44-58	11	16/14/16
		P16	33/39/33	43	38/44/38	24-48	5	10/4/10
10	Decommissioning	P13	49/45/39	59	54/50/44	21-42	-	
		P14	37/39/37	47	42/44/42	38-53	8	13/11/13
		P15	37/39/37	47	42/44/42	38-52	5	10/8/10
		P16	33/39/33	43	38/44/38	18-42	-	4/-/4



HB WALLARAH COAL 1163 PAC Review conceptual Tooheys Road Site Layout 31 03 2017 Rev C

WALLARAH 2 COAL PROJECT

Appendix J
NSW Health Response

Subject: RE: Wallarah 2 - Submission

From: Dianne Munro
Sent: Wednesday, January 25, 2017 9:45 AM
To: Melanie Hollis <Melanie.Hollis@planning.nsw.gov.au>
Cc: KBarry@wallarah.com.au; Andrew Wu <AWu@hansenbailey.com.au>
Subject: FW: Wallarah 2 - Submission

Hi Melanie,

Please find responses to the NSW Health comments in red below.

1. I can confirm that our comment relating to Wyee residences does refer to locations P14-P17, and also to any other residences in the vicinity of these assessment locations which are similarly affected now and in the future. There is some planning underway for land owned by Darkinjung LALC and there may be other development in this vicinity in the future. This reinforces the importance of noise control at the source rather than at the receptor.

See response to P14-P17 at (4) below. The DLALC conceptual residential development has been responded to in detail in WACJV's responses dated 4/11/16 and 16/1/17.

2. We seek confirmation that the VLAMP recommended actions (Table 8 of the July 2016 Acoustic Report) are not included as noise mitigation strategies in the noise modelling used to predict the operational noise levels. In other words, air conditioning and mechanical ventilation have not already been included in the noise modelling, rather they are available to further mitigate noise to meet the noise limits proposed as recommended approval conditions.

We can confirm that air conditioning and mechanical ventilation are not included in the noise modelling for the Project.

3. We also seek advice on the outcome of the EPA's request of the proponent that the amenity classifications and resultant project specific noise criteria be reviewed.

The EPA in its letter dated 20 December 2016, confirms that issues raised by the EPA in its letter (dated 5 September 2016) were adequately addressed in the WACJV Response. This includes acceptance of the "Urban" criteria as the most appropriate receiver classification. See WACJV response to DP&E dated 16/1/17 for further detail.

4. The next comment is in relation to the recommended actions in Table 8 of the July 2016 Acoustic Report. Table 8 assumes the VLAMP recommended actions are acceptable to residents and effective. Our concern is to ensure that residents will not be exposed to any additional noise whilst inside their dwellings as a result of the increased noise limits (above the original PSNC) proposed in the EPA's recommended approval conditions dated 12/12/16.

The applicability of the VLAMP was discussed in Section 6.4.3 of the Amendment Document. Noise levels at three residences (assessment locations P14, P15 and P16) are predicted to exceed the PSNC by up to 4 dBA. In accordance with the VLAMP, WACJV has consulted with these landowners and has notified them of their right to request acoustic treatments at their residences. WACJV will consult with these landowners to discuss management of noise impacts. See Section 5.7.1 of WACJV Amendment RTS dated 4/11/16.

The EPA response dated 20/12/16 confirms that issues raised by the EPA in its letter (dated 5 September 2016) were adequately addressed in the WACJV Response.

- Following discussion today on this project with Geoff Parnell of DPE, we acknowledge that DPE and EPA may not consider continuous real time monitoring of noise as the most effective means of enforcement of approval conditions. As previously stated we defer to the appropriate regulators on approval and EPL conditions. Our comments can be interpreted as a request for consideration of periods of continuous monitoring to demonstrate the effectiveness of noise control measures. An example would be to check on the effectiveness of dwelling treatments listed in VLAMP.

Noted. A Noise Management Plan will be prepared for the Project with an appropriate, site specific noise monitoring network developed in consultation with relevant regulators.

Please do not hesitate to let me know should you require anything further.

Regards,
Dianne.

From: Melanie Hollis [<mailto:Melanie.Hollis@planning.nsw.gov.au>]
Sent: Tuesday, January 24, 2017 8:47 AM
To: Dianne Munro <DMunro@hansenbailey.com.au>
Subject: FW: Wallarah 2 - Submission

Hi Dianne

The Department has received some further comments from Health NSW in relation to the noise impacts from Wallarah 2.

Could you please review and respond to the points raised by Monday 30 January.

Kind Regards

Melanie Hollis
Planning Officer
Resource Assessments | Planning Services
Level 22, 320 Pitt Street | GPO Box 39 | Sydney NSW 2001
T 02 8217 2043 E melanie.hollis@planning.nsw.gov.au

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<image005.jpg>

From: Kerry Spratt [<mailto:Kerry.Spratt@health.nsw.gov.au>]
Sent: Friday, 20 January 2017 3:39 PM
To: Melanie Hollis <Melanie.Hollis@planning.nsw.gov.au>
Cc: Peter Lewis <Peter.Lewis1@health.nsw.gov.au>; Adam McEwen <Adam.McEwen@health.nsw.gov.au>
Subject: FW: Wallarah 2 - Submission

Dear Melanie

Thank you for seeking clarification on our previous comments relating to the Wallarah 2 Coal Project. This response is in consultation with Dr Peter Lewis.

I can confirm that our comment relating to Wyee residences does refer to locations P14-P17, and also to any other residences in the vicinity of these assessment locations which are similarly affected now and in the future. There is

some planning underway for land owned by Darkinjung LALC and there may be other development in this vicinity in the future. This reinforces the importance of noise control at the source rather than at the receptor.

We seek confirmation that the VLAMP recommended actions (Table 8 of the July 2016 Acoustic Report) are not included as noise mitigation strategies in the noise modelling used to predict the operational noise levels. In other words, air conditioning and mechanical ventilation have not already been included in the noise modelling, rather they are available to further mitigate noise to meet the noise limits proposed as recommended approval conditions.

We also seek advice on the outcome of the EPA's request of the proponent that the amenity classifications and resultant project specific noise criteria be reviewed.

The next comment is in relation to the recommended actions in Table 8 of the July 2016 Acoustic Report. Table 8 assumes the VLAMP recommended actions are acceptable to residents and effective. Our concern is to ensure that residents will not be exposed to any additional noise whilst inside their dwellings as a result of the increased noise limits (above the original PSNC) proposed in the EPA's recommended approval conditions dated 12/12/16.

Following discussion today on this project with Geoff Parnell of DPE, we acknowledge that DPE and EPA may not consider continuous real time monitoring of noise as the most effective means of enforcement of approval conditions. As previously stated we defer to the appropriate regulators on approval and EPL conditions. Our comments can be interpreted as a request for consideration of periods of continuous monitoring to demonstrate the effectiveness of noise control measures. An example would be to check on the effectiveness of dwelling treatments listed in VLAMP.

Please contact me or Dr Lewis to discuss further if needed.

Regards Kerry

Kerry Spratt
Environmental Health Officer
Central Coast Public Health Unit
Level 1, 4 Watt St Gosford
PO Box 361 GOSFORD NSW 2250
Ph 4320 9730 Fax 4320 9746 kerry.spratt@health.nsw.gov.au
www.health.nsw.gov.au

Appendix K
Gateway Planning Team Report –
DLALC Rezoning Application

**BUSHELLS RIDGE/DOYALSON, 425 Bushells Ridge Road, Bushells Ridge & 10 Wyee Road,
Doyalson**

Proposal Title : BUSHELLS RIDGE/DOYALSON, 425 Bushells Ridge Road, Bushells Ridge & 10 Wyee Road, Doyalson

Proposal Summary : The Darkinjung Local Aboriginal Land Council lodged a multi-site rezoning proposal with Council in June 2014. The proposal sought to facilitate residential and employment development and conservation outcomes on 5 sites in northern Wyong. Due to the complexity of the multi-site rezoning proposal, Council separated the project into site specific proposals.

Council resolved to progress Site 1 Lake Munmorah and a Gateway determination has been issued. Council resolved also to support Site 3 Doyalson but deferred consideration of Site 4 Bushells Ridge.

The proponent submitted a pre-Gateway review request for the rezoning proposal at Site 4 Bushells Ridge. The Deputy Secretary endorsed the Department's Information and Assessment Report relating to the request and considered there may be merit in the proposal proceeding to the Gateway determination stage. The proposal was referred to the JRPP for advice.

The JRPP reviewed the proposal on 19 November 2015 and recommended that the proposal be submitted for a Gateway determination. Given the proximity of Site 4 Bushells Ridge to Site 3 Doyalson, already supported by Council, Council were advised to consider combining the sites into one planning proposal.

A proposal to rezone land at Bushells Ridge Road, Bushells Ridge and Wyee Road, Doyalson has subsequently been submitted for a Gateway determination.

The objective of the proposal is to rezone land to enable low density and large lot residential development, development for the purposes of a neighbourhood centre and environmental conservation. The proposed land use configuration is as follows:

Site 4 – Bushells Ridge: Rezone IN1 General Industrial and E2 Environmental Conservation to R2 Low Density Residential, R5 Large Lot Residential and a zone to conserve and manage areas of environmental significance.

Site 3 – Doyalson: Rezone RU6 Transition and E2 Environmental Conservation to R2 Low Density Residential, B1 Neighbourhood Centre and zone/s to conserve and manage areas of environmental significance.

This report proposes that the planning proposal should proceed subject to conditions detailed in the recommendation.

PP Number : PP_2016_WYONG_005_00 **Dop File No :** 16/04122

Proposal Details

Date Planning Proposal Received :	19-Apr-2016	LGA covered :	Wyong
Region :	Hunter	RPA :	Wyong Shire Council
State Electorate :	WYONG	Section of the Act :	55 - Planning Proposal
LEP Type :	Precinct		

Location Details

**BUSHELLS RIDGE/DOYALSON, 425 Bushells Ridge Road, Bushells Ridge & 10 Wyee Road,
Doyalson**

Street : **Bushells Ridge Road**
Suburb : **Bushells Ridge** City : **Bushells Ridge** Postcode : **2259**
Land Parcel : **Lot 107, 108, 109, 110 and 111 DP 755245, Lot 191, 192 and 193 DP 1032847**
Street : **Wyee Road**
Suburb : **Doyalson** City : **Doyalson** Postcode : **2262**
Land Parcel : **Part Lot 204 DP 1117900**

DoP Planning Officer Contact Details

Contact Name : **Claire Swan**
Contact Number : **43485003**
Contact Email : **claire.swan@planning.nsw.gov.au**

RPA Contact Details

Contact Name : **Scott Duncan**
Contact Number : **0243505541**
Contact Email : **scott.duncan@wyong.nsw.gov.au**

DoP Project Manager Contact Details

Contact Name :
Contact Number :
Contact Email :

Land Release Data

Growth Centre :		Release Area Name :	
Regional / Sub Regional Strategy :	Central Coast Regional Strategy	Consistent with Strategy :	No
MDP Number :		Date of Release :	
Area of Release (Ha)	95.00	Type of Release (eg Residential / Employment land) :	Both
No. of Lots :	0	No. of Dwellings (where relevant) :	895
Gross Floor Area :	0	No of Jobs Created :	0

The NSW Government Lobbyists Code of
Conduct has been
complied with :

If No, comment :

Have there been meetings or
communications with
registered lobbyists? :

If Yes, comment :

**BUSHELLS RIDGE/DOYALSON, 425 Bushells Ridge Road, Bushells Ridge & 10 Wyee Road,
Doyalson**

Supporting notes

Internal Supporting
Notes :

Council has described the applicable lands as:

425 Bushells Ridge Road, Bushells Ridge, including:

- Lot 107, 108, 109 and 111 DP 755245
- Lot 110 DP 745245
- Lot 191 DP 1032847

10 Wyee Road, Doyalson, including:

- Lot 204 DP 1117900

On review of the planning proposal and locality maps identifying the proposed boundary of the planning proposal, it is apparent that Council's land description for the applicable lands is incorrect.

The applicable lands, as mapped in the planning proposal, include:

- Lot 107,108,109,110 and 111 DP 755245
- Lot 191, 192 and 193 DP 1032847
- Part Lot 204 DP 1117900.

The planning proposal will need to be amended to reflect the correct land description prior to exhibition.

Council submitted the planning proposal on 18 March 2016. An updated planning proposal was provided on 19 April 2016.

External Supporting
Notes :

Adequacy Assessment

Statement of the objectives - s55(2)(a)

Is a statement of the objectives provided? **Yes**

Comment :

The objective of the proposal is to amend existing planning controls and rezone land to enable low density and large lot residential development, development for the purposes of a neighbourhood centre and protect the remaining areas of environmental significance.

Council has also identified amendments to the Land Reservation Acquisition Map of Wyong Local Environmental Plan (LEP) 2013 for the purposes of road widening. This should be stated in the objectives of the proposal.

Explanation of provisions provided - s55(2)(b)

Is an explanation of provisions provided? **Yes**

Comment :

Council proposes to achieve this objective by amending the Wyong Local Environmental Plan (LEP) 2013 as follows:

- Rezone the applicable land at Bushells Ridge from IN1 General Industrial and E2 Environmental Conservation to R2 Low Density Residential, R5 Large Lot Residential and a zone or zones to be determined that will conserve and manage areas of environmental significance.
- Rezone the applicable land at Doyalson from RU6 Transition and E2 Environmental Conservation to R2 Low Density Residential, B1 Neighbourhood Centre and a zone or zones to be determined that will conserve and manage areas of environmental significance.
- Amend the minimum lot size maps for each zone as follows:
R2 - 450sqm

**BUSHELLS RIDGE/DOYALSON, 425 Bushells Ridge Road, Bushells Ridge & 10 Wyee Road,
Doyalson**

R5 - 2,000sqm

E2 - 40ha

E3 - 40ha

- Identify the applicable land at Bushells Ridge and Doyalson as an Urban Release Area, subject to the provisions of Part 6 of Wyong Local Environmental Plan (LEP) 2013.
- Identify the applicable land at Bushells Ridge and Doyalson on the Land Acquisition Map of the Wyong Local Environmental Plan (LEP) 2013 for the purposes of road widening.

Council has identified further investigation is required to identify zone boundaries and requirements for land acquisition.

To address environmental, social and economic impacts of future development as a result of the proposed rezoning, Council proposes to prepare site specific development provisions that will be incorporated in an amendment of Clause 6.1 of Development Control Plan (DCP) 2013. These development provisions are not proposed to be exhibited concurrently with the Planning Proposal.

The explanation of provisions is considered adequate.

Justification - s55 (2)(c)

a) Has Council's strategy been agreed to by the Director General? **Yes**

b) S.117 directions identified by RPA :

* May need the Director General's agreement

1.1 Business and Industrial Zones

1.2 Rural Zones

1.3 Mining, Petroleum Production and Extractive Industries

2.1 Environment Protection Zones

2.3 Heritage Conservation

2.4 Recreation Vehicle Areas

3.1 Residential Zones

3.2 Caravan Parks and Manufactured Home Estates

3.3 Home Occupations

3.4 Integrating Land Use and Transport

4.1 Acid Sulfate Soils

4.2 Mine Subsidence and Unstable Land

4.3 Flood Prone Land

4.4 Planning for Bushfire Protection

5.1 Implementation of Regional Strategies

6.1 Approval and Referral Requirements

6.2 Reserving Land for Public Purposes

6.3 Site Specific Provisions

Is the Director General's agreement required? **Yes**

c) Consistent with Standard Instrument (LEPs) Order 2006 : **Yes**

d) Which SEPPs have the RPA identified?

SEPP No 44—Koala Habitat Protection

SEPP No 55—Remediation of Land

SEPP (Mining, Petroleum Production and Extractive Industries) 2007

e) List any other matters that need to be considered :

SEPP 44 - Koala Habitat Protection

Council has advised a potential Koala Habitat assessment will be required as part of any future ecological assessment to address SEPP 44 matters.

SEPP No 55—Remediation of Land

Clause 6 of the SEPP requires contamination and remediation to be considered in zoning or rezoning proposals. Council has advised a Phase 1 Contaminated Lands Assessment will be required to address the requirements of the SEPP.

SEPP (Mining, Petroleum Production and Extractive Industries) 2007

The applicable lands at Doyalson are located within a Mine Subsidence District. Council proposes to consult the Mine Subsidence Board (MSB) as the Planning Proposal progresses.

The applicable lands at Bushells Ridge are in the vicinity of the proposed Wallarah 2 coal mine. Council has proposed to consult NSW Trade and Investment - Resources and Energy and adjoining lease owners to determine the impact of the proposed rezoning and resultant development on coal and mineral resource extraction in the locality.

Have inconsistencies with items a), b) and d) being adequately justified? **Unknown**

If No, explain :

1.1 Business and Industrial Zones

Council states the the proposal will rezone approximately 60 hectares of IN1 General Industrial lands to enable residential and commercial development. The proposal is therefore inconsistent with this Direction.

Council has proposed to balance the impact of this loss through the creation of additional industrial lands, approximately 45 hectares, through a separate planning proposal at Wallarah. This planning proposal is yet to be submitted to the Department for a Gateway determination.

A neighbourhood centre is also proposed however there is no support in the CCRS, NWSSP or Council's Retail Strategy for a centre at this location.

Further assessment of both matters will be required and Council will need to seek the Secretary's agreement to support the inconsistency with the direction.

1.2 Rural Zones

Council has identified the applicable lands at Doyalson as land use zone RU6. This zoning has been applied as an interim measure until further planning investigations are undertaken and the appropriate land use configuration for the area is determined. This process will determine that land use configuration. Council will need to address the requirements of this Direction following consultation with the NSW Department of Primary Industries - Agriculture as the Planning Proposal progresses.

1.3 Mining, Petroleum Production and Extractive Industries

The applicable lands at Doyalson are located within a Mine Subsidence District. Council proposes to consult the Mine Subsidence Board (MSB) as the Planning Proposal progresses.

The applicable lands at Bushells Ridge are in the vicinity of the proposed Wallarah 2 coal mine. Council has proposed to consult NSW Trade and Investment - Resources and Energy and adjoining lease owners to determine the impact of the proposed rezoning and resultant development on coal and mineral resource extraction in the locality.

Consistency with this Direction cannot be determined, at this stage, and therefore Council should address the requirements of the Direction following consultation with NSW Trade and Investment - Resources and Energy.

2.1 Environment Protection Zones

The applicable land is located within an identified green corridor in the North Wyong Shire Structure Plan. The proposal seeks to rezone environmental conservation land for residential purposes and is inconsistent with the Direction. Council will need to consult with Office of Environment and Heritage (OEH) to address impacts on biodiversity, offsets, threatened species and the green corridor and habitat networks and justify the inconsistency under the terms of the Direction.

2.3 Heritage Conservation

Council has advised studies will be conducted to investigate the presence of Aboriginal cultural heritage on the applicable land. Consistency with the Direction cannot be determined, at this stage, and Council should address the requirements of the Direction once additional information is gathered and agency consultation on Aboriginal heritage matters is complete.

3.1 Residential Zones

Council has advised the proposal is generally consistent with the Direction however zone boundaries are yet to be established and funding arrangements for infrastructure servicing are yet to be resolved. Council should address the requirements of the Direction following provision of additional information on zones, servicing and infrastructure arrangements.

3.4 Integrating Land Use and Transport

Council has advised the proposal is generally consistent with the Direction however further investigation is required to establish appropriate zones within the site and further assessment on alternative transport options is to be undertaken. Council should address the requirements of the Direction following provision of traffic and transport investigations.

4.1 Acid Sulfate Soils

Council has stated the proponent will be required to undertake an Acid Sulfate Soil assessment. The applicable lands are several kilometres from the nearest Acid Sulfate Soil class 1-4 lands and this is therefore not considered necessary. Council should update its consideration of the Direction prior to exhibition of the planning proposal as there is no inconsistency with the Direction.

4.2 Mine Subsidence and Unstable Land

The applicable land is located within a Mine Subsidence District and consistency with the Direction would need to be determined following consultation with the Mine Subsidence Board.

4.3 Flood Prone Land

Council has identified that no flood mapping exists for the area proposed to be rezoned and has advised a local flood study would be required. Council will need to address the requirements of the Direction once additional information on flooding and drainage has been obtained.

4.4 Planning for Bushfire Protection

The applicable land is located on land identified as Bushfire Prone. Council should address the terms of the Direction once additional information regarding bushfire protection has been obtained and consultation with the NSW Rural Fire Service has occurred.

5.1 Implementation of Regional Strategies

Council has advised the proposal is inconsistent with the North Wyong Shire Structure Plan staging plan for land release within strategically located sites and proposes development identified within a future green corridor. Council will need to reconsider the Direction as further investigations are completed. Council will need to address the terms of the Direction and seek the Secretary's agreement for the inconsistency.

6.2 Reserving Land for Public Purposes

Council could not confirm if there will be a requirement for land reservations for traffic improvements, parks and wildlife corridors. The terms of the Direction will need to be addressed following the completion of the appropriate studies.

Mapping Provided - s55(2)(d)

Is mapping provided? **Yes**

Comment :

Council has provided:

- Existing Land Zoning and Minimum Lot Size Maps.

Council will also need to provide the following mapping:

- Further refined proposed Land Zoning, Minimum Lot Size, Urban Release Area and Land Reservation Acquisition Maps once the land use configuration has been determined.

Community consultation - s55(2)(e)

Has community consultation been proposed? **Yes**

Comment : **Council proposes a 28 day exhibition period. This is supported.**

Additional Director General's requirements

Are there any additional Director General's requirements? **Yes**

If Yes, reasons :

TIMELINE

Council anticipate notification of the plan in July 2017 (approximately 16 months). An 18 month timeframe is considered sufficient time to make the plan.

DELEGATIONS

Council has requested delegations to make the plan. There are a number of inconsistencies with the CCRS, NWSSP and S117 Directions and Council would need to seek the Secretary's agreement for any inconsistencies prior to the plan being made. Due to the extent of further information required it is recommended delegations be retained by the Department in this case.

Overall adequacy of the proposal

Does the proposal meet the adequacy criteria? **Yes**

If No, comment :

Proposal Assessment

Principal LEP:

Due Date :

Comments in relation to Principal LEP : **The planning proposal seeks to amend Wyong LEP 2013**

Assessment Criteria

Need for planning proposal :

Council has advised the planning proposal arose from an examination of development issues on Darkinjung Local Aboriginal Land Council (DLALC) lands identified by a working group established by the Department of Premier and Cabinet.

As a result of this examination five development sites within the North Wyong Shire Structure Plan area were nominated for further consideration through the rezoning process. The applicable lands at Bushells Ridge and Doyalson are two of the five identified development sites.

Consistency with
strategic planning
framework :

NORTH WYONG SHIRE STRUCTURE PLAN (NWSSP)

The proposal is located on land identified as 'strategically located' and 'Green Corridor and habitat networks' in the NWSSP. The proposal includes Development Precinct 11 (a proposed employment area) which is identified as staged long term release area (i.e. greater than 15 years).

The staging of development for any future urban land within the 'strategically located' lands is expected to be generally consistent with the staging identified on the adjoining land. Although the proposal is inconsistent with the staging of release areas, the NWSSP makes provision for flexibility in staging plans to allow additional land to be released provided satisfactory arrangements are in place to forward fund the appropriate infrastructure. It also provides a framework for identifying and assessing development opportunities in these areas subject to key issues being addressed including:

- More detailed understanding of the environmental features of the land and opportunities to contribute to the proposed corridor and habitat networks;
- Resource extraction potential related to proposed coal mining and clay extraction (where these localised impacts occur);
- Opportunities to offset vegetation losses within future development and the green corridor; and
- The need for additional residential or employment uses to meet future demand.

Council has advised additional studies will be required to address these matters and this is supported given a development footprint would need to be determined through supporting studies, additional investigation and agency consultation.

The proposal seeks to rezone areas identified as green corridor and habitat networks in the NWSSP. However, as a high-level strategy, the key objective of the NWSSP is to ensure a balance between development and biodiversity conservation within the broader context of the green corridor. In addition, the NWSSP envisaged the boundary of both the development and conservation areas would be determined by Council, through more detailed local planning investigations.

Given the planning proposal seeks to locate development on and in the vicinity of this 'strategically located' lands it is considered the proposal can be supported at the Gateway subject to further investigations to identify the final land use zone boundaries and an appropriate pathway for the green corridor in this area. However, it is not possible to support the scale of development or the development footprint until these further investigations and consultation occurs.

CENTRAL COAST REGIONAL STRATEGY (CCRS)

Council provided an assessment against the sustainability criteria for new land release and identified the proposal is generally consistent with the criteria. Council has acknowledged further work is required in relation to supporting studies and consistency with a number of S117 Directions before consistency can be determined.

DRAFT CENTRAL COAST REGIONAL PLAN

The draft Central Coast Regional Plan was exhibited from 27 November 2015 to 24 March 2016. It is a high level document to plan for population growth and change on the Central Coast. Council identified the Directions of the draft Plan including the focus of increased employment development in the locality of the proposal and the environmental significance of lands within the proposal.

The proposed rezoning is not inconsistent with the draft Central Coast Regional Plan (the draft Plan). The draft Plan envisages the Department and Wyong Shire Council reviewing the North Wyong Shire Structure Plan to reflect the latest planning information and provide greater certainty about issues associated with strategic sites. Both the existing Central Coast Regional Strategy and the draft Plan provide a pathway for progression of the rezoning.

The proposal has been considered against the current strategic planning framework and further work is necessary to determine its consistency.

COMMUNITY STRATEGIC PLAN 2030

Council has provided an assessment against the objectives and key actions of the Community Strategic Plan and advised the proposal is consistent with the relevant objectives of its plan.

SETTLEMENT STRATEGY

Council's Settlement Strategy was conditionally endorsed by the Department. The strategy identified sites as being strategically constrained to be subject to additional land use investigations to determine the suitability of the site for future development and green corridors. The proposal is consistent with this approach.

Environmental social
economic impacts :

Council has identified a number of issues to be resolved regarding flora and fauna and the impacts of development within the conservation corridor identified in the North Wyong Shire Structure Plan.

A number of EECs and threatened flora and fauna species have been identified in a preliminary ecological inventory. Council has advised the site is proposed to be incorporated as part of a future biodiversity certification application in conjunction with other land holdings within the same ownership. This will require consultation with OEH to resolve the conservation corridor and bio-certification matters.

Council has also identified a number of other issues to be resolved including:

- Bushfire
- Mineral Resources - Extraction and Subsidence
- Aboriginal and Non-Aboriginal Heritage
- Contaminated Lands and Acid Sulfate Soils
- Flooding, drainage and stormwater management
- Noise and vibration impacts in relation to the railway, proposed CASAR Motor Sports Park and proposed upgrades to Warnervale Aerodrome.
- Social and amenity impacts, particularly the relationship between future commercial development and Wyee village in Lake Macquarie Local Government Area
- Traffic and transport impacts
- Water supply, sewer and power.

FURTHER INVESTIGATIONS

Council has identified the following studies and further investigation requirements to address environmental, social and economic impacts of the proposal:

- detailed water and sewer servicing plan (which will include details on who will design and build infrastructure. Details will also be required on the timing of the provision of funds to provide these services)
- services review (gas, telecommunications, electricity provision etc.)
- complete ecological investigations (seasonal flora and fauna surveys/vegetation mapping/conservation offset strategy to be done in accordance with approved OEH offset methodologies)
- flooding, drainage and stormwater management studies
- social impact assessment
- retail strategy justification
- mining compatibility assessment
- preliminary contaminated land and acid sulfate risk study
- noise and vibration assessment for proposed development in proximity of rail corridors, Warnervale Aerodrome, proposed CASAR Motor Sports Park and Wallarah 2 Coal Mine
- aboriginal archaeological assessment
- revised traffic impact assessment report (which will also examine public transport, pedestrian and cycleway planning issues)
- structure plan, urban design principles and draft Development Control Plan
- draft VPA and possible revision to Section 94 Contribution Plan (dependent on infrastructure and servicing issues).

- updated planning proposal/planning controls (rezoning)
- clarification of the land use zone configuration and boundaries to address regional wildlife corridor planning outcomes identified in the NWSSP including input from OEH on corridor sizing and planning for environmental outcomes in the NWSSP.

Given the site is located within a green corridor and a development footprint is yet to be established, the additional information requirements Council proposes are generally supported. The noise assessment for proposed development in proximity to the rail corridor and to understand the noise impacts of the proposed Motor Sports Park and proposed upgrade to Warnervale Aerodrome is supported.

The JRPP recommended that in addition to the matters raised in the Department's assessment of the pre-Gateway request, the following should be addressed to inform and confirm the suitability of the site for residential development and the location of proposed zones and land uses:

- air quality impacts from the proposed CASAR Motor Sports Park, Wallarah 2 Coal Mine and the associated spur rail line;
- air quality, noise and amenity impacts from the nearby existing clay mine and tile facility;
- examination of potential land use conflicts and impacts of residential development on the above mentioned surrounding existing and proposed non-residential land uses;
- expand the study area to include the adjoining site fronting Bushells Ridge Road which lies outside the ownership of Darkinjung LALC to provide an opportunity for the orderly development of land should the land be rezoned;
- Flora and Fauna constraints – including potential red flags;
- Aboriginal Heritage constraints – including potential red flags;
- Social and economic impact assessment;
- overland flow paths and stormwater requirements need to be identified and considered in determining the location of proposed zones and land uses.
- examine opportunities to ensure the rezoning proposal is integrated with the expansion of Wyee Village including opportunities for shared community facilities, open space and pedestrian networks between Wyong Shire Council and Lake Macquarie City Council.
- Bushfire planning requirements need to be considered, including road access planning and possible impacts of development staging to avoid single road entry/exit points into the development and
- Confirmation of servicing and infrastructure requirements to facilitate residential development including the need for State and local contributions towards infrastructure.

The JRPP's recommendations have been considered in the Gateway conditions.

AGENCY CONSULTATION

Council provided a list of agencies to be consulted with and included:

- Ausgrid/Transgrid
- Commonwealth Department of Environment
- Department of Planning and Environment
- Department of Primary Industries - Office of Water
- Department of Trade and Investment-Resources & Energy(Geological Survey of NSW)
- Guringai Tribal Link
- Yulawirri Nurai Indigenous Inc.
- Jemena
- Local Land Services
- Lake Macquarie City Council
- Mine Subsidence Board
- NSW Rural Fire Service
- NSW Trade and Investment - Crown Lands
- Office of Environment and Heritage (Conservation Planning)
- Office of Environment and Heritage (Heritage)
- Office of Environment and Heritage (Water, Floodplains and Coasts)
- Roads and Maritime Services

- Transport for NSW

The Department of Education and Communities, NSW Health, and the emergency services (Police, Fire, Ambulance and SES) should be consulted given the additional demands likely to be created by the additional population from future development. In addition the NSW Department of Primary Industries - Agriculture should be consulted given the planning proposal inconsistency with Section 117 Direction 1.2 Rural Zones.

Consultation with the Department of Planning and Environment and Commonwealth Department of Environment is considered unnecessary.

INFRASTRUCTURE PROVISION LOCAL AND STATE

Council proposes to include the site as an Urban Release Area and it would be subject to provisions in Wyong LEP 2013 that relate to satisfactory arrangements to be made for the provision of designated State public infrastructure and adequate arrangements for public utility infrastructure.

Assessment Process

Proposal type :	Precinct	Community Consultation Period :	28 Days
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Timeframe to make LEP :	18 months	Delegation :	DDG
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Public Authority Consultation - s56(2)(d) :	Ambulance Service of NSW Department of Education and Communities Office of Environment and Heritage NSW Department of Primary Industries - Minerals and Petroleum Department of Trade and Investment Mine Subsidence Board Transport for NSW Fire and Rescue NSW Department of Health NSW Police Force NSW Rural Fire Service Transport for NSW Transport for NSW - Roads and Maritime Services State Emergency Service Transgrid Adjoining LGAs Other
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Is Public Hearing by the PAC required?	No
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(2)(a) Should the matter proceed ?	Yes
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If no, provide reasons :

Resubmission - s56(2)(b) : **No**

If Yes, reasons :

Identify any additional studies, if required. :

If Other, provide reasons :

BUSHELLS RIDGE/DOYALSON, 425 Bushells Ridge Road, Bushells Ridge & 10 Wyee Road, Doyalson

Identify any internal consultations, if required :

No internal consultation required

Is the provision and funding of state infrastructure relevant to this plan? **Yes**

If Yes, reasons : **The site will be mapped as an urban release area and be subject to the 'satisfactory arrangements' provisions in Wyong LEP 2013.**

Documents

Document File Name	DocumentType Name	Is Public
Planning Proposal_Wyong_005_Proposal Council Letter.pdf	Proposal Covering Letter	Yes
19042016 Updated Planning Proposal - Post JRPP Determination- revised.pdf	Proposal	Yes
Planning Proposal_Wyong_005 Mapping.pdf	Map	Yes

Planning Team Recommendation

Preparation of the planning proposal supported at this stage : **Recommended with Conditions**

S.117 directions:

- 1.1 Business and Industrial Zones
- 1.2 Rural Zones
- 1.3 Mining, Petroleum Production and Extractive Industries
- 2.1 Environment Protection Zones
- 2.3 Heritage Conservation
- 2.4 Recreation Vehicle Areas
- 3.1 Residential Zones
- 3.2 Caravan Parks and Manufactured Home Estates
- 3.3 Home Occupations
- 3.4 Integrating Land Use and Transport
- 4.1 Acid Sulfate Soils
- 4.2 Mine Subsidence and Unstable Land
- 4.3 Flood Prone Land
- 4.4 Planning for Bushfire Protection
- 5.1 Implementation of Regional Strategies
- 6.1 Approval and Referral Requirements
- 6.2 Reserving Land for Public Purposes
- 6.3 Site Specific Provisions

Additional Information : **The planning proposal should proceed subject to the following conditions:**

1. Council is to be satisfied that sufficient information has been provided to demonstrate that the planning proposal adequately addresses the following issues:

- water and sewer servicing plan and funding mechanisms
- services provision (gas, telecommunications, electricity)
- ecological investigations (in consultation with OEH)
- flooding, drainage and stormwater management
- bushfire planning requirements
- retail strategy justification
- land use capability assessment including compatibility with mining and extractive industries
- social impact assessment
- economic impact assessment
- preliminary contaminated lands assessment
- noise and vibration assessment
- air quality assessment
- Aboriginal cultural heritage
- traffic report including examination of public transport, pedestrian and cycleway

planning issues

- open space and recreation analysis
- opportunities to integrate rezoning with expansion of Wyee village including shared community, open space and pedestrian networks between Wyong Shire Council and Lake Macquarie Council
- land use conflicts and impacts of residential development on existing and proposed non-residential land uses in proximity including the rail line, proposed CASAR Motor Sports Park, proposed Wallarah 2 coal mine and rail spur and existing clay mine and tile facility.

2. Prior to undertaking public exhibition, update the planning proposal and supporting maps as required to:

- ensure land descriptions are correct
- clarify the encroachment of proposed residential development on the proposed Wallarah 2 underground coal mine and rail spur at the southern extent of Lot 193 DP 1032847
- determine proposed planning provisions are supported by studies and agency consultation.

3. Prior to undertaking public exhibition, update the planning proposal to consider consistency with SEPP 44 Koala Habitat Protection.

4. Council is to demonstrate that the planning proposal satisfies the requirements of State Environmental Planning Policy (SEPP) 55 – Remediation of Land and demonstrate the site is suitable for rezoning once information on contamination has been obtained.

5. Council is required to demonstrate consistency with the following S117 Directions after supporting information has been obtained and/or following agency consultation:

- 1.1 Business and Industrial Zones
- 1.2 Rural Zones (NSW Department of Primary Industries - Agriculture)
- 1.3 Mining, Petroleum Production and Extractive Industries (NSW Trade & Investment - Resources and Energy)
- 2.1 Environment Protection Zones (Office of Environment and Heritage - National Parks and Wildlife Service)
- 2.3 Heritage Conservation (Office of Environment and Heritage - Heritage Branch)
- 3.1 Residential Zones
- 3.4 Integrating Land Use and Transport (Transport NSW – RMS)
- 4.2 Mine Subsidence and Unstable Land (Mine Subsidence Board)
- 4.3 Flood Prone Land
- 4.4 Planning for Bushfire Protection (NSW Rural Fire Service)
- 5.1 Implementation of Regional Strategies
- 6.2 Reserving Land for Public Purposes

6. Consultation is required with the following bodies:

- Lake Macquarie City Council
- Ausgrid
- Transgrid
- NSW Department of Primary Industries - Agriculture
- NSW Department of Primary Industries - Water
- Office of Environment and Heritage
- NSW Trade & Investment - Resources and Energy
- NSW Department of Primary Industries – Lands
- Mine Subsidence Board
- Transport for NSW - Roads and Maritime Services
- Transport for NSW
- Guringai Tribal Link
- Yulawirri Nurai Indigenous Inc.
- Jemena
- NSW Rural Fire Service
- Fire and Rescue NSW

- State Emergency Service
- NSW Ambulance Service
- NSW Police Force
- NSW Health
- NSW Department of Education and Communities

7. The planning proposal must be made publicly available for 28 days.

8. The timeframe for completing the LEP is to be 18 months from the week following the date of the Gateway determination.

9. No public hearing is required.

10. The Department retains delegation to make the plan.

Supporting Reasons :

Notwithstanding the need for certain issues to be resolved, there is sufficient strategic and site specific merit for the proposal to proceed to the Gateway as:

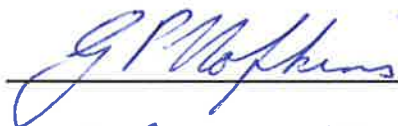
- The North Wyong Shire Structure Plan allows for development proposals to progress on strategically constrained lands;

- The proposal would represent a logical extension of the existing adjoining urban area at Wyee

- The planning proposal process provides for the additional investigations and agency consultation required to justify the rezoning for residential and employment purposes and identify the regional conservation corridor to be conducted post a Gateway determination.

- Matters to address biodiversity conservation, bushfire management, flooding and drainage, land contamination, traffic, water and sewer, noise and vibration mitigation and resource extraction impacts appear capable of resolution and can be further reviewed as part of the post Gateway determination requirements.

Signature:



Printed Name:

G P HOPKINS

Date:

29 April 2016

Appendix L
Conditions – DLALC Rezoning Application



Contact: Claire Swan
Phone: (02) 43485003
Email: claire.swan@planning.nsw.gov.au

Our ref: PP_2016_WYONG_005_00 (16/04122)
Your ref: RZ/4/2014

Mr Rob Noble
Acting Chief Executive Officer
Wyong Shire Council
PO Box 20
Wyong NSW 2259

Attn: Scott Duncan

Dear Mr Noble

Planning proposal to amend Wyong Local Environmental Plan 2013

I am writing in response to your Council's letter dated 24 February 2016 requesting a Gateway determination under section 56 of the Environmental Planning and Assessment Act 1979 (the Act) in respect of the planning proposal to rezone land for the purposes of residential and commercial development and protection of environmentally significant lands at Bushells Ridge Road, Bushells Ridge and Wyee Road, Doyalson.

As delegate of the Minister for Planning, I have now determined the planning proposal should proceed subject to the conditions in the attached Gateway determination. The Gateway allows the proposal to proceed to the next stage but given the need for further investigation and consultation, it is not possible to commit to a particular development footprint or planning provisions at present. Further investigations and consultation should be used as the basis for determining the appropriateness of proposed planning provisions and the location of zone boundaries.

Following further investigations and agency consultation, Council should submit the revised planning proposal to the Department of Planning and Environment for comment prior to proceeding with community consultation.

Council may still need to obtain the agreement of the Department's Secretary to comply with the requirements of relevant S117 Directions. Council should ensure this occurs prior to the plan being made.

Plan making powers were delegated to councils by the Minister in October 2012. It is noted that Council has requested to be issued with delegation for this planning proposal. I have considered the nature of Council's planning proposal and have decided not to issue an authorisation for Council to exercise delegation to make this plan.

The amending Local Environmental Plan (LEP) is to be finalised within 18 months of the week following the date of the Gateway determination. Council should aim to commence the exhibition of the planning proposal as soon as possible. Council's request for the Department of Planning and Environment to draft and finalise the LEP should be made 6 weeks prior to the projected publication date.

The State Government is committed to reducing the time taken to complete LEPs by tailoring the steps in the process to the complexity of the proposal, and by providing clear and publicly available justification for each plan at an early stage. In order to meet these commitments, the Minister may take action under section 54(2)(d) of the Act if the time frames outlined in this determination are not met.

Should you have any queries in regard to this matter, I have arranged for Ms Claire Swan, of the Department's Central Coast regional office to assist you. Ms Swan can be contacted on (02) 43485003.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Monica Gibson', with a stylized flourish at the end.

2/5/2016
Monica Gibson
Director Regions, Hunter and Central Coast
Planning Services

Encl:
Gateway Determination

Gateway Determination

Planning proposal (Department Ref: PP_2016_WYONG_005_00): to rezone certain land at Bushells Ridge Road, Bushells Ridge and Wyee Road, Doyalson to enable low density and large lot residential development, environmental conservation and potential development for the purposes of a neighbourhood centre.

I, the Director Regions, Hunter and Central Coast at the Department of Planning and Environment as delegate of the Minister for Planning, have determined under section 56(2) of the *Environmental Planning and Assessment Act 1979* (the Act) that an amendment to the Wyong Local Environmental Plan (LEP) 2013 to rezone land to enable residential and employment development and environmental conservation should proceed subject to the following conditions:

1. Council is to be satisfied that sufficient information has been provided for the planning proposal to address the following issues:
 - water and sewer servicing plan and funding mechanisms
 - services provision (gas, telecommunications, electricity)
 - ecological investigations (in consultation with OEH)
 - flooding, drainage and stormwater management
 - bushfire planning requirements
 - retail strategy justification
 - land use capability assessment including compatibility with mining and extractive industries
 - social impact assessment
 - economic impact assessment
 - preliminary contaminated lands assessment
 - noise and vibration assessment
 - air quality assessment
 - Aboriginal cultural heritage
 - traffic report including examination of public transport, pedestrian and cycleway planning issues
 - open space and recreation analysis
 - opportunities to integrate rezoning with expansion of Wyee village including shared community, open space and pedestrian networks between Wyong Shire Council and Lake Macquarie Council
 - land use conflicts and impacts of residential development on existing and proposed non-residential land uses in proximity including the rail line, proposed CASAR Motor Sports Park, proposed Wallarah 2 coal mine and rail spur and existing clay mine and tile facility.
2. Prior to undertaking community consultation Council is to update the planning proposal to:
 - Correct the land description that identifies the applicable lands of the planning proposal.
 - Clarify the encroachment of proposed residential development on the proposed Wallarah 2 underground coal mine and rail spur.

- Confirm the suitability of the site for residential development and the locations of proposed zones, land uses and planning provisions based on studies and agency consultation.
3. Council is to update its consideration of the consistency with the following s.117 Directions after supporting information has been obtained or/ or following agency consultation:
 - 1.1 Business and Industrial Zones
 - 1.2 Rural Zones
 - 1.3 Mining, Petroleum Production and Extractive Industries
 - 2.1 Environment Protection Zones
 - 2.3 Heritage Conservation
 - 3.1 Residential Zones
 - 3.4 Integrating Land Use and Transport
 - 4.2 Mine Subsidence and Unstable Land
 - 4.3 Flood Prone Land
 - 4.4 Planning for Bushfire Protection
 - 5.1 Implementation of Regional Strategies
 - 6.2 Reserving Land for Public Purposes.
 4. Prior to undertaking community consultation, Council is to update the planning proposal to consider consistency of the State Environmental Planning Policy (SEPP) No. 44 Koala Habitat Protection.
 5. Council is to demonstrate the planning proposal satisfies the requirements of State Environmental Planning Policy (SEPP) 55 – Remediation of Land. Council is to prepare an initial site contamination report to demonstrate the site is suitable for rezoning to the proposed zone. The report is to be included as part of the public exhibition.
 6. Council is to provide the updated planning proposal to the Department of Planning and Environment for comment prior to undertaking community consultation.
 7. Community consultation is required under sections 56(2)(c) and 57 of the Act as follows:
 - (a) the planning proposal must be made publicly available for a minimum of **28 days**; and
 - (b) the relevant planning authority must comply with the notice requirements for public exhibition of planning proposals and the specifications for material that must be made publicly available along with planning proposals as identified in section 5.5.2 of *A Guide to Preparing LEPs* (Department of Planning and Infrastructure 2013).
 8. Consultation is required with the following public authorities under section 56(2)(d) of the Act and/ or to comply with the requirements of relevant S117 Directions:
 - Lake Macquarie City Council
 - Ausgrid
 - Transgrid
 - NSW Department of Primary Industries - Agriculture

- NSW Department of Primary Industries - Water
- Office of Environment and Heritage
- NSW Trade & Investment - Resources and Energy
- NSW Department of Primary Industries – Lands
- Mine Subsidence Board
- Transport for NSW - Roads and Maritime Services
- Transport for NSW
- Guringai Tribal Link
- Yulawirri Nurai Indigenous Inc.
- Jemena
- NSW Rural Fire Service
- Fire and Rescue NSW
- State Emergency Service
- NSW Ambulance Service
- NSW Police Force
- NSW Health
- NSW Department of Education and Communities

Each public authority is to be provided with a copy of the planning proposal and any relevant supporting material, and given at least 21 days to comment on the proposal.

9. A public hearing is not required to be held into the matter by any person or body under section 56(2)(e) of the Act. This does not discharge Council from any obligation it may otherwise have to conduct a public hearing (for example, in response to a submission or if reclassifying land).
10. The timeframe for completing the LEP is to be **18 months** from the week following the date of the Gateway determination.

Dated 2 day of May 2016



Monica Gibson
Director Regions, Hunter and Central Coast
Planning Services
Department of Planning and Environment

Delegate of the Minister for Planning

Appendix M
NSW Parliamentary Research e-Brief



1. Introduction
2. Labour force trends
3. The Central Coast region and NSW electorates
4. Definitions and methodological notes

Central Coast labour force trends

by Daniel Montoya

1. Introduction

This e-brief, which is part of a series relating to all NSW regions, sets out key labour force trends for the residents of the Central Coast region. Data has been sourced from the Australian Bureau of Statistics' (ABS) monthly [Labour Force Survey](#). The ABS divides NSW into 28 regions; 15 in Greater Sydney and 13 in Regional NSW.

Covered are four key labour force indicators:

- Employment (full-time and part-time);
- The participation rate;
- The unemployment rate; and
- The youth unemployment rate.

A map of the Central Coast region is included at the end of the e-brief. The map also shows the NSW electorates located wholly or partly within the region. The e-brief finishes with a short section on labour force definitions and methodological notes.

2. Labour force trends

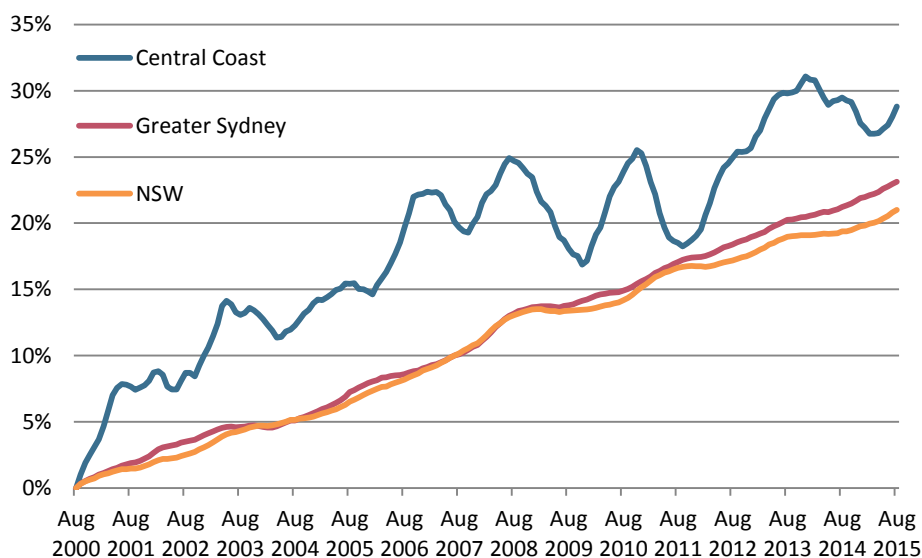
In August 2015, Central Coast figures for all four labour force indicators were worse than NSW and Greater Sydney figures: annual employment growth and the participation rate were lower; and the total and youth unemployment rates were higher. The youth unemployment rate was the second highest in Greater Sydney.

Headline figures (August 2015)

Indicators	Central Coast	Greater Sydney	NSW
Employment	148,100	2,466,900	3,664,200
2014-15 employment growth	-0.7%	1.9%	1.6%
Participation rate	57.5%	65.7%	63.3%
Unemployment rate	6.1%	5.2%	5.9%
Youth unemployment rate	15.2%	11.4%	12.8%

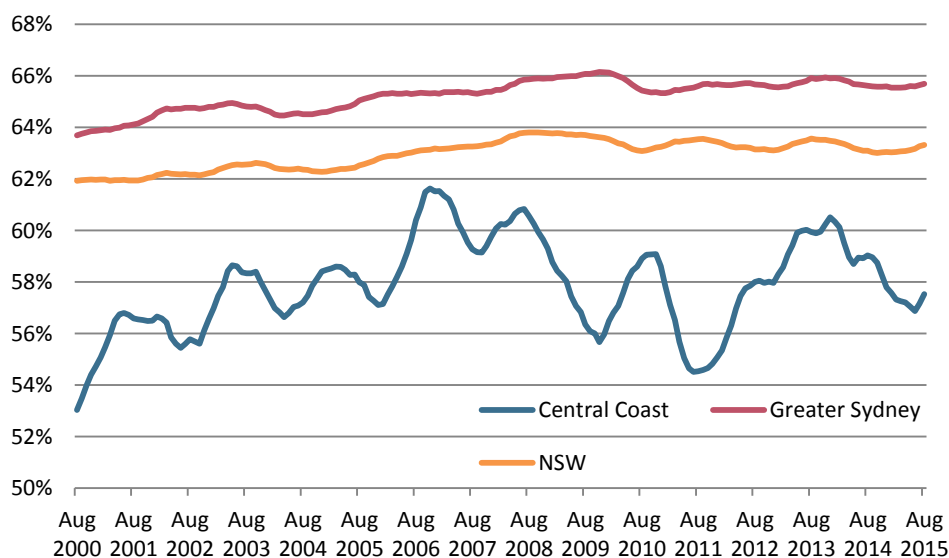
Between August 2000 and August 2015, employment in the Central Coast increased by 28.8%, from 111,400 to 148,100; Greater Sydney grew by 23.1% and NSW grew by 21.0%. Total employment reached a high of 151,600 in December 2013. Since then, full-time employment declined from 103,500 to 94,800 in February 2015 before rising to 99,600. Part-time employment rose from 48,100 to 51,200 in November 2014 before falling to 48,500. Year on year, total employment in the Central Coast is down by 0.7% while it is up by 1.9% in Greater Sydney and 1.6% in NSW.

Cumulative employment growth (August 2000 to August 2015)



Over the last 15 years, the Central Coast participation rate has fluctuated between a low of 53.0% in August 2000 and a high of 61.6% in November 2006. In August 2015, the participation rate stood at 57.5%, below both the NSW (63.3%) and Greater Sydney (65.7%) rates. The 2-year average participation rates were 59.6% (Central Coast), 65.7% (Greater Sydney) and 63.2% (NSW).

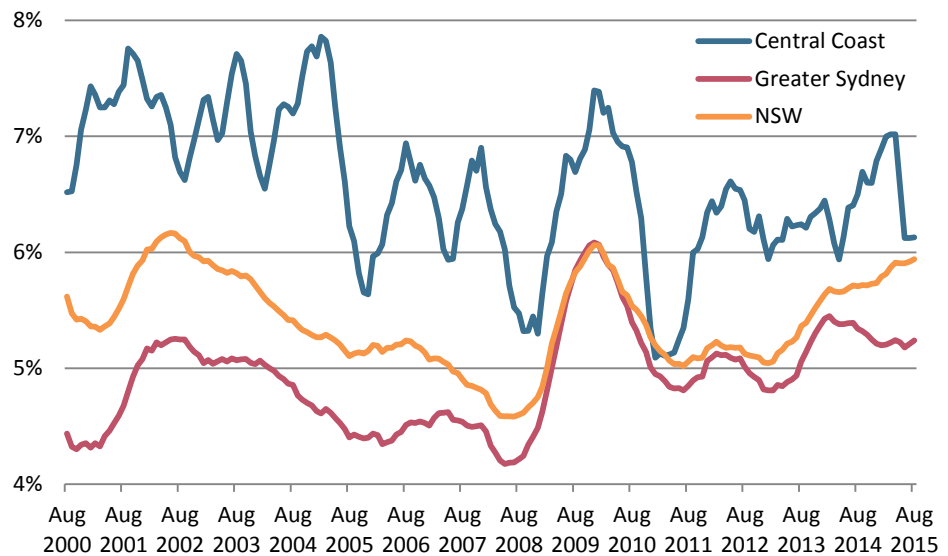
Participation rate (August 2000 to August 2015)



Central Coast labour force trends

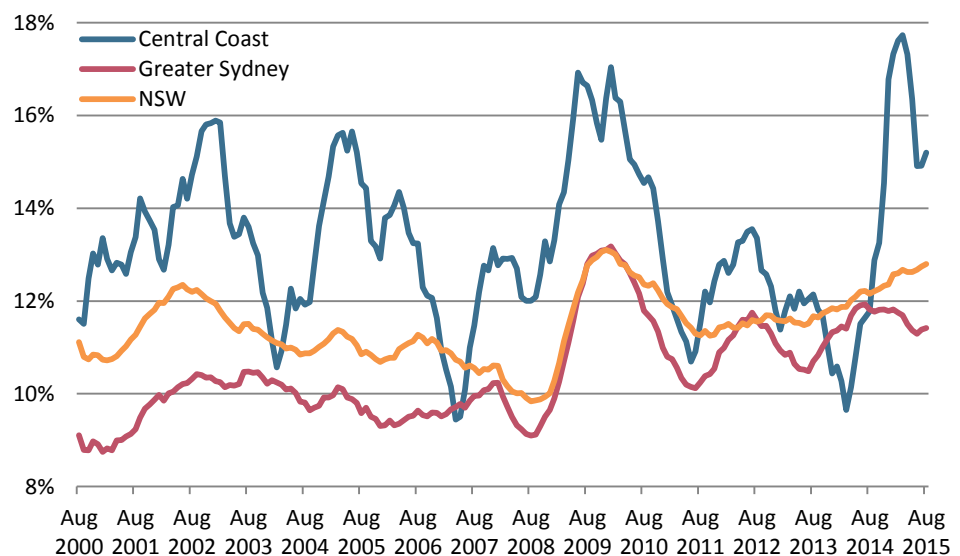
Since August 2000, the unemployment rate in the Central Coast has fluctuated between a low of 5.1% in January 2011 and a high of 7.9% in February 2005. In August 2015 the rate was 6.1%, higher than both the NSW (5.9%) and Greater Sydney (5.2%) rates. The 2-year average unemployment rate for the Central Coast was 6.5%; it was 5.3% for Greater Sydney and 5.7% for NSW.

Unemployment rate (August 2000 to August 2015)



In March 2014, the youth unemployment rate reached 9.7%, just above the 15-year low of 9.4% reached in April 2007. However, since then the rate peaked at a 15-year high of 17.7% in March 2015 before falling to 15.2% in August 2015, the second highest rate in Greater Sydney. At this time, the Greater Sydney rate was 11.4% and the NSW rate was 12.8%. The Central Coast had a 2-year average youth unemployment rate of 13.3%, which is higher than Greater Sydney (11.5%) and NSW (12.2%).

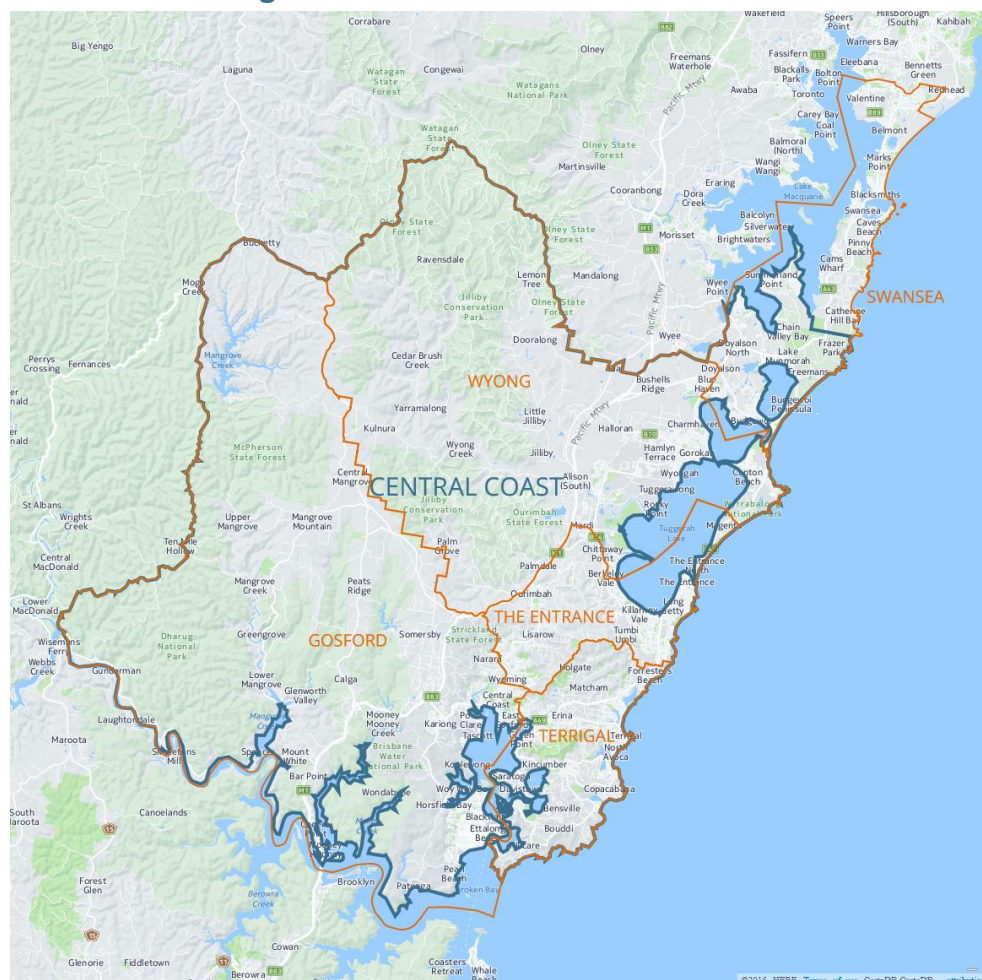
Youth unemployment rate (August 2000 to August 2015)



3. The Central Coast region and NSW electorates

Five electorates are located either wholly or partly within the Central Coast region, based on their population at the 2011 Census¹: Gosford (100%); Swansea (42%); Terrigal (100%); The Entrance (100%); and Wyong (100%).

Central Coast region and NSW electorates



4. Definitions and methodological notes

A number of methodological notes merit mention. These notes are set out in more detail at the beginning of the 2014 Research Service publication, [*NSW regional labour force trends by labour force indicator*](#).

- The data presented in this e-brief applies to an area's *resident labour force* (i.e. those persons who reside in an area) as opposed to its *workforce* i.e. those persons who work in an area.
- The ABS [Labour Force Survey](#) covers about 0.32% of the Australian population aged 15 years or over. Its primary purpose is to provide labour force estimates for the nation and, secondarily, for each State and Territory. Due to the small sample size involved, regional data should therefore be interpreted with caution.

- While labour force data is normally subject to seasonal adjustment, this only applies to National and State level data. The regional data in this publication is original, non-seasonally adjusted data; for comparative purposes, the State level data in this publication is also original, non-seasonally adjusted data.²
- Using the [recommended](#) ABS methodology for regional labour force indicators, all the data presented are 12-month averages.
- Youth unemployment is a complex issue. It is worth noting therefore that the youth unemployment rate only paints part of the picture, generally being held to represent an overestimate of youth unemployment.

Definitions

Full-time employed	Employed persons who usually worked 35 hours or more a week (in all jobs) and those who, although usually working fewer than 35 hours a week, worked 35 hours or more during the Labour Force Survey week.
Labour force	The total number of employed and unemployed persons.
Participation rate	The labour force expressed as a percentage of the civilian population in the same age group.
Part-time employed	Employed persons who usually worked fewer than 35 hours a week (in all jobs) and either did so during the Labour Force Survey week or were not at work during the reference week.
Unemployed	Persons aged 15 years and over who were not employed during the week of the Labour Force Survey, and: <ul style="list-style-type: none">• had actively looked for full time or part time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week; or• were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.
Unemployment rate	The number of unemployed persons expressed as a percentage of the labour force.
Youth population	Persons aged 15 to 24

Related Research Service publications:

- [*Western Sydney: an economic profile*](#) (2015)
- [*NSW Economic Update Winter 2015*](#) (2015)
- [*Labour force trends in Greater Sydney*](#) (2014)
- [*NSW regional labour force trends by labour force indicator*](#) (2014)
- [*The Central Coast Region: an economic profile*](#) (2012)

¹ The electoral boundaries as included in this map are the official boundaries from the [Electoral Commission NSW](#). The only way to calculate what proportion of an electorate's population is contained within an ABS region is to use an approximation of the electoral boundary based on the ABS statistical geography. This is the only methodology by which Census data can be generated for a NSW electorate.

² Seasonally adjusted employment figures, participation rates and unemployment rates for NSW can be found in the Research Service publication, [*NSW Economic Update Winter 2015*](#)

Information about Research Publications can be found on the Internet at the:
[NSW Parliament's Website](#)

Advice on legislation or legal policy issues contained in this paper is provided for use in parliamentary debate and for related parliamentary purposes. This paper is not professional legal opinion.

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ISSN 1838-0204

Appendix N
Consultation Update

DA AMENDMENT STAKEHOLDER ENGAGEMENT STRATEGY

The Stakeholder Engagement Strategy for the Wallarah 2 Project throughout the EIS and Amendment process included the provision of written materials to the community with an open offer to contact the project for further information and direct consultation with Government, Agencies, Community and other Stakeholder groups.

It should be noted that Wyong Coal chose not to hold a Public Meeting for the following reasons:

- Public meetings are not controlled and generally result in an adversarial situation
- Wyong Coal is aware of the threat of violence to a project supporter in attendance at a Public Meeting held in 2013
- Feedback from the stakeholders indicated a Public Meeting would not;
 - Provide sufficient opportunity for constructive discussion and feedback
 - Provide an equal opportunity for many stakeholders to ask questions and seek feedback in a Public Forum.
- The Department of Planning and Environment advised Wyong Coal that they were going to conduct a Public Meeting

The following Stakeholder Engagement activities were conducted specifically for the amendment:

- Community Newsletters
 - Newsletter Numbers 29 and 30 were published and delivered in April/May 2016 and July 2016 respectively
 - On each occasion, 12,500 Community Newsletters were delivered to Business and Residential properties, Registered Clubs and Cafes at the following locations (See attached plan)
 - Berkeley Vale
 - Blue Haven
 - Dooralong
 - Doyalson
 - Hamlyn Terrace
 - Jilliby
 - San Remo
 - Tuggerah
 - Warnervale
 - Woongarrah
 - Wyee
 - Wyong
 - Wyong Creek
 - Wyong North
 - Yarramalong



Wallarah 2

COAL PROJECT

Coal Project Newsletter

Number 29 - April 2016

Our project is moving forward – and so are the community projects!

The Wallarah 2 community grants for 2016 have now been finalised and we expect these will bring much needed assistance to a broad range of community projects throughout Wyong and the wider Central Coast. We again highlight in this newsletter how beneficial some of the projects have been that were supported under our 2015 Grants Program.

The other aim of the Wallarah 2 Community Foundation, vocational training, goes from strength to strength. This year sees a new intake of apprentices plus additional opportunities for local indigenous youth for apprenticeship and university scholarships under our recent agreement with Guringai Tribal Link Aboriginal Corporation.

We have continued to explore opportunities to progress our proposed development. The Planning and Assessment Commission has thoroughly assessed the impacts of the mine, including concerns regarding water catchment, and has stated that there is merit in allowing the project to proceed. We have however been constrained by land access to get our coal from the mine to the port. To progress our ability to transport our coal to Newcastle port by rail, we have recently applied for a mining lease. In the meantime we are continuing our engineering and environmental studies.

We continue to receive expressions of interest from local construction firms and individuals seeking employment. We are compiling a register of those interested and you are encouraged to advise us of your interest. I trust you find this newsletter interesting and informative and remember to call in or contact us if you wish to know more about the project and the opportunities it will bring.



Peter Allibon

General Manager

What's Inside



Making opportunities with CCCT in training for the region's youth... And they are living it!



Partnering with Guringai: Boosting grants as we kick off indigenous employment and education initiatives



Highlighting the grant projects funded by 2015 Wallarah 2 Community Foundation grants...



Chris Wallace helps our kids get the Fire Safe message



Latest News: The 2016 Community Foundation grants will fund 8 more community projects...

www.wallarah.com.au



Wallarah 2

COAL PROJECT

Coal Project Newsletter

Number 30 - July 2016

Welcome to this big edition of the Wallarah 2 Coal Project Newsletter

The main story is that an amendment to the plans for the Wallarah 2 Coal Project has been placed on exhibition for public comment. Details of the proposed amendment are inside. The full application is available on the Department of Planning & Environment website (projprospectplanning.nsw.gov.au).

As many are aware, in 2014 the Project was the subject of proceedings in the Land & Environment Court, which ruled that the company had to obtain the consent of the New South Wales Aboriginal Land Council to its application.

The company has been unable to obtain that consent, so we put our thinking cap on to find a way to avoid any impact on Aboriginal land, and therefore remove the need for consent from the Aboriginal Land Council. After a lot of hard work we've found a way to do that which also reduces environmental impact.

Those changes are the focus of the amendment application which is now on exhibition. In a nutshell, the Amendment avoids the need to develop infrastructure on land owned by the Guringai Local Aboriginal Land Council. We have redesigned the coal transportation infrastructure and sewer connection for the Project. All other aspects of the proposal remain unchanged.

In summary the Amendment makes three changes to the original proposal:

- Removal of the previously proposed rail loop and relocation of the rail spur and train load out facility to along the eastern side of the Main Northern Rail Line
- Extension of a conveyor system to deliver product coal from the stockpile to the new location of the train load out facility and
- Relocation of sewer connection.

Also inside is the story of 16-year-old Wolladulla student Meghan Britton who has taken on a school-based mechanical apprenticeship with Booths Motor Group at Tuggerah... with assistance from the Wallarah 2 Coal Project.

The Wallarah 2 Community Foundation has also been busy with donations to Sculpture on the Greens and Central Coast Cross Country.

As always if you would like any information about the Wallarah 2 Coal Project, don't hesitate to contact us.

Cheers!



Peter Allibon

General Manager

What's Inside



Details of the proposed Amendment to the Wallarah 2 Coal Project, now on exhibition.



New equipment boosts safety for Central Coast Cross Country



Student takes on school-based mechanical apprenticeship, thanks to Wallarah 2 Community Foundation



Support for Sculpture on the Greens

www.wallarah.com.au

WALLARAH 2 COAL PROJECT - NEWSLETTER DISTRIBUTION AREAS

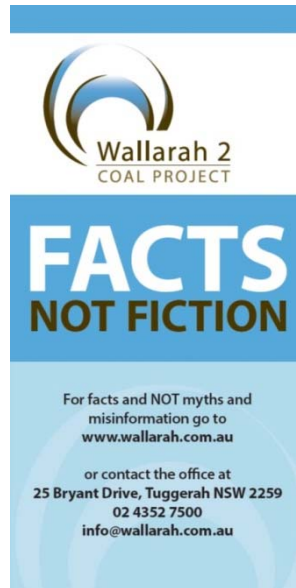


The map displays the distribution areas for the Wallarah 2 Coal Project newsletter, covering a large region of the Central Coast of New South Wales. Key locations and areas highlighted include:

- Businesses:** Berkeley Vale, Blue Haven, Doyalson, Tuggerah, Wyre, Wyong, (900) & Wyong North (150), Local Cafes & Clubs (500)
- Residential:** Blue Haven (2410), Doyalson (110), Hamilton Terrace (2150), San Remo (1700), Woongarah (1555), Wyee (795)
- Local:** Dorrington, Jilby, Yarramalong & Wyong Creek (1000), Warnervale & Bruce Crescent (250)

The map also shows major roads, water bodies, and other local landmarks, providing a comprehensive overview of the project's reach.

- **FACTS NOT FICTION Community flyer**
 - 4300 **FACTS NOT FICTION** Flyers identifying issues raised by project opponents were delivered to the following locations resulting in further direct consultation with two property owners from Blue Haven
 - Blue Haven
 - Bushells Ridge Road
 - San Remo
 - Local Clubs



- Preparation of a visual representation of the proposed development (3D flyover) which was posted on the Wallarah 2 Website and copies distributed to various agencies and individuals.



- **Media Articles**

Wyong Coal initiated articles in the Central Coast Express Advocate (27th July 2016), Central Coast Business Review (August 2017) and International Coal News (2 August 2017)

14 NEWS
CENTRAL COAST BUSINESS REVIEW - AUGUST 2016

Wallerah 2 amended plans on exhibition

IT HADN'T CLEARED the final approval hurdles as yet, but the proponents of the Wallerah 2 underground coal mine are seeking expressions of interest from potential employees and business partners.

The project – if approved – will generate 300 direct jobs and plenty of opportunities for the Central Coast business and trade why the company is now advertising for Expressions of Interest.

"We want to hear from experienced underground coal miners as well as from those who don't have experience but would like to join the industry," said Project Manager Kerry Barry. "While a final decision on the proposal is still some distance in the future we want to be prepared if we get the green light."

The company also wants to hear from local businesses who may have the capacity to provide both goods and services to the proposed mine in both construction and operation.

An amendment to the plans for the Wallerah 2 Coal Project is currently on exhibition for public comment.

In 2014 the project was the subject of proceedings in the Land & Environment Court, which ruled that the company had to obtain the consent of the new South Wales Aboriginal Land Council to its application. Kerry Barry said the company has been unable to obtain that consent.

"So we put our thinking caps on to find a way to avoid any impact on Aboriginal land, and therefore remove the need for consent from the Aboriginal Land Council."

After a lot of hard work we've found a way to do that which also reduces environmental impacts.

Those changes are the focus of the amendment application. The Amendment avoids the need to develop infrastructure on land owned by the Darkinjung Local Aboriginal Land Council, thereby removing the requirement for the consent of the NSW Aboriginal Land Council.

Mr Barry explained the company redesigned the coal transportation infrastructure and sewer connection for the project. All other aspects of the proposal remain unchanged.

In submitting the Amendment makes three changes to the original proposal:

- Removal of the previously proposed rail loop and re-location of the rail spur and train load out facility to the eastern side of the main northern rail line.
- Extension of a conveyor system to deliver product coal from the stockpile to the new location of the train load out facility and
- Redesign of sewer connection.

The Amendment to the application reduces the area of disturbance of fourth land at the Torrey Road Site by 29%.

For the full Amendment Application and to make a submission go to the Major Projects website of the Department of Planning and Environment at majorprojects.nsw.gov.au.



Single drawing view on map

BUSHLEYS RIDGE

Change to coal plan

Amendment removes need for rail loop traversing Darkinjung land

Denise Barnes

AN AMENDMENT to the development application for the Wallerah 2 Coal Project will be on public exhibition until September 1.

The amendment was the removal of a proposed rail loop that crossed land owned by the Darkinjung Local Aboriginal Land Council which had refused access to its land.

Project manager Kerry Barry said that decision forced the company to come up with an alternative solution that would not affect the Darkinjung land.

"We put our thinking caps on to find a way to avoid any impact on Aboriginal land, and therefore remove the need for consent from the Aboriginal Land Council," Mr Barry said.

"After a lot of hard work we've found a way to do that which also reduces environmental impacts."

While the actual mining proposal remains the same, the amendment will see the rail spur and train load out facility moved to the eastern side of the main northern rail line. The conveyor system will be extended to deliver the coal from the stockpile to the new train load out facility and the sewer connection will also be redesigned.

Mr Barry said the changes reduced the impact on bushland at the Torrey Road site by 29 per cent.

The Department of Planning and Environment is now calling on the community to have their say.

A spokesman said after community consultation, the department would finalise its assessment of the amendment and refer the proposal to the Independent Planning Assessment Commission for review.

"Community consultation is an integral part of the planning process and the applicant will have to respond to the feedback we receive," the spokesman said.

Community consultations will be held on August 1, 8-9pm at Doyalson RSL, August 4, 9am-noon and 2.30-5pm at Doyalson RSL, August 8, 4-7pm at Wallerah 2 office, 21 Bryant Drive, Tuggerah, August 13, 10-11am, also at the Wallerah 2 office, 21 Bryant Drive, Tuggerah. Call 4322 7600 to make an appointment.

Have your say

- ▶ To make a submission or view the amended development application visit majorprojects.nsw.gov.au.
- ▶ Written submissions can be sent to the Department of Planning and Environment, Attn: Director-Resource Assessment, GPO Box 30, Sydney NSW 2001 until September 1.



Rail Spur and Load Out Bin Relocated

Conveyor Extended

Amendment to the Wallerah 2 Coal project eliminates the need to use Darkinjung land for a rail spur.

ICN3 INTERNATIONAL COAL NEWS

HOME ABOUT US ADVERTISE SUBSCRIBE SITE MAP HELP CONTACT WORK FOR US SURVEYS

Tuesday 2 August 2016

mining & corporate advisory

Wallerah 2 has another go
Tuesday 2 August 2016
LOU CHEN

THE Wyong Areas Coal Joint Venture, whose main partner is Kores, has re-submitted a proposal for the \$800 million Wallerah 2 coal project in New South Wales' central coast which includes various changes including removal of the previously proposed controversial railway loop.

The company submitted the amended proposal following a Land and Environment Court decision in 2014, which required landowners' consent to build the rail loop.

The initial project could not proceed until the NSW Aboriginal Land Council gave its consent for a rail spur to cross Darkinjung land.

Longwall mining will extend beneath the Wyong State Forest area.

The rail line would be needed to transport 5 million tonnes per annum of coal for a minimum of 25 years.

The court ruled any determination would be invalid without the consent of the NSW Aboriginal Land Council.

"The need for consent of the state land council is, in my mind, a core aspect of the approval process of any development, including state significant development," Justice Malcolm Craig said.

Previously the Aboriginal Land Council asked for \$300 million, a claim that was "pure invention" according to the company.

Other proposed changes to the proposal include the re-location of the secondary rail track and train loading facility to the eastern side of the main northern rail line and a conveyor system to deliver coal from a stockpile at the proposed Torrey Road surface facilities site to the new train loading facility location.

LATEST NEWS

- 'Tight gas' could be a lifeline at Christmas
- Recommissioning helps Warragabri restart
- NSW supports Springvale extension
- News Wire
- Wallerah 2 has another go
- Renewables improve SA price index report
- European wind growth strong
- Price index for Polish mine partners

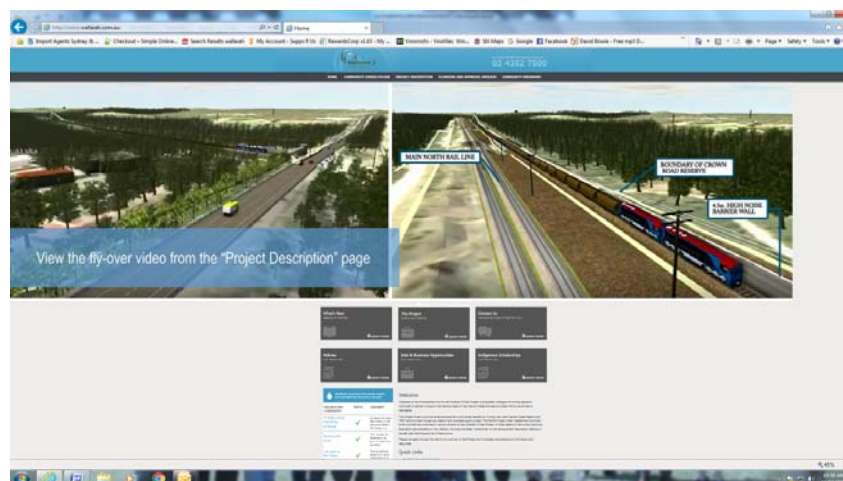
- **Amendment specific information days** were advertised in the Central Coast Express Advocate Newspaper on the 29th June 2016 and the 27th July 2016 respectively (See attached adverts). These information sessions were held at the Doyalson RSL (3 sessions) and Wyong Coal's Tuggerah Offices (2 sessions) whilst two (2) additional drop in sessions were held at Tuggerah (See attached spreadsheet of attendees and issues).

- Doyalson RSL - Monday 1st August (5pm-8pm) and Thursday 4th August 2016 (9am-12noon and 2pm – 5pm)
 - Fourteen (14) attendees
- Tuggerah Offices – Tuesday 9th August (4pm-7pm) and Saturday 13th August 2016 (9am-11am)
 - Four (4) attendees
- Additional drop in session 17th August 2016
 - Two (2) attendees

- Additional drop in session 1st September 2016
 - Two (2) attendees

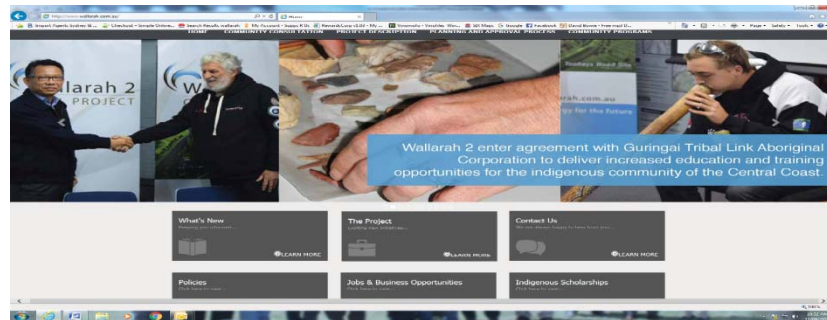


- Personal briefings with impacted landowners - Specifically the owners of P14, P15 and P16 impacted by Noise.
- Community contact line and website;

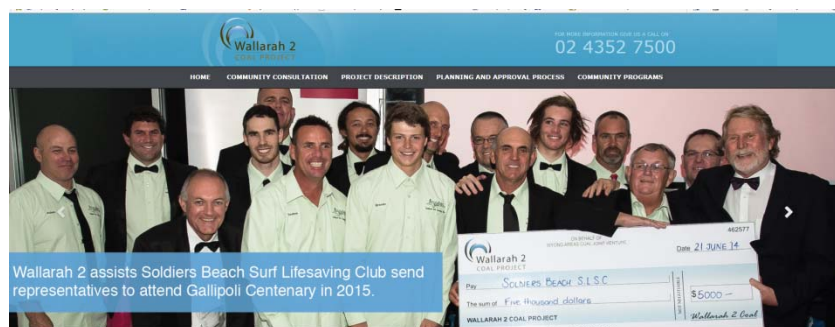


- Briefings and meetings with state and local government authorities;
- Briefings and meetings with third party infrastructure owners;

- Consultation with Special Interest groups including the Darkinjung Local Aboriginal Land Council and the Guringai Tribal Link Aboriginal Corporation;



- Consultation with Aboriginal stakeholders in accordance with the 'Aboriginal cultural heritage consultation requirements for proponents 2010' (DECCW, 2010);
- Sponsorship and support of community groups and clubs via the Community grants program.



Project specific Stakeholder Engagement details were also provided in the following amendment specific documentation.

- Section 4 of the Amendment to Development Application SSD-4974 (July 2016)
- Appendix D - Updated DLALC Consultation Log of the Amendment to DA SSD-4974 Response to DP&E (January 2017)
- Further consultation (below) provided to the Department of Planning and Environment 22 March 2017
- Email to Darkinjung Local Aboriginal Land Council CEO 20 December 2016 offer of further consultation – CEO replied unavailable
- Email to Darkinjung Aboriginal Land Council CEO 23 December 2016 requesting information – No response
- Meeting on 27 February 2017 at Maitland between Boral, Wyong Coal and DRE at Maitland
- Multiple meetings with the NSW Department of Industry | Resources & Energy | Industry Investment & Export Support.
- Meeting and consultation with RMS and Sydney Trains on 7 March 2017 including participation in a Wyong Coal Risk Assessment associated with the proposed Nikko Road Operations.
- Wyong Coal has been liaising closely with Sydney Trains management to assist in facilitation of rail corridor access for the PAC site visit on 4 April 2017.

- Notification of PAC Public Hearing and project update to Hunter Valley Coal Chain Coordinator, Transport for NSW, ARTC, PWCS and NCIG so that their capacity forecasts can be revised to reflect commencement of coal production based on the April 2017 PAC Hearing.
- Meetings and discussions with Central Coast Council on 21 December 2016, 13 February 2017 and 22 February 2017
- Two draft agreements with Central Coast Council are in the final stage of review and expect to be finalised prior to the PAC hearing
- Contacted the owners of the Kerry Mtn property on Thompson Vale Road with offer of further consultation on 21 and 22 March 2017 – Awaiting response
- Contacted the CEO of Darkinjung Local Aboriginal Land Council offer of further consultation 22 March 2017 – Awaiting response
- Meeting with DPI Crown Lands 12 December 2016 and several follow-up conversations and arrangements for future meeting onsite
- Direct email correspondence to 450 business and individuals in March 2017 notifying of PAC Public Hearing on 5/4/17
- Direct hardcopy mail correspondence to 177 individuals in March 2017 notifying of PAC Public Hearing on 5/4/17
- Multiple meetings with the CEO of Subsidence Advisory NSW
- Multiple discussions with Department of Planning and Environment
- Meeting with NSW Parliamentary Secretary for the Central Coast Scott McDonald 20 February 2017
- Project update to staff of Minister for Planning 23 February 2017
- Project update to staff of Minister for Mineral Resources 3 March 2017
- Meeting with Guringai Aboriginal Tribal Link Corporation on 21 March 2017 to finalise Apprenticeship candidates, University Scholarship candidate and Business Mgt Strategy

Appendix O
Hue Hue Subsidence District Proclamation

Government Gazette of the State of New South Wales (Sydney, NSW : 1901 - 2001), Friday 31 January 1986 (No.18), page 495

**DEPARTMENT OF MINERAL RESOURCES
NOTICES**

**(8520) Department of Mineral Resources,
Sydney, 31st January, 1986.**

**MINE SUBSIDENCE COMPENSATION ACT, 1961—
PROCLAMATION**

I, Air Marshal Sir JAMES ANTHONY ROWLAND, Governor of the State of New South Wales on the recommendation of the Minister, with the advice of the Executive Council, and in pursuance of the provisions of section 15(1) of the Mine Subsidence Compensation Act, 1961, do hereby proclaim the area defined in the Schedule hereto to be the Hue Hue Mine Subsidence District for the purposes of the said Act. (M 84-3014).

Signed and Sealed at Sydney this 31st day of December, 1985.

**L. W. STREET,
By deputation from His Excellency the Governor.**

By His Excellency's Command,

**PETER COX,
Minister for Mineral Resources and Energy.**

GOD SAVE THE QUEEN!

SCHEDULE

***Land District—Gosford; Shire—Wyang; Parishes—Munmorah
and Wyong; County—Northumberland***

Area: Being the lands shown on plan catalogued M 26711R in the Department of Mineral Resources, Sydney, and being more particulary described as follows:

Government Gazette of the State of New South Wales (Sydney, NSW : 1901 - 2001), Friday 31 January 1986 (No.18), page 495

particulars described as follows.

Commencing at the intersection of the southern boundary of Sparks Road with the western boundary of Sydney to Newcastle Freeway, thence generally south westerly, southerly and south easterly by part of the western boundary of the abovementioned freeway to its intersection with the southern boundary of portion 46 REM, Parish of Wyong, thence by part of this boundary westerly to its intersection with the eastern boundary of Hue Hue Road (Main Road No. 217), thence by part of the eastern boundary of the abovementioned Hue Hue Road generally northeasterly and northerly to its intersection with the northeastern boundary of Durren Road, thence by part of this boundary generally northwesterly, northerly, northwesterly, northerly and northeasterly to its intersection with the southern boundary of Sandra Street, thence by part of this boundary easterly and southerly to its intersection with the southern boundary of the beforementioned Hue Hue Road, thence, by part of this boundary, generally northeasterly to the southern boundary of the beforementioned Sparks Road, thence by part of this boundary generally easterly and southeasterly to the point of commencement.

Appendix P
WSC Late Submission to EIS Response

3 December 2013

Mr Clay Preshaw
Senior Planning Officer
Department of Planning & Infrastructure
GPO Box 39
SYDNEY NSW 2001

Dear Clay,

**WALLARAH 2 COAL PROJECT
WYONG SHIRE COUNCIL LATE SUBMISSION - RESPONSE**

1 INTRODUCTION

1.1 BACKGROUND

The 'Development Consent Application' and supporting 'Wallarah 2 Coal Project Environmental Impact Statement' (EIS) (Hansen Bailey, 2013) was placed on public exhibition for eight weeks from 26 April 2013 to 21 June 2013.

A total of 748 submissions (including 20 regulatory agencies) were received by the Department of Planning & Infrastructure (DP&I) during and following the eight week public exhibition of the EIS. The 'Wallarah 2 Coal Project Response to Submissions' (Hansen Bailey, 16 September 2013) (RTS) was prepared on behalf of WACJV to support SSD-4974 under section 78A(8A) of the EP&A Act. The RTS responded to the submissions raised by stakeholders during the public exhibition period.

DP&I provided the RTS on 17 September 2013 to the 20 regulatory authorities who provided a submission to the public exhibition of the EIS. The majority of regulators provided subsequent responses. Various meetings with regulators were held and the 'Wallarah 2 Coal Project Residual Matters Report' (Residual Matters Report) dated 30 October 2013 provided detailed responses to any residual regulatory issues. Office of Environment and Heritage provided further comment dated 1 November 2013 to which WACJV provided a response dated 8 November 2013.

1.2 DOCUMENT PURPOSE

Wyong Shire Council (WSC) has subsequently provided a further comment following closure of the exhibition period dated November 2013 (see **Appendix A**). This letter report responds to the issues raised in the WSC comments of November 2013.

2 WSC SUBMISSION RESPONSES

This section reproduces the submission from WSC and prepared by Earth Systems dated November 2013 in italics and indented. WACJV's responses are shown in plain text. Each item from Table 3-1 is listed in the following sections. Items from Table 3-2 have been allocated a letter A through P (row 1 to 16) in order to facilitate responses. Items identified with a 'Yes' in Table 3-1 as being addressed are not repeated in the following sections (Finding Numbers 12, 18, 20, 21 and 22).

Similarly, items from Table 3-2 which are identified with a 'Yes' as being addressed are not repeated in the following sections (Finding Letters D, E and F).

It should be noted that in relation to surface water and groundwater issues, NSW Office of Water (NOW) has provided a submission to DP&I dated 1 November 2013 in response to the Residual Matters Report which concludes '*the Office of Water accepts that the proponent has adequately addressed its concerns*'.

In relation to subsidence, Trade and Investment NSW – Division of Resources and Energy (DRE) provided a submission to DP&I dated 3 October 2013 noting that '*DRE has no additional comments*'.

2.1 STRUCTURE AND APPROACH

2.1.1 Finding Number 1 and Letter B - Air Quality and Water

The response provides no justification as to why construction impacts were not clearly separated from operations impacts and fails to articulate the extent of construction impacts for most parameters.

Air Quality

The air quality impact assessment is fundamentally flawed and air quality exceedances are anticipated during operations, thus the assumption that construction impacts will necessarily be compliant with emissions criteria cannot be justified with certainty.

Earth Systems are incorrect in this statement. The air quality impact assessment does not predict any exceedances during operation, either as an increment from the project alone or cumulatively (when background is considered). Compliance during operation is predicted to represent compliance during construction on the basis that construction phase emissions are significantly less than operation phase emissions and operations comply with air quality goals.

Ambient conditions for 24-hour PM10 often exceed criteria in the region (>16% if measured days), thus air quality impact criteria during both construction and operations will exceed air quality criteria under various meteorological conditions.

The NSW EPA Approved Methods for the Modelling and Assessment of Air Pollutants in NSW includes a section on “Dealing with elevated background concentrations (Section 5.1.3). In this section the EPA required that the proponent must demonstrate that no additional exceedances will occur as a result of the proposed activity and that best practice management practices will be implemented. Both these requirements are satisfied in the air quality impact assessment.

Emission factors for the construction phase were taken from USEPA (1995) and NERDDC (1998) instead of the more up-to-date and Australian emission factors, available from the National Pollutant Inventory (NPI) Emission Estimation Technique Manual for Mining (2012).

Earth Systems are incorrect in this statement. Although published in 2012, the NPI emission factors are not “more up-to-date”. They are, in fact, based on the USEPA (1995, 1998), NERDDC (1998) and SPCC (1993), as described in the first paragraph of Appendix A of the NPI manual.

Water Quality

Construction phase impacts are not addressed. The justification in the Response to Submission points to erosion and sediment control planning that relies on the completion of various components of Project construction (e.g. sediment dams). No controls are recommended for minimising erosion and sediment control at the outset of construction and potential impacts from hydrocarbons and other construction phase water quality are not considered, nor are management measures provided

The management of stormwater quality during the construction phase would be addressed through the implementation of a construction phase erosion and sediment control plan as part of the Site Water Management Plan, based on a typical best practice approach. Such a plan is usually developed as part of detailed documentation for construction because the appropriate control measures depend on the construction sequence. The risks associated with construction phase impacts for the project are not significantly greater than any other construction project.

2.1.2 Finding Number 1b and Letter I – Closure Planning

Although it is recognized that WACJV intends to develop a Rehabilitation and Closure Plan, no indication in the response is provided with respect to the approach to closure planning, impact assessment and post-closure risk mitigation.

Should WACJV be granted a Development Consent, DP&I will stipulate the particulars that need to be addressed in relation to closure planning which shall be outlined in the Rehabilitation and Closure Plan. Consistent with contemporary DA's in NSW, this plan will be developed in consultation with relevant regulators to the approval of DP&I.

2.1.3 Finding Number 2 and Letter J – Risk Assessment

Since submission of the 2013 EIS additional investigations have been undertaken and additional mitigation measures derived (refer to Table 11, Response to Submissions, 2013) which are not captured in the revised risk assessment.

The primary purpose of the risk assessment process is to prioritise and focus the required environmental assessments for the Project EIS. Mitigation and management measures were then developed based on the outcomes of these environmental assessments. Any residual matters will be addressed in conditions of Development Consent and post-approvals required by DP&I. The risk assessment is not required to be revisited.

2.1.4 Finding Number 3 – Environmental Management System

The response specifies the intention of WACJV to develop an Environmental Management System while Table 11 outlines the plans and strategies that would form the basis of the EMS.

Noted. The EMS will be developed as described in Table 11 and outlined in any future Development Consent.

2.1.5 Finding Number 4 and Letter O – Environmental Audits

Response has addressed recommendation to have independent environmental audits conducted, however no further detail is provided regarding the proposed nature of the audit, frequency, etc.

Should a Development Consent be granted to WACJV for the Project then it will detail the parameters of any required Environmental Audit.

2.1.6 Finding Letter G – Mine Design and Layout

Although little heavy vehicle movement is expected on internal roads, it is still necessary to determine potential disturbances or impacts caused by heavy vehicles on local environment (e.g. dust, noise, vibration).

As the Project is proposed to comprise an underground mine, very limited heavy vehicle movements within the mine will occur, primarily in relation to deliveries to site from external roads. Internal roads are shown on Figure 19 and Figure 21 of the EIS for each of the Tooheys Road and Buttonderry sites, respectively. There are no heavy vehicles hauling materials within the site.

2.2 STAKEHOLDER ENGAGEMENT

2.2.1 Finding Number 5 – Stakeholder Engagement Evidence

Although different methods of engagement were employed as stated in the response, the only examples and evidence provided to substantiate the statement was a newsletter and one example of a residential letter.

No meetings minutes or other evidence from meeting are presented. Therefore, it is not possible to determine if stakeholders adequately engaged and if raised concerns were accurately captured and addressed

Section 5 of the EIS outlines the stakeholder engagement carried out for the Project. Additional information is provided in Section 3.24 of the EIS. As stated in Section 5.3.4 of the EIS, the Community Reference Group meeting minutes are supplied on the Project website. Additionally, Section 3.24.1 of the RTS discusses the adequacy of the community consultation.

2.2.2 Finding Letter H – Stakeholder Engagement Plan

Although the RTS states that WACJV will continue to undertake consultation with stakeholders, it does not specify a strategy, plan of how consultation will be undertaken and does not provide an indication of a grievance mechanism, a best practice approach typical of impact assessments.

Should a Development Consent be granted to WACJV for the Project then the consent will detail the parameters for the Community Consultative Committee (CCC), complaints register and public access to information requirements. Noise and Air Quality management plans will also detail the process for addressing complaints specific to noise and air quality impacts.

2.3 WATER

2.3.1 Finding Number 6 – Water Quality Impacts

While suspended sediment will likely be the primary water quality pollutant during construction, it is one of a number of potential pollutants that require management (e.g. hydrocarbons, acid and metalliferous drainage, etc.).

Although the mine water management system has been designed to ensure no uncontrolled discharges, the RTS admits the possibility of an uncontrolled discharge to occur in an extreme event, however no mitigation measures or contingency are provided.

Furthermore, inferring that impacts to Wallarah Creek will be minimised because flood conditions and dilution are assumed to reduce impacts, there is no further investigation to support this assumption. Dilution is also not an adequate means of reducing impact, which depends on the nature of potential contaminants (chemical and physical), etc.

The assumption that passive treatment for potential contaminants in the Entrance Dam will ensure discharge is of suitable quality does not consider the range of potential water quality issues that may occur.

The proposed water management strategy for the project does not rely on dilution to reduce impacts. It prevents impacts by being designed for zero discharge under all climatic conditions experienced in the last 120 years. An extreme rainfall event beyond any event experienced in the last 120 years could, theoretically, result in overflow from mine water dams at the Tooheys Road site. However, the risk of environmental harm occurring is low because:

- The area captured in the mine water management system at the Tooheys Road site is about 36 hectares, compared to a catchment area of about 400 hectares for Wallarah Creek, thereby diluting any overflow by a factor of 10;

- Extreme rainfall would result in fresh water inflow to the mine water system, improving the water quality of any overflow; and
- The volume of any overflow could be reduced or eliminated by transferring water for temporary storage underground.

Since there is no coal handling at the Buttonderry site, the range of pollutants likely to occur in runoff to the Entrance Dam is similar to other catchments with industrial land use. These pollutants can be managed using urban stormwater best management practices, consistent with any other industrial site.

2.3.2 Finding Number 7 and Letter C – Acid and Metalliferous Drainage

The 2013 EIS Appendix C Geology Report or RTS do not indicate that a geochemical analysis was undertaken to test for AMD, rather a desktop analysis was relied upon.

However, the Soils and Land Capability Impact Assessment (EIS 2013) found the “potential of acid sulphate soils (ASS) and potential acid sulphate soils (PASS) to occur in the south of the Project Boundary along the lower reaches of the Jilliby Creek and Little Jilliby Creek, and along the unnamed waterway adjacent to western boundary of the Buttonderry Site” (page 8). Furthermore, the report states that “any activities in sections of the Project Boundary within or close to these areas (e.g. construction and final rehabilitation of the Buttonderry Sites...800 meters from an area with a potential for ASS and PASS to be present) should take into account the potential presence of ASS and PASS and ensure such soils are appropriately assessed and managed.” (Page 8, EIS 2013). ASS are soils that typically contain significant concentrations of pyrite. When exposed to oxygen coupled with sufficient moisture, they oxidise and result in sulphuric acid generation.

Section 7.19.3 of the EIS states “A review of the potential distribution of Potential Acid Sulphate Soils (PASS) and Acid Sulphate Soils (ASS) shows that there is no area which contains a high probability of PASS and ASS forming within the Project Boundary. There is a low probability of occurrence in the south of the Project Boundary along the Jilliby Creek and Little Jilliby Creek and along an unnamed waterway adjacent to the northern boundary of the Buttonderry Site. Infrastructure Areas do not occur within these low probability areas.”

Additionally, as noted in Section 3.18.14 of the RTS “*management measures for PASS and ASS, in the unlikely event that they are uncovered, will be provided in the Soil and Land Capability Procedure.*”

2.3.3 Finding Number 8 – Water Treatment Plant Monitoring

Although the WTP monitoring point will be located at the release point from the WTP as part of the monitoring program, baseline conditions at the discharge point have not been captured and therefore will not provide a baseline comparison of impacts including cumulative impacts.

Furthermore, no indication is provided of when the WTP release sampling point will be installed. If it is installed after Project activities commence (e.g. construction, operations) begin, it will not be possible to distinguish between existing baseline conditions (prior to project activities and potential Project impacts/influences) and Project impacts.

The proposed discharge point for the WTP is located on a small ephemeral gully, about 200 metres upstream of its confluence with Wallarah Creek. Monitoring of water quality on this small gully is difficult because flows are relatively small and occur only for a short period after rainfall. In addition, there is no baseline data set for this gully. The proposed water management strategy is based on ensuring no adverse impact in Wallarah Creek, which is the receiving watercourse for all runoff from the Tooheys Road site. Wallarah Creek has a good baseline data set, with more than 60 samples taken over about 6 years for some parameters.

2.3.4 Finding Number 9 – Untreated Mine Water Overflow

Response does not directly address concerns regarding potential overflow of the MOD specifically, such as reference to a design criteria of MOD and mitigation measures to prevent overflow.

Although the mine water management system has been designed to ensure no uncontrolled discharges, the RTS admits the possibility of an uncontrolled discharge to occur in an extreme event, however no mitigation measures are provided and no contingency plan proposed.

Furthermore, the detailed design of mine water dams should be undertaken in conjunction with the EIS and finalized before obtaining environmental approvals in order to adequately categorize residual impacts following mitigation measures considered in the design criteria.

See response under Section 2.3.1 above. Detailed design of infrastructure is usually undertaken following determination for State Significant Developments in NSW in consultation with relevant regulators.

2.3.5 Finding Number 10 – Groundwater Parameters

The response does not state a rationale for only conducting a limited range of parameters and does not indicate an intention to implement a more comprehensive monitoring program.

Furthermore, it indicates that data collected from relevant piezometers was only over a course of 2 years collected more than 10 years ago. As a result referenced parameters may not adequately represent current groundwater properties in the Project Area.

Table 11 of the RTS notes “*In consideration of the findings from the groundwater and surface water assessments, the Water Management Plan will ensure that the monitoring program as described is implemented and maintained so that the modelled predictions and assumptions can be verified and any potentially unforeseen water impacts can be identified and managed.*” It should also be noted that in relation to surface water and groundwater issues, NOW provided a submission to DP&I dated 1 November 2013 concluding ‘*the Office of Water accepts that the proponent has adequately addressed its concerns*’.

2.3.6 Finding Number 11 – Groundwater Impact Mitigation

The response does not adequately articulate mitigation measures for potential groundwater impacts nor does it adequately address the need for a more rigorous monitoring protocol to identify potential impacts.

Table 11 of the RTS notes “*In consideration of the findings from the groundwater and surface water assessments, the Water Management Plan will ensure that the monitoring program as described is implemented and maintained so that the modelled predictions and assumptions can be verified and any potentially unforeseen water impacts can be identified and managed.*” It should also be noted that in relation to surface water and groundwater issues, NOW provided a submission to DP&I dated 1 November 2013 concluding ‘*the Office of Water accepts that the proponent has adequately addressed its concerns*’.

2.4 AIR QUALITY AND GREENHOUSE GAS

2.4.1 Finding Number 13 & Letter A – Approved Methods

The Approved Methods for Modelling and Assessment of Air Pollutants in NSW (DECC, 2005) lists the statutory methods for modelling and assessing emissions of air pollutants from stationary sources in the state. It is referred to in Part 4: Emission of Air Impurities from Activities and Plant in the Protection of the Environment Operations (Clean Air) Regulation 2002 (the ‘Regulation’). Industry has an obligation to ensure compliance with the requirements specified in the Regulation.”

If approved, the Project will operate under, and comply with, an Environmental Protection Licence (EPL) issued by the EPA under the *Protection of the Environment Operations Act 1997* (POEO Act).

The modelling for predicted impacts (Sections 8.1 –8.7 of the EIS) and associated contour plots consider emissions from Project-related operations alone. Predicted impacts from the Project must be summed with respective background concentrations to determine total impact for each parameter and averaging period. Instead, the impact assessment compares predicted emissions from Project operations alone against the impact criteria, giving the impression that concentrations of applicable parameters will be compliant with impact criteria. As ambient conditions exceed guidelines on occasion, exceedances will occur, which will be exacerbated with Project emissions.

Earth Systems are incorrect in this statement. Both incremental and cumulative impacts are presented in air quality impact assessment. Contour plots are presented for project alone impacts while cumulative impacts are presented in tabular form for each receiver location. Cumulative impacts for 24-hour PM₁₀ are based on a probabilistic approach.

Maximum daily PM10 used a Monte Carlo statistical simulation to randomly select values, rather than use maximum available PM10. While there may be merit in using a statistical approach, The Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (DECC, 2005) specifies the use of maximum measured volumes in cases where measurements were not taken often enough to include them in the model, and advises consulting Air Technical Advisory Services Unit of the DECC otherwise.

Pacific Environment has discussed this statistical probability approach with the Air Technical Advisory Services Unit of the NSW EPA and has adopted this approach in numerous air quality impact assessments for mining and other operations, most of which are reviewed by the NSW EPA. Furthermore, the EPA has reviewed this air quality assessment and they did not find an issue with the use of this statistical probability approach for cumulative 24-hour PM₁₀ assessment.

A cumulative impact assessment should capture total impacts (background concentration summed with predicted Project-related inputs) combined with anticipated future development. The cumulative impact assessment does not adequately consider the combined effects of Project emissions, future development (e.g. Warnervale Town Centre construction) and ambient conditions

A cumulative assessment has been completed and is presented in Section 8.8 of the air quality impact assessment, based on the existing ambient environment. At a distance of over 3 km from the Project, the construction of the Warnervale Town Centre is not expected to have any noticeable cumulative impact above that described in the air quality impact assessment.

2.4.2 Finding Number 14 – Air Quality Impact Mitigation and Monitoring

The proponent has committed to developing an Air Quality Management Plan (AQMP). The AQMP has not been included in the EIS.

The future AQMP will provide an (undisclosed) number of PM10/PM2.5 particulate monitors. There is no commitment for ambient air gases or odour monitoring from the potentially odorous ventilation stack.

It is accepted that the rail corridor is used by all train movements, though a monitor between the corridor receptors and site may prove beneficial. .

There is little basis for requiring ambient monitoring of “gases or odour”. The ventilation stack will emit mine ventilation air. Mine ventilation air is required to have low enough pollutant levels to ensure occupational health and safety for underground mine employees. When mine ventilation air is emitted from a ventilation stack, pollutant concentrations are further dispersed and diluted and ambient air quality concentrations are significantly lower than the safe levels that underground miners are exposed to.

The balance of evidence suggests that fugitive emissions from coal transportation do not present a significant risk to the community. Notwithstanding this, the proponent is committed to best practice emissions controls on coal transportation including water spraying the coal surface during train loading as well as best practice load profiling.

2.4.3 Finding Number 15 – Energy and Greenhouse Strategy

A commitment has been shown to provide Greenhouse Gas mitigation measures in a future Air Quality Management Plan (AQMP). An AQMP has not been included as part of the EIS.

WACJV should clarify the wording/timing of the Energy and Greenhouse Strategy, as to whether “within” refers to 2 years prior to or after commencement of longwall mining. And the timing of anticipated greenhouse mitigation measures contained within the Strategy.

The commitment to develop a greenhouse strategy within 2 years of commencement of mining is to allow adequate time to gather data on methane levels within the seam and to investigate the feasibility of long term methane capture and utilisation. The timing of the GHG mitigation measures will be dependent on the outcomes of the options study for capture and utilisation (flaring versus beneficial re-use). Consistent with contemporary DA's in NSW, this strategy will be developed in consultation with relevant regulators to the approval of DP&I.

2.5 NOISE AND VIBRATION

2.5.1 Finding Number 16 – Road Transport of Coal

The Noise study noted that coal maybe transported by road when regular train freight is not available. This represents a potential “worst-case” emission scenario for both noise impacts and air quality impacts to the community

This statement is not included in the noise study for the Project. As stated in reference point 34 of Table 11 of the RTS document, “the Project will not transport any coal to port via the road network”.

2.5.2 Finding Number 17 – Exceedance of Project Specific Noise Criteria

Mitigation measures specific to the Project Specific Noise Criteria (PSNC) are not addressed in the RST and therefore mitigation measures specific to these exceedances are not provided.

As described in Section 7.8.3 of the EIS, the PSNC are not predicted to be exceeded at any privately owned residences during construction and operations. Mitigation measures to be included in the Noise Management Plan are listed in Section 7.8.4 of EIS. Consistent with contemporary DA's in NSW, this plan will be developed in consultation with relevant regulators to the approval of DP&I.

2.6 ECOLOGY

2.6.1 Finding Number 19 – Offset Calculations

The response does not include the calculations conducted to determine offsets or include details of the Biodiversity Offset Package. As a result it is not possible to determine the accuracy or suitability of methods used in determining offsets.

Table 63 of the EIS provides a complete breakdown of the area of each vegetation type to be disturbed and the area of each vegetation type within the Biodiversity Offset Areas (BOS). Table 64 of the EIS provides further information regarding habitat for Threatened flora and fauna species within both the impact area and BOS. All of the values are provided. It is unclear what additional information is required.

Each of the Commonwealth Department of the Environment (Previously SEWPaC) and OEH dated 4 October 2013 and 1 November 2013 respectively have reviewed the quantum of offsets proposed for the Project and are satisfied it meets their requirements.

2.7 COMMUNITY HEALTH AND SAFETY

2.7.1 Finding Number 23 and Letter L – Air and Water Impacts on Community Health and Safety

Given the information gaps and recommendations provided in this Report, responses related to community health and safety with respect to water and air quality are not adequately addressed.

Comprehensive baselines are required to establish existing water quality, air, and traffic conditions in order to assess potential impacts, develop comprehensive monitoring and management plans.

Significant baseline monitoring data has been collected for the Project for water, air and traffic.

Baseline water quality monitoring for the Project commenced in 1996 and continued until 2004. Following a hiatus, monitoring resumed and has been undertaken without interruption since 2006. Surface water sampling has been conducted at 14 sites for a range of water quality parameters: pH, salinity, temperature, dissolved oxygen, TSS, TDS, heavy metals and organic compounds.

Baseline air quality monitoring for the Project commenced in 1996, which provided monthly averages for dust fallout levels. In addition, PM₁₀ and PM_{2.5} concentrations were measured by high volume air samplers (HVAS). Air quality monitoring was discontinued in early 2004 but recommenced in late 2006 and has continued to date.

Baseline traffic data surrounding the Project was obtained from permanent Roads and Maritime Services stations between 1995 and 2004 and supplemented with turning traffic volumes, queue lengths and site inspections in both wet and dry conditions at appropriate intersections during multiple traffic studies for the preparation of the 'Wallarrah 2 Coal Project Environmental Assessment' (International Environmental Consultants Pty Limited, 2010) and the EIS.

2.8 IMPACTS BEYOND DGRS

2.8.1 Finding Number 24 – Contingency Plan for Disasters

A Disaster Risk Management Plan ensures natural and human-induced emergencies associated with the Project are addressed. This Plan should be inclusive of specific Contingency Plans to manage particular events, including the management / treatment of the Mine Operations Dam (MOD) and spontaneous combustion. Disaster risk management should have been included in the revised risk assessment of the 2013 EIS. The lack of this contingency plan is consistent with the general lack of contingency plans in the RTS.

As part of conditions of development consent, DP&I will require a suite of management plans to be developed. DP&I will stipulate if any of these management plans are required to consider any 'emergency contingencies'.

2.8.2 Finding Number 25 and Letter M – Impacts to Buttonderry Waste Management Facility

Although the longwall panels are located over 1 km from the waste management facility there may be potential impacts to the facility due to subsidence, loss of geotechnical integrity, etc. Given the socio-economic and environmental significance of the facility to the area, impacts should be assessed and included in the risk assessment.

As stated in the RTS “Each of the Waste Management Facility and the Buttonderry Surface Facilities area are located outside the [Subsidence Impact Limit] (SIL) and as such interactions between the waste site and coal extraction are considered highly unlikely.” Consultation will be carried out with WSC to encourage sharing of monitoring data from the Buttonderry Waste Management Facility to identify any potential impacts and to facilitate appropriate adaptive management responses.

2.9 MANAGEMENT AND MONITORING

2.9.1 Finding Number 26 and Letter N – Management and Monitoring

An ESMMP type plan was not adopted in the 2013 EIS. The proponent has indicated a plan will be developed in the future.

Without a plan to review simultaneously with the EIS it is not possible to ascertain the efficacy of the management strategies to avoid and minimise impacts.

Consistent with contemporary DA's in NSW, this plan will be developed in consultation with relevant regulators to the approval of DP&I.

2.9.2 Finding Letter N – Environmental Management System

An Environmental Management System based on ISO14001:2004 ‘Environmental management systems -- Requirements with guidance for use’ is developed and implemented for the Project.

An Environmental Management System will be developed based on ISO14001:2004 ‘Environmental management systems -- Requirements with guidance for use’.

3 CONCLUSION

We trust this response provides DP&I adequate information to ensure that WSC's issues as provided in its submission dated November 2013 have adequately been addressed by WACJV (and its specialists) in the EIS and RTS.

Should you have any queries in relation to this letter, please contact me on 02 6575 2003.

Yours faithfully

HANSEN BAILEY

A handwritten signature in purple ink, appearing to read 'D Munro', is shown within a light grey rectangular box.

Dianne Munro
Principal

APPENDIX A

Regulatory Correspondence

Wallarah 2 Coal Project

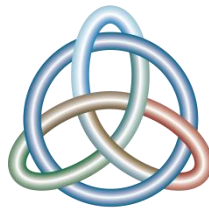
Wyong, NSW, Australia

Review of Response to Submissions to the Wyong Shire Council 2013 EIS Review

Prepared for



By



EARTH SYSTEMS
Environment | Water | Sustainability

November 2013



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Executive Summary

Earth Systems was engaged by Wyong Shire Council to review the *Response to Submissions* (2013) provided by Wyong Areas Coal Joint Venture with respect to the findings and recommendations raised by Earth System in its review of the Wallarah 2 Coal Project 2013 EIS.

In the review of the 2013 EIS, Earth Systems concluded that the approach to the EIS deviated from standard practices (i.e. baseline assessment; impact assessment for construction, operations and closure; management and mitigation measures; residual impacts; and monitoring and reporting). In many cases, baseline conditions were inadequately addressed, impact assessments were underdeveloped and management and mitigation measures commonly pointed to management plans that would be developed in the future. These conclusions, in addition to specific data gaps for many components assessed in the EIS, were provided to WACJV in June 2013.

While the WACJV *Response to Submission* (RTS) acknowledged and responded to each of the issues identified in the 2013 EIS Review, many of the responses were inadequate and do not articulate measures to rectify the gaps identified in the EIS. These gaps render it impossible to determine residual impacts, particularly for the following:

- Air quality (construction and operations phases);
- Groundwater quality;
- Surface water quality for the controlled discharge point on the tributary to Wallarah Creek;
- Acid and metalliferous drainage (AMD); and
- Post-closure water quality, landform stability, visual amenity, etc.

The management and monitoring detail required to properly determine how impacts will be managed is still not provided, which leads to further uncertainty in the prediction of residual impacts.

Residual impacts are anticipated for air quality, however the extent of those impacts cannot be determined based on information from the EIS and *Response To Submission*. Residual impacts for water quality, noise and vibration, terrestrial habitat, and other criteria assessed cannot be adequately estimated without provision of the management measures that have been proposed for future management plans.

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1 Introduction

Earth Systems was commissioned in November 2013 by the Wyong Shire Council (WSC) to review the Wallarah 2 Coal Project Response to Submissions (RTS) in relation to the Earth Systems' review of the 2013 Environmental Impact Statement (EIS) and provision of recommendations.

The Wyong Areas Coal Joint Venture (WACJV) proposes to develop an underground coalmine known as the Wallarah 2 Coal Project (W2CP) (the Project), which would extract coal from beneath the Dooralong and Yarramalong Valleys in Wyong Shire, New South Wales using longwall mining techniques.

A chronology of the application process of the Project to date is summarised in Table 1-1.

Table 1-1. Summary of the Wallarah 2 Coal Project Application Process.

Date	Outcome
2010	Environmental Assessment (2010; referred to as the 2010 EIS) is submitted to the Director-General of the NSW Department of Planning (DoP) for assessment and approval under Part 3A of the NSW <i>Environmental Planning and Assessment Act 1979</i> (EP&A Act) and placed on public exhibition from 31 March to 2 June 2010.
March 2011	Development application for the Project is refused by the Minister for Planning due to: <ul style="list-style-type: none"> • Uncertainty around subsidence; • Inadequate characterization of potential impacts to surface water quality, ecology (particularly in the western portion of site), cultural heritage; and • The Project was not considered to be consistent with the principles of sustainable development.
November 2011	WACJV lodges a new application for development consent of a mining lease.
January 2012	NSW Government issues new Director General's Requirements (DGRs) for the Project ('New DGRs') to supplement DGRs issued in 2009. The new DRGs outline issues requiring comprehensive evaluation during the environmental assessment for Project approval.
July 2012	NSW Government issues supplementary DGRs to focus on the assessment of potential Project-related impacts on biodiversity, reinforcing Project obligations under the Environmental Protection and Biodiversity Conservation Act 1999 and the Environmental Protection and Biodiversity Conservation Regulations 2000.
April 2013	WACJV prepares a second Draft EIS (herein the 2013 EIS) to meet the regulatory requirements of EIS in NSW, address issues identified in the 2010 EIS refusal and meet the original and supplementary Director General Requirements.
April 2013	Draft EIS is placed on public exhibition from 26 April 2013 to 21 June 2013.
September 2013	Hansen Bailey on behalf of WACJV prepares a Response to Submissions document (RTS) responding to 748 submissions received during the public exhibition of the 2013 EIS.
October 2013	Hansen Bailey on behalf of WACJV prepares a subsequent Residual Matters Report.

WSC has engaged Earth Systems to review Hansen Bailey's responses on behalf of WACJV to the issues and recommendations identified by Earth Systems in its review of the 2013 EIA. As such, the objectives of this Report are to:

- Determine if the responses provided in the RTS adequately address issues and concerns raised by Earth Systems' review of the 2013 EIS;
- Indicate if the recommendations provided by Earth Systems in its review of the 2013 EIS were considered and addressed in the response; and

- Identify any other areas of uncertainty and or where further investigations and assessments are required prior to Project determination and/or during the construction, operation and closure stages of the Project.

1.1 Project Overview

The Project is located approximately 9 km to the northwest of Wyong township in New South Wales (refer to Figure 1-1). The proposed mining area is located within the declared Wyong Mine Subsidence District and the Hue Hue Mine Subsidence District, which together extend west of the F3 Sydney – Newcastle Freeway.



Figure 1-1 Project Location (Source: Hansen Bailey, 2013a)

Two primary surface facilities are proposed for the Project. The main coal handling and rail loading facility are referred to as the Tooheys Road Site and would be located adjacent the northeast corner of the F3 Freeway and the Motorway Link Road intersection. The Buttonderry Site would include ventilation shafts, office and employee facilities and be located to the south of the Buttonderry Waste Disposal Facility off Hue Hue Road. The majority of the underground extraction area lies beneath the Yarramalong and Dooralong Valleys and Wyong State Forest.

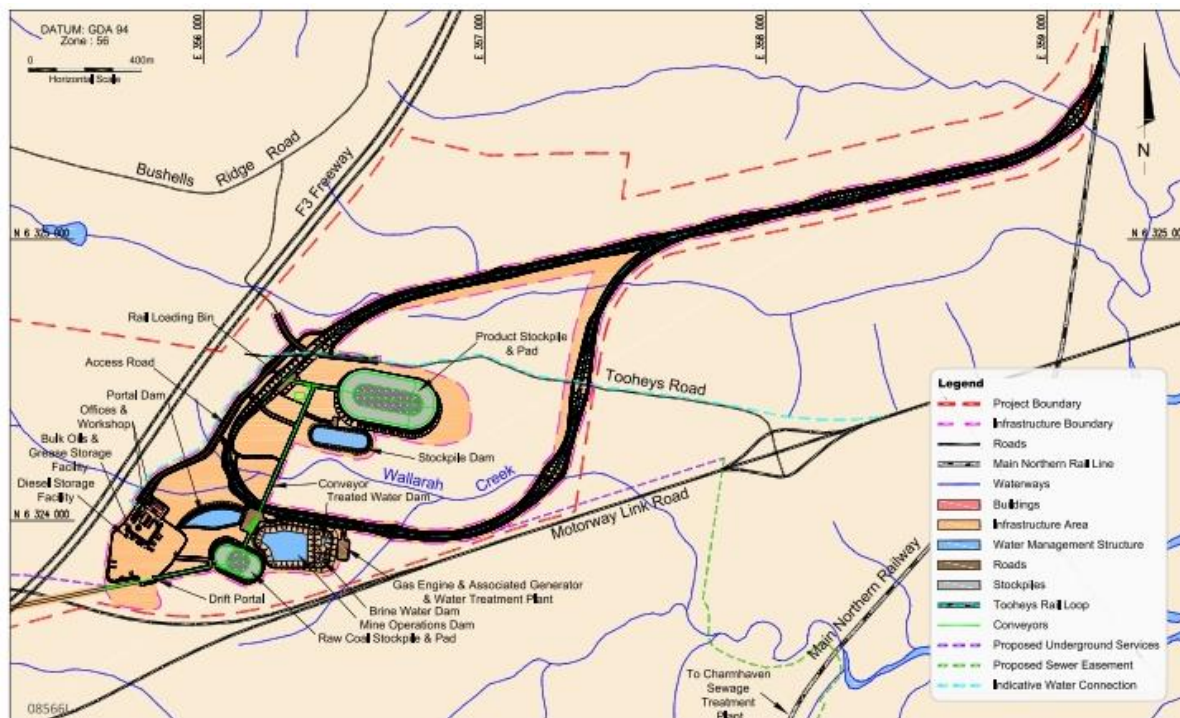


Figure 1-2 Tooheys Road Site (Source: Hansen Bailey, 2013a)

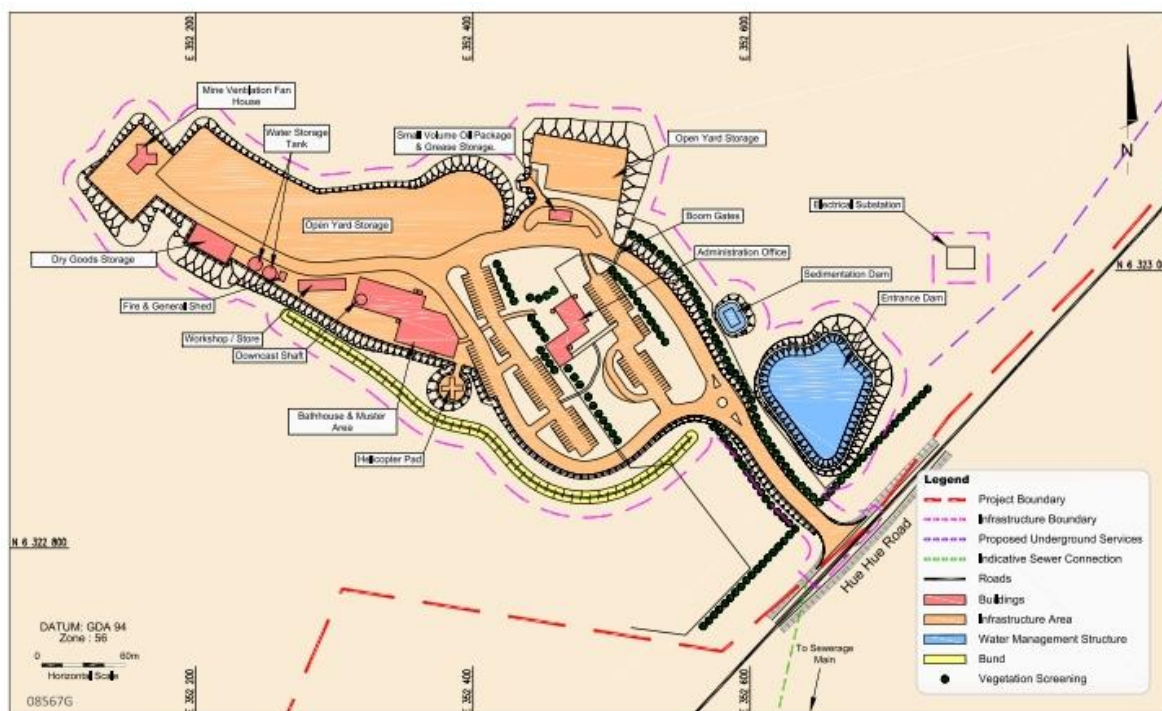


Figure 1-3 Buttonderry Site (Hansen Bailey, 2013a)

WACJV proposes to extract of up to 5 million tonnes per annum of run-of-mine (ROM) coal from the Wallarah-Great Northern Coal Seam for a period of 42 years using longwall mining methods. The Project is described in full in Chapter 3 of the 2013 EIS.

Key land uses within the Project Application Area range from light industrial, commercial and housing developments to small townships and small farms (Figure 1-4). The Tooheys Road Site is located between the F3 Freeway and an active clay quarry and tile factory. The Buttonderry Site is situated adjacent to the Wyong Employment Zone (WEZ) and the Buttonderry Waste Management Facility. The proposed Warnervale Town Centre (WTC) is located southeast of the Project sites while the Blue Haven residential area is located approximately 3 km to the north east of the Tooheys Road Site. A sewage treatment plant is located approximately 2 km to the south east of the Tooheys Road Site

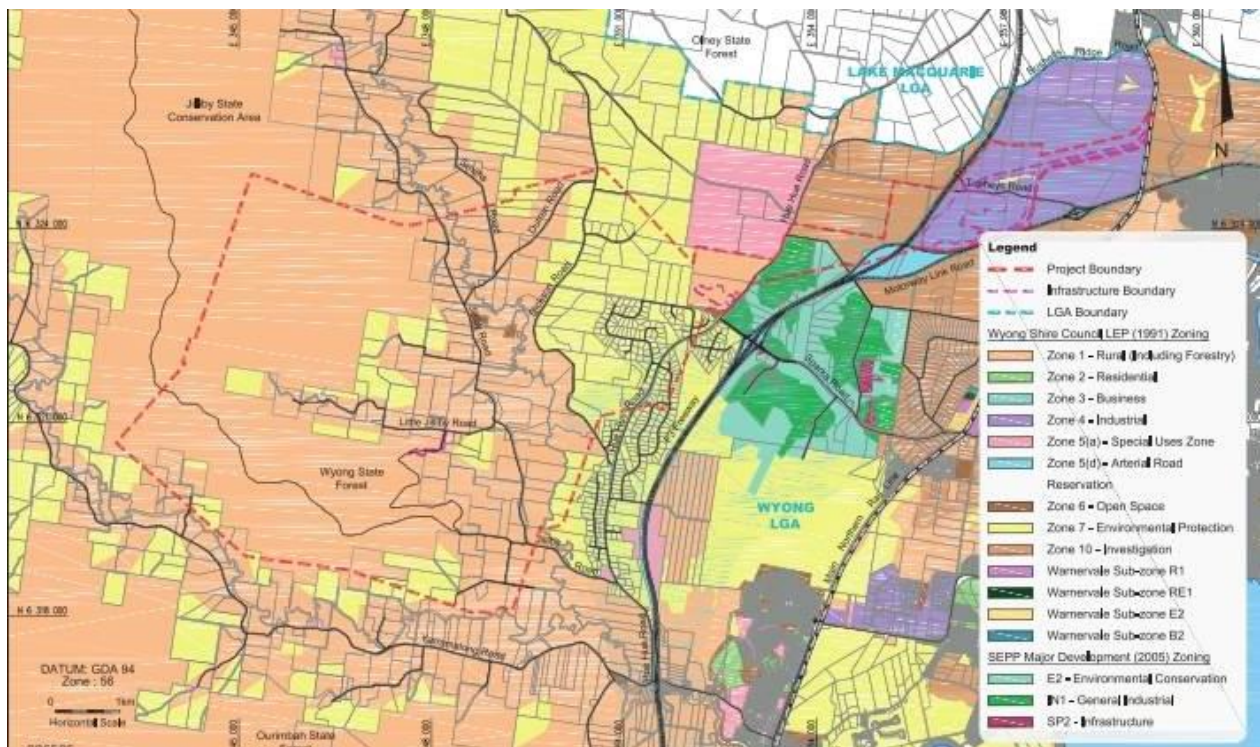


Figure 1-4 Surface Facilities and Surrounding Land Uses (Source: Hansen Bailey, 2013a)

The Jilliby State Conservation Area and Wyong State Forest are located to the west of the Project area. Jilliby Creek flows to the southeast before merging with the Wyong River which feeds Tuggerah Lake. Wallarah Creek flows through the Tooheys Road Site to Budgewoi Lake.

Major transport routes near the Project area include the F3 Freeway, Motorway Link Road and the Main Northern Railway Line.

2 Methodology

This Report was undertaken to review and evaluate the adequacy of the responses and information presented in the *Response to Submissions* (2013) as they pertain to the findings and recommendations provided by Earth Systems in its review of the 2013 EIS. To ensure a comprehensive review, Earth Systems undertook the following steps:

1. Review of the responses in the RTS (2013) against the Review of 2013 EIS conducted by Earth Systems (June 2013);
2. Determine if the findings were addressed;
3. Assess the suitability and comprehensiveness of the response against each finding identified and recommendations provided by Earth Systems in the Review of the 2013 EIS; and
4. Summarise key findings from this Report.

2.1.1 Literature Review

The following documents were reviewed during the preparation of this Report:

- *Walarah 2 Coal Project Response to Submissions* (2013);
- *Walarah 2 Coal Project Residual Matters Report* (2013);
- *Walarah 2 Coal Project Review of the 2013 EIS* (2013);
- *Walarah 2 Coal Project Environmental Assessment: Volumes 1 to 6* (2013) and technical appendices;
- *Walarah 2 Coal Project Environmental Assessment: Volumes 1 to 4* (2010) and technical appendices;
- *Director-General's Environmental Assessment Requirements* (January 2012) and *Supplement to the Director-General's Requirements* (July 2012);
- All relevant Federal and State legislation, policies and plans; and
- Relevant environmental, sustainability and environmental impact assessment (EIA) standards and best practice guidelines.

3 Review

3.1 Review of RTS

An analysis of the suitability and quality of the proponent's responses to the findings, queries and recommendations identified by Earth Systems are presented in Table 3-1. The review is structured according to the 13 findings highlighted in the Executive Summary and the 12 recommendations provided in the *Review of the 2013 EIS* (Earth Systems, 2013).

Table 3-1. Review of WACJV's response to issues identified by Earth Systems in the 2013 EIS.

Findings of EIS Review	Finding number	Earth Systems Finding	Finding Addressed	WACJV Response	WACJV Reference (Response to Submissions, 2013)	Assessment of Response
Structure and Approach	1	<i>EIS does not adequately assess construction impacts; in particular related to air quality, water quality and transport.</i>	No , air quality and water quality impacts are further commented on, but the deficiencies are not addressed.	<p><u>Air Quality:</u></p> <p><i>"Section 7.1 of the AQGGA provided detailed dust emission estimates for a construction phase scenario. The estimated dust emissions during construction were found to be significantly lower (approximately 50% lower) than the estimated dust emissions during the operational phase." "Section 8 of the AQGGA demonstrated that the Project will comply with the air quality impact assessment criteria at all locations during the operational phase. Due to the lower emissions during the construction phase, it can be concluded that the construction phase of the Project would also comply with the air quality criteria under all modelled climatic conditions."</i></p> <p><u>Water Quality:</u></p> <p><i>"The water balance model is configured to represent the changing characteristics of the water management system over the 28 year Project life, including the construction period. The construction period represents the first three years of the Project life, which has been simulated in the water balance model."</i></p> <p><i>"There are predicted to be overflows from the Entrance Dam at the Buttonderry Site during the construction period ranging from 0 ML/year (during an extremely dry year) to approximately 65 ML/year (during an extremely wet year). Since there is no coal handling at the Buttonderry Site, the primary potential pollutant will be suspended sediment. The runoff will be suitable for release after treatment of sediment within the Entrance Dam. The proposed erosion and sediment controls are described in Section 6.3 of the SWIA. There is no coal handling at the Tooheys Road Site during Year 1. Groundwater inflows to the underground commence in Year 2 of the Project,</i></p>	Section 3.5.1, 3.3.6, 3.11.7, 3.11.8	<p>The response provides no justification as to why construction impacts were not clearly separated from operations impacts and fails to articulate the extent of construction impacts for most parameters.</p> <p><u>Air Quality</u></p> <p>The air quality impact assessment is fundamentally flawed and air quality exceedences are anticipated during operations, thus the assumption that construction impacts will necessarily be compliant with emissions criteria cannot be justified with certainty.</p> <p>Ambient conditions for 24-hour PM₁₀ often exceed criteria in the region (>16% if measured days), thus air quality impact criteria during both construction and operations will exceed air quality criteria under various meteorological conditions.</p> <p>Emission factors for the construction phase were taken from USEPA (1995) and NERDDC (1998) instead of the more up-to-date and Australian emission factors, available from the National Pollutant Inventory (NPI) Emission Estimation Technique Manual for Mining (2012).</p> <p><u>Water Quality</u></p> <p>Construction phase impacts are not addressed. The justification in the <i>Response to Submission</i> points to erosion and sediment control planning that relies on the completion of various components of Project construction (e.g. sediment dams). No controls are recommended for minimising erosion and sediment control at the outset of construction and potential impacts from hydrocarbons and other construction phase water quality are not considered, nor are management measures provided.</p>

Findings of EIS Review	Finding number	Earth Systems Finding	Finding Addressed	WACJV Response	WACJV Reference (Response to Submissions, 2013)	Assessment of Response
				corresponding with the construction of the required drift. The volumes of groundwater inflows are shown in Section 5.7 of the SWIA. The WTP will be operating from the end of Year 1 of the Project to treat any groundwater inflows and any rainfall runoff, with excess treated water to be discharged to Wallarah Creek in accordance with the water management strategy and the conditions of an EPL."		
	1	<i>EIS does not adequately consider closure planning and no assessment of potential closure impacts has been undertaken.</i>	No , a commitment to prepare a closure plan has been made; however, the lack of closure planning within the body of the report leads to uncertainty in the assessment of impacts.	<i>"Further detail on rehabilitation objectives to ensure a safe, stable and non-polluting final landform will be included in a Rehabilitation and Closure Plan for the Project to be developed in consultation with relevant regulators. It shall include information on relevant domains and discuss final landuse, rehabilitation objectives, domain objectives, completion criteria and rehabilitation monitoring. The timing of the preparation of the plan will be consistent with any conditions of Development Consent."</i>	Section 3.22	Although it is recognized that WACJV intends to develop a Rehabilitation and Closure Plan , no indication in the response is provided with respect to the approach to closure planning, impact assessment and post-closure risk mitigation.
	2	<i>The risk assessment and cost benefit analysis need to be re-rated based on the remaining knowledge gaps and uncertainties and the findings of further recommended studies.</i>	No , the risk assessment and cost benefit analysis has not been re-rated.	<i>"The BCA of the Project was based on the best available information about the Project, including information from a range of specialist assessments predicting the likely environmental, social and cultural impacts. The Economic Impact Assessment considered reasonable worst-case assumptions for the purposes of the impact assessment including the BCA...This analysis indicated that the results of the BCA were not sensitive to reasonable changes in the assumptions for any of these variables. In particular, significant increases in the values used for impacts of greenhouse gas emissions, agricultural impacts and forestry impacts had little impact on the overall economic desirability of the Project."</i> <i>"Chapter 6 of the EIS provides a summary of Appendix F of the EIS which provides a detailed Revised Risk Assessment of the potential known Project risks in accordance with the WACJV Risk Assessment Matrix. The risk assessment was</i>	Section 3.17.2, 3.27.18	Since submission of the 2013 EIS additional investigations have been undertaken and additional mitigation measures derived (refer to Table 11, Response to Submissions, 2013) which are not captured in the revised risk assessment.

Findings of EIS Review	Finding number	Earth Systems Finding	Finding Addressed	WACJV Response	WACJV Reference (Response to Submissions, 2013)	Assessment of Response
				<i>undertaken in accordance with the DGRs which required they identified the key issues for further assessment."</i>		
	3	<i>Lack of Environmental Management System or a commitment to develop one.</i>	Partially addressed. A description of Environmental Management System was not provided, however an indication to develop one was included.	<i>"WACJV will develop and implement an Environmental Management System in consultation with the relevant regulators (and the Aboriginal community where relevant) consistent with Section 7 of this EIS to the approval of DP&I which shall comprise (at least)" 17 strategies / plans.</i>	Section 3.25, Table 11 of Section 4.	The response specifies the intention of WACJV to develop an Environmental Management System while Table 11 outlines the plans and strategies that would form the basis of the EMS.
	4	<i>Lack of commitment to regular independent environmental audits throughout the project life cycle. However, there is a commitment to develop an Annual Review Report to systematically assess performance and identify areas for improvement.</i>	Partially addressed. A commitment to undergo Independent Environmental Audits is stated, however no indication of regularity or frequency provided.	<i>"WACJV will commission Independent Environmental Audits in accordance with any conditions of Development Consent."</i>	Section 3.27.14, Table 11 of Section 4	Response has addressed recommendation to have independent environmental audits conducted, however no further detail is provided regarding the proposed nature of the audit, frequency, etc.
Stakeholder Engagement	5	<i>2013 EIS does not indicate that WACJV has adequately engaged with the community during the environmental assessment process and consequently limited consultation has been conducted. The EIS does not provide</i>	No. No additional information is provided to determine if stakeholders were adequately engaged or if their concerns were accurately captured and addressed in the	<i>"As described in Section 5.3 of the EIS, various methods were employed to engage with the local community including local community meetings, focus groups and telephone surveys, five newsletters, direct correspondence, creation of a community reference group and Project information days."</i>	Section 3.24.1	Although different methods of engagement were employed as stated in the response, the only examples and evidence provided to substantiate the statement was a newsletter and one example of a residential letter. No meetings minutes or other evidence from meeting are presented. Therefore, it is not possible to determine if stakeholders adequately engaged and if raised concerns were accurately captured and

Findings of EIS Review	Finding number	Earth Systems Finding	Finding Addressed	WACJV Response	WACJV Reference (Response to Submissions, 2013)	Assessment of Response
		<i>sufficient information on the concerns raised by the community during consultation.</i>	EIS.			addressed.
Water	6	<i>EIS does not assess impacts on surface water quality or provide potential management and mitigation measures including a contingency planning for uncontrolled discharge.</i>	No. Impacts on surface water quality have not been assessed.	<p><i>"There are predicted to be overflows from the Entrance Dam at the Buttonderry Site during the construction period ranging from 0 ML/year (during an extremely dry year) to approximately 65 ML/year (during an extremely wet year). Since there is no coal handling at the Buttonderry Site, the primary potential pollutant will be suspended sediment. The runoff will be suitable for release after treatment of sediment within the Entrance Dam. The proposed erosion and sediment controls are described in Section 6.3 of the SWIA. "</i></p> <p><i>"As described in Section 5.3.1 of the SWIA, the mine water management system has been designed to ensure that there are no uncontrolled discharges (overflows) from the mine water storages (Portal Dam, Stockpile Dam and Mine Operations Dam) to the receiving environment under all historical climatic conditions."</i></p> <p><i>"It is possible that an event greater than the design capacity of the mine water storage dams could occur and potentially cause uncontrolled discharges to Wallarah Creek. During such an extreme weather event, it is likely that Wallarah Creek would be in flood and any uncontrolled discharges from the mine water storages would be significantly diluted by flood flows in the receiving water."</i></p>	Section 3.3.1, 3.3.6	<p>While suspended sediment will likely be the primary water quality pollutant during construction, it is one of a number of potential pollutants that require management (e.g. hydrocarbons, acid and metalliferous drainage, etc.).</p> <p>Although the mine water management system has been designed to ensure no uncontrolled discharges, the RTS admits the possibility of an uncontrolled discharge to occur in an extreme event, however no mitigation measures or contingency are provided.</p> <p>Furthermore, inferring that impacts to Wallarah Creek will be minimised because flood conditions and dilution are assumed to reduce impacts, there is no further investigation to support this assumption. Dilution is also not an adequate means of reducing impact, which depends on the nature of potential contaminants (chemical and physical), etc.</p> <p>The assumption that passive treatment for potential contaminants in the Entrance Dam will ensure discharge is of suitable quality does not consider the range of potential water quality issues that may occur.</p>
Water	7	<i>No assessment of potential acid and metalliferous drainage (AMD)</i>	No. No assessment of AMD has been conducted.	<i>"The Newcastle Coal Measures are not associated with marine incursions. As a result the coal seams and the surrounding sediments do not contain significant concentrations of sulphide minerals. Sulphur content of Newcastle Coal Measure coals is significantly lower than sulphur levels recorded in Greta coals. Analysed</i>	Section 3.23.3	<p>The 2013 EIS Appendix C Geology Report or RTS do not indicate that a geochemical analysis was undertaken to test for AMD, rather a desktop analysis was relied upon.</p> <p>However, the Soils and Land Capability Impact</p>

Findings of EIS Review	Finding number	Earth Systems Finding	Finding Addressed	WACJV Response	WACJV Reference (Response to Submissions, 2013)	Assessment of Response
				<i>values are typically less than 0.3%. There are no recorded events of AMD issues associated with contamination of water which has emanated from mines operating in the Newcastle Coal Measures."</i>		Assessment (EIS 2013) found the "potential of acid sulphate soils (ASS) and potential acid sulphate soils (PASS) to occur in the south of the Project Boundary along the lower reaches of the Jilliby Creek and Little Jilliby Creek, and along the unnamed waterway adjacent to western boundary of the Buttonderry Site" (page 8). Furthermore, the report states that "any activities in sections of the Project Boundary within or close to these areas (e.g. construction and final rehabilitation of the Buttonderry Sites...800 meters from an area with a potential for ASS and PASS to be present) should take into account the potential presence of ASS and PASS and ensure such soils are appropriately assessed and managed." (Page 8, EIS 2013). ASS are soils that typically contain significant concentrations of pyrite. When exposed to oxygen coupled with sufficient moisture, they oxidise and result in sulphuric acid generation.
Water	8	<i>Lack of immediate downstream sampling point of proposed Wallarah Creek tributary discharge site.</i>	No. A WTP monitoring point will be located at the release point; however this will not provide baseline data for basis of comparison.	<i>"Section 6.4 of the SWIA details the existing and proposed surface water monitoring program for the Project. Table 6.3 in the SWIA shows that the [Water Treatment Point] WTP monitoring point will be located at the release point from the WTP. The existing Wallarah Creek surface water monitoring locations W6 and W12 are located on Wallarah Creek downstream and upstream of the discharge location respectively and will continue to be utilised during operations."</i>	Section 3.3.3	Although the WTP monitoring point will be located at the release point from the WTP as part of the monitoring program, baseline conditions at the discharge point have not been captured and therefore will not provide a baseline comparison of impacts including cumulative impacts. Furthermore, no indication is provided of when the WTP release sampling point will be installed. If it is installed after Project activities commence (e.g. construction, operations) begin, it will not be possible to distinguish between existing baseline conditions (prior to project activities and potential Project impacts/influences) and Project impacts.
Water	9	<i>Lack of contingency for potential overflow of untreated mine water from the Mine Operations Dam</i>	No. No contingency plan is provided.	<i>"The mine water management system has been designed to ensure that there are no uncontrolled discharges (overflows) from the mine water storages (Portal Dam, Stockpile Dam and Mine Operations Dam) to the receiving environment under all historical</i>	Section 3.3.1	Response does not directly address concerns regarding potential overflow of the MOD specifically, such as reference to a design criteria of MOD and mitigation measures to prevent overflow. Although the mine water management system has

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		(MOD).		<p>climatic conditions...The discharge of untreated mine water is not part of the water management system design for the Project. As mentioned above, the mine water management system has been designed to avoid uncontrolled discharges to the receiving environment from mine water storages for all historical climatic conditions."</p> <p>"Detailed design of mine water dams will be undertaken in the detailed design stage of the Project, following the granting of the relevant approvals."</p>		<p>been designed to ensure no uncontrolled discharges, the RTS admits the possibility of an uncontrolled discharge to occur in an extreme event, however no mitigation measures are provided and no contingency plan proposed.</p> <p>Furthermore, the detailed design of mine water dams should be undertaken in conjunction with the EIS and finalized before obtaining environmental approvals in order to adequately categorize residual impacts following mitigation measures considered in the design criteria.</p>
Water	10	Insufficient groundwater parameters measured during baseline (i.e. only pH, conductivity and TDS were measured).	No. There is no justification or indication for the limited parameters measured.	<p>"It is acknowledged that baseline groundwater monitoring was fragmented, with water level, salinity and pH being monitored from 1999 to 2001 at many of the piezometers installed in the alluvial lands. Subsequently, access to these piezometers was not possible. However, it is important to note that the available data supports a quasi-steady state system for the important alluvial lands aquifer where the water table fluctuates over a predictable range in response to rainfall. Ionic speciation was also conducted on water samples collected on at least five occasions during 1998-1999...groundwater quality is not predicted to change as a result of the Project."</p>	Section 3.2.5	<p>The response does not state a rationale for only conducting a limited range of parameters and does not indicate an intention to implement a more comprehensive monitoring program.</p> <p>Furthermore, it indicates that data collected from relevant piezometers was only over a course of 2 years collected more than 10 years ago. As a result referenced parameters may not adequately represent current groundwater properties in the Project Area.</p>
Water	11	Limited groundwater mitigation measures presented requiring better articulation of groundwater quality mitigation.	No. No groundwater mitigation measures developed.	<p>"...Should future (rigorous) monitoring of the aquifer system identify deterioration in water quality that can be attributed to the Project, mitigation measures may include localised rerouting of rainfall runoff to enhance aquifer recharge or changes to the mine plan. Measures to mitigate impacts on groundwater quality will be detailed in the Water Management Plan."</p>	Section 3.2.5	<p>The response does not adequately articulate mitigation measures for potential groundwater impacts nor does it adequately address the need for a more rigorous monitoring protocol to identify potential impacts.</p>
Water	12	EPBC Act 'Water Trigger' Amendment (2013) has not been	Yes. The RTS indicates a pending decision regarding application of the	<p>"The EPBC Act Water Trigger Amendment 2013 was passed by parliament on 19 June 2013. The Minister has 60 days from the commencement of the Bill to decide whether the Project requires approval in</p>	Section 3.28.6	<p>60 days from June 19 is August 17. It would be expected that a decision would have been made prior to submission of the RTS; however this is not</p>

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		<i>considered.</i>	water trigger to the Project.	<i>relation to the new water trigger. In its submission, SEWPaC indicated that a decision on whether the water trigger applies to the Project was still pending."</i>		discussed in the RTS.
Air Quality	13	<p><i>The methodology for air quality impact assessment was not undertaken in a manner consistent with applicable legislation (DECC, 2005). Detailed modelling includes only Project emissions rather than Project emissions with baseline conditions. This provides a misleading assessment of likely dust levels that will be experienced by surrounding communities.</i></p> <p><i>Construction impacts and impacts associated with certain climatic conditions are not clearly outlined.</i></p>	No. The assertion that the modelling was conducted according to the <i>Approved Methods</i> is not accurate; therefore the fundamental issue was not addressed.	<i>"The AQGGA was completed in accordance with the Approved Methods for Modelling and Assessment of Air Pollutants in NSW (DECC, 2005) (the Approved Methods). The submission from EPA confirmed that the air quality assessment was conducted in accordance with the Approved Methods. The Approved Methods is not legislation but rather a guideline for the completion of air quality assessments in NSW. "</i>	Section 3.5.2	<p>The Approved Methods for Modelling and Assessment of Air Pollutants in NSW (DECC, 2005) lists the statutory methods for modelling and assessing emissions of air pollutants from stationary sources in the state. It is referred to in Part 4: Emission of Air Impurities from Activities and Plant in the Protection of the Environment Operations (Clean Air) Regulation 2002 (the 'Regulation'). Industry has an obligation to ensure compliance with the requirements specified in the Regulation."</p> <p>The modelling for predicted impacts (Sections 8.1 – 8.7 of the EIS) and associated contour plots consider emissions from Project-related operations alone. Predicted impacts from the Project must be summed with respective background concentrations to determine total impact for each parameter and averaging period. Instead, the impact assessment compares predicted emissions from Project operations alone against the impact criteria, giving the impression that concentrations of applicable parameters will be compliant with impact criteria. As ambient conditions exceed guidelines on occasion, exceedences will occur, which will be exacerbated with Project emissions.</p> <p>Maximum daily PM₁₀ used a Monte Carlo statistical simulation to randomly select values, rather than use maximum available PM₁₀. While there may be merit in using a statistical approach, <i>The Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales</i> (DECC, 2005) specifies the use of maximum measured volumes in cases where measurements were not taken often enough to include them in the model, and advises consulting Air Technical Advisory Services Unit of the DECC</p>

Findings of EIS Review	Finding number	Earth Systems Finding	Finding Addressed	WACJV Response	WACJV Reference (Response to Submissions, 2013)	Assessment of Response
						otherwise. A cumulative impact assessment should capture total impacts (background concentration summed with predicted Project-related inputs) combined with anticipated future development. The cumulative impact assessment does not adequately consider the combined effects of Project emissions, future development (e.g. Warnervale Town Centre construction) and ambient conditions
Air Quality	14	<i>Predicted Project-related emission concentrations from dispersion modelling assume Project implementation of best practices. These estimates are only relevant provided these controls are implemented. It is unclear whether the EIS commits the Project to these management and mitigation measures.</i>	No. No clear explanation provided.	<p>“WACJV has committed to the implementation of all best practice dust management measures outlined in the AQGGA. Full details of dust management measures will be provided in an Air Quality Management Plan (AQMP), which the proponent will prepare in accordance with the conditions of the development consent for the Project. The AQMP will describe all best practice dust control and monitoring measures to be implemented, including the measures required by the EPA. All measures will be quantifiable, auditable, measurable and enforceable. The AQMP will include Key Performance Indicators (KPIs) for determining compliance with the plan and conditions of development consent. Although considered an unlikely occurrence due to the anticipated high moisture content of the Project’s resource, should spontaneous combustion be determined to be a risk in the future, it shall be considered in the AQMP with relevant management and mitigation measures incorporated to the approval of relevant regulators.”</p> <p>“As outlined in Section 11.3 of the AQGGA, the existing monitoring network will be updated or augmented with a number of continuous PM₁₀ / PM_{2.5} monitoring instruments. These will provide near real-time data on dust levels in the local community. Full details and locations of monitors will be outlined in the AQMP.”</p> <p>“Continuous monitoring stations are not intended to be</p>	Section 3.5.5, 3.5.6	<p>The proponent has committed to developing an Air Quality Management Plan (AQMP). The AQMP has not been included in the EIS.</p> <p>The future AQMP will provide an (undisclosed) number of PM₁₀/PM_{2.5} particulate monitors. There is no commitment for ambient air gases or odour monitoring from the potentially odorous ventilation stack.</p> <p>It is accepted that the rail corridor is used by all train movements, though a monitor between the corridor receptors and site may prove beneficial.</p>

Findings of EIS Review	Finding number	Earth Systems Finding	Finding Addressed	WACJV Response	WACJV Reference (Response to Submissions, 2013)	Assessment of Response
				<i>established along the rail corridor as suggested in some submissions. Such monitoring is not considered necessary since recent studies have determined that fugitive emissions are not a significant concern. In any event, dust levels within the rail corridor are the result of all train movements. Should it be required it would therefore be more appropriate for monitoring to be undertaken by the appropriate rail authority or government agencies, rather than an individual rail transport customer"</i>		
Greenhouse Gas	15	<i>Greenhouse gas emission mitigation strategies are very brief and do not demonstrate a sufficient level of commitment by the Proponent to reduce emissions and does not adequately address the terms listed in the Director-General's Environmental Assessment Requirements and the Supplementary Director-General's Requirements.</i>	Partial. Commitments not thoroughly described.	<p>"Greenhouse gas mitigation measures are outlined in Section 10.6 of the AQGGA. Additional detail on GHG mitigation measures will be provided in the AQMP, which would be required as a condition of development consent. As stated in Section 7.6.4 of the EIS, WACJV will also develop an Energy and Greenhouse Strategy within 2 years of the commencement of longwall mining.</p> <p><i>Although the submission notes that the list of mitigation measures is brief, the proposed mitigation measures are significant in terms of GHG savings. For example, the proposed methane capture and utilisation has the potential to achieve a GHG reduction of more than 50% through flaring; with additional reductions achieved through the beneficial re-use of methane for on-site power generation (if feasible)."</i></p>	Section 3.6.4	<p>A commitment has been shown to provide Greenhouse Gas mitigation measures in a future Air Quality Management Plan (AQMP). An AQMP has not been included as part of the EIS.</p> <p>WACJV should clarify the wording/timing of the Energy and Greenhouse Strategy, as to whether "within" refers to 2 years prior to or after commencement of longwall mining. And the timing of anticipated greenhouse mitigation measures contained within the Strategy.</p>
Noise and Vibration	16	<i>It is unclear whether the control measures identified in the Noise and Vibration specialist study are Project commitments or recommended best practices. The results of noise modelling are</i>	Partially addressed.	"The Noise and Vibration Impact Assessment (Appendix N of the EIS) for the proposed development predicts that there will be no change in the L _{Amax} noise level and only a marginal change in the L _{Aeq} , 24Hr noise level in the vicinity of the rail line. Using the guidance provided in the 'WHO Methodological Guidance for estimating the burden of disease from environmental noise' (WHO, 2012) this marginal change will result in less than a 1% increase in sleep	Section 3.8.1	The Noise study noted that coal maybe transported by road when regular train freight is not available. This represents a potential "worst-case" emission scenario for both noise impacts and air quality impacts to the community

Findings of EIS Review	Finding number	Earth Systems Finding	Finding Addressed	WACJV Response	WACJV Reference (Response to Submissions, 2013)	Assessment of Response
		<i>only valid if the recommended attenuation measures are committed to and implemented.</i>		<p>disturbance of the population in the immediate vicinity of the rail line."</p> <p>"Section 7.8.3 of the EIS identifies that noise modelling for a peak annual production output of 5 Mtpa shows that the additional rail traffic noise will marginally increase (1-2 dBA) the existing LA rail traffic noise levels on the Main Northern Rail Line. With respect to the LAmaseq, 24 hour noise levels, the Project is not expected to increase the existing levels.</p> <p>The OEH LA60 dBA criteria are shown to be satisfied at approximately 70 m from the rail line. As Blue Haven is greater than 500 m from the rail loop / rail line junction, the OEH criteria is met."</p>		
Noise and Vibration	17	<i>While noise modelling indicates that construction and operational noise will not be a major issue for the Project, modelling predicted that there may be some exceedences of Project Specific Noise Criteria (PSNC). Additional mitigation measures are not identified to prevent these exceedences.</i>	No. Predicted exceedences not addressed.	<i>"As described in Section 7.8.3 of the EIS, the Project Specific Noise Criteria (PSNC) are not predicted to be exceeded at any privately owned residences during construction and operations. Mitigation measures are outlined in Section 7.8.4 of the EIS."</i>	Section 3.8.1	Mitigation measures specific to the <i>Project Specific Noise Criteria (PSNC)</i> are not addressed in the RST and therefore mitigation measures specific to these exceedences are not provided.
Ecology	18	<i>Although an overall adequate ecological baseline was provided, it lacks detail in regard to threatened species</i>	Yes, Additional flora and aquatic surveys were conducted in 2013. Although sufficiently detailed	<i>"As the majority of the quadrat data provided in the EIS was collected outside of the five year timeframe prescribed by regulatory bodies, additional flora surveys were conducted in July 2013....The July 2013</i>	Section 3.9.2, 3.9.3, 3.10	Surveys for threatened species were not conducted. The Project is assuming that threatened species occur within the Project Area as part of a conservative approach.

Findings of EIS Review	Finding number	Earth Systems Finding	Finding Addressed	WACJV Response	WACJV Reference (Response to Submissions, 2013)	Assessment of Response
		<i>population distribution and abundance estimates. Ecological surveys should have been conducted over a broader survey area to reflect impacts associated with all project components.</i>	surveys for threatened species were not conducted for flora and fauna, the Project is assuming their respective occurrence.	<p><i>surveys provided a total of 30 additional quadrats."</i></p> <p><i>"Targeted searches for the aforementioned threatened flora species within the SIL were not considered necessary due to the limited extent of disturbance. Nevertheless, the assessment has adopted a conservative approach by assuming that these threatened flora species have the potential to occur within areas of suitable habitat within the SIL. The areas of potential habitat for threatened fauna that will be cleared, subsided and offsets have been presented in Table 6.2 of the EIA."</i></p> <p><i>"It was conservatively assumed that threatened frog species occur within the Project Boundary due to the availability of suitable habitat and historical recordings...Further surveys for threatened frog species will be conducted once survey conditions are appropriate to determine areas where threatened frogs are more likely to occur and to fulfil survey effort requirements specified by regulatory agencies."</i></p> <p><i>"Any threatened species that have been historically recorded within the Project Boundary and surrounding areas were considered as likely to occur. Impacts on potentially occurring species have been assessed as if they were recorded. Potential impacts on recorded and potentially occurring threatened species have been assessed in Section 6.8 of the EIA."</i></p>		Additional surveys for threatened species would improve the existing knowledge base of their population and distribution and may lead to discovery of additional species.
Ecology	19	<i>Offsets required under the EPBC Act for threatened species identified within the Project Boundary were not calculated using the new EPBC Act Policy Guidelines of 2012.</i>	Partially addressed. No calculations of offsets for threatened species were provided in the RST to support the response.	<i>Since the exhibition of the EIS, further fieldwork has been conducted to assess the proposed Biodiversity Offset Package (BOP) under the new EPBC Act Offsets Policy's Offsets Assessment Guide. In particular, assessments were conducted for the species listed as controlled action species: namely Charmhaven Apple (Angophora inopina) and Black-eyed Susan (Tetradlea juncea), listed as Vulnerable under the EPBC Act; and Spotted-tail Quoll (Dasyurus maculatus) and Giant Barred Frog (Mixophyes</i>	Table 11 of Section 4, Section 3.9.5, 3.9.9	The response does not include the calculations conducted to determine offsets or include details of the Biodiversity Offset Package. As a result it is not possible to determine the accuracy or suitability of methods used in determining offsets.

Findings of EIS Review	Finding number	Earth Systems Finding	Finding Addressed	WACJV Response	WACJV Reference (Response to Submissions, 2013)	Assessment of Response
				<p><i>iteratus</i>), listed as <i>Endangered</i> under the EPBC Act.</p> <p>The results of the assessment under the Offsets Assessment Guide were provided to SEWPaC in June 2013. SEWPaC has reviewed this assessment and is satisfied with the adequacy of the proposed BOP for offsetting impacts to Matters of National Environmental Significance (MNES)."</p> <p>"Indirect offsetting measures will be required for the Giant Barred Frog. WACJV will provide indirect offsets in the form of funds for research or education programs to meet the 100% offset requirements under the EPBC Act Offsets Policy."</p> <p>"The proposed BMP will include measures for rehabilitating degraded areas and revegetating grassland areas back to native vegetation. The offset areas will be conserved in perpetuity and the quality of the native vegetation will be improved through active management. As a result, there will no net loss of biodiversity, which is consistent with the required. Maintain and Improve 'principles of the Native Vegetation Act 2003."</p>		
Traffic and Transport	20	A Rail Study has been conducted as part of the 2013 EIS to address the gaps in information regarding transport impacts identified in the 2010 EIS. This is a more comprehensive assessment of the transport route of the coal.	Yes.	"The DGRs relating to impacts of the rail network have been reproduced in the submission from TfNSW. These issues have been addressed in Section 3.12.2 and Section 3.12.3."	Section 3.12	Additional measures are provided for managing risks related to rail transport. Furthermore, WACJV has committed to develop a Traffic and Transport Management Plan (TTMP) to manage impacts of the Project on the traffic network.
Visual	21	The visual assessment conducted for the	Yes.	"Appendix E of the EIS provides plan and elevation drawings for the relevant infrastructure items. The	Section 3.15	No further issues identified in the review of the RTS.

Findings of EIS Review	Finding number	Earth Systems Finding	Finding Addressed	WACJV Response	WACJV Reference (Response to Submissions, 2013)	Assessment of Response
Amenity		<i>Project provides a good site analysis and identification of key viewpoints, assessment of potential visual impacts and recommendations for mitigation measures to minimise impacts of the Project.</i>		<i>Visual Impact Assessment considered these drawings in its assessment."</i>		
Archaeology and Cultural Heritage	22	<i>In general, a comprehensive survey and report of the Aboriginal cultural and historic heritage of the areas surveyed within the Project Boundary has been prepared apart from some areas with accessibility restrictions.</i>	Yes.	<i>"WACJV will continue to consult with the Aboriginal community during the construction and operation of the Project."</i>	Section 3.13.1	Continual and transparent consultation with Aboriginal communities is paramount in addressing any concerns or potential impacts are covered and should form part of the Stakeholder Engagement Strategy discussed above.
Community Health and Safety	23	<i>Uncertainties and knowledge gaps identified in Earth Systems review of the 2013 EIS including air and water quality impacts indicate that the assessment of community health and safety impacts and risks and their necessary management and mitigation measures are unlikely to be sufficiently</i>	No. Identified data gaps and uncertainties which have the potential to impact community health and safety have not been adequately addressed in the RTS as referenced throughout this report.	<i>"Walarah Creek and Buttonderry Creek are located outside of the Gosford-Wyong Water Supply Scheme catchment and are part of the Tuggerah Lakes Water Source. Therefore there are no potential impacts to the water quality of the Gosford-Wyong Water Supply Scheme due to possible overflows from the mine water management system or the proposed discharges of treated water to Wallarah Creek." "Section 7.1 of the AQGGA provided detailed dust emission estimates for a construction phase scenario. The estimated dust emissions during construction were found to be significantly lower (approximately 50% lower) than the estimated dust emissions during the operational phase...Due to the lower emissions during the construction phase, it can be concluded</i>	Section 3.3.6, 3.5.1, 3.5.5	Given the information gaps and recommendations provided in this Report, responses related to community health and safety with respect to water and air quality are not adequately addressed. Comprehensive baselines are required to establish existing water quality, air, and traffic conditions in order to assess potential impacts, develop comprehensive monitoring and management plans.

Findings of EIS Review	Finding number	Earth Systems Finding	Finding Addressed	WACJV Response	WACJV Reference (Response to Submissions, 2013)	Assessment of Response
		comprehensive.		<p>that the construction phase of the Project would also comply with the air quality criteria under all modelled climatic conditions."</p> <p>"WACJV has committed to the implementation of all best practice dust management measures outlined in the AQGGA. Full details of dust management measures will be provided in an Air Quality Management Plan (AQMP), which the proponent will prepare in accordance with the conditions of the development consent for the Project. The AQMP will describe all best practice dust control and monitoring measures to be implemented, including the measures required by the EPA."</p>		
Impacts beyond DGRs	24	Contingency plans for potential disasters, whether naturally occurring or human induced, have not been included in the EIS. This is an oversight.	No. A Disaster Risk Management Plan was not developed.	"Insufficient detail is provided to ascertain the exact nature of this submission; however it has been assumed here that it refers largely to environmental incidents. Should WACJV be granted Development Consent, that instrument (along with various other post approvals' documentation) will include further risk assessment and subsequent procedural notification requirements for any environmental incidents occurring on site."	Section 3.27.12	A Disaster Risk Management Plan ensures natural and human-induced emergencies associated with the Project are addressed. This Plan should be inclusive of specific Contingency Plans to manage particular events, including the management / treatment of the Mine Operations Dam (MOD) and spontaneous combustion. Disaster risk management should have been included in the revised risk assessment of the 2013 EIS. The lack of this contingency plan is consistent with the general lack of contingency plans in the RTS.
Impacts beyond DGRs	25	The Buttonderry Waste Management Facility is mentioned in the EIS in respect to visual amenity, however, the potential environmental risks (gas and leachate leakage) associated with the proximity of this facility to the project are not discussed.	No. Inadequate justification provided for disregarding potential environmental risks associated with the proximity of the facility to the Project.	"The longwall panels in the Extraction Area are located over 1 km from the Buttonderry Waste Management Facility. Each of the Waste Management Facility and the Buttonderry Surface Facilities area are located outside the SIL and as such interactions between the waste site and coal extraction are considered highly unlikely."	Section 3.27.8	Although the longwall panels are located over 1 km from the waste management facility there may be potential impacts to the facility due to subsidence, loss of geotechnical integrity, etc. Given the socio-economic and environmental significance of the facility to the area, impacts should be assessed and included in the risk assessment.

Findings of EIS Review	Finding number	Earth Systems Finding	Finding Addressed	WACJV Response	WACJV Reference (Response to Submissions, 2013)	Assessment of Response
Management and Monitoring	26	<i>The EIS is not accompanied by management and monitoring plans. It is understood that these have not yet been prepared. Good industry international practice and / or best practice require an Environmental Management and Monitoring Plan (ESMMP) to be prepared as part of the EIS process.</i>	No. No ESMMP has been developed and a specific timeframe or description of proposed plans part of the EMS not provided.	An Environmental Management Strategy (EMS) and an Environmental Monitoring Plan are included as part of the Environmental Management System to be developed and implemented in the future.	Table 11 of Section 4	<p>An ESMMP type plan was not adopted in the 2013 EIS. The proponent has indicated a plan will be developed in the future.</p> <p>Without a plan to review simultaneously with the EIS it is not possible to ascertain the efficacy of the management strategies to avoid and minimise impacts.</p>

Table 3-2. Review of WACJV's response to recommendations identified by Earth Systems in the 2013 EIS.

Recommendations of 2013 EIS Review	Earth Systems Recommendation	Recommendation Addressed	WACJV Response	WACJV Reference (Repose to Submissions, 2013)	Assessment of Response
Air quality	<i>Air quality impacts are assessed utilising relevant methodologies to ensure that detailed impact assessments of project phases are conducted effectively.</i>	No. The assertion that the impact assessment is conducted according to approved methods (DECC, 2005) is inaccurate.	"The AQGGA was completed in accordance with the Approved Methods for Modelling and Assessment of Air Pollutants in NSW (DECC, 2005) (the Approved Methods). The submission from EPA confirmed that the air quality assessment was conducted in accordance with the Approved Methods."	Section 3.5.1	<p>The impact assessment did not sum the combined effects of Project emissions and ambient conditions (total impact); therefore estimates of exceedences are not valid.</p> <p>The cumulative impacts was not calculated with maximum background concentrations as is required for Level 1 Assessment (DECC, 2005).</p> <p>The cumulative impact assessment does not consider future development in modelling.</p>
Greenhouse gas	<i>A more realistic assessment of greenhouse gas (GHG) impacts is provided by including Scope 2 and 3 emissions sources in the analysis of the GHG impacts and updating impacts of the Project on anthropogenic global warming</i>	Partially addressed.	"The AQGGA included estimates of Scope 1, 2 and 3 emissions and provided an overview of the potential impacts on the environment. It is impossible to isolate the Project's impacts on climate change at a local level, and the contribution of the Project to global changes in sea levels, acidification, etc. However, as an example, the average annual Scope 1 emissions generated by the Project would represent approximately 0.04% of Australia's annual average commitment under the Kyoto Protocol. The Scope 1 emissions would account for a very small portion of Global Greenhouse Gas (GHG) emissions, given that Australia in total contributes approximately 1.5% of global GHG emissions (ABS, 2010)."	Section 3.6.1	Although the potential Project impacts on climate change at the global level were not provided, an estimation of emissions generated by the Project on the national level was established.
Water quality	<i>Surface water quality is investigated further to ensure that all sources of contaminants are identified and that water sources are effectively monitored for changes associated with the Project.</i>	No. Surface water quality was not investigated further and AMD assessments were not conducted.	<i>There are no recorded events of AMD issues associated with contamination of water which has emanated from mines operating in the Newcastle Coal Measures.</i>	Section 3.23.3	The RTS does not provide further consideration to AMD potential as stated above despite occurrence of ASS and PASS soils in the vicinity of potential project disturbance areas.

	<i>A geochemical assessment for potential AMD / salinity is conducted, including development of contingency plans for the management and treatment of the Mine Operations Dam</i>				
EPBC 'Water Trigger' Amendment (2013)	<i>The EPBC Act Water Trigger Amendment (2013) is considered by the Proponent.</i>	Yes. The RTS indicates a pending decision regarding application of the water trigger to the Project.	<i>"The EPBC Act Water Trigger Amendment 2013 was passed by parliament on 19 June 2013. The Minister has 60 days from the commencement of the Bill to decide whether the Project requires approval in relation to the new water trigger. In its submission, SEWPaC indicated that a decision on whether the water trigger applies to the Project was still pending."</i>	Section 3.28.6	60 days from June 19 is August 17. It would be expected that a decision would have been made prior to submission of the RTS; however this is not discussed in the RTS.
Ecology	<i>Further detailed surveys for biodiversity are conducted, including extended flora survey to establish a robust flora baseline for the Subsidence Impact Limit.</i>	Yes. Additional flora surveys were conducted in 2013.	<i>As the majority of the quadrat data provided in the EIS was collected outside of the five year timeframe prescribed by regulatory bodies, additional flora surveys were conducted in July 2013. These surveys were conducted within the infrastructure boundary at the Tooheys Road and Buttonderry Sites, as well as in the proposed Hue Hue and Tooheys Road offset areas. The July 2013 surveys provided a total of 30 additional quadrats."</i>	Section 3.9.2, 3.9.9	Additional surveys were conducted to better characterize flora, however they were predominantly focused around the proposed locations of surficial disturbance. A survey covering distribution across the Project area would assist in identify potential management measures in response to potential impacts such as subsidence which are independent of predicted surficial disturbance due to surface project infrastructure.
Ecology	<i>The Biodiversity Offset Strategy for threatened species is revised to ensure it addresses the current Policy and that currently proposed offsets for fauna habitats are reviewed for suitability.</i>	Yes. The Biodiversity offset Package (BOP) was re-assessed.	<p><i>"Mitigation measures such as active fauna management and monitoring will be detailed in the BMP. Compensatory measures include the provision of a comprehensive Biodiversity Offset Package (BOP), which will conserve habitat for EECs and threatened species in perpetuity."</i></p> <p><i>"Since the exhibition of the EIS, further fieldwork has been conducted to assess the proposed Biodiversity Offset Package (BOP) under the new EPBC Act Offsets Policy's Offsets Assessment Guide."</i></p> <p><i>"Biodiversity Offset Package (BOP) under the new EPBC Act Offsets Policy's Offsets Assessment Guide. In particular, assessments were conducted for the species listed as controlled action species: namely Charmhaven Apple (Angophora inopina) and Black-eyed Susan (Tetralthea juncea), listed as Vulnerable</i></p>	Section 3.9.2, 3.9.9	Additional surveys were conducted to better characterize flora and fauna distribution as part of the assessment of the proposed Biodiversity Offset Package.

			<i>under the EPBC Act; and Spotted-tail Quoll (Dasyurus maculatus) and Giant Barred Frog (Mixophyes iteratus), listed as Endangered under the EPBC Act."</i>		
Mine Design and Layout	<i>Internal haulage routes are confirmed to allow assessment of potential impacts of heavy vehicle movement.</i>	No. No indication provided for the future assessment of heavy vehicle traffic on internal haulage roads.	<i>"As the Project is proposed to comprise an underground mine, very limited heavy vehicle movements within the mine will occur, primarily in relation to deliveries to site from external roads. Internal roads are shown on Figure 19 and Figure 21 of the EIS for each of the Tooheys Road and Buttonderry sites, respectively."</i>	Section 3.27.1	Although little heavy vehicle movement is expected on internal roads, it is still necessary to determine potential disturbances or impacts caused by heavy vehicles on local environment (e.g. dust, noise, vibration).
Stakeholder Engagement	<i>A robust Stakeholder Engagement Plan is developed that is inclusive of commitments to ongoing consultation and a structured grievance procedure</i>	No. The RTS does not indicate a Stakeholder Engagement Plan and grievance procedure are not specified.	<i>"WACJV has conducted and will continue to conduct a comprehensive stakeholder engagement program throughout the EIS process aimed at maximising the opportunity for community interaction. WACJV will continue to undertake consultation with stakeholders, particularly the consultation commitments made in this RTS."</i>	Section 3.24	Although the RTS states that WACJV will continue to undertake consultation with stakeholders, it does not specify a strategy, plan of how consultation will be undertaken and does not provide an indication of a grievance mechanism, a best practice approach typical of impact assessments.
Rehabilitation and Closure	<i>A comprehensive Rehabilitation and Closure Plan is prepared.</i>	No. A Rehabilitation and Closure Plan has not been prepared.	<i>"Further detail on rehabilitation objectives to ensure a safe, stable and non-polluting final landform will be included in a Rehabilitation and Closure Plan for the Project to be developed in consultation with relevant regulators. It shall include information on relevant domains and discuss final landuse, rehabilitation objectives, domain objectives, completion criteria and rehabilitation monitoring. The timing of the preparation of the plan will be consistent with any conditions of Development Consent."</i>	Section 3.22	Without developing a Rehabilitation and Closure Plan as part of the EIS, it is difficult to determine how closure and post closure impacts will be mitigated and the nature of residual impacts.
Risk Assessment and Cost Benefit Analysis	<i>The Risk Assessment and Cost Benefit Analysis are reviewed and revised based on detailed findings of further recommended work.</i>	No. The risk assessment and cost benefit analysis has not been re-rated.	<i>"This analysis indicated that the results of the BCA were not sensitive to reasonable changes in the assumptions for any of these variables. In particular, significant increases in the values used for impacts of greenhouse gas emissions, agricultural impacts and forestry impacts had little impact on the overall economic desirability of the Project."</i> <i>"Chapter 6 of the EIS provides a summary of Appendix F of the EIS which provides a detailed Revised Risk Assessment of the potential known Project risks in accordance with the WACJV Risk Assessment Matrix."</i>	Section 3.17.2, 3.27.18	Since submission of the 2013 EIS additional investigations have been undertaken and additional mitigation measures derived (refer to Table 11, Response to Submissions, 2013) which are not captured in the revised risk assessment.

			<i>The risk assessment was undertaken in accordance with the DGRs which required they identified the key issues for further assessment."</i>		
Disaster Risk Management	<i>A Disaster Risk Management Plan is developed to cover natural and human-induced emergencies associated with the Project. This Plan should be inclusive of specific Contingency Plans to manage particular events, including the management / treatment of the Mine Operations Dam (MOD) and spontaneous combustion.</i>	No. A Disaster Risk Management Plan was not developed.	<i>"Insufficient detail is provided to ascertain the exact nature of this submission; however it has been assumed here that it refers largely to environmental incidents. Should WACJV be granted Development Consent, that instrument (along with various other post approvals documentation) will include further risk assessment and subsequent procedural notification requirements for any environmental incidents occurring on site.</i>	Section 3.27.12	<p>The response states that insufficient detail was provided to determine the nature of the recommendation and appears to indicate that an assumption needed to be made that the submission refers to environmental incidents. However, in Section 3.7 of the Earth Systems Review of the 2013 EIS, it states:</p> <p><i>"Disaster risk management for naturally occurring or human- induced events have been overlooked in the EIS. These include <u>environmental emergencies such as uncontrolled discharge during high rainfall events, water storage dam wall failure, and bushfires.</u> Other disasters could include those associated with spontaneous combustion or blasting accidents.</i></p> <p><i>It is recommended that a comprehensive disaster risk management plan is developed, inclusive of detailed contingency plans to manage specific events, such as the development of contingency plan for management / treatment of the Mine Operations Dam (MOD) water that would be required should MOD water levels approach potential uncontrolled discharge stages to prevent untreated water from reaching Wallarah Creek."</i></p>
Community Health and Safety	<i>The Community Health and Safety assessment is reviewed and revised based on the findings of the further work recommended.</i>	No. Identified data gaps and uncertainties which have the potential to impact community health	<i>"Wallarrah Creek and Buttonderry Creek are located outside of the Gosford-Wyong Water Supply Scheme catchment and are part of the Tuggerah Lakes Water Source. Therefore there are no potential impacts to the water quality of the Gosford-Wyong Water Supply Scheme due to possible overflows from the mine water</i>	Section 3.3.6, 3.5.1, 3.5.5	Given the information gaps and recommendations provided in this Report, responses related to community health and safety with respect to water and air quality are not adequately addressed.

		and safety have not been adequately addressed in the RTS as referenced throughout this report.	<p><i>management system or the proposed discharges of treated water to Wallarah Creek."</i></p> <p><i>"Section 7.1 of the AQGGA provided detailed dust emission estimates for a construction phase scenario. The estimated dust emissions during construction were found to be significantly lower (approximately 50% lower) than the estimated dust emissions during the operational phase...Due to the lower emissions during the construction phase, it can be concluded that the construction phase of the Project would also comply with the air quality criteria under all modelled climatic conditions."</i></p> <p><i>"WACJV has committed to the implementation of all best practice dust management measures outlined in the AQGGA. Full details of dust management measures will be provided in an Air Quality Management Plan (AQMP), which the proponent will prepare in accordance with the conditions of the development consent for the Project. The AQMP will describe all best practice dust control and monitoring measures to be implemented, including the measures required by the EPA."</i></p>		Comprehensive baselines are required to establish existing water quality, air, and traffic conditions in order to assess potential impacts, develop comprehensive monitoring and management plans.
Community Health and Safety	<i>Potential impacts upon the Buttonderry Waste Management Facility associated with the development of the Project are fully considered.</i>	No. Inadequate justification provided for disregarding potential environmental risks associated with the proximity of the facility to the Project.	<i>"The longwall panels in the Extraction Area are located over 1 km from the Buttonderry Waste Management Facility. Each of the Waste Management Facility and the Buttonderry Surface Facilities area are located outside the SIL and as such interactions between the waste site and coal extraction are considered highly unlikely."</i>	Section 3.27.8	Although the longwall panels are located over 1 km from the waste management facility there may be potential impacts to the facility due to subsidence, loss of geotechnical integrity, etc. Given the socio-economic and environmental significance of the facility to the area, impacts should be assessed and included in the risk assessment. This is a potential oversight.
Management, Monitoring and Reporting	<i>Management and Monitoring Plans are prepared for each aspect of assessment prior to commencement of the Construction phase to clearly outline how impacts will be mitigated and managed.</i>	Partially addressed. <i>Management and Monitoring Plans are intended to be developed, no timeline is provided.</i>	<p>"WACJV will develop and implement an Environmental Management System in consultation with the relevant regulators (and the Aboriginal community where relevant) consistent with Section 7 of the EIS to the approval of DP&I which shall comprise:</p> <ul style="list-style-type: none"> • Environmental Management Strategy 	Section 3.25, Table 11 of Section 4.	It is best practice to include an Environmental Monitoring and Management Plan with the EIS to demonstrate commitment to managing risks and accountability to stakeholders. It should describe environmental parameter monitoring, implementation, processes and

Management, Monitoring and Reporting	<i>An independent expert is commissioned by the Proponent to conduct Environmental Audits of the project on a regular basis throughout the project life cycle.</i>	<i>An indication to conduct Environmental Audit is also provided.</i>	(EMS); <ul style="list-style-type: none"> • Environmental Monitoring Plan (incorporating subsidence, groundwater, surface water, air quality and noise) • Extraction Plan; • Water Management Plan; • Air Quality Management Plan; • Energy and Greenhouse Strategy; • Noise Management Plan; • Biodiversity Offset Strategy; • Land Clearance Protocol; • Traffic and Transport Management Plan; • Aboriginal Cultural Heritage Management Plan; • Historic Heritage Management Plan; • Soil and Land Capability Procedure (including an Acid Sulphate Soils Management Procedure); • Land Management Plan; • Bushfire Management Plan; • Waste Management System; and 		scheduling. Findings from regular monitoring of air and water quality etc. should be provided to interested stakeholders on a regular basis to ensure that transparency.
Management, Monitoring and Reporting	<i>An Environmental Management System based on ISO14001:2004 'Environmental management systems - Requirements with guidance for use' is developed and implemented for the Project.</i>	No. No reference to ISO14001:2004 given.	Landscape Management Plan"		

4 Conclusions

In general, the *Response to Submission* does not adequately address many of the findings highlighted by Earth Systems in its Review of the 2013 EIS. Furthermore, the recommended measures provided in the review were only partially considered in the RTS. As a result, significant data gaps and uncertainties still remain.

As the EIS was not developed according to the standard EIA approach (i.e. baseline determination, impact assessment, management and mitigation measures, residual impacts), it is not possible to determine residual impacts in many instances. Significant data gaps exist in the baseline assessments and impact analyses for various parameters as well as for the majority of impacts commonly associated with construction. This fundamental flaw in the approach to the EIA allows for significant uncertainty regarding the residual impacts.

Deficiencies in baseline assessment are perhaps most pronounced for groundwater quality and components of surface water quality and include the following significant aspects:

- Water quality monitoring for groundwater was limited to pH, electrical conductivity and TDS. This limitation provides very little basis for comparison.
- There has been no baseline assessment of the water quality in the Wallarah Creek tributary controlled discharge point for the Project. Impacts related to discharge will be difficult to interpret without an understanding of baseline conditions.
- Geochemical analysis for AMD were not conducted, though there is some evidence of material that could generate AMD south of the Project Boundary along the lower reaches of the Jilliby Creek and Little Jilliby Creek, and along the unnamed waterway adjacent to western boundary of the Buttonderry Site

The impact assessment remains flawed in a number of areas, including:

- Assessment of construction phase impacts (and their management, mitigation and monitoring) were largely omitted from the process.
- The air quality impact assessment was not conducted according to the Approved Methods for Modelling and Assessment of Air Pollutants in NSW (DECC, 2005). The approach employed in the EIS, and defended in the *Response to Submission*, underrepresents the likelihood for exceedences in various air quality criteria.
- Lack of closure and rehabilitation planning in project design.

5 References

References provided below include guidelines, regulations and best practices relevant to the Wallarah 2 Coal Project and this review.

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- NSW Department of Planning (2008) *Impacts of Potential Underground Coal Mining in the Wyong LGA- Strategic Review*.
- NSW Department of Planning (2008) *Impacts of Underground Coal Mining on Natural Features in the Southern Coalfields - Strategic Review*.;
- NSW Minerals Council (1997) *Guidelines for Best Practice Community Consultation in the New South Wales Mining and Extractive Industries*.
- NSW Treasury (2007) *NSW Treasury Guidelines for Economic Appraisal*, NSW Treasury.
- Pacific Power International (1997) *Cooranbong Colliery Life Extension Project Overburden Strata Groundwater Study*, June 1997.
- World Bank (2006) *Environmental Impact Assessment Regulations and Strategic Environmental Assessment Requirements: Practices and Lessons Learned in East and Southeast Asia*. Environment and Social Development Department.

Appendix Q
PAC2 Response

1 INTRODUCTION

This document responds to a query in relation to potential impacts to the Wyong River from the Planning Assessment Commission (PAC) to Kenny Barry at Wyong Areas Coal Joint Venture (WACJV) on 29 March 2017 in relation to the Wallarah 2 Coal Project Amended (the Amendment).

2 WYONG RIVER

2.1 SUBSIDENCE IMPACTS

No coal extraction will occur beneath the Wyong River. However, two short stretches of the Wyong River are located just within the southern extent of the Subsidence Impact Limit. The predicted subsidence effects for the Wyong River were presented in Section 5.3 of the *Subsidence Predictions and Impact Assessments* (Appendix H of the EIS).

The predicted maximum subsidence effects are:

- Maximum conventional subsidence of 175 mm;
- Maximum conventional tilt of 1 mm/m;
- Maximum upsidence of 150 mm; and
- Maximum closure of 100 mm.

The predicted maximum tilt of 1 mm/m represents a change in gradient of 1 in 1,000. Tilts of this magnitude are negligible and are unlikely to result in any noticeable changes in ponding, scouring or stream alignment (MSEC, 2013).

Subsidence effects can be associated with fracturing of the underlying bedrock, which can divert surface flows into groundwater systems. However, in the case of the Wyong River, the bedrock is overlain by thick alluvial deposits. In the highly unlikely event of fracturing, those fracture pore spaces would be filled by alluvial sediments, thereby negating any possible impacts on stream flow.

2.2 GROUNDWATER IMPACTS

The Project is predicted to result in subsidence of parts of the Wyong River alluvium. Subsidence can temporarily increase the groundwater storage capacity of subsided alluvial lands. As a consequence, a slightly greater portion of rainfall will recharge the groundwater system, which will result in reduced surface runoff for a short period until such times as equilibrium is reached.

Mackie Environmental Research (MER) conducted groundwater flow modelling to estimate the potential increases in groundwater storage capacity. The results of the modelling are presented in Section 5.2 of the Groundwater Impact Assessment (Appendix I of the EIS). MER predicted that increases in the groundwater storage of the Wyong River as described could occur during mining of six longwall panels (LW1SW to LW6SW).

MER conservatively estimated that subsidence of the Wyong River alluvium could result in an additional 30 ML of groundwater storage, with an equivalent decrease in surface runoff during the period of subsidence and equilibrium. The annual average flow of Wyong River upstream of the confluence with Jilliby Creek is 39,326 ML (refer NSW DPI-Water waterinfo.nsw.gov.au, Wyong R @Gracemere Flow Statistics Report).

Also any such temporary groundwater retention effect associated with subsidence is comprised of incremental one-off conditions over the relevant period of mining. That is, it is the (much lower) incremental volume rather than the cumulative total which defines the maximum potential effect on annual groundwater retention and corresponding temporary reduction annual surface flow. Nevertheless, even a cumulative total of 30 ML represents a negligible impact on the flow regime of the Wyong River.

2.3 WATER MONITORING

In accordance with the conditions of its Development Consent, WACJV will implement a surface water quality monitoring program, which will include two sites located along the Wyong River. Water quality monitoring at two points in the Wyong River was commenced by Wyong Coal in 1990's.

The monitoring program will include monthly measurements of pH, EC and TSS, as well as detailed water quality analyses on an annual basis.

The water monitoring program will tie in closely with the subsidence monitoring program which is a requirement articulated within the extraction plan for each longwall panel.

Appendix R
Minutes DLALC Meeting



MEETING DATE: 7 September 2016

MEETING LOCATION: 168 Pacific Highway Watanobbi

PRESENT:

Sean Gordon (Darkinjung)
Lynne Hamilton (Darkinjung)
Tony Simpson (Darkinjung)
Brooke Harb (Darkinjung)
Peter Allonby (Wyong Coal)

Peter Smith (Wyong Coal)
Kevin Reed (Wyong Coal)
Kenny Barry (Wyong Coal)
Min ParK (Wyong Coal)

MINUTE TAKER: Brooke Harb

Meeting Start: 9:10am

1. INTRODUCTION

Peter Allonby explained that they requested the meeting to clarify any concerns that Darkinjung may have about the amended development application for the Wallarah 2 Coal Project..

Sean Gordon stated that Darkinjung Local Aboriginal Land Council (Darkinjung) listen with the intent of better understanding the amended Development Application (DA). Sean Gordon advised Darkinjung have lodged their objection submission.

Sean Gordon expressed his frustration that since the last meeting between Darkinjung and Wyong Coal on 22nd February 2016 there has been no contact made by Wyong Coal, other than the mandatory consultation in regard to Aboriginal culture and heritage. Wyong Coal commented that Darkinjung had been given an open invitation to request information and had the same opportunity as other stakeholders during Public Exhibition. Sean Gordon advised that Darkinjung regards that as inadequate communication. The parties agreed to disagree as what constitutes open communication.

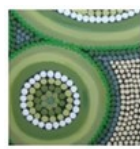
2. NIKKO ROAD – CLOSURE

Discussions were had regarding the road closure application. Peter Allonby said that the GIPA request was for all communication and not just the road closure application. He confirmed that Wyong Coal had challenged the release of documents because it wanted some redactions due to commercial-in-confidence and privacy concerns.

Lynne Hamilton mentioned other objections Darkinjung has included in their submission regarding Nikko Road such as Nikko Road's significance as a regional link road.

3. NOISE AND DUST

Peter Smith stated that the noise and air concerns in the residential area of Blue Haven and other nearby residents had been adequately addressed within the amended DA. Peter Smith explained the report that had been commissioned only addressed the existing residences and existing zoning in the immediate area as required within the



guidelines. Lynne Hamilton mentioned the proposal did not address the rezoning of land along Wyee Road, Gosford Road and Bushells Ridge Road to residential.

Lynne Hamilton mentioned that in Wyong Coal's report, the noise measured on the property on Bushells Ridge Road showed as 4 decibels above the allowed limit for industrial land yet the land in this area will be rezoned to residential under Darkinjung's Gateway Determination. Lynne Hamilton confirmed that the proposed residential land is less than 260 meters from the proposed conveyor belt.

Peter Smith reiterated that Wyong Coal is required to address existing zoning only and tabled plans showing noise and dust contours and a copy of the VLAM policy

4. PROPOSED CONVEYOR SYSTEM

Peter Smith provided more details on the proposed coal loader and conveyor system stating the conveyor will be covered on 1 side and the roof and needs an open side for access. The gantries are enclosed on 4 sides. Further discussion was had on the details and nature of the conveyor system and its adequacy.

5. CONSULTATION WITH SURROUNDING LANDOWNERS

Lynne Hamilton questioned Wyong Coal about negotiations with the other land owners in the area. Peter Smith stated Wyong Coal had commenced communications, subject to design and monitoring and these details will be addressed in consent conditions.

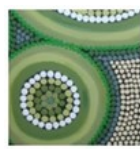
6. ABORIGINAL LAND RIGHTS ACT 1983

Sean Gordon stated he feels Wyong Coal failed to address Darkinjung's aspirations under the Aboriginal Land Rights Act which was put into place to compensate Aboriginal people for the deposition of land and to build an economic base. He also added that further valuations had been done by Darkinjung, accessing the economic impact of the proposal on Darkinjung's proposed residential developments to the immediate north of the development site to be to the value of an \$8Million loss.

Sean Gordon explained the extensive work that has been carried out by Darkinjung since Wyong Coal's original submission in order to meet Darkinjung's aspirations ie. Residential rezoning along Wyee Road, Gosford Road and Bushells Ridge Road, signing of an agreement to lease with CASAR motorsports, Business Plan for a Resource Recovery Hub and rezoning of land on the southern side of the Motorway Link Road to industrial.

7. BUSHFIRE PREVENTION

Sean Gordon pointed out that the amended development application did not address required APZ's (Asset Protection Zones) and only mention's the 3 metre wide road for access to Darkinjung Properties. Sean Gordon stated the only land available for APZ's was the land owned by Darkinjung and Kerry Mountain Pty Ltd to the east of Nikko Road yet Darkinjung had not been approached in regard to this.



8. PROPOSED ACCESS ROAD

Lynne Hamilton stated that Darkinjung is unable to respond to the amended DA thoroughly as all details of the access road have not been provided within the amended DA. There was discussion about the width of the proposed access to road and whether it was sufficient and the lack of detail on how continuous access is to be achieved under the Motorway Link Road. Kenny Barry advised that Wyong Coal's designers have said that, in final design, it is likely that the rail line would relocate 3m to the west meaning there could be 6m available for the road.

9. PROPOSED CONSTRUCTION

Lynne Hamilton asked how the infrastructure within the Nikko Road corridor would be built as the amended DA does not provide details. Kenny Barry explained that Wyong Coal intended to access the construction site from Gosford Road and then via the rail corridor. Kenny Barry stated that Wyong Coal had discussed construction with an accredited rail constructor who is confident that the construction works can be completed within the 20 metre corridor that is currently Nikko Road.

10. RAIL ACCESS

Sean Gordon stated that it would be difficult for Darkinjung to get approval to access the main north-south rail line from their industrial land if the amended DA was approved. Kenny Barry commented that, based on Wyong Coal's path modelling, he found it hard to see that connections to the main line for both would not be possible.

11. DOCUMENTATION

Sean Gordon commented that a lot of the details being discussed are not included in the amended DA documentation. Sean Gordon raised the question "how is the everyday person meant to understand this proposal".

12. ALTERNATE ACTIONS

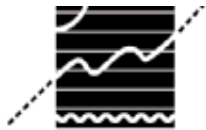
Sean Gordon stated that as a result of the projects in train since the original DA there may be an opportunity to revisit the original proposal for a rail spur and that the Department of Planning had suggested such action may be in the best interests of both parties. Peter Allonby commented that Wyong Coal's discussions with Boral were commercial-in-confidence but warned that access to Boral land associated with the original proposal may be problematic.

Discussions were had on how to move these matters forward and the format of such negotiations. The parties agreed that this needs to be progressed expeditiously. Tony Simpson discussed that all conversations had should be kept confidential with the meeting agreeing.

Meeting Closed at 10:45am

Appendix S
Bushfire Risk Assessment

Appendix T
Economics Response



Gillespie Economics

Environmental and Resource Economics: Environmental Planning and Assessment

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11 April 2017

Kenny Barry
Project Manager
Wallerah 2 Coal Project
PO Box 3039 Tuggerah NSW 2259

Dear Kenny

Re: Response to The Australia Institutes Submission and Presentation to the Wallarah 2 Planning Assessment Commission

As requested, Gillespie Economics has reviewed the written submission and presentation made by The Australia Institute (TAI) to the Wallarah 2 Coal Project, Planning Assessment Commission. Detailed comments on TAI's submission and presentation are provided in Attachment 1.

TAI's written submission contains as an Attachment, the previous TAI submission dated September 2016. The issues raised in this Attachment were previously addressed in the proponent's Response to Submissions and so are not addressed here.

Regards

Dr Rob Gillespie
Principal
Gillespie Economics

ATTACHMENT 1 - RESPONSE TO THE AUSTRALIA INSTITUTE

1. The Australia Institute

The Institute aims to foster informed debate about our culture, our economy and our environment and bring greater accountability to the democratic process. Our goal is to gather, interpret and communicate evidence in order to both diagnose the problems we face and propose new solutions to tackle them. The Institute is wholly independent and not affiliated with any other organisation.

TAI is far from independent. It was founded two decades ago by a former Greens Party candidate. The last two Executive Directors are also former Green's Party staffers. TAI is on the public record as opposing all coal mining and has prepared submissions opposing numerous NSW coal mining proposals and criticising the associated Economic Assessments. TAI's views on the economic assessment of coal mining projects has been found to be at odds with the views of reputable economists and agencies including ACIL, Centre for International Economics, Deloitte, AIGIS Group, BAEconomics (Dr Brian Fisher OA), Economic Consulting Services, Gillespie Economics, BDA Group, Professor Jeff Bennett (ANU), Professor John Rolfe (Central Queensland University), the NSW Department of Planning and Environment and NSW Treasury.

TAI has previously been caught out making incorrect statements over the estimated royalties from mining projects and had to make a public apology through the media (refer to the front page of the Newcastle Herald, 15 September 2014).

TAI has recently been accused of fudging economic facts in a report where it suggested that imposing a coalmining moratorium would have a minimal impact on jobs and the economy (NSW Mining News, 9 December 2016). TAI's unpeer reviewed study did not stand up to review by Cadence Economics who found that job losses from a moratorium would be between 19,200 and 38,400.

2. NPV Reduction in Revised Economic Assessments

TAI discussed the 2008, 2013 and 2016 assessments and stated the Project's NPV has reduced from \$1.5 b to \$485 m in the most recent assessment.

The difference in results of the current Economic Impact Assessment (Appendix J of the Amended Document) to the previous Economic Impact Assessments are a result of:

- Each assessment relating to different project descriptions (e.g. the 2008 analyses related to a project with an operating life of 37 years compared to the current project with a life of 28 years);
- Updating of the detailed financial model on which the Economic Impact Assessment is based using contemporary information, including updated coal price assumptions to reflect the most recent forecasts; and
- Reporting of the results at different scales based on evolving requirements of guidelines (e.g. the 2008 Economic Impact Assessment reported the net benefits of the Project to whomever benefits accrued (globally, including the profits to foreign entities) but also included discussion of benefits to NSW (not reported by TAI), whereas the 2013 and 2016 analyses reported the results globally, nationally and for NSW, although TAI compares the national results in the 2013 analysis to the NSW results in the 2016 analysis). In summary, the results that TAI is comparing are the estimated global net benefits in 2008, national net benefits in 2015 and NSW net benefits in 2016.

3. DP&E's Peer Reviewer Incorrect

TAI stated the independent Peer Review conducted for DP&E by CIE is wrong and that the actual project value is zero.

The Project Economic Impact Assessment was independently peer reviewed by:

- Mr Drew Collins, Managing Director of BDA Group and previous Director of Economics and Environmental Reporting at the NSW Environment Protection Authority; and
- the Centre for International Economics.

Both reviews endorse the finding that the Project will have net benefits to NSW.

While the Economic Impact Assessment undertaken by Gillespie Economics for the Project was peer reviewed twice, the TAI's "assessment" was not peer reviewed and largely represents unsubstantiated statements and misrepresentations (refer to example above).

4. Operating Cost Assumption Incorrect

TAI suggested that the operating cost for the Project is wrong. TAI calculated the Project's operating cost at US\$40/tonne and stated that it is their opinion that this "small, greenfield, underground mine" "in difficult country and politically sensitive" would cost far more to operate. TAI stated that "it would be one of the most expensive in the country in reality". TAI further stated that it would be the cheapest mine to run in the Hunter Valley and Queensland and is therefore incorrect.

The estimated operating cost of the Project included in the Economic Impact Assessment is from a detailed bottom up costing and financial model of the Project, undertaken by the proponent for the purpose of determining if it is willing to invest in the Project.

The operating costs of the Project are relatively low compared to other coal mines because:

- the coal seam being mined is thicker than most underground mines;
- the Project coal does not require any washing and hence coal handling and preparation costs per tonne are minimal;
- there is no loss of coal volume during processing i.e. from ROM to product coal, because it does not require any washing;
- the Project is located close to the Port of Newcastle and hence rail costs are low;
- the Project is located in an area where supporting infrastructure is already available on a user pays basis; and
- the Project does not require the provision of accommodation for workers.

The mines that TAI is comparing the Project's costs to are of no relevance because they are:

- located in QLD not NSW;
- vast distances from Port with higher transport costs;
- mines that require washing of the Run-of-Mine coal and reduction in recovery of product coal; and
- have significant infrastructure and accommodation costs.

Most Queensland mines produce metallurgical coal as their primary product, thermal coal being a secondary product. The value of thermal coal does not stand alone in those cases since their viability is driven by higher value coking coal.

The estimated operating costs for the Project that are included in the Economic Impact Assessment are actually comparable to four underground mines located near the Wallarah 2 Project, according to data from Wood MacKenzie. This information is proprietary in nature but could be provided to the PAC on a confidential basis.

5. Water Value Incorrect

TAI asserted that the effective value of \$0 impact to water resources in the economic model was incorrect.

The biophysical groundwater and surface water impacts of the Project are considered in detail in Section 2.2 of the Economic Impact Assessment (Appendix J of the Amended Document). This consideration is based on the analysis of water impacts in the EIS, the PAC (2014) Review Report and the DP&I Environmental Assessment Report (2014).

The consideration of water issues from an economic perspective are specifically addressed in Section 4.4.2 of the Economic Impact Assessment (Appendix J of the Amendment Document).

As identified in Section 4.4.2, groundwater modelling by Mackie Environmental Research (2016) indicates that the effects on the alluvial groundwater system will be minor and transient. The Extraction Area of the Project covers only a small percentage of the entire combined Gosford Wyong Water Supply Scheme catchment area, the majority of which lies within the Wyong State Forest. There will be some minor alterations to flows of drainage lines in these areas as a result of subsidence. However, the overall impact to the water supply will be negligible.

Nevertheless, WACJV will obtain Water Access Licences (WALs) for 300 ML which is the predicted maximum redirection of surface runoff which will be temporarily stored in alluvial soils over longwall panels, thereby reducing potential runoff contributions until such time as the alluvial areas equilibrate and near normal runoff is re-established. By purchasing these WALs from other water users, the Project will result in no additional water take from the catchment.

The Economic Impact Assessment includes the opportunity cost of holding these WALs at \$2,000 per ML, not \$0 as claimed by TAI.

Groundwater ingress into the underground mine workings would primarily be saline water sourced from the coal seam or the deep overburden strata within the fractured zone. WACJV will obtain WALs to account for the predicted groundwater take. It is proposed that this groundwater will be pumped to the surface and treated in the water treatment plant in accordance with the Water Management Plan. The reject stream will be disposed of in the underground workings and the treated water product will be used for operational purposes and/or discharged into adjoining streams in accordance with an appropriate EPL. Groundwater modelling has shown that the effects of the Project on the alluvial groundwater system will be minor and result in negligible effects on stream flows. No impacts are expected from the Project on groundwater users within the regional aquifers due to the lack of connective cracking to the underground workings of the Project (Mackie Environmental Research, 2013).

Both peer reviewers of the Economic Impact Assessment endorse the treatment of water impacts in the Economic Impact Assessment.

CIE states that:

"The Central Coast Council's submission (dated 16 September 2016), for example, raised particular concerns regarding impacts on groundwater and surface water. Based on the proponent's Response to Submissions (dated November 2016) and the recent responses by the NSW Government agencies, we understand that actions will be undertaken to mitigate impacts and that any residual impacts would not materially change the results of the CBA."

The peer review by Drew Collins states that:

"In relation to non-production costs and benefits, Gillespie Economics provides a sound summary in Section 2 of the EIA of the predicted physical impacts (drawn from the EIS), and in Section 4 a comprehensive valuation of residual impacts, once measures to mitigate, offset or compensate impacts has been accounted for. As shown in Table 4.4, the collective scale of these impact valuations is minor relative to the project benefits at the global or national level, and indeed at the state level as shown in Table 4.5. Therefore, whilst some parameter valuations may be contestable at the margin, the adoption of alternative valuations is unlikely to have a material impact on the estimated net benefits of the project."

6. Future of Coal

TAI asserted that the market for coal in 2040 would be half that of now and there would be no market for the Project.

The Proponent for the Project is 82.25% owned by Kores Australia Pty Ltd, a subsidiary of Kores Resources Corporation, one of Korea's state owned energy and resources enterprises. There is an identified direct need and market for the resource in Asia Pacific Region including South Korea, hence the proposed investment.

More generally, the notion that the market for coal in 2040 would be half of that now is without foundation. The International Energy Agency (2016) World Energy Outlook 2016, forecasts coal demand expanding at 1.2% per year to 2040 under the Current Policies Scenario.

7. Crowding Out of Other Sectors Ignored

TAI stated that the economic assessment ignores crowding out of other sectors in the region.

The potential for 'crowding out' of other sectors in the region is addressed in Section 6.5 of the Economic Impact Assessment. This Section states that:

"Where employed and unemployed labour resources in the region are limited and the mobility of in-migrating or commuting labour from outside the region is restricted, there may be competition for regional labour resources as a result of the individual project that drives up regional wages. In these situations, there may be some 'crowding out' of economic activity in other sectors of the regional economy."

'Crowding out' would be most prevalent if the regional economy was at full employment and it was a closed economy with no potential to use labour and other resources that currently reside outside the region. However, the regional economy is not at full employment and is an open economy with access to external labour resources. Consequently, 'crowding out' of economic activity in other sectors as a result of the Project would not be expected to be significant.

However, even where there is some 'crowding out' of other economic activities this does not indicate losses of jobs but the shifting of labour resources to higher valued economic activities. This reflects the operation of the market system where scarce resources are reallocated to where they are most highly valued and where society would benefit the most from them. This reallocation of resources is therefore considered a positive outcome for the economy not a negative."

8. Health Effects Ignored

TAI stated that the economic assessment did not include a valuation of the health effects of the Project.

Health effects are considered in Section 4.4.2 of the Economic Impact Assessment. This stated that:

"The results of the dispersion modelling indicate that the predicted incremental ground level concentrations for PM₁₀, PM_{2.5}, TSP and dust deposition at the closest residential receptors during construction and operation of the Project are all below the impact assessment criteria. A cumulative assessment, incorporating existing background levels, indicates that the Project is unlikely to result in any additional exceedances of relevant impact assessment criteria at the neighbouring receivers. Cumulative impacts from NO₂ as a result of flaring were found to be minor when added to existing background levels (PAEHolmes 2012).

A detailed assessment of health risks associated with the Project's anticipated air quality impacts, including risks of lung cancer, heart disease and other respiratory diseases calculated that the predicted statistical increases resulting from the Project would be negligible. NSW Health has considered this information and has no residual concerns.

Consequently, no economic implications associated with air quality have therefore been identified for inclusion in the CBA."