Summary of Commissions Recommendations and the Departments revised draft conditions

For further detail of the Departments consideration of the Commission’s recommendations refer to Part 2 of the Wallarah 2 Addendum Assessment Report.

<table>
<thead>
<tr>
<th>Commission Recommendation</th>
<th>Department’s Consideration and Action</th>
<th>Draft Condition and Schedule Number</th>
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<tbody>
<tr>
<td><strong>Conventional Subsidence</strong></td>
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<tr>
<td>1) That a rigorous set of performance measures be included in any consent. Rigorous in this context means able to be measured or assessed in a scientifically and legally sound manner and be capable of enforcement. These performance measures must be supported by:</td>
<td>The Department supports the Commission’s position. The Department has strengthened its proposed draft conditions of consent regarding both performance measures, and the required content of Extraction Plans. This includes a number of minor changes to the recommended performance measures for watercourses and removing the reference to ‘percentage performance’.</td>
<td>- Condition 1 and Table 1, Schedule 3</td>
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<td>(i) a requirement that the Extraction Plan for each longwall contains revised subsidence predictions based on experience from previous mining on the site and that these revised predictions will not allow the performance criteria to be exceeded;</td>
<td>A number of the Commission’s recommendations are satisfied by existing standard conditions of consent.</td>
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<td>(ii) a requirement that the Extraction Plan for each longwall contains:</td>
<td>The draft consent’s performance measures are linked to the significance of features and the likelihood of severity of impacts. The performance measures are similar to those applied in recent approvals for other underground coal mines, including in sensitive areas.</td>
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<td>(a) appropriate triggers to warn of the development of an increasing risk of exceedance of the performance criteria (eg the subsidence predictions themselves and/or other relevant subsidence-related measurements);</td>
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<td></td>
<td>(b) specific action plans to respond to increased risk of exceedance that will ensure the criteria are not exceeded (eg cessation of mining, narrowing of the longwall, altering seam height etc; and</td>
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<td></td>
<td>(c) an assessment of remediation measures that may be required if exceedance does occur and the capacity to implement the measures.</td>
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</table>
2) Although the risks to the significant public infrastructure such as the M1 Motorway and the Buttonderry Waste Management Facility appear small, the necessary steps to prevent impacts should be included in any consent and the consent authority should be satisfied that these steps will in fact, ensure the safety and/or integrity of the infrastructure.

The Department considers that the requirement to include TARPs for all built features (including key public infrastructure) within Extraction Plans, coupled with the performance measures for key public infrastructure, satisfy this recommendation. Also performance measures for key public infrastructure (M1 Motorway, Mardi-Mangrove Creek Dam Pipeline, Main Northern Railway and electricity lines and towers) to be always safe and serviceable. The required content for TARPs has been strengthened.

3) That at least two formal reviews of the predicted subsidence impacts should be required: one after the first 5 longwalls have been completed (LW 1N-5N) and one after the next four have been completed (LW 6N-9N).

The Department has recommended independent audits of subsidence impacts within six months of the completion of Longwalls 5N and 9N and at any other time required by the Secretary. The auditor must conduct an independent audit of the subsidence, surface water, and groundwater impacts of the development, assess the significance of these impacts (if any) and investigate measures to minimise any impacts.

Non-conventional Subsidence

4) That appropriate monitoring of non-conventional subsidence effects be included as a requirement in any consent and that the relevant Extraction Plan be required to contain appropriate measures to control the risks from non-conventional subsidence so as to ensure that the environmental performance criteria are not exceeded.

The Department has recommended strengthening and making explicit the condition requiring monitoring of both conventional and non-conventional subsidence.

Potential Losses of Baseflow from Impacts on Groundwater

5) 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;

As requested by the Commission, revised estimates of baseflow losses were provided in WACJV’s response to the Commission’s review report (see Appendix F) and subsequently reviewed by DPI Water. The Department has undertaken a further assessment of the potential losses of baseflow on the Central Coast Water Supply (CCWS). The Department has recommended new conditions for a comprehensive water monitoring program which would include monitoring of surface water, groundwater, flooding and the CCWS.
<table>
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<tr>
<th>Statements</th>
<th>Responses</th>
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<tr>
<td>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).</td>
<td>The Department agrees with the Commission that both temporary and permanent potential losses of baseflow are to be treated as potential impacts on the CCWS.</td>
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<td>6) 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.</td>
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<td>7) Potential impacts on shallow groundwater systems be included in the performance criteria in Schedule 3 of any consent, particularly in relation to potential losses that could contribute to decreases in baseflow to streams supplying CCWS. The maximum predicted impacts of 300 ML/y should not be allowed to be exceeded unless the environmental impacts remain within existing predictions and any loss can be compensated.</td>
<td>There is general agreement among the consultants, experts, agencies, the Department and the Commission that the combined maximum impacts of subsidence on baseflow of 300 ML/year is a conservative estimate and that the majority of this loss is attributed to storage increases associated with subsidence of sections of the alluvium. In response to the Commission and the public’s concerns and to strengthen enforceability by regulators, the Department has amended the performance measures for 3rd, 4th, 5th and 6th order streams to include their alluvium.</td>
</tr>
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<td>8) Appropriate monitoring arrangements, satisfactory to NOW (now DPI Water), be incorporated into the conditions of any consent to ensure that all potential losses of baseflow be accounted for.</td>
<td>The Department has recommended strengthening and clarifying the performance measures associated with water resources and water supply, and the subsequent monitoring that would need to be undertaken to ensure compliance with these performance measures. A new Water Monitoring Program is recommended, requiring preparation in consultation with DPI Water, EPA and Council.</td>
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**Subsidence Impacts on Privately-owned Bores and Wells**

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<th>Statements</th>
<th>Responses</th>
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<td>9) Pre-mining testing of privately owned registered bores and wells be required to establish their performance characteristics.</td>
<td>The Department has recommended new conditions for a comprehensive water monitoring program which would include monitoring of, groundwater and specifically requires the program to monitor and report on mine-induced changes in groundwater yield/quality against background, in particular, on groundwater bore users in the vicinity of the site.</td>
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10) The burden of proof that any declines in performance were not due to mining impacts rest with the Proponent (Applicant). The Department has included a note to this effect in the draft conditions of consent.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Schedule</th>
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<tr>
<td>6 Note</td>
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</table>

**Potential Impacts on the Central Coast Water Supply (CCWS)**

11) The project be required to meet a no net impact performance outcome on catchment water resources during the life of the mine.

The Department has proposed a condition of consent requiring WACJV, prior to the extraction of Longwall 6N and in consultation with DPI Water and the Central Coast Water Council, to develop and be in a position to implement a compensatory mechanism to compensate for the measured losses of water to the CCWS. This must include a consideration of all reasonable and feasible measures to compensate for the measured losses of water, including the supply by return of treated mine water.

- Condition 9, Schedule 3
- Condition 15, Schedule 4
- Condition 16, Schedule 4

12) Consideration be given to augmentation of CCWS supply by return of sufficient minewater treated to the required standards for raw water supply to compensate for the estimated losses during the life of the mine.

13) The principles governing this augmentation of CCWS supply be as described in section 3.3.1.4 of this review report.

14) That mining beyond LW 5N not be permitted until the mechanism to compensate for potential impacts on water availability for CCWS is operational.

15) That no compensation be required beyond mine closure for the predicted 36.5 ML/y loss provided that a review prior to mine closure confirms that the loss does not exceed 36.5 ML/y.

The Department has included this in the draft conditions of consent.

- Condition 9, Schedule 3
- Condition 15, Schedule 4

**Potential Impacts on Water Availability for Users Other than CCWS**

16) Specific provision be made in the conditions of any consent to ensure that landholders whose access to surface waters is negatively affected by the project have compensatory supply provided within 24 hours and that the Proponent (Applicant) be responsible for restoring access as soon as practicable.

The Department has reviewed the most recent underground coal mine determination by the Commission (i.e. Springvale Coal Project) and has recommended minor updates to the wording of the compensatory water supply condition to reflect this determination.

- Condition 14, Schedule 4

17) The Proponent (Applicant) bear the onus of proof in the event of a dispute over subsidence-induced impacts on surface water access.

The Department has included a note to this effect in the draft conditions of consent.

- Condition 14 Note, Schedule 4
### Potential Impacts on Stream Morphology

**18) Before the project is submitted to the consent authority, the risks to stream morphology of interaction between significant rainfall event(s) and the interface between subsided and unsubsided sections of a stream be assessed with a view to properly describing the risk (and quantifying if possible), and providing a detailed assessment of the options available to deal with any such eventuality and an assessment of the capacity to implement any such options on the Project Area streams.**

Further information as requested by the Commission was provided in WACJV’s response to the Commission’s review report.

The Department has carefully considered the Commission’s request for an assessment of the risk of impacts at the interface of subsided and unsubsided stream sections during heavy rainfall events. WACJV, in its response to the Commission’s review, provided the results of a preliminary analysis that was undertaken to determine stream reaches where there is a risk of changes to stream morphology.

Given that the existing alluvial stream systems are dynamic, the Department agrees that baseline and ongoing monitoring is a key element of identifying subsidence-related impacts to stream morphology.

The recommended water monitoring program would include measurements and inspections of ground levels, vegetation, ecology, water quality and groundwater.

- **Condition 8 (e), Schedule 3**

**19) That the performance criteria for stream morphology for streams in the Project Area underlain by alluvium be:**

a) no more than minor consequences in any part of the stream at any time; and

b) post-subsidence, stream sections be returned to a condition equivalent or better than their pre-subsided condition.

The Department has recommended changes to the performance measures and rehabilitation objectives within the draft conditions of consent to reflect this recommendation.

- **Condition 1 and Table 1, Schedule 3**
- **Condition 33 and Table 8, Schedule 4**

**20) Rigorous conditions be included in the Extraction Plan for each longwall to ensure that:**

a) the previous experience of impacts on stream morphology are incorporated;

b) there are appropriate triggers to warn of developing problems;

c) there is a clear response plan to prevent exceedance of the criteria; and

d) clear strategies are identified to address any exceedance that might occur despite the adaptive management requirements.

The Department has reviewed the most recent underground coal mine determination by the Commission (i.e. Springvale coal project) and has recommended updates to the Extraction Plan condition to reflect this determination, including the requirement for TARPs and contingency strategies.

Each Extraction Plan must provide revised predictions of the potential subsidence effects, subsidence impacts and environmental consequences of mining proposed to be covered by the Extraction Plan, incorporating any relevant information obtained since the consent. This extends to the previous experience of impacts on stream morphology.

- **Condition 6, Schedule 3**
Each Extraction Plan must include Trigger Action Response Plans (TARPs) which must address all features in Tables 1 and 2 of the draft conditions including:

- appropriate triggers to warn of increased risk of exceedance of any performance measure;
- specific actions to respond to high risk of exceedance of any performance measure to ensure that the measure is not exceeded; and
- an assessment of remediation measures that may be required if exceedances occur and the capacity to implement the measures.

Each Extraction Plan must include TARPs that expressly provide for:

- adaptive management where monitoring indicates that there has been an exceedance of any performance measure in Tables 1 and 2, or where any such exceedance appears likely; and
- an assessment of remediation measures that may be required if exceedances occur and the capacity to implement those measures.

Water Quality Monitoring in Response to Subsidence Impacts

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<thead>
<tr>
<th>Water Quality Monitoring in Response to Subsidence Impacts</th>
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<tr>
<td>21) That before extraction of longwall 6N commences a program of water quality monitoring that can differentiate subsidence-induced impacts from background variation be implemented. The program is to be developed in consultation with the Water Supply Authority, EPA and NOW (now DPI Water) and be approved by the Director-General (now Secretary) before implementation.</td>
<td>The Department has recommended new conditions for a comprehensive water monitoring program which would include monitoring of surface water, groundwater, flooding and the CCWS.</td>
<td>- Condition 9 (a), Schedule 3</td>
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<td>This program would apply to each Extraction Plan (not just those prior to Longwall 6N) and include comparison with baseline data.</td>
<td>- Condition 9 (e), Schedule 3</td>
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<td>The recommended Water Monitoring Program requires preparation in consultation with DPI Water, EPA and Council.</td>
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<td>22) That the program be subject to independent audit each year at least until the Director-General (now Secretary) is satisfied that longer intervals can provide appropriate safeguards.</td>
<td>The Department has recommended independent audits of subsidence impacts (including those on water resources) within six months of the completion of both Longwalls 5N and 9N and at any other time required by the Secretary.</td>
<td>- Condition 10, Schedule 3</td>
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Porters Creek Wetland

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<th>Porters Creek Wetland</th>
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<td>23) That a performance measure of negligible consequences should be specified for Porters Creek Wetland in any consent and that this should be supported by a monitoring regime sufficient to</td>
<td>In the Department’s view, an efficient and achievable measure to achieve this outcome would be to monitor catchment flows and water quality within the section of Hue Hue Creek subject to subsidence impacts.</td>
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<tr>
<td><strong>Water Monitoring Generally</strong></td>
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<td>24) That the consent authority review water-related monitoring requirements carefully to ensure that they will provide (a) the information necessary to assess performance of the project against performance criteria in any consent and (b) also provide the information necessary to support the adaptive management requirements in Extraction Plans for individual longwalls.</td>
<td>The Department has recommended new conditions for a comprehensive water monitoring program which would include monitoring of surface water, groundwater, flooding and the CCWS.</td>
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<th><strong>Flooding</strong></th>
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<td>25) That an Emergency Evacuation Management Plan be prepared. This plan should include clearly identified secondary access routes for those properties that will be adversely impacted by the 1% AEP flood. For those properties that do not have either a primary or secondary access route as a result of flooding, the Proponent (Applicant) must consult/negotiate with the individual landowners to reach a mutually agreed resolution for emergency evacuations before extraction of any longwalls that could create altered flood conditions for these properties occurs. In the situation where no agreement can be reached, either party may refer the matter to the Director-General (now Secretary) for resolution.</td>
<td>The Department has recommended a flood management protocol be developed as part of the Extraction Plan process which would identify access routes, include regular consultation with landowners, Council and emergency services and provide up-to-date subsidence information to relevant emergency planning authorities.</td>
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<tr>
<th><strong>Infrastructure and Improvements Impacted by Subsidence</strong></th>
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<td>26) That before granting any consent, the consent authority satisfy itself that proposed compensation measures for subsidence-related damage to privately-owned built features will deliver a fair and reasonable outcome for affected property owners. If the consent authority cannot be satisfied that the outcomes will be fair and reasonable than the consent authority will have to consider whether the</td>
<td>The Department is satisfied that existing proposed compensation measures for subsidence-related damage to privately-owned built features would deliver fair and reasonable outcomes for affected property owners.</td>
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<td><strong>Impact</strong></td>
<td><strong>Requirement</strong></td>
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<td><strong>Noise</strong></td>
<td>27) That the predicted noise levels be re-assessed for properties 57 and 58 and a condition be attached to any consent that provides for noise mitigation or acquisition for privately owned properties when noise is predicted to exceed the PSNL on more than 25 percent of privately owned land. (Note that the requirement for mitigation or acquisition should depend on the degree of exceedance of the noise criteria consistent with normal practice).</td>
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<td>28) That a requirement for monitoring of wheel squeal noise from use of the rail loop be included in any consent and that additional mitigation measures be implemented if the noise becomes an on-going issue.</td>
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<td><strong>Air Impacts</strong></td>
<td>29) That a condition be added requiring the implementation of methane gas capture and flaring within a specified timeframe and that a proposal be developed for beneficial use of the captured gas within three years of the commencement of longwall operations and to be implemented within a timeframe as required by the Director-General (now Secretary).</td>
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<td><strong>Impacts Associated with the Surface Facilities</strong></td>
<td>30) That the water treatment system, including the reverse osmosis and brine treatment plants be designed to meet the discharge criteria specified by the EPA.</td>
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<td>31) That a requirement for construction of a reverse osmosis plant be inserted in 15(c) of Schedule 3 of the proposed conditions of consent.</td>
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for the project. This plan must be in general accordance (or conformity) with the EIS, which commits to the operation of a Water Treatment Plant.

**Aboriginal and Non-Aboriginal Heritage**

32) That the Heritage Management Plan included in the Department’s draft recommended conditions (condition 5(k), Schedule 3) should include a trigger action response plan to manage unexpected subsidence impacts (similar to condition 21, Schedule 4).

The Department has updated the relevant Extraction Plan condition to include the requirement for a TARP.

- Condition 6 (ix), Schedule 3

33) That a note should be included in condition 1, Schedule 3 that any dispute in relation to impacts on Aboriginal heritage sites should be referred to the OEH for a final determination, and dispute in relation to impacts on historic sites should be referred to the Secretary for the Department of Planning and Environment for final determination.

The Department has recommended that consultation with OEH is undertaken in this regard.

- Condition 6 (vii), Schedule 3

**Estimates of Project Benefits**

34) That, for the purposes of assessment under cl.12AA of the Mining SEPP, the significance of the resource is limited to the creation of 300 direct jobs, royalty payments of between $100m and $200m and capital investment significantly less than $800m. If this becomes crucial in the consent authority’s task of assessing the project under s.79C of the Act, then the Commission recommends that the consent authority require that a new economic analysis be undertaken and subjected to external rigorous independent review before a decision is made.

A revised Economic Impact Assessment was undertaken for the amended project and has been assessed and peer reviewed.

- None required

**Agricultural Businesses**

35) That the performance measures included in the Department’s draft conditions of consent for built features (condition 3, Schedule 3) be amended to include the definition of ‘other privately-owned built features and improvements’ by including a list of examples. This list is inclusive, not exclusive.

The Department notes that the definition applies to all ‘other privately-owned built features and improvements’ and includes a list of examples.

- Condition 3, Schedule 3
include a wider range of improvements relevant to agriculture that may be impacted by subsidence (eg those relevant to the turf farm) and that the relevance of the listed performance measures to each of the categories of other infrastructure that might be impacted by subsidence be reviewed.

The Department also notes that there are a number of other avenues available in relation to compensation to landowners affected by subsidence, including:

- compensation under the *Mine Subsidence Compensation Act 1961*;
- compensable loss under the *Mining Act 1992*.

- Condition 4, Schedule 3
ISSUES RAISED DURING TELECONFERENCE

1. Central Coast Council’s position on the application.

The Central Coast Council’s position is no different to that of the former Wyong Shire Council and the former Gosford City Council who both objected to the development. This position was confirmed by the Central Coast Council by resolution at the meeting of 14 September 2016 where the Council resolution was to adopt the draft submission in relation to Wallarah 2 which confirmed its objection to the amended Wallarah 2 proposal. Council resolved the following:

RESOLVED on the motion of Mr REYNOLDS:

337/16 That Council adopt the draft submission prepared in relation to the Wallarah 2 Coal Project (SSD 4974).
338/16 That Council request the Chief Executive Officer lodge the submission with the Director Resource Assessments – Department Planning and Environment.

2. Water resources

   a. The percentage of water that goes to the Central Coast supply system from alluvial aquifers, surface water (streams & creeks), groundwater from the coal measures and piping from the Hunter.

   The Central Coast Water Supply operates as an integrated system of various sources that contribute different amounts of water based on their particular attributes, operating rules and the prevailing climatic conditions. The primary source of water is the local streams.

   The groundwater systems are estimated to provide approximately 5ML/ year when operating. However, this has not been tested long term under drought conditions.
The Central Coast has a large population that relies on a relatively small water resource base. The region is a major growth area for the state with the population anticipated to grow substantially (by 75,000 conservatively) over the operating life of the Wallarah 2 mine.

Given the large and growing community of the Central Coast and the limited water resource base available to the water supply, any loss of water will impact the ability to supply the water needs of the community and place that community at greater risk during drought.

b. A plan that shows the Wyong weir catchment area and the location of the proposed mine site in relation to the catchment area.

Refer attachments 1 and 2.

c. Council’s plan to future proof the water supply for the expected population growth to 2036 and beyond.

Council is currently reviewing the long term water supply strategy for the Central Coast. This review is being undertaken in parallel with the next evolution of the Lower Hunter Water Plan.

Issues that affect the long term water security of the Central Coast include the long term operation of the link between the Hunter and Central Coast, changes to water availability associated with review of water sharing plans, and a review of drought risks.

The water supply reviews for both the Hunter and Central Coast are scheduled to be completed in mid-2020.

d. Comment on the 2014 PAC Review recommendations and the Department Addendum Report including the draft conditions.

Overarching comments in relation to the Central Coast Water Supply

The PAC report of 2014 considered the whole project including the mine generally addressed the water supply concerns of Council.

In particular the discussion and recommendations contained in section 3.3.1.4 are considered by Council to be particularly pertinent for the preparation of the conditions of consent in the event the proposal was to gain approval.

The key items to be incorporated into the conditions of consent are:-
Specific requirement that the project be required to meet a no net impact performance outcome on the catchment water resources available to the Central Coast Water Supply (CCWS).

Requirement to compensate the Central Coast Water Supply for any loss of water access caused by the mining activity. The compensation measure will need to provide a real and equivalent amount of water to the CCWS as that lost due to mining impacts.
  - The preferred mechanism to compensate for any water loss is to provide appropriately treated water downstream of the mining impacts at an appropriate point for the CCWS.
  - An alternative mechanism in the event of insurmountable constraints in providing the compensatory water is the provision of financial contributions for the Central Coast Water Supply Authority to augment the water supply infrastructure to achieve an equivalent supply amount.
  - Purchasing of water licenses should be specifically excluded as a compensatory mechanism.
  - A minimum compensatory water amount of 300ML/annum shall be in place and operational before mining is permitted beyond LongWall 5N.

A monitoring system capable of confirming catchment losses from mine related impacts is to be developed and implemented. The monitoring system must be acceptable to the Central Coast Council (as the Central Coast Water Supply Authority) which shall have an approval role in the water monitoring system.

Specific Comments

<table>
<thead>
<tr>
<th>Definitions</th>
<th>AEP – Annual Exceedance Probability</th>
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<tbody>
<tr>
<td>Schedule 3 Table 1 - Watercourses</td>
<td>Verification that no connective cracking has occurred between the base of the alluvium and the underground workings may be difficult in practice. There should be a requirement for testing of connective cracking following subsidence events and periodically thereafter. Any results showing that connective cracking has resulted should result in stop work and further environmental assessment and approval prior to any further mining operation re-commencing.</td>
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<tr>
<td>Schedule 3 Table 1 - Water supply</td>
<td>The combination of this performance measure with clause 2 offsets as currently drafted means that only CCWS water losses in excess of 300ML/annum are offset/compensated. This was not the intent of the PAC in 2014. It would be more appropriate to change the performance measure to “no net loss of water available to the Central Coast Water Supply”.</td>
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<tr>
<td>Schedule 3 Extraction Plan 6 (g) (iii) Water Management Plan.</td>
<td>Given the implications for the ongoing monitoring review and offsets associated with the impacts of the mine, the Water Management Plan should be subject to the approval (not just consultation) of the EPA, DPI Water and the Central Coast Council. The Water Management Plan should make specific reference to the appropriate management of acid mine drainage (AMD) and include requirements to develop appropriate trigger levels associated with AMD.</td>
</tr>
<tr>
<td>Schedule 3</td>
<td>Given the implications for the ongoing monitoring review and offsets associated</td>
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| **Extraction Plan 6**  
**Water Monitoring Program 8** | with the impacts of the mine the Water Monitoring Program should be subject to the approval (not just consultation) of the EPA, DPI Water and the Central Coast Council. |
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<tr>
<td><strong>Water Monitoring Program 9 Central Coast Water Supply Monitoring Program</strong></td>
<td>Given the implications for the ongoing monitoring review and offsets associated with the impacts of the mine the Central Coast Water Supply Monitoring Program should be subject to the approval (not just consultation) of the EPA, DPI Water and the Central Coast Council (as the Central Coast Water Supply Authority).</td>
</tr>
<tr>
<td><strong>Water Monitoring Program 9 Central Coast Water Supply Monitoring Program 9(c)</strong></td>
<td>Should the reference to 5 (g) be 6(g) (iii) instead?</td>
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<td><strong>9(e)(iv)</strong></td>
<td>Whilst the assessment of baseflow losses are important, so are the changes to flows greater than the baseflow. The water supply is supplemented during times of higher water flows. The water supply extracts water from the Wyong River (which Jilliby Jilliby Creek flows into over a broad range of streamflows). The monitoring plan should monitor and report on all water losses to the water supply not just from base flow losses. Compensation should be based on all losses incurred.</td>
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</table>
| **Schedule 4**  
**Condition 16.** | The PAC Report 2014, Section 3.3.1.4 discusses the basis and issues around the application of compensatory water for the CCWS. The conditions should include explicit requirements to reflect the PAC Report 2014  
- Explicitly exclude the purchase of water licences as a compensatory measure.  
- Compensatory water shall be operational to provide a minimum amount of 300ML/a before mining beyond LongWall 5N occurs. The amount of compensatory water shall be adjusted based on the monitoring results to achieve no net impact. The burden of proving the monitoring results rests with the proponent in the event that a reduction of the compensatory water amount below 300ML/annum is proposed.  
- Compensatory water is not required to be provided after the cessation of mining operations but only if the proven permanent water loss is less than 36.5ML/annum. |

**Comments on the Department of Planning and Environment Addendum Report February 2017**

The Department argues that only water losses to the Central Coast Water Supply in excess of 300ML/a require compensation. Council is currently reviewing its long term water supply strategy where preliminary investigations indicate that the cost to replace 300ML/a of water supply is likely to cost in the order of $4m if part of a scheme with considerable economies of scale. In addition to the capital cost it is noted that these options have higher operating costs than water sourced from Wyong River.
Council has been concerned with the potential for the transfer of both risk and costs from the proponent of Wallarah 2 Coal mine to the Central Coast community.

Council considers the approach taken by the PAC in their report of June 214 as more appropriate for the Central Coast Community than that argued by the Department of Planning and Environment and requests that the draft conditions of consent be amended to be consistent with those recommended by the PAC in 2014.

e. Any information in relation to "a gazetted water protection zone in the 1950s" which was referred to in the public hearing.

The Wyong catchment (including the Jilliby Jilliby sub catchment) was proclaimed a Catchment District in 1950 under the then Local Government Act 1919. This act was replaced by the Local Government Act 1993.

f. Need for water quality guarantees.

Much of the focus of the impact of the mine has been on the potential impact on water availability. Safeguards are also required to manage the potential for affecting water quality of the regions water resources.

The EIS indicates minimal risk associated with saline and acid discharges, there remains a potential for impact on water quality. Both these potential sources of pollution require appropriate performance monitoring, and mitigation measures in the event the mining activities does impact on water quality.

3. Subsidence
a. Comment on issues that Council considers have not been adequately addressed in the 2014 PAC Review recommendations and the Department's draft conditions attached to the 2017 AR Report.

Previous reporting undertaken on behalf of Council found that the subsidence modelling amount was conservative, meaning that subsidence amounts are likely to be greater. It is noted that subsidence events may also vary across the subsided area due to geological features. Any increase in anticipated subsidence will increase flood impacts in the locality and increased and unacceptable isolation of homes within the district. It is suggested that a condition should be added to require a post subsidence survey to be undertaken to verify the resultant landform levels, and require the flood mitigation measures to be increased accordingly. This would include adjusting the flood mitigation measures to both public and private land and asset owners affected by any levels of subsidence which were greater than anticipated.
b. *Flooding and related issues including increase in maintenance cost as a result of proposed mitigation measures on roads.*

The flood modelling is based upon subsidence information which is acknowledged to be an estimate. Previous reporting undertaken on behalf of Council found that the subsidence modelling amount was conservative, therefore the flood impacts on the locality as a result of the development are likely to be worse than modelled.

The development will therefore result in greater and prolonged isolation events for people within the locality. The increase in the frequency and duration of flood affectation of the local roads will lead to accelerated deterioration of Council’s roads assets by having wetter pavement materials (including subgrade) for larger periods and more frequently.

It is noted that some road raising is proposed to alleviate this and provide flood free access.

Due to the uncertainty of the subsidence and resultant flood levels, it is recommend that the conditions require the applicant to provide the extent of road raising currently proposed, but to also undertake survey and flood modelling to verify the flood levels post subsidence events and extend/further raise those roads if required. Such works would need to be proposed/designed and undertaken by the applicant and agreed to by the road authority and other appropriate stakeholders.

The appropriate remediation/augmentation to drainage infrastructure is required where any changes to overland surface water or underground drainage systems (eg culverts) occur as a result of the mining. This also must be considered and approved by Council.

Any changes to surface stormwater flows and changes to ground levels as a result of the proposal may result in additional road maintenance. While the raising of roads may be required for flood mitigation measures, there may be additional maintenance costs in the road pavement and drainage maintenance. Table drains often get overgrown and require vegetation management as well as the periodic cleaning of the drains. These measures need to be factored in.

4. **Waste facility**

   a. *A plan to show the proposed final footprint of the Buttonderry Waste Management facility.*

   The proposed mine footprint adjoins the Buttonderry Waste Management property. Concerns are raised that the mine will impact on the operational capacity of the facility, and that the weight /impact of the landfill has not been appropriately accounted for.
   Refer attachments 3, 4 and 5.
b. **Comment on potential impact on the facility.**

**Impacts on integrity:**
Council’s initial response requested that the project proposal should consider the potential impacts upon Buttonderry Waste Management Facility and in particular the subsidence impacts on the leachate collection systems and landfill gas (methane) management systems. It is Council's view that these matters have not been adequately addressed.

It is unclear whether the subsidence caused by the proposed mining may impact the current and future operations of Buttonderry Waste Management Facility in terms of geological impacts, but also any reduction in trafficable access to the site will cause operational impacts on the facility. Refer to attached figures.

It also appears that there may not have been any allowance made by the proponent project assessment for the future quantities and locations of waste placement, surface loadings and future landfill extensions at Buttonderry Waste Management Facility and the impacts that this additional weight may have upon each other. The surface load will be significant and will be in the order of an additional 30 million m³ or tonnes of waste.

- Current cell area 4 has an estimated total capacity of 12 million m³
- Future cell area 5 (to the west of creek) estimated at 100ha has an approximate capacity of 30 million m³.

Buttonderry Waste Management Facility has substantial future capacity to serve the Central Coast community for the next 100 years +. The operations of this proposal should not be allowed to impact the facility.

This additional loading needs be considered in the planning, not just the landform present now. Should subsidence occur, a substantial concern remains which is that the leachate and landfill gas (methane) gas management systems could be compromised that might lead to environmental impacts.

In summary,

- The mining area should be designed to avoid undermining the Buttonderry Waste Management Facility
- The facility should be located outside the 26.5 angle of draw, and
- The facility should not be subject to vertical subsidence.

**Access:**
Hue Hue Road is the only effective access point to the Buttonderry waste facility. If the section of Hue Hue Road across Buttonderry Creek adjacent to the Wallarah site was to
subside to the predictions, then it would result in more frequent flooding and impact on access to this essential service.

5. **Regional planning for the area**

   a. *Progress of the planning proposals after gateway determination.*

**RZ/14/2014**

**Wallarah**

Rezoning from RU6 Transition to IN1 General Industrial (approximately 42 ha) and E2 Environmental Conservation (approximately 45 ha)

1. Council endorsement 13/5/2015
2. Gateway determination requested 9/11/2016, received 9/12/2016
3. Proponent undertaking investigative studies – nil supplied to Council to date. It is noted that these studies will need to include 12 months of seasonal flora and fauna study. Advice indicates that these studies will also incorporate the other DLALC proposal sites.
4. Gateway determination lapses 16/6/2018

**RZ/4/2014 (2 site progressing under a single planning proposal)**

**Site 1 - 425 Bushells Ridge Road, Bushells Ridge**

Rezoning from IN1 General Industrial and E2 Environmental Conservation to R2 Low Density Residential and R5 Large Lot Residential.

**Site 2 - 10 Wyee Road, Doyalson**

Rezoning from RU6 – Transition and E2 Environmental Conservation to R2 Low Density Residential and B1 Neighbourhood Centre.

1. Council endorsement 24/2/2016 (accepting RPA role for PP post JRPP consideration on 15/11/2015 and advice of 15/01/2016)
2. Gateway determination requested 24/2/2016, received 2/5/2016
3. Proponent undertaking investigative studies. It is noted that these studies will need to include 12 months of seasonal flora and fauna study. Advice indicates that these studies will also incorporate the other DLALC proposal sites.
4. Gateway determination lapses 2/11/2017

6. **Nikko Road**

   a. Future planning and connectivity to the existing road network.

   It is a normal release area planning approach to utilise existing road reserves within the road network. Due to their size and location, they often present opportunities
for connectivity. In utilising an existing road reserve, there is a requirement to factor in the construction costs (ie physical road and drainage work within the allocated road reserve) however there is no need to purchase the road corridor.

Sale of this road to a private company transitions the land into private ownership and foregoes this opportunity as a future connection. It also means that as part of any future release area planning for the area, that the additional “land component” cost will be added to the release area and thereby reducing affordability.

It is noted that the Voluntary Planning Agreement does not address this matter as it did not form part of the original proposal. As such an alternative arrangement would be required which could be imposed via a condition if approved.

7. **Bio diversity**
   a. Any new/updated study that has identified additional species that have not been included in the assessment of the amended application.

   All relevant species have been included in the assessment of the amended application, i.e. there have not been any new or updated studies that have identified additional species in the locality that Council is aware of.

8. **VPA**
   a. *Comment on the VPA signed in 2014 and any changes which Council will require.*

   It is noted that the Voluntary Planning Agreement related to the development as originally proposed, and not as modified. As such the disbenefit of the loss of Nikko Road as a public road (and future connection) was not factored into the agreement. The mine developer should be required to offset the loss of this public road asset, and the requirement could be imposed via a condition if approved.

   Such a condition should establish that the developer must provide a cash contribution to the Central Coast Council to the equivalent value of the Nikko Road parcel. The purpose of the contribution is to offset the loss of Nikko Road as it will no longer be available for use as a public road. The VPA should be modified to provide for this contribution.

9. **Bushfire**
   a. All APZ / bushfire reduction measures need to be located within the property subject of the application. It is noted that a bushfire management plan should be developed outlining how the mine will respond to bushfire events and the assistance that will be provided to the RFS during these events. This plan needs to be developed in conjunction with and approved by the local RFS. Any loss of vegetation as a result of the APZ needs to be considered as part of the biodiversity offsetting requirements.

10. **Post mining**
a. The EIS indicates minimal risk associated with saline and acid discharges, there remains a potential for impact on water quality. Both these potential sources of water pollution require appropriate performance monitoring, and mitigation measures in the event the mining activities does impact on water quality. It is noted that once operations cease and the mine is filled with ground water, there is potential for highly saline or otherwise affected waters to decant from the mine into the surrounding areas and waterways. A condition is required to ensure that the waters which exit the site both during mining and post mining operations are of a quality which matches that of the receiving waters. Conditions should also be imposed that require that the mine operator is responsible for the longer term impacts of the mining operation. It is suggested that a bond may be an appropriate mechanism.

11. Draft Conditions
   a. Comments on the draft conditions attached to the Department’s 2017 Addendum Report.

Schedule 1 Administrative Conditions

Condition 16 Planning agreement

Add wording at the end of the existing sentence to read:

The applicant must implement the Voluntary Planning Agreement made on 7 July 2014 with Wyong Shire Council and Wyong Coal Pty Limited as amended per the following:
The developer must provide a cash contribution to the Central Coast Council to the equivalent value of the Nikko Road parcel. The purpose of the contribution is to offset the loss of Nikko Road as it will no longer be available for use as a public road.

Schedule 3 Specific Environmental Conditions - underground mining

Condition 1 – Table 1 – Water Supply

Add the following dot points:

- All water losses to the Central Coast water supply are to be compensated to achieve no net impact.
- A minimum amount of 300ML per year compensatory water shall be operational before mining beyond Long Wall 5N occurs.
**Condition 3 – Performance Measures – Built Environment – Table 2 – Key Public Infrastructure**

Add the following dot points to the Key Public Infrastructure Row:

- Buttonderry Waste Management Facility
- Hue Hue Road

**Condition 10 – Independent Audits of Subsidence impacts**

Add the following:

(f) consider whether the impact of the mine on subsidence, surface water, and or ground water, is greater than predicted in the EIS and will have a significant environmental or social impact.

**Condition 11 – Independent Audits of Subsidence impacts**

Add the following:

(d) consult with Council, the Consultative committee and asset holders regarding the results and proposed mitigation measures.

(e) stop mining operations on the site where the Independent Audit results show that the impact of the mine on subsidence, surface water, and or ground water, is greater than predicted in the EIS and will have a significant environmental or social impact, until an environmental audit has been undertaken and the impacts of such and the proposed remediation measures have been put in place to the satisfaction of the secretary.

**New condition after Condition 11 but before Condition 12**

Add the following

Condition 11A

Within 6 months of the results of the audit of subsidence impacts and where the subsidence impacts are greater than anticipated, the flood study for the locality is to be revised to verify whether additional flood mitigation measures are required to offset the flood impacts of the development. Additional flood mitigation measures may be required to mitigate flooding impacts on both public and private land and asset owners. All works are to be
proposed/designed and undertaken by the applicant and agreed to by the road authority and other appropriate stakeholders.

Schedule 4 Specific Environmental Conditions - General

Condition 14 – Compensatory Water Supply

Add the following:

Compensatory Water is not required to be provided after the cessation of mining operations only if the proven permanent water loss is less than 36.5ML per annum.

The purchase of water licences is not considered an appropriate compensatory measure for Central Coast Water Supply.

Condition 16 – Central Coast Water Supply Compensatory Arrangement

Delete point (a) as this is not an acceptable compensatory measure.

Condition 20 – Biodiversity Offset Strategy – Table 7

Add a row to the table which requires that the loss of any endangered species resultant from any clearing undertaken for the required asset protection zones is appropriately compensated.

Condition 30 – Bushfire Management

Add the following:

Prepare a bushfire management plan in consultation with and to the satisfaction of the RFS in relation to procedures undertaken in the event of a bushfire threat or event in the locality.

Condition 33 Rehabilitation objectives – Table 8 – Water Quality

Include additional dot point:
- All water existing the property is to be at the rate of pre-development flows, are to be dissipated appropriately and are to be of an equivalent quality to the receiving waters.

**Schedule 6 Environmental Management, Reporting and Auditing**

**Condition 3 Revision of Strategies, Plans and Programs**

Add the following:

(e) a change of any licence requirement

**Condition 8 Regular reporting**

Amend the condition to require the following particular reports to be made public:

- Noise monitoring – as per condition 5 of Schedule 4;
- Air quality monitoring station results - as per condition 11 of Schedule 4;
- Biodiversity management plan monitoring – as per condition 22(g) of Schedule 4; and
- Waste management annual review – as per condition 29 of Schedule 4.

**Condition 11 Independent Environmental Audit**

Amend the condition to require that a copy of the Independent Environmental Audit also be provided to council.

**Conclusion**

The Central Coast Council remains in opposition to the mine proposal. It is suggested that a precautionary approach should be engaged to remove the risk of actual impacts which may include:

- loss of water quality/supply,
- increase social impacts including isolation during emergency events,
- Reduction of performance of critical infrastructure,
- Loss of environmental values.
Water catchment areas
Little Jilliby water catchment area
Buttonderry Waste Management Facility (BWMF) Landfill cell locations shown coloured
Attachment 4

Buttonderry Waste Management Facility (BWMF) Landfill mounding shown in red.
Proximity of Buttonderry Waste Management Facility (BWMF) to the project boundary

BWMF property is rectangular and is shown edged heavy navy
Dear Commissioners

Thank you for the opportunity to lodge further comments in regard to the Amended Development Application (the Amended DA) being considered by yourselves for the Walallah 2 Coal Mine located at Walallah on the Central Coast of New South Wales.

This submission should be read in conjunction with Darkinjung's previous written submissions.

Figure 1.1 below shows Darkinjung's interests in the immediate vicinity to the proposed development site. Land shown in yellow is owned by Darkinjung. Land shown in purple has been granted to Darkinjung and is awaiting transfer. Land shown in pink has a current Aboriginal Land Claim over it.

Fig 1.1 – DLALC Landholdings Bushells Ridge

The extent of Darkinjung’s land holdings in relation to the Amended DA is shown on Fig. 1.2 below. ¹

¹ Fig. 10 of Amended Development Application
Darkinjung strongly objects to the Amended DA for the following reasons.

1. **The Amended DA is not an amendment**

1.1 Darkinjung's legal advice maintains that the Amended DA cannot properly be considered an amendment of SSD-4974, and is instead a new development which requires the lodgement of a new development application. The Amended DA proposes a development whereby a coal conveyor, rail, and coal loading infrastructure on different land and is such a substantive variation to the project, the subject of SSD-4974.

1.2 It involves 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. It now directly affects two major Darkinjung projects being the Wyee Road Residential Site and the Bushells Ridge Residential Site.

1.3 The Director-General's Assessment Requirements - Section 78A(8A) of the Environmental Planning and Assessment Act 1979 (the DGs Requirements) set down in the original Development Application for this project, were not issued on this basis. In particular, it did not consider what issues were relevant to the consideration of a proposal to construct a coal conveyor and loading facility on a 20m corridor on bushfire prone land. Nor do they consider the full range of issues associated with constructing a lengthy coal conveyor in close proximity to major roads and crossing the main Sydney to Newcastle rail line. They do not address the range of issues that arise for the road network around Nikko Rd. Furthermore, it does not set a proper framework to consider the impacts on Darkinjung's Wyee...
Road Residential Site, or the Bushells Ridge Residential site, expanding urban area of Wyee or the residential suburb of Blue Haven which are in close proximity to the area the subject of the Amended DA.

1.4 The extent of these issues highlight that Amended DA 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.

2. Lack of formal EIS prepared in regard to the Amended Development Application

2.1 The original EIS does not include information on the land affected by the Amended DA D and is not relevant. The proponent has not provided an EIS for the amended Development Application.

2.2 The DGs Requirements 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 and the Amended DA do not comply with this requirement. There are not sufficient drawings showing how Darkinjung's existing access will be maintained in relation to the construction of bridges in the vicinity of Spring Creek or how that access will be maintained with the proposed changes in levels of the land. There is no "site plan" which shows "existing levels of the land in relation to buildings and roads". 2 Nor does it contain a sketch which shows "proposed finished levels of the land in relation to existing and proposed buildings and roads", 3 proposed methods of draining the land" 4 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 The location of the coal conveyor in relation to Tooheys Road is also not shown.

2.3 The plans provided with the Amended DA are inconsistent. Pages 38 and page 65 of the Department's Addendum Report confirm that WACJV has committed to developing an all-weather access road with a minimum width of 6m along the section of road subject to the road closure application. However, the amended plans submitted (shown on pages 19 and page 65 of the Department's Addendum Report), illustrate:

- Page 19 – the area for the access road as 4.1m to the boundary;
- Page 65 – a 3m wide access road plus 1m to the boundary.

2.4 In addition to the above, there also appears to be discrepancies with regards to the dimensions of the proposed train loadout facility. On page 18 of the Department's Addendum Report it states " WACJV has advised that the bin would be approximately 12m in diameter and 29m in height"; however, the amended plans

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2 Environmental Planning and Assessment Regulation 2000 (EPAA Reg), Schedule 1, Clause 2(1)(a) 2(2)(d).
3 EPAA Reg, Schedule 1, Clause 2(1)(b) and 2(3)(d).
4 EPAA Reg, Schedule 1, Clause 2(1)(b) and 2(3)(g).
5 EPAA Reg, Schedule 1, Clause 2(1)(b) and 2(3)(e).
submitted (shown on page 19 of the Department’s Addendum Report), illustrate a bin 14.9m in diameter and 27.5m in height. These discrepancies are significant in the context of the narrow corridor in which the infrastructure is proposed to be constructed.

2.5 The conflicting information does not enable us to effectively respond to the proposal. The discrepancies point to an overall lack of coordination between the original and amended proposals, which may have the potential to result in a consent which will require subsequent amendments which have further impact on DALC lands.

2.6 In the absence of proper plans and diagrams the public notification processes are compromised as is the ability for the Amended DA to be properly assessed.

3. Road Closures – Toohys Road

3.1 Darkinjung is concerned that there now appears to be a proposal to close Toohys Rd. Darkinjung was not aware of this intention until it was brought to its attention at the PAC Hearing.

3.2 A proposal to close Toohys Rd was not part of the original Development Application, or exhibited amended application. In the summary of the Amended DA (Table 1) (p.9) there is no reference to the closure of Toohys Rd. While Toohys Rd is listed in the revised schedule of lands this could equally be taken be a reference to the conveyoyr merely crossing it in the same way the rail line crossed under the original proposal. The absence of any detailed plans in the Amended DA makes it difficult to identify precisely what is proposed for the conveyoyr system in the vicinity of Toohys Road.

3.3 Darkinjung now understands that the application to close Nikko Rd (Closure Application W562973) also contains an application to close Toohys Rd. The reason why this has been unclear is that Darkinjung has only seen a redacted version of Closure Application W562973. The Department of Primary Industries - Lands (DPI) plan shown at Fig 1.3 suggests that the application to close Nikko Rd is part of that proposal. If there is a proposal to close Toohey’s Rd, then the lack of clarification in the Amended DA is misleading and has deprived people affected to fairly respond. There has been no assessment of it.

3.4 Toohys Rd is an important local thoroughfare which is regularly used by local residents. It is also an important emergency road to local residents. During bushfires Toohys Road is used for access to the immediate area by emergency vehicles. Local traffic has used Toohys Road as an emergency exit when Bushfires have closed Bushells Ridge Road and Hue Hue Road. Traffic has been directed along Toohys Road when accidents have occurred on the M1. In fact this has happened earlier this year. The importance of Toohys Rd to the local road network is
apparent from the fact that the M1 was constructed with an overpass to ensure it remained open for public use.

3.5 The closure of Tooheys Rd would have significant impacts on other businesses in the area. Darkinjung have entered into an Agreement to Lease Lot 195 for a term of 60 years with CASAR Supporters Inc. See the location on fig. 1.5 below. CASAR Supporters Inc lodged their Development Application with Wyong Shire Council (now Central Coast Council) on 30 June 2015. They are currently completing further ecological studies as requested by Council. Access to the site will be via Lot 191 to the north. It is proposed that traffic to the development is directed off the M1 at the Motorway Link Road, to turn left into Tooheys Road at the overpass and along Tooheys Road to Bushells Ridge Road. This cannot happen if Road Closure Application W562973 is approved CASAR Supporters Inc. will have to revise all traffic studies completed to date.

4. Road Closures - Nikko Road

4.1 As noted in our previous submissions, of particular concern to Darkinjung is that the Amended DA is premised on the closure of Nikko Rd. Nikko Rd is a formed dirt road that fronts Lots 60, 196, 197 and 204. It is the only road access to those parcels.
4.2 Nikko Rd is a Crown Road and the public currently have a right to access it. 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 the WSC as a condition of separate development consent. See Fig. 1.4 below.

Fig. 1.4 Detail required for continued access under Link Road overpass – provided by Wallarah 2 Coal Project on 29 August 2016 (not included in amended Development Application)

4.3 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.

4.4 There is also a separate transmission line that runs down Nikko Rd from near the Motorway Link Rd towards Warnervale. Nikko Rd is also required for access to a rising sewer main which is located on Lot 196 which Darkinjung understands is Central Coast Council infrastructure maintained by the Council.

4.5 This is the only access to Nikko Rd because, as is apparent from aerial imagery, the other potential approaches from the southern section of Nikko Rd and Spring Creek Road, while in road reserves, are not functional because of Spring Creek in the east and Wallarah Creek in the south. These are wide, deep and permanent creeks that prevent road access. Lots 60, 196, 197 and 201 will become effectively land locked if the access by Nikko Rd becomes unavailable.

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6 Sections 5-6, Roads Act 1993 (NSW).
4.6 Darkinjung is entitled to have benefit of the both legal and practical access that was available when the land was transferred to it under the ALRA. The members of Darkinjung are entitled to be able to access the land freely, and safely, without having the risk or inconvenience of having to traverse an operating coal transporting facility.

4.7 Removing legal access will have a clear immediate financial impact on the value of the land to Darkinjung. The absence of appropriate access, will also limit the ability of Darkinjung to utilise the land in future.

4.8 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.

4.9 Darkinjung's Submission sets out a number of issues in relation to access that would arise in the event that Nikko Road closed. They are not satisfactorily addressed in the WACJV Response. Darkinjung repeats the concerns set out in Darkinjung's Submission. In relation to the issue of access being maintained Darkinjung makes the following additional observations:

a. The WACJV Response states that the WACJV will create an easement, but the terms of the easement are unknown. Neither the Department, nor the PAC can know or assess whether the terms will satisfactorily ensure safe ongoing access.

b. At para 6.1.5 (p.11) the WACJV Response states in relation to the easement that will replace Nikko Road that "It is not intended to be used by the public". That highlights that there is an intention to alter access. It will clearly impact adjoining land owners. Darkinjung is entitled to invite whoever they want to its land, and they are entitled to have safe access for such invitees. They should not have the existing access removed and replaced by an easement that has to be shared with an operating coal loading facility.

c. There is still no adequate plan showing the location of the easement and how it will connect with other access points. As plans showing finished levels have not been provided, it is unclear how the easement will link up with existing access.

d. Nor is it clear whether the change in levels proposed will enable that access to be properly maintained.

e. It is now unclear what the proposal is. The Amended DA and attached plans show a 3m easement. The WACJV Response shows a 6m easement. It is now unclear what the proposal involves.

f. Dust and noise impacts for people using the road are not addressed.

5. **Strategic importance**

5.1 The Proponent and the Department of Planning and Environment have failed to understand the strategic importance of the Nikko Road Reserve to the future growth of the North Wyong and southern Lake Macquarie regions. The newly released Central Coast Regional Growth Plan clearly states that a further 41,500 houses will be required over the next 20 years. Much of this development will happen across North Wyong. In the immediate area, the North Wyong Shire Structure Plan, 2012 identifies the following growth;
<table>
<thead>
<tr>
<th>Growth Precinct</th>
<th>Dwelling potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precinct 6 (NWSSP)</td>
<td>1,764</td>
</tr>
<tr>
<td>Precinct 8 (NWSSP)</td>
<td>1,764</td>
</tr>
<tr>
<td>Warnervale Town Centre (NWSSP)</td>
<td>1,650</td>
</tr>
<tr>
<td>Plus Wyee urban growth</td>
<td>2,000</td>
</tr>
<tr>
<td>Plus Darkinjung rezonings</td>
<td>900</td>
</tr>
<tr>
<td><strong>Total new dwellings</strong></td>
<td><strong>8,078 (or 19,387 people @ 2.4 people/dwelling)</strong></td>
</tr>
</tbody>
</table>

Table 1 Planned residential growth between Wyee - Warnervale

5.2 Table 1 above illustrates that significant urban growth is planned for this locality over the next 20 years. The Nikko road corridor provides an obvious road connection opportunity within this growth corridor, linking a future population of approximately 19,400 to the planned commercial & retail facilities within these growing centres.

6. **Bushfire Risk**

6.1 Despite being a proposal to undertake a development on bushfire prone land (as mapped by Central Coast Council), the Amended DA is silent on the issue. No assessment has been prepared for the Amended DA, nor has an addendum been provided to the original Preliminary Hazard Analysis. It is therefore questioned as to how a proper assessment of the potential hazards (as required by the Director General’s requirements) can be made.

6.2 It does not provide any APZs. It is premised on the removal of a public road which assists in the management of bushfire risks.

6.3 Bushfires are not a remote possibility in the area. There are significant residential areas in the vicinity. WSC took the responsible planning measure of identifying bushfire prone vegetation areas. The construction of a coal loading and coal conveyor in such an area without any buffer to the adjoining E2 Environmental Conservation land and without an APZ is irresponsible and cannot be justified from a planning perspective.

6.4 The WACJV Response does not adequately address the issue of bushfire risk or the need for the project design to have regard to basic standards. As noted in the DLALC Submission the Amended DA proposes the development of a coal loading facility in bushfire prone land (vegetation buffer) and immediately adjacent to Category 1 Vegetation without any setbacks or "Asset Protections Zones". The Project will be wholly contained within a 20m corridor. The eastern side of the 28m coal loader will be immediately adjacent to the canopy of the adjoining bushland. The proposed 6m access road will in some sections be fenced on one side, and have a retaining wall on the other. There is no indication of, and no room for, appropriate turn around bays for emergency vehicles. It is not a defendable space in the event of a fire. Darkinjung maintains that it will be a fire trap.
6.5 The risks associated with such a design are exacerbated by the fact that it is now stated that the loading facility will be remotely operated with no staff on site, meaning that any response to a fire would be at least 20 minutes away, if not more.

6.6 The original risk assessment stated that bushfire would be addressed "maintaining fire breaks around surface facilities". The current design does not allow for any such measure. The WACJV appears to disavow any requirement to have regard to NSW Rural Fire Service's guideline titled 'Planning for Bush Fire Protection' by reference to s 79BA(1) of the Environmental Planning and Assessment Act. It has clearly not been considered or taken into account. The failure to do so is inconsistent with the DGs Requirements which required a detailed assessment of the "key issues" including "an assessment of the potential impacts of all stages of the development, including cumulative impacts, taking into consideration relevant guidelines, policies plans and statutes". The "Key Issues" identified in the DGs Requirements included the "Hazards - paying particular attention to public safety, and including bushfires".

6.7 The WACJV Response refers to Condition 26 under Schedule 4 of Recommended Development Consent which required "bushfire management measure to be implemented". However, such a requirement cannot address fundamental design defects whereby infrastructure is built without setbacks or asset protection zones. That recommendation was in any event made on the assumption that there would be appropriate setbacks around the project. Those setbacks no longer exist.

6.8 The WACJV Response states that "... 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 its workforce, the local community and its equipment in the event of bushfire." Darkinjung submits that 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. It is simply a shirking of the obligations to properly assess bushfire risks in accordance with the DGs Requirements. It is deferring of a critical matter which ought to be considered in any assessment as to whether the Project should proceed at all.

6.9 The approach in this matter can be contrasted with what occurred in the Mandalong Southern Extension Project. That was also State Significant Development where the Director-General's Requirements identified "bushfire hazard as a key issue" which was to be addressed in the EIS. Like this matter is was required that relevant legislation and guidelines be considered. A separate bushfire risk assessment was undertaken for that project and it considered the RFS Planning for Bushfire Protection as one of the relevant Guidelines to be

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7 WACJV Response p.122.
8 WACJV Response p.122.
9 See Bushfire Risk Assessment- 130-1106 Centennial Coal Mandalong Mine Southern Extigension Project SSD-5144, p.3.
taken into account. Also relevantly, it proposed asset protection zones around surface infrastructure as ranging between 20m and 45m.

6.10 The failure to provide for adequate set backs and APZ risks having adjoining land owners being targeted to provide for those setbacks on their land in future. Darkinjung has previously had adjoining landowners who have failed to provide adequate bushfire prevention measures (such as asset protection zones – APZ’s) enforce the provision of APZ’s and the maintenance of the same on the land council. Such was the case of Wyong Shire Council’s (now Central Coast Council) Norah Head Caravan Park which did not include an APZ.

7. Consideration of Landscape in Design

7.1 Darkinjung maintains its concerns about landscape design of the coal loading facility proposed for Nikko Road.

7.2 There is still no adequate plan showing the location of the easement proposed for Nikko Road and how it will connect with other access points. As plans showing finished levels have not been provided, it is unclear how the easement will link up with existing access. Nor is it clear whether the change in levels proposed will enable that access to be properly maintained.

7.3 The Amended DA identifies that there will be significant cut and fill along Nikko Rd. The Amended DA states that approximately 60,000m3 of fill will be used. As initial and final levels have not been identified the location and extent of the cut and fill have also not been identified.

7.4 The effect on surface water, water tables and soils have similarly been assessed. This is a significant failing given the terms of the DGs Requirements, the location of the and in proximity to Spring Creek which is a sensitive coastal location under SEPP 71, and the vicinity of the land to acid sulphate soils.

7.5 For the reasons explained below, Darkinjung cannot access its land via Thompson Vale Rd or Spring Creek Rd:

(a) Contrary to what is said in the Amended DA, the proposed easement does not allow for the existing access to continue. The existing access from the western side of the Sydney / Newcastle Rail line will be blocked by the rail siding. The Amended DA assumes that access will be available through Spring Creek Road and Thompson Vale Rd. As noted above, Thompson Vale Rd is not formed all the way to Nikko Rd. It also crosses a creek. Spring Creek Rd is also not formed and cannot be used because Spring Creek crosses it twice. No part of Amended DA relates to any works on Thompson Vale Rd or Spring Creek Rd. They are not part of the Project Area identified in the DA. They are not part of an Amended DA.

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10 Ibid, p.11.
11 Ibid, p.25.
(b) There is no description of the nature of the fencing for the project area to protect the site from trespass or set-backs from the fencing. Given the proximity to the facility to a residential area, it is not unforeseeable that there will be children in the vicinity from time to time. Nor is there an explanation with how the need to enclose the area will be achieved if public access is provided by way of an easement.

(c) It is said that the facility will be controlled locally and remotely (p.15) Drawing 22-17704-C205 shows the existence of a "control room". However how individuals could be stationed there is unclear. There is no indication of worker's facilities, toilets or other basic amenities. If such are to be provided there is no indication as to how they will be constructed within the corridor or how they will impact on the proposed easement. More fundamentally:

(i) there is no provision for parking;
(ii) no provision for appropriate access for emergency vehicles;
(iii) it is not even clear how the employees will access the site, given the lack of current access on Spring Creek Road and Thompson Vale Rd, is inadequate, no other road works are proposed or described in the development application.

(d) Drawing 22-17704-C206 in Appendix B shows 1 in 30 gradients from rail level across the proposed 3m wide access road and into a substantive cut away which will significantly alter the existing levels of the land.\textsuperscript{12} This shows that there will be a substantial drainage issue which will need to be addressed. No drainage is planned, or referred to. The alteration of the land contours in turn create unassessed issues as to the impacts on the water quality in Spring Creek from runoff from around the loading facility where coal dust and other pollutants such as oil and grease will no doubt accumulate.

(e) The Amended DA identifies no contingency for spillage or the need for an emergency stockpile area in the event that there is a mechanical failure. Nor does it identify how such an area would be managed.

8. Amenity Impacts – Air Quality and Noise

8.1 NSW Health advised the Department that while the RTS2 addressed some of its concerns it did not adequately address concerns over air quality and noise impacts. As noted within the submission from NSW Health; health impacts can occur below guideline values, and there is no safe level of exposure to particulate matter. Particulate matter will be elevated beyond the boundaries of the proposal which increases the risk of adverse health effects for people exposed to increased levels of particulate pollution.

8.2 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

\textsuperscript{12} See Drawing 22-17704-C206 - "Typical Cut Section CH112.685 to 11.785".
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 does not adequately address this issue. The WAJCV 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),L90 at all times and LAeq levels less than 50 dB(A) at all times, depicting a relatively quiet ambient environment. Darkinjung maintains that the proper classification is "suburban".

8.3 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.

8.4 WACJV notes that there is scope for Darkinjung’s development to be modified so that the potentially noise-affected areas are reserved for Environmental Conservation, rather than residential development. The Department appears to be of the same view, that the potential lots which may experience noise greater than the amenity criteria are based on Darkinjung’s conceptual plans, which could be subject to change as the planning proposal and subsequent development application progress. Darkinjung’s residential rezoning has not been afforded the weight that it deserves in regards to assessing the potential impacts of the amended development. Whilst the rezoning is within gateway, the project has significantly advanced in its design, with a substantial amount of work having already been conducted and a number of consultant reports having been received based on the current design.

8.5 No regard has been granted to the provisions of SEPP (Mining, Petroleum Production and Extractive Industries) 2007, Clause 12 – Compatibility of proposed mine, petroleum production or extractive industry with other land uses which states:

"Before determining an application for consent for development for the purposes of mining, petroleum production or extractive industry, the consent authority must:

a) Consider:

i. The existing uses and approved uses of land in the vicinity of the development, and

ii. Whether or not the development is likely to have a significant impact on the uses that, in the opinion of the consent authority having regard to land use trends, are likely to be the preferred uses of land in the vicinity of the development, and"
iii. Any ways in which the development may be incompatible with any of those existing, approved or likely preferred uses’

8.6 Given that Darkinjung’s rezoning has received a Gateway determination for ‘residential’ rezoning, the potential impacts to this land should be assessed in terms of its ‘likely preferred use’ for residential development. It is noted that the “likely preferred use of the land” for residential development is also consistent with the Central Coast Regional Plan which identifies the land as ‘urban area’. It is therefore considered that at the very least, the land should receive rights under the VLAMP, as will be afforded to other impacted land owners (i.e. residences at locations P14, P15 and P16).

9. Economic Impact

9.1 As explained in its previous submissions, Darkinjung is an Aboriginal land council established under the ALRA which was enacted to provide some remedy for the injustice of the dispossession of Aboriginal people from their lands. Under the ALRA, land is returned to Aboriginal land councils to enable them to pursue the cultural, social and economic object of the Act. The Amended DA does not adequately assess socio-economic impacts on the Aboriginal community.

9.2 Darkinjung is the largest private landowner on the Central Coast. We currently have freehold ownership of 2,535 hectares of land. There is a further 1,040 hectares awaiting transfer. Darkinjung has carried out a detailed analysis of their assets and has identified that less than 10% is in locations suited to economic development. These economic landholdings are not necessarily ready for development. Many need to be rezoned in order to realise their full potential.

9.3 The process that Darkinjung has been through to identify the economic potential of its land has taken 8 years. In 2015 our rezoning applications across North Wyong were passed through to the Gateway process. Darkinjung have appointed consultants covering all disciplines. These consultants have been carrying out required inspections and ground truthing in order to compile data that will allow us to sit with Central Coast Council’s planners and assess changes that will be required to the footprint of each rezoning area.

9.4 To assist you we have attached copies of plans and reports prepared by our team (as listed on Attachment A) that has identified the ecology of each site as well as suitable servicing options for each site. Our urban design consultant is now preparing alternate footprints for each site. When these are prepared we will meet with Council’s planners to discuss the suitability of our proposals.

9.5 In respect to the progress of Darkinjung planning proposal in the locality, a summary of events to date is provided as Attachment B demonstrating to the PAC that Darkinjung has, and is, continuing to diligently plan for it’s land in this area – both for economic and environmental outcomes.
9.6 The Economic Impact Assessment prepared by Gillespie Economics on behalf of WACJV predicted a net economic benefit of $485 Million to the NSW community. Darkinjung have prepared Attachment C - an economic forecast for the rezoning process across North Wyong. You will note the forecast does not take into account the CASAR Motorsports project on lot 195 nor the proposed resource recovery hub. Even without these projects being considered we predict that our economic development program across North Wyong will result in an economic benefit in excess of $1.048 Billion. Darkinjung finds it difficult to believe that the Department of Planning refuses to consider our rezoning applications in any way, let alone as better alternatives to the current Amended DA.

9.7 The Wyee and Warnervale area is a growing residential area. There will be increasing demands for residential land on the Central Coast into the future. In fact, the Central Coast Regional Plan, released by the Department of Planning and Environment in 2016 (p.19), states:

“To accommodate the projected housing growth over the next 20 years, 2075 new homes will be needed each year on average. This is 685 more homes each year than the average annual housing production of 1,390 dwellings over the 19 years to 2014-15.”

Darkinjung is the only private landholder in the region that can provide substantial numbers of residential lots (approx. 1700 across North Wyong) and substantial areas of environmental offset lands to permit such development. This amended DA places the viability of these residential developments at risk.

9.8 Darkinjung has sought opinion on the potential financial impact of the amended proposal upon future residential estates being located so close to significant coal loading infrastructure. It is estimated that retail lot values would be adversely affect by approximately $10,000/lot - equals an $8,700,000 loss over the life of the project. A copy of the advice received from MDA Property Consultants dated 23 August 2016 is attached as Attachment D.

10. Consultation with Affected Land Owners

10.1 The Amended DA states that "WACJV has undertaken direct consultation with adjoining landowners and businesses"(p.28) . It also states that "DLALC was consulted regarding the proposed concept for the Amendment in February 2016"(p.29). Whilst Darkinjung’s cultural heritage officers were contacted in relation to potential impacts on cultural matters (a requirement under OEH guidelines), Darkinjung as a landowner, was not consulted.

10.2 The absence of consultation is compounded by the continued resistance to provide Darkinjung with basic information about the project, despite the Amended DA affecting Darkinjung’s interests in a substantial manner as outlined in this submission. The Director General's requirements required consultation with public authorities and “affected landowners”. It also mandated that: “The EIS must:

- describe the consultation process used and demonstrate effective consultation has occurred;
- describe the issues raised by public authorities, service providers, community groups and landowners.

10.3 The Amended DA does not comply with this requirement. It does not identify any of the issues raised by the public authorities it says it consulted in relation to the Amended DA. The requirement to consult with adjoining land owners did not occur in a way that allows compliance with this requirement. That is presumably why the Amended DA does not address the issue in the way required by the Director-Generals requirements.

10.4 To enable the PAC to understand the lack of consultation we have prepared the table below. This table clearly notes every item of correspondence between WACJV and Darkijnung between January 2016 and December 2016. The table has been colour coded and clear descriptions of the form of correspondence and its content are shown. The items coloured red are the only items relevant to the Amended DA. Many of those items coloured red relate to Darkijnung’s requests for further information.

10.5 WACJV have failed to consult with Darkijnung, as a major stakeholder, in a meaningful manner.
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<tr>
<th>DATE</th>
<th>CORRESPONDENCE FORM</th>
<th>CORRESPONDENCE FROM</th>
<th>CORRESPONDENCE TO</th>
<th>ATTENDEES</th>
<th>DESCRIPTION OF CONTENTS</th>
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<td>Email</td>
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<td>Request to meet regarding Cultural &amp; Heritage Assessment</td>
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<td>Lynne Hamilton</td>
<td>Peter Allonby</td>
<td></td>
<td>Request for information about archaeologist, survey dates, etc. and informing Peter Allonby that the C &amp; H team would return to work on 1 February, 2016. Information was required to determine who should attend the meeting.</td>
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<td>Lynne Hamilton</td>
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<td>Lynne Hamilton</td>
<td>Peter Smith</td>
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<td>Meeting</td>
<td>Sean Gordon</td>
<td>Peter Allonby</td>
<td>RPO proposed by Darkinjung and Wyong Coal's intention to continue with the amended DA</td>
<td></td>
</tr>
<tr>
<td>27/10/2016</td>
<td>Email</td>
<td>Sean Gordon</td>
<td>Peter Allonby</td>
<td>Enclosing letter to Wyong Coal</td>
<td></td>
</tr>
<tr>
<td>27/10/2016</td>
<td>Letter</td>
<td>Sean Gordon</td>
<td>Peter Allonby</td>
<td>Confirming Darkinjung's position of fighting amended DA and proposing a RPO</td>
<td></td>
</tr>
<tr>
<td>29/10/2016</td>
<td>Email</td>
<td>Peter Allonby</td>
<td>Sean Gordon</td>
<td>Response to Darkinjung's letter of 27/10/16</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Type</td>
<td>Recipients</td>
<td>Details</td>
<td></td>
<td></td>
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<td>-------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23/12/2016</td>
<td>Email</td>
<td>Kenny Barry, Sean Gordon, Peter Smith, Peter Allonby</td>
<td>Email Received 1.17pm. Mr Barry was seeking access to Darkinjung land for Spectrum Acoustics and demanding a response by 5.00pm. Darkinjung's offices were already closed for the Christmas period when email arrived.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Relevance**

- Culture & Heritage
- Amended DA
- DLALC's Proposed RPO
- DLALC's Recycling Facility
- Administrative matters (e.g. Meeting requests, access requests, minutes, etc)
11. Alternative Design Options

11.1 Schedule 2 Part 3, Section 7, (1)(c) of the Environmental Planning and Assessment Regulation 2000 requires "an analysis of any feasible alternatives to the carrying out of the development, activity or infrastructure...". In the Amended DA WACJV did assess the potential of the original Development Application and the Amended Development application. They did make mention of two other alternatives. One being transportation via Vales Point Power Station and the other being an alternative location for the rail spur on the western side of the existing rail line. This last option was discounted immediately because the land on the western side of the rail line is owned by Darkinjung. At no time did WACJV attempt to discuss this option with Darkinjung.

11.2 During a meeting between WACJV and Darkinjung on 7 September 2016 Darkinjung tabled an alternate proposal for a conveyor system to transport coal under the Motorway Link Road, across land owned by Darkinjung to a rail line that would sit in an old redundant rail line corridor and coal loader along the western side of the existing rail line (see Attachment E). This proposal would result in the coal loader being sited over 1 km away from residential development (existing Blue Haven), within the buffer zone of the existing Charmhaven Sewer Treatment Plant where other development is restricted and surrounded by land that is zoned industrial. This siting could, potentially, also accommodate future rail access to Darkinjung's industrial rezoning proposal on the southern side of the Motorway Link Road. This option (called Option C) would not require any roads to be closed or loss to public access.

11.3 WACJV refused to consider this option as a viable alternative dismissing it immediately. Darkinjung believe that Option C is the best solution. It will relieve many of the concerns of the residents of the immediate area in regard to noise and air contamination as well as most of Darkinjung's concerns. It does, however, require WACJV and Darkinjung to negotiate commercial terms in relation to the siting of the conveyor system, the coal loader and the new rail line.

11.4 As Option C has not been considered or assessed by WACJV, and subsequently the Department, it is considered that an inadequate analysis has been conducted as part of the amended development application, and as part of the Department's assessment.

Once again we thank you for the opportunity to make further comments in relation to this Amended DA. It appears that on each occasion that we have addressed this matter we have realised additional problems with the proposal. It is clear that the applicant has failed to provide sufficient detail to address a large number of problems with their proposal. It is also clear that they have failed to develop a solution to how they will transfer coal to their market that is to the benefit of the whole of the community within the location of the project.
I have included copies of each of our previous submissions for clarity. A list of all documents provided is attached to this letter. If you have further questions, after reading our submissions, please do not hesitate to contact either myself, or Lynne Hamilton.

Yours sincerely

[Signature]

Sean Gordon
Chief Executive Officer
Darkinjung Local Aboriginal Land Council
Submission to PAC regarding Amended DA for Wallarah 2 Coal Mine

Document List

1. Darkinjung’s previous Submissions

2. Attachment A – list of rezoning reports

3. Attachment B – Chronological History of Darkinjung’s Dealings

4. Attachment C – Economic Assessment of Darkinjung’s Rezoning

5. Attachment D - MDA property Consultants advice dated 23rd August 2016

6. Attachment E – Option C Plan
Darkinjung Local Aboriginal Land Council
Submission to PAC regarding Amended DA for Wallarah 2 Coal Mine

Documents included with submission regarding Darkinjung's land being rezoned in Bushells Ridge, Wyee and Wallarah

1. 12-4-17RezoningStormwater - Stormwater Plans for rezoning land Bushells Ridge, Wyee and Wallarah
2. 16HNG-5814 Bushells Ridge Rezoning Bushfire Constraints Report dated 20 January 2017
3. 2218586_001_Vegetation_A_20170221 - Ecological Assessment Plan dated 21 February 2017
4. Bushells Ridge_Sewer_Option1
5. Bushells Ridge_Sewer_Option2
6. Bushells Ridge_Water_Stage 1
7. Bushells Ridge_Water_Stage 2A
8. Bushells Ridge_Water_Stage 2B
Darkinjung LALC in Planning 2010 – 2017

The table below provides a summary of Darkinjung LALC’s efforts to secure opportunity for self-determination and economic independence within Darkinjung owned land across the northern part of the former Wyong Shire.

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 (October)</td>
<td>The Department of Planning releases the Draft North Wyong Shire Structure Plan. This Draft Plan noted most of Darkinjung LALC’s lands interest in the area as either strategically located but significantly constraint land subject to further investigation, or within green corridors and buffer zone areas.</td>
</tr>
<tr>
<td>2011-2012</td>
<td>Darkinjung response to the Draft Plan by having numerous meetings with various Agencies and Ministers, supported by written submissions.</td>
</tr>
<tr>
<td>2012</td>
<td>Department of Premier and Cabinet establishes Inter-agency Taskforce, with the endorsement of the Regional Minister in his role as Chair of the Executive Committee Regional Economic Development and Employment Strategy (REDES). This Taskforce includes DPC (Chair), Council, the Department of Planning, OEH, Trade and Investment and the Central Coast Regional Development Corporation.</td>
</tr>
<tr>
<td>2012 (October)</td>
<td>Department of Planning releases final North Wyong Structure Plan October 2012, where there is emerging (but not full) recognition for potential within Darkinjung owned land.</td>
</tr>
<tr>
<td>2013-current</td>
<td>Ongoing dialogue with DPC and relevant Agencies of the Inter-agency Taskforce.</td>
</tr>
<tr>
<td>2014 (June)</td>
<td>Consistent with Taskforce discussions, Darkinjung lodges a multi-site rezoning application with Wyong Shire Council. This rezoning application provides for; Approximately 180 ha of residential land(1,700 new homes), 46ha of employment land and 800ha of conservation off set land.</td>
</tr>
<tr>
<td>2014 (November)</td>
<td>WSC supports rezoning Site 1, providing for approximately 600 lots at Lake Munmorah.</td>
</tr>
<tr>
<td>2014 (December)</td>
<td>WSC Supports rezoning Site 3, providing for approximately 375 lots off Wyee Road, Doyalson, <strong>but defers</strong> Site 4 off Bushells Ridge Road for a further 500 lots.</td>
</tr>
<tr>
<td>2015 (May)</td>
<td>WSC supports rezoning Site 5, providing for 46ha employment land off Link Road, Wallarah. (Close to M1 &amp; adjacent to rail corridor)</td>
</tr>
<tr>
<td>2015 (June)</td>
<td>WSC reconSIDers Bushells Ridge Site 3 rezoning and again <strong>defers</strong> matter pending release of the Central Coast Regional Growth Plan.</td>
</tr>
<tr>
<td>Year</td>
<td>Event Description</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2015 (June)</td>
<td>Darkinjung lodges Pre-Gateway Review through the Department of Planning.</td>
</tr>
<tr>
<td>2015 (November)</td>
<td>Pre-Gateway review supported by the JRPP on 19 November 2015.</td>
</tr>
<tr>
<td>2016 (May)</td>
<td>Gateway Determination issued for Site 3 (approximately 500 lots off Bushells Ridge Road.)</td>
</tr>
<tr>
<td>2016 (July-ongoing)</td>
<td>Consulting specialist team comprising Ecology, Archaeology, Service &amp; Investigations, Stormwater management, Geotech, Acoustic, Planning engaged and relevant investigations commence. (Engagement of consultants delayed until all 3 relevant residential Gateways were issued so that a single team could be consistent across this planning sub-Region). Ongoing consultation with relevant stakeholders including Community Groups, Government Agencies (including Lake Macquarie City Council who is remote from tradition planning Region.) Darkinjung LALC also involved in negotiations with Crown Lands &amp; Council under amended legislation (Aboriginal Land rights Act 1983) to promote Aboriginal Land Agreements.</td>
</tr>
<tr>
<td>2016 (December)</td>
<td>Gateway Determination issued for Site 5- proposed 46ha employment land.</td>
</tr>
<tr>
<td>2017 (ongoing)</td>
<td>Ecological fieldwork for Spring 2016 and Summer 2016/17 complete with draft findings tabled for project review. Ecological findings suggest minor project footprint amendments to avoid sensitive ecological locations. Design layout currently under review. The project teams is working towards delivery of relevant reports in order to achieve the targeted Gateway completion dates of; Nov 2017 (Bushells Ridge &amp; Doyalson), Feb 2018 (Lake Munmorah) &amp; June 2018 (Wallarah employment lands)</td>
</tr>
<tr>
<td>2016 – ongoing</td>
<td>Department of Planning releases draft &amp; then the final Central Coast Regional Plan, 2036. This Plan includes clear acknowledgement for Aboriginal people of the Central Coast and importance to properly consider Darkinjung LALC’s significant landholdings, particularly in the north Wyong area. Clear Goals, Directions &amp; Actions are specified in the Regional Plan and Implementation Plan; including; Goal 1: Direction 6 – Strengthen the economic self-determination of Aboriginal communities: Actions 6.1, 6.2; Direction 8 – Recognise the cultural landscape of the Central Coast: Action 8.3; Goal 3: Direction 17 Align land use &amp; Infrastructure: Action 15.5 (Link communities) Action 17.4 Goal 4: Direction 19 Accelerate housing supply and improve housing choice Actions 19.1; 19.2; 22.1</td>
</tr>
<tr>
<td>2012 (March) to 2016 (March)</td>
<td>During this period, Darkinjung pursued a separate DA for a proposed manufactured home estate at Halekulani. A DA was lodged in June 2012 with the former WSC, but was refused by Council in August 2014. Darkinjung commence legal action in October 2014, and ultimately mediated a result in March 2016. This proposal remains the topic of ongoing discussions between WSC and Darkinjung to now facilitate this development. Conservation offsets required for this development may have an inter-relationship with the broader rezoning applications.</td>
</tr>
<tr>
<td>Development Site</td>
<td>Location</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>DS 1</td>
<td>Lake Munmorah</td>
</tr>
<tr>
<td>DS 3</td>
<td>Wyee Road</td>
</tr>
<tr>
<td>DS 3</td>
<td>Wyee Road</td>
</tr>
<tr>
<td>DS 3a</td>
<td>Bushells Ridge Rd</td>
</tr>
<tr>
<td>DS 3b</td>
<td>Bushells Ridge Rd</td>
</tr>
<tr>
<td>DS 5</td>
<td>Link Rd</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Assumptions**

- Does not include full estimated development costs - e.g. provision of services, Council & other authority fees etc.
- Does not include management of conservation offset land.
- Does not include economic multipliers.
- Commercial improvements assumed at 10,000m² @ $1500/m²
- Industrial improvements assumed at 40% site coverage @ $3000/m²
23 August 2016

Lynne Hamilton
Planning & Development Manager
Darkinjung Local Aboriginal Land Council
PO Box 401
WYONG NSW 2259

Dear Lynne

RE: REVISED WALLARAH 2 PROPOSAL AND ASSOCIATED LOSS OF ECONOMIC OPPORTUNITIES/BENEFITS TO DLALC

I refer to your recent instructions wherein you have requested overview advice as to the likely adverse impact on the economic opportunities and associated benefits that apply to the DLALC landholdings within the immediate area and which will be adversely impacted by the revised Wallarah 2 proposal, if it is approved.

As you are aware DLALC are proposing a major residential subdivision just to the north of the new/revised coal loading facility on land off Bushells Ridge Road and having a total yield of approximately 870 lots.

I am of the opinion that the close proximity of the proposed rail loading facility and associated infrastructure will have an adverse impact on the saleability of the 870 lots due to potential noise impact which could require acoustic treatment for dwellings.

In addition there is potential for adverse market reaction to potential impact due to coal dust.

As you will appreciate the market only needs to perceive a problem for saleability/marketability of land to be adversely affected.

Having regard to the above comments it is acknowledged that it is currently difficult to definitively assess the likely loss of economic opportunities/benefits, however as a minimum a reduction in gross realisable allotment value of $10,000 would result in a significant loss to DLALC, i.e. 870 lots x $10,000 per lot equals an $8,700,000 loss over the life of the project.
In addition to impacting on DLALC's residential development sites in this area the revised Wallarah 2 proposal will remove the potential for rail access to be provided to the industrial land owned by DLALC which is currently situated on the western side of the Main Northern Rail Line at Bushells Ridge.

This industrial land is currently very well located, not only in relation to the Central Coast and Hunter industrial land markets but also to the Greater Sydney metropolitan area, noting the close proximity of the M1 Motorway whilst the NorthConnex which is currently under construction, will, when complete, further improve accessibility to Central Coast industrial property.

In relation to the industrial land at Bushells Ridge currently owned by DLALC, the potential availability of rail access makes this a unique industrial landholding. The removal of this potential rail access will have a significant adverse impact on potential economic opportunity and associated benefit to DLALC.

I understand the above advice is all that is required at this stage.

Please do not hesitate to contact me if you require any additional information.

Yours faithfully
MDA PROPERTY

MICHAEL J DICK
FAPI
CERTIFIED PRACTISING VALUER
Ref/Job No: 16HNG_5814

20 January 2017

Dear Brooke,

Re: Bushfire constraints assessment of proposed rezoning and residential development of

Proposed Development – 425 Bushells Ridge Road, Bushells Ridge (Lots 111, 107 to 109//DP755245; Lot 191//DP1032847; Lot 110//DP745245)

This letter assesses the site against the constraints imposed by ‘Planning for Bush Fire Protection 2006’ (the document controlling development in bushfire prone lands in NSW) in relation to the proposed rezoning and residential re-development of the abovementioned sites.

The advice in this letter is based on the following research and knowledge:

- Previous site inspections and experience of the area;
- A desktop analysis of the vegetation and topography within and surrounding the subject land;
- The requirements of the Environmental Planning & Assessment Act 1979 and Rural Fires Act 1997;
- The requirements of ‘Planning for Bush Fire Protection 2006’ (PBP) and other related NSW Rural Fire Service (RFS) policy in regards to bushfire planning and design in bushfire prone areas (RFS 2006); and
- The requirements of AS3959-2009 ‘Construction of buildings in bushfire-prone areas’ in regards to the anticipated Bushfire Attack Level (BAL) requirements.
It is our understanding that the proposal is to investigate approval for the rezoning and subsequent residential development of the site. Development of this nature is captured as Integrated Development and requires the issue of a Bush Fire Safety Authority (BFSA) from the RFS, in accordance with Section 100B of the Rural Fires Act 1997.

1. **Asset Protection Zones (APZs) / construction standards**

PBP 2006 determines APZs and construction levels for proposed development based primarily on vegetation type and slope. The predominant bush fire prone vegetation influencing the subject land is situated from remnant bushland within the property which has connectivity with other areas of bushland. The bushfire prone vegetation impacting the site and surrounding area consists predominantly of Dry Sclerophyll Forest with pockets of Coastal Swamp Forests.

Whilst the vegetation contains a wide assemblage of flora classifications, the dominant vegetation type for 140 m of the property boundary would be classified as under PBP as being ‘forest’. Evidence of fire history onsite indicates medium to high fire intensity has been achieved within the site previously.

The multiple parcels of land involved

The slope varies, however, the effective slope is largely within the 0-5° downslope category. **Figure 1** provides several points of discussion regarding the level of protection for the proposed subdivision design:

**Point 1 – Powerline easement.** These easements are considered to be an APZ where management regimes are undertaken regularly. **Point 1** indicates the specific locations where lots adjoin an easement through the centre of the site and Council and/or NSW RFS may request some documentation from the relevant authority to confirm management in perpetuity.

**Point 2 – Adjoining subdivision proposal.** The subdivision adjoins private property which is proposed to be developed for residential subdivision in the future. Where development does not occur simultaneously, temporary protection measures for APZs and turning circles will be required or a legal management agreement.

**Point 3 – Riparian creeklines.** The site includes large areas of land conserved for conservation and one riparian corridor onsite. The finer detail surrounding the provision of APZs for the riparian corridor will need to be checked to make sure that the width of the riparian corridor does not exceed the maximum width permitted by PBP to achieve riparian vegetation reductions for APZ.

**Point 4 – Vacant lots.** Vacant lots that are vegetated will require staging of lots or removal for the provision of compliant APZs or a legal management easement over the adjoining vacant lots.
Figure 1: Bushfire Hazard Assessment
Table 1: Public roads

<table>
<thead>
<tr>
<th>Intent may be achieved where:</th>
<th>Acceptable solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• firefighters are provided with safe all weather access to structures (thus allowing more efficient use of firefighting resources)</td>
<td>• public roads are two-wheel drive, all weather roads</td>
</tr>
<tr>
<td>• public road widths and design that allows safe access for firefighters while residents are evacuating an area</td>
<td>• urban perimeter roads are two-way, that is, at least two traffic lane widths (carriageway 8 metres minimum kerb to kerb), allowing traffic to pass in opposite directions. Non perimeter roads comply with Table 4.1 – Road widths for Category 1 Tanker (Medium Rigid Vehicle)</td>
</tr>
<tr>
<td></td>
<td>• the perimeter road is linked to the internal road system at an interval of no greater than 500 metres in urban areas</td>
</tr>
<tr>
<td></td>
<td>• traffic management devices are constructed to facilitate access by emergency services vehicles</td>
</tr>
<tr>
<td></td>
<td>• public roads have a cross fall not exceeding 3 degrees</td>
</tr>
<tr>
<td></td>
<td>• public roads are through roads. Dead end roads are not recommended, but if unavoidable, dead ends are not more than 200 metres in length, incorporate a minimum 12 metres outer radius turning circle, and are clearly sign posted as a dead end and direct traffic away from the hazard</td>
</tr>
<tr>
<td></td>
<td>• curves of roads (other than perimeter roads) are a minimum inner radius of six metres</td>
</tr>
<tr>
<td></td>
<td>• maximum grades for sealed roads do not exceed 15 degrees and an average grade of not more than 10 degrees or other gradient specified by road design standards, whichever is the lesser gradient</td>
</tr>
<tr>
<td></td>
<td>• there is a minimum vertical clearance to a height of four metres above the road at all times</td>
</tr>
<tr>
<td></td>
<td>• the capacity of road surfaces and bridges is sufficient to carry fully loaded firefighting vehicles (approximately 15 tonnes for areas with reticulated water, 28 tonnes or 9 tonnes per axle for all other areas). Bridges clearly indicated load rating</td>
</tr>
<tr>
<td>• the capacity of road surfaces and bridges is sufficient to carry fully loaded firefighting vehicles</td>
<td>• public roads greater than 6.5 metres wide to locate hydrants outside of parking reserves to ensure accessibility to reticulated water for fire suppression</td>
</tr>
<tr>
<td>• roads that are clearly sign posted (with easy distinguishable names) and buildings / properties that are clearly numbered</td>
<td>• public roads between 6.5 metres and 8 metres wide are No Parking on one side with the services (hydrants) located on this side to ensure accessibility to reticulated water for fire suppression</td>
</tr>
<tr>
<td>• there is clear access to reticulated water supply</td>
<td>• public roads up to 6.5 metres wide provide parking within parking bays and located services outside of the parking bays to ensure accessibility to reticulated water for fire suppression</td>
</tr>
<tr>
<td>• parking does not obstruct the minimum paved width</td>
<td>• one way only public access roads are no less than 3.5 metres wide and provide parking within parking bays and located services outside of the parking bays to ensure accessibility to reticulated water for fire suppression</td>
</tr>
<tr>
<td></td>
<td>• parking bays are a minimum of 2.6 metres wide from kerb to kerb edge to road pavement. No services or hydrants are located within the parking bays</td>
</tr>
<tr>
<td></td>
<td>• public roads directly interfacing the bush fire hazard vegetation provide roll top kerbing to the hazard side of the road</td>
</tr>
</tbody>
</table>
2. Bushfire Attack Levels (BALs)

Based on the required APZ setback distances, potential future residential buildings within the subject land will require construction to a minimum of BAL-29 as per Section 8 of AS 3959-2009 (Amdt 2) ‘Construction of buildings in bushfire-prone areas’. This is the threshold for integrated residential development including medium density residential buildings.

With the exception of affected lots mentioned in Section 1 (APZs) above, the majority of lots appear compliant.

3. Access

Public roads appear to be compliant, managed road reserve widths for subdivisions are generally 20 m wide which also provide the minimum APZ. Table 1 provides the public road requirements from PBP to assist with the design process. The current configuration of the existing development does include access through adjoining subdivision proposals which may require a legal management agreement.

4. Water Supply

Water supply shall need to be extended onsite to comply with the requirements of PBP. It is also noted that any redevelopment of the site should include an upgraded reticulated hydrant network within the site itself.

5. Conclusion

Future residential development will require further investigation in finer detail to conclude that the final design does not have subtle non-compliances in APZ or road widths due to local variations in slope.

If you require further information, please contact me on 4302 1222.

Yours sincerely,

Mark Hawkins
Senior Bushfire Consultant
FPAA BPAD Level 2 Certified Practitioner No. BPAD30419-L2
References


Figure 1

Vegetation (Ecological)

PCT 1621 Smooth-barked Apple open forest on coastal lowlands of the Central Coast
PCT 1636 Scribbly Gum - Red Bloodwood - Angophora inopina healthy woodland on lowlands of the Central Coast
PCT 1717 Broad-leaved Paperbark - Swamp Mahogany - Swamp Oak - Saw Sedge swamp forest of the Central Coast and Lower North Coast

Threatened Fauna (Ecological)

- Eastern Chestnut Mouse
- Grey-headed Flying-fox
- Masked Owl
- Wallum Froglet
- White-tailed Freetail Bat
- Wallum Froglet

Threatened Flora (Ecological)

- Acacia binyorniana
- Angophora inopina
- Cryptostylis hunteriana
- Tetrahteca juncea
- Angophora inopina
- Eucalyptus paramammensis

Eucalyptus paramammensis


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Coast forest of the Central Coast and Lower North Mahogany - Swamp Oak - Saw Sedge swamp
PCT 1717 Broad-leaved Paperbark - Swamp Mahogany - Swamp Oak - Saw Sedge swamp forest of the Central Coast and Lower North Coast

Vegetation

Biodiversity Assessment

Darkinjing Local Aboriginal Land Council
Bushells Ridge Residential Subdivision

Paper Size A4

LEGEND

Proposed subdivision
Development
Possible Offset Lands
Conservation
GHD Flora surveys
Tetrahteca juncea
Transsect
Biobank survey plot

358,000
359,000
360,000
358,000
359,000
360,000

©2018 GHD Maps & Deliverables/2218586_001_Vegetation_A.mxd

© GDA 1994 MGA Zone 56

Grid: GDA 1994 MGA Zone 56

0 40 80 160 240 320 Metres

6,326,000
358,000
359,000
360,000
Dear Mr Van Den Brande

Wallarah 2 Coal Project Amended Application - Ambient Air Quality

I refer to your email dated 7 April 2017 seeking advice from the Environment Protection Authority (EPA) regarding the air quality assessment for the Wallarah 2 Coal Project amended application. I understand a submission from Environmental Justice Australia raised a number of concerns around local ambient air quality in the Wyong/Central Coast area.

Good to Very Good Air Quality in Lake Macquarie-Wyong Local Government Areas

The EPA commissioned a review of air quality in the Lake Macquarie-Wyong local government areas. The review considered data collected by NSW Government monitoring sites at Wallsend and Wyong, and industry operated sites at Dora Creek, Marks Point, Wyee, Wakefield and Teralba. The review covered the period of September 2013 to June 2016 with a detailed analysis of 2014 and 2015 data.

Particulate matter (PM_{10} and PM_{2.5}) data were compared against the National Environment Protection (Ambient Air Quality) Measure (NEPM) criteria. For PM_{10}, the 24-hour criterion of 50μg/m³ and annual criterion of 30μg/m³ were applied. For PM_{2.5} the advisory reporting standards were applied, being, 24-hour criterion of 25μg/m³ and annual criterion of 8μg/m³.

The review found that air quality in the Lake Macquarie-Wyong local government area was generally good to very good. From September 2013 to June 2016, all data were within applicable guidelines except for nine days when levels of particle matter were elevated by bushfire activity and a widespread dust storm. Further information and monthly reports are available on the EPA website at: www.epa.nsw.gov.au/esdsmoky/lake-mac-wyong-air-quality.htm

Other Air Quality Studies in the Lower Hunter

Other air quality studies commissioned by the EPA, including the Lower Hunter Dust Deposition Study (2015) and the Lower Hunter Particle Characterisation Study (2016), concluded that air quality in the Lower Hunter is good by world standards. Regional modelling of airborne fine particles was completed as part of the Lower Hunter Particle Characterisation Study. The study demonstrated that levels and
sources of airborne fine particles in Lake Macquarie are similar to other parts of the Lower Hunter. Further information is available from the EPA website at: www.epa.nsw.gov.au/air/LHairQualStuds.htm.

Location of Government Operated Air Quality Monitoring Stations

The NEPM requires that air quality monitoring stations are located to obtain a representative measure of the air quality likely to be experienced by the general population in the region. The site of the Wyong air quality monitoring station, at the northern end of the Wyong race course, meets the requirements of both the NEPM and the Australian Standard AS/NZS 3580.1.1:2007 (Methods for sampling and analysis of ambient air – Guide to siting air monitoring equipment).

The Office of Environment and Heritage (OEH) operates a network of seven air quality monitoring stations in the Lower Hunter and Wyong which provides a comprehensive picture of the air quality likely to be experienced by the general population of the Lake Macquarie area.

Modelling and Assessment of Air Pollutants in NSW – Applicable Criteria

The EPA notes the amended application was submitted with an Environmental Impact Assessment for the project in July 2016. In assessing air impact assessments submitted as part of any planning application, the EPA refers to criteria in the document, Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (2005) if the application was submitted before 20 January 2017. Any planning application submitted after 20 January 2017 is assessed against criteria in the updated Approved Methods document (2016).

As the amended application was submitted before 20 January 2017, the appropriate criteria has been applied in the air impact assessment for the Wallarah 2 project.

Covering Coal Trains to Reduce Air Borne Dust

The NSW Government is considering the recommendations of the report by the NSW Chief Scientist, Independent Review of Rail Coal Dust Emissions Management Practices in the NSW Coal Chain, undertaken at the request of the former Minister for the Environment. The review identified the need for further targeted studies to better understand the nature and distribution of particles along rail corridors.

The EPA is currently working with industry to improve coal loading and unloading practices to minimise the generation of parasitic coal and reduce to the distribution of particles along rail corridors. It is expected that the outcomes of this work in the Hunter region will be applied across the coal industry and would also be applicable to the Wallarah 2 project, should it be approved.

If you wish to discuss any of the above further please contact me on 4908 6800.

Yours sincerely

MARK HARTWELL
Head, Regional Operations Unit
Environment Protection Authority
Jorge, please find attached plan showing the general location south of the motorway link road of DLACs Option 3 Area (Opposite to Borals location to the north) and within viewing distance of Blue Haven. I assume this is what you are referring to, as we never called it option 3, however I can confirm this is the option they talked about after they offered and withdrew from a proposal to revert to the original rail spur.

Please also note that DPE included a short synopsis of this situation in their Addendum Report at Page 36, 4.4.4 Paragraph 5 dot point 3 and paragraphs 6 and 7.

Please note the points below which Wyong Coal considered before moving on from further consideration of this option.

The Option 3 “solution” does not consider:

- Does not have rail connection to north. To get northern connection would move everything further south and may further compromise train length. The northern connection would then be in closer proximity to Blue Haven than DA amendment and without natural buffer of Link Road and is likely to introduce greater community concerns than the current high level of concern.

- The loading bin would be in closer proximity to Blue Haven than DA amendment and without natural buffer of Link Road.

- Required train length for Wyong Coal
  - Any extension of rail to south and movement of loading bin to mid-point will involve complex crossings of a meandering sensitive riparian ecosystem (Wallarah Creek).
  - The southern end of the trains would be directly adjacent to existing residential developments at Woongarrah and Wallarah.

- The area is subject to a native title claim.

- The basis of Wyong Coal moving forward was no change to the DA amendment or, if reverting to the original alignment, no change to the previously assessed submission. This would have been a major change requiring significant design and impact assessment work to confirm its viability (which appears doubtful) let alone formulating an amendment for assessment.

- The clearance required for this alternative will almost certainly required additional EPBC Act offsets.

- Other future DLALC “plans” could appear during the assessment timeframe such as residential zoning between the rail and Blue Haven that would have a significant impact.

Any questions please give me a call.

Thanks
Kenny Barry
Hello Kenny,

Sorry for this late request. The Commission would like an indication whether the information on Page139 of the second RTS (4 November 2016) relates to the consideration of Darkinjung’s option 3? If so, do you have an indication of where option 3 is located?

Cheers

Jorge Van Den Brande | Planning Officer Secretariat
NSW Planning Assessment Commission
Level 3, 201 Elizabeth Street Sydney NSW 2000
e: Jorge.vandenbrande@pac.nsw.gov.au | p: 9383 2104 | f: 9299 9835 | www.pac.nsw.gov.au

Please consider the environment before printing this e-mail.
Ms Robyn Kruk
Chairperson
Wallarah 2 Coal Project Review Panel
NSW Planning Assessment Commission
Level 3, 201 Elizabeth Street
Sydney NSW 2000

Dear Ms Kruk

Wallarah 2 Coal Project (SSD 4974)

On the 24th and 29th March 2017 the Department of Planning and Environment received correspondence from the Planning and Assessment Commission requesting further comment on the Wallarah 2 Coal Project Addendum Assessment Report, as part of the Commission’s review of the project application.

The Department reviewed the Commission’s requests and has prepared a response, appended to this letter as Attachment A.

If you have any enquiries about this matter, please contact me on 9274 6308 or via email at howard.reed@planning.nsw.gov.au.

Yours sincerely

[Signature]
Howard Reed
Director
Resource Assessments
Attachment A

1. Recommendation 1 requires “the Extraction Plan for each longwall ...” Condition 6, Schedule 4 requires an extraction plan for all second workings and the notes attached to this condition indicates that “extraction plans may be staged, with each plan covering a defined area of underground workings”. The extraction plan for each longwall is also referred to in recommendation 20. Please explain why the draft condition does not require an extraction plan for each longwall panel as recommended in the review.

The Department was unaware that the use of the phrase “Extraction Plan for each longwall” within the Commission’s First Review Report indicated a Commission position that any Extraction Plan should cover only a single longwall. The Department understood that the Commission was seeking that each Extraction Plan gave individual consideration to each individual longwall that it covered. The Department supports this position, and notes that the First Review Report contains no argument or discussion in favour of the “one Plan, one longwall” view. Further, the Commission has never proposed or recommended this view in any other of the many underground coal mine approvals that it has considered, nor has it previously discussed its practicality with the Department.

Since Extraction Plans were developed by the then Department of Mineral Resources shortly after 2000, and then adopted by the Department for use in development consents, there has always been a recognition that Extraction Plans could (and commonly should) cover multiple longwalls (generally from 3 to 5). Requiring individual Extraction Plans for individual longwalls would not be feasible for many reasons, including:

- the lag effect of subsidence – the full effect of subsidence at any particular point on the surface from just the underlying panel can take several months to reach full effect;
- development of cumulative subsidence – the full effect of many subsidence parameters (particularly vertical subsidence and upsidence) at any particular point on the surface are the expression of subsidence from both the overlying and following two longwalls;
- the proposal would not readily allow for the management of such cumulative subsidence, in that each Extraction Plan would be focussed on the management of extraction of a single panel;
- following the completion of subsidence effects on the surface (from both the underlying and following panels), subsidence monitoring data must be collected, analysed and reported, which can take a considerable period of time;
- following data acquisition and analysis, there is a further substantial period of time required for preparation of the Extraction Plan and conducting the required consultation;
- ongoing longwall progression – a longwall mine can only be operated economically and efficiently if the longwall machine is operating continually (except for “longwall changeouts” between panels, which usually take 4 to 6 weeks);
- from the conceptual mine plan in the EIS (Figure 18), it can be seen that longwalls progress over varying timeframes, with some shorter panels being extracted in less than 12 months; and
- the time associated with the Department’s review of the Extraction Plan and any further consultation required.

Considering the above, it would not be reasonable to expect that the approval of an Extraction Plan for subsequent longwalls be delayed until the monitoring data from the previous panel has been collected, analysed and considered in the updated subsidence predictions for the next panel. This would inevitably result in the suspension of mining operations until this process could be competed and is therefore not viable.

The Department agrees with the Commission that all Extraction Plans should give individual consideration to each longwall panel and its impacts, and allow for the fullest application of adaptive management of subsidence impacts. The Department has included a number of provisions in the recommended conditions that achieve this outcome as follows:

- monitoring programs to assess the impacts on all natural and built features, including a specific program to monitor the impacts on the Central Coast Water Supply;
- the preparation of Trigger Action Response Plan/s addressing all features in Tables 1 and 2, which contain appropriate triggers to warn of an increased risk of exceedance of any performance measure and specific actions to respond to a high risk of exceedance of any performance measure to ensure that the measure is not exceeded;
• independent audits of subsidence impacts at the completion of mining in longwalls 5N and 9N including an audit of subsidence, surface water and groundwater impacts;
• a requirement for management plans to contain a contingency plan to manage unpredicted impacts;
• a requirement for reporting to the Department any exceedance of criteria, including the performance measures contained in the consent; and
• an Annual Review including identifying trends in monitoring data, reporting of non-compliances, and identifying any discrepancies between predicted and actual impacts.

The Department’s recommended condition follows the Commission’s recommendation that each longwall has an Extraction Plan, but provides a pragmatic solution in that Extraction Plans may be submitted for groups of longwalls simultaneously. The impacts to all built and natural features are regularly reassessed, taking into account recorded impacts and available monitoring results.

2. The Commission would like more explanation on the comparison of the greenfield [Wallarah] mine and the Mandalong mine to justify the adoption of similar conditions.

In developing the draft conditions for performance measures, Extraction Plans and other subsidence matters for the Wallarah 2 Coal Project, the Department reviewed and gave careful consideration to the equivalent conditions for other underground coal mining operations recently approved by the Commission (ie Mandalong, Airly and Springvale underground mines). It is also relevant to note that the Commission merit reviews and approvals of these three projects all postdate the Commission’s First Review of the Wallarah 2 Coal Project in June 2014.

The Department notes the Commission’s comments regarding the key difference between the Wallarah 2 Coal Project and the approved Airly Coal Mine, Springvale Mine Extension Project and Mandalong Southern Extension Project, in that the latter three are existing operations, unlike the greenfield Wallarah 2 Coal Project. The Department confirms that the Airly and Springvale mines were not compared in a “like for like” contrast of potential impacts but were used as a comparison for the application of contemporary conditions and drafting and consideration of Commission recommendations.

While noting the particular sensitivities of the greenfield Wallarah site (which are primarily related to the size of the overlying and nearby streams and their use of a key water source for the Central Coast Water Supply) the Department considers that Mandalong is also a reasonable analogue for the Wallarah 2 Coal Project. Mandalong’s colliery holding is immediately to the north of the Wallarah 2 exploration licences. Mandalong is an adjacent underground mine targeting the same seam, at similar depths and with similar longwall geometry. The Mandalong Southern Extension Project supports continued longwall development to the south, moving closer to the Wallarah 2 exploration licences.

The Department supports a set of standard or template conditions to manage the effects of mine subsidence, across all underground coal mines. This template is updated from time to time, to reflect increased knowledge and Commission recommendations. For any new mine approval, the template is then overlaid with particular measures (eg performance measures and adaptive management measures) to reflect the particular environment in which the mine is proposing to operate and the risks involved in the proposed mining. This is the process which the Department has applied in respect of the Wallarah 2 Coal Project, where performance measures, adaptive management measures, monitoring measures and compensation measures reflect the particular local sensitivities (especially the Central Coast Water Supply) and the Commission’s recommendations.

3. Recommendation 20 – Wyong River Performance Measures: Wyong River (p 110 of the Addendum Report) is included as a 6th Order Streams with a performance measure of “negligible subsidence impacts and environmental consequences”. Please clarify whether this performance measure represents a lessening of control as discussed/recommended in the first review report.

The Department does not consider that the proposed performance measure represents any lessening of control over impacts and consequences on the Wyong River. The performance measure proposed in the draft conditions which accompanied the Department’s Preliminary Assessment Report was “negligible environmental consequences”. The Department considers instead that this standard has been strengthened by also including “negligible subsidence impacts”. Subsidence impacts are defined in the
draft consent as “physical changes to the ground and its surface caused by subsidence effects, including tensile and shear cracking of the rock mass, localised buckling of strata caused by valley closure and upsidence and surface depressions or troughs”. This definition includes cracking of the rock mass, whether that cracking is connected to the mine workings (ie “connective cracking”) or not.

4. Recommendation 22 – Annual audit of Water Monitoring Program

At its meeting with the Department on 24 March 2017, the Commission requested clarification on the Department’s response to the Commission’s First Review Report’s Recommendation 22, which proposed that water quality monitoring in response to subsidence should be subject to an “independent audit each year, until the Secretary is satisfied that longer intervals can provide appropriate safeguards”.

In considering this recommendation, the Department could find no supporting text in the Report to further explain the Commission’s intention. However, when considering Recommendation 22 in the light of Recommendation 21, it becomes apparent that the Commission could not have been proposing annual audits over the years prior to the commencement of Longwall 6N, since it is in these years that the program of water quality monitoring is to be developed and then approved. The question then becomes, what auditing of water quality monitoring should take place after the program is developed and after longwall mining which may impact on water quality is commenced (ie longwall 6N)?

Draft conditions 7-10 of Schedule 6 outline requirements for incident reporting, Annual Reviews and triennial Independent Environmental Audits. These focus on the environmental performance of the project as a whole, which includes, *inter alia*, the water monitoring program. Further, condition 5 of Schedule 6 requires the Applicant to report any exceedance of the performance measures and criteria set out in Schedule 3 and 4 and the measures taken to mitigate the impacts.

The Department considers that these conditions, in conjunction with the requirements outlined in the water monitoring program itself, the TARP components of Extraction Plans and the Commission’s proposed independent subsidence impact audits, provide adequate environmental safeguards, without additional annual audits of the results of the water quality monitoring program.

In this respect, the Department supported the Commission’s Recommendation 3, which requires independent audit of subsidence impacts within six months of the completion of Longwalls 5N and 9N, or at any other time as directed by the Secretary (see draft conditions 10 and 11 of Schedule 3). These reviews would also address the environmental consequences of subsidence impacts, including water quality impacts. A further safeguard in draft condition 10 allows for the Secretary to request that additional audits be carried out should there be concerns regarding subsidence impacts.

The Department considers that this monitoring, reporting, review and auditing framework provides a robust oversight and adaptive management framework.

5. Table 27 appears to suggest there will be significant exceedance of construction noise for properties P13 to P16. Given the proposed construction period is 2 years, please clarify the acceptability of the proposed noise exceedance.

WACJV provided further details of its predicted construction noise for the Wallarah 2 Coal Project including ‘works outside standard hours’ (WOSH). Table 1 below shows a worst-case scenario for construction noise exceedances within and outside standard hours for all construction stages of the project. Modelling, undertaken in accordance with the Interim Construction Noise Guidelines (ICNG) predicts a maximum exceedance of 20 dB(A) for WOSH at P14.

Most construction works will occur within standard construction hours between 7 am to 6 pm, Monday to Friday and between 8 am and 1 pm on Saturdays. WACJV has advised that track possession of the Main Northern Rail Line (MNRL) would be required during Construction Stages 3 and 9. Stage 3 involves constructing the conveyor over the MNRL, while Stage 9 requires track tie in at the northern end of the project area (see Figure 1).

The timing of track possession is determined by Transport for NSW and is generally carried out over a 48-hour period between 2 am Saturdays and 2 am Mondays. Table 1 shows construction noise exceedances outside of work hours throughout the *entire* construction period. WACJV notes that WOSH would only occur if required by Sydney Trains and then for limited periods while track possession occurs.
Receiver P13 is moderately impacted during WOSH in some construction phases. Apart from short periods during Stage 9 (which requires track possession in the likely 48 hour increments) it is unlikely that P13 would be subject to the predicted noise levels shown in Table 1, as the remaining construction would be completed during standard work hours.

 Receivers P14, P15 and P16 are shown as being impacted by construction noise during standard hours and for most WOSH construction, WACJV has observed that these locations are already influenced by noise from the Motorway Link Road and the nearby MNRL. WACJV has noted that these same residences are also impacted by operational noise from its proposed rail siding and is in the process of consulting with these residents. Noise mitigation measures have not been included in the modelling shown in Table 1, however WACJV has stated that operational mitigation measures could be provided for the impacted receivers prior to construction commencing. These would be developed in consultation with the residents.

 The Department accepts that completing construction works requiring track possession as WOSH is necessary to ensure rail and worker safety and to prevent disruptions to rail services. However, WACJV has provided predicted exceedances for noise outside of standard hours for all construction stages (see Table 1). The Department considers that all remaining construction works for the project would be able to be accommodated within standard hours unless further track possession is required, and then only for limited periods. Therefore, condition 2 of Schedule 2 of the draft conditions requires WACJV to carry out construction works within standard work hours unless otherwise agreed by the Secretary.

 The Department has also recommended conditions to address the impacts of construction noise. This includes requiring WACJV to comply with the ICNG and preparing an Out of Hours Work Protocol. This protocol must be developed in consultation with the EPA and residents impacted by construction noise and must be approved by the Secretary. WACJV has committed to offering short term accommodation alternatives to impacted residents where the ICNG night-time noise level is predicted to be exceeded. Additionally, WACJV has noted that residents eligible for operational noise mitigation may request early delivery of the mitigation measures to address construction noise impacts. The Department considers that this would allow impacted residents the opportunity to negotiate a suitable outcome with WACJV to mitigate or reduce construction noise impacts.


 While the Amended Wallarah 2 Coal Project is not being assessed under the Bilateral Agreement between the NSW and Commonwealth Governments, the Department’s biodiversity assessment has been accredited by the Commonwealth for the purposes of its own assessment.

 The Commonwealth Minister for the Environment will decide on whether or not to approve the project under the EPBC Act following the Commission’s determination. The Commonwealth’s assessment will not formally begin until after the Commission’s determination.

 7. Addendum Assessment Report Errors

 The Department has identified the following three minor errors or mis-descriptions in its Addendum Assessment Report:

 - There are four occurrences where the noise impacts from the project have been described as “significant”. The use of the term ‘significant’ in these instances does not reflect the definition of that term within the VLAMP. Instead, the noise impacts of the project are classified as “moderate” under the VLAMP. These occurrences are noted on Page 1 of the Executive Summary, Page 50 and 51, Part 1 and Page 125, Part 3.
 - Figure 21 on page 65 of the report is an early draft of that figure (contained in the EIS), rather than the final version later provided by WACJV. As such, it shows a 3 m wide access roadway. The final figure, showing a 6 m wide access roadway, has already been provided to the Commission.
 - On page 64, the report incorrectly states that WACJV lodged a road closure application with RMS. WACJV’s application was lodged with DPI Crown Lands.
7. Attached is a summary table of the items that were not adopted as requested by the different agencies. Could you provide further explanation to reason(s) these were not included in the recommended conditions?

For the Department's comments, please see Table 2 below.
Table 1 Construction Phases and Predicted Noise exceedances at sensitive receivers

<table>
<thead>
<tr>
<th>Construction Stage</th>
<th>Projected Timing</th>
<th>Construction Activity</th>
<th>Receiver Reference</th>
<th>RBL Day/Evening/Night</th>
<th>Construction Noise Management Level $L_{Aeq 15 min}$ dB(A)</th>
<th>Predicted Exceedance of Noise Management Level $L_{Aeq 15 min}$ dB(A)</th>
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<td>Standard (Day)</td>
<td>WOSH</td>
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<td>Site Establishment (east of MNRL)</td>
<td>Q3 2018 – Q4 2018</td>
<td>Clearing, mulching, fencing, access roads, compounds</td>
<td>P13</td>
<td>49/45/39</td>
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<td>Q1 2019 – Q3 2019</td>
<td>Footing preparation, concrete pours, steel and structure erection</td>
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<td>Conveyor Construction over MNRL</td>
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<td>Bridge at Ch 112480</td>
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Figure 1 Wallarah 2 Coal Project construction activity locations
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<th>Agency</th>
<th>Correspondence</th>
<th>Comments</th>
<th>DPE response</th>
<th>DPE Comments to PAC</th>
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<td></td>
<td></td>
<td>a. Water Management Plan should include licensing information details</td>
<td>b. Included</td>
<td>“before commencement of construction of surface facilities” and “in consultation with DPI Water”.</td>
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<td></td>
<td></td>
<td>b. Geomorphological monitoring must be established prior to mining commencement and in consultation with DPI Water.</td>
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<td></td>
<td></td>
<td>• To include as a condition that the Crown roads (Nikko Rd &amp; part of Tooheys Rd) must be closed and acquired before any works on this land.</td>
<td>Included. See condition 17 of Schedule 2</td>
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<td></td>
<td></td>
<td>• If the roads are either acquired or not closed when consent proceeds, DoI Lands approval is required for the construction of surface infrastructure on all affected Crown roads</td>
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<td></td>
<td></td>
<td>• Yet to review response to review recommendation 5(a) to (c) and available to meet PAC to discuss</td>
<td>The Department is satisfied WACJV has provided adequate responses to these review recommendations.</td>
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<td>• Response to 5(d) should be restated in the current document for ease of reference.</td>
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<td></td>
<td></td>
<td>• In relation to 5(e), the proponent has noted that there are no other impact mechanisms that have not been considered.</td>
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<td>DRE</td>
<td>undated</td>
<td>• Condition 33 Sch 4 – Rehabilitation Objectives</td>
<td>a. Included</td>
<td></td>
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<td></td>
<td></td>
<td>a. Mine site</td>
<td>b. Included</td>
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<td></td>
<td></td>
<td>b. Rehabilitation materials</td>
<td>c. Not included</td>
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<td></td>
<td></td>
<td>c. Surface infrastructure to include “further development consent is obtained for their retention and post mining use from the relevant consent authority”</td>
<td>d. Included</td>
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<td></td>
<td></td>
<td>d. Portals and vent shafts</td>
<td>e. Included</td>
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<td></td>
<td>e. All watercourses …are greater than negligible</td>
<td>f. Included</td>
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<td></td>
<td></td>
<td>f. Included in first item</td>
<td>g. Not included</td>
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<td></td>
<td></td>
<td>g. The Department did not adopt DRE’s recommended wording as the requirement to obtain additional necessary approval (development consent or otherwise) for post-mining use is inherent in legislation and does not need to be reflected in conditions of consent.</td>
<td>h. Included</td>
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<td></td>
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<td>h. Included</td>
<td>i. Included in first item</td>
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<tr>
<td>f.</td>
<td>All watercourses where subject to mine water discharges</td>
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<td>g.</td>
<td>Water quality to include “…after rehabilitation”… and … “and the performance measures of Table 1 following rehabilitation”…</td>
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<td>h.</td>
<td>Native flora and fauna</td>
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<tr>
<td>i.</td>
<td>Revegetated final landforms</td>
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<td>j.</td>
<td>Steep slopes and rock face features</td>
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<tr>
<td>k.</td>
<td>Other land affected by the development</td>
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<td>l.</td>
<td>Built features damaged by mining operations</td>
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<td>m.</td>
<td>Community</td>
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<td>n.</td>
<td>Notes</td>
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<td>j.</td>
<td>Accepted</td>
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<td>k.</td>
<td>Simplified and included</td>
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<td>Accepted</td>
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<td>m.</td>
<td>Accepted</td>
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<tr>
<td>n.</td>
<td>Included</td>
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<td>g.</td>
<td>The Department did not adopt DRE’s recommended wording as the condition already clearly relates to rehabilitation. Condition 1 of Schedule 3 also already requires that the Applicant ensure that the development does not cause any exceedances of the performance measures in Table 1. The “development” includes rehabilitation”, and so DRE’s intention is already achieved.</td>
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</table>

- **Condition 34, Sch 4. Reframe as “The applicant must rehabilitate the site progressively “to the satisfaction of DRE …””**

- **Condition 35, Sch 4:**
  a. DRE recommends deletion as it duplicates the Mining Operations Plan condition on the mining lease
  b. If Condition 35 to be included, DRE recommends an additional item (i) – address all aspects of mine closure and rehabilitation, including post mining land use domains, rehabilitation objectives, completion criteria and rehabilitation monitoring and management.
  c. Proposed notes to the condition:
     1. The RMP should apply to all land impacted by the development, whether prior to or following the date of consent.
     2. The Biodiversity Management Plan and RMP require substantial integration to achieve biodiversity objectives for the rehabilitated mine site

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<tr>
<td>j.</td>
<td>Not included</td>
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<tr>
<td>a.</td>
<td>Condition 35 remains</td>
</tr>
<tr>
<td>b.</td>
<td>Item (i) not included</td>
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<tr>
<td>c.</td>
<td>(1) Include the first part of this note.</td>
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<td>(2) Included</td>
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</table>

DRE also indicated that it may pursue discussions with the Department regarding amendments to standard rehabilitation conditions. These discussions have not been pursued to date.

- **This is a standard condition, with progressive rehabilitation to be a matter of fact. This framing increases the power of the Department’s Compliance Branch to ensure effective implementation.**

  a. Condition 35 must remain. The Rehabilitation Management Plan (RMP) is an essential part of the conditions of consent for every mining project. Since 2005, this has given DPE oversight over mine rehabilitation. However, recognising DRE’s historic and ongoing expertise in this field, for many years standard conditions have required that the RMP is prepared to DRE’s satisfaction. DRE separately requires a Mining Operations Plan under conditions of mining leases. Only recently has DRE begun to scope down these plans to eliminate other aspects of
<table>
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<tr>
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<th>Letter 8 Feb 2017</th>
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<tbody>
<tr>
<td>a. Condition 29 Sch 4 should include L3.1 and L3.2, 2 standard environment protection licence conditions</td>
<td></td>
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<tr>
<td>b. Condition 7 Sch 6 is inconsistent with the <em>Protection of the Environment Operation Act 1997</em> which requires incidents to be reported immediately</td>
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<tr>
<td>c. Appendix 5 (p 39) is inconsistent with Condition 5 Sch 4 and the EPA recommended terms of approval of 29 Dec 2016 requiring monthly attended noise monitoring. Appendix 5 only requires quarterly attended monitoring.</td>
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<thead>
<tr>
<th>Emails between Department and EPA</th>
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<tbody>
<tr>
<td>a. Not included</td>
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<td>b. Addressed and condition 7 updated.</td>
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<td>c. Included.</td>
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<tbody>
<tr>
<td>a. It is not necessary to repeat all EPL conditions in the development consent. The project has not sought approval for the receipt, storage, treatment or processing of waste from external sources and therefore any consent issued would not permit this activity.</td>
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<tbody>
<tr>
<td>a. The night noise criteria for P8 is 44 dB(A) ( L_{A_{1(1 \text{ min})}} ) and 45 dB(A) ( L_{A_{1(1 \text{ min})}} ).</td>
</tr>
<tr>
<td>b. Normally the ( L_{\text{max}} ) levels are in the order of 10 dB(A) above the 15 minute criteria. However, in this case the background levels provided by WACJV were insufficient and therefore the default lowest ( L_{\text{max}} ) criterion of 45 dB(A) was applied. This was agreed with the EPA.</td>
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</table>
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

Prepared by:

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

April 2017

For:

WYONG AREAS COAL JOINT VENTURE
PO Box 3039
TUGGERAH NSW 2259
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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*”.
Conceptual Project Layout

Note: This Figure delineates the mining area for the approval period within the overall extraction area as requested by DP&E.
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.

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<th>Abbreviated Name</th>
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<tr>
<td>1</td>
<td>April 2013</td>
<td>Wallarah 2 Coal Project Environmental Impact Statement</td>
<td>EIS</td>
<td>DP&amp;E website</td>
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<td>September 2013</td>
<td>Wallarah 2 Coal Project Response to Submissions</td>
<td>RTS1</td>
<td>DP&amp;E website</td>
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<td>Letter to WACJV from DP&amp;E seeking comment on attached Chalk &amp; Fitzgerald (C&amp;F) correspondence dated 22 April 2016</td>
<td>C&amp;F Letter to DP&amp;E</td>
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</tr>
<tr>
<td>8</td>
<td>7 July 2016</td>
<td>Wallarah 2 Coal Project Amendment to Development Application SSD-4974</td>
<td>Amendment Document</td>
<td>DP&amp;E website</td>
</tr>
<tr>
<td>9</td>
<td>7 September 2016</td>
<td>Meeting Minutes Wyong Coal / DLALC</td>
<td>Minutes</td>
<td>Appendix R</td>
</tr>
<tr>
<td>10</td>
<td>4 November 2016</td>
<td>Wallarah 2 Coal Amendment Development Application SSD-4974 – Response to Submissions</td>
<td>RTS2</td>
<td>DP&amp;E website</td>
</tr>
<tr>
<td>11</td>
<td>19 December 2016</td>
<td>Response to DPE Queries – Coastal SEPP and Crown Lands Act</td>
<td>DP&amp;E Response 1</td>
<td>DP&amp;E website</td>
</tr>
<tr>
<td>12</td>
<td>16 January 2017</td>
<td>Amendment to DA SSD-4974 Response to DP&amp;E – Water, DLALC, Heritage and socio-economics</td>
<td>DP&amp;E Response 2</td>
<td>Appendix G</td>
</tr>
<tr>
<td>Ref</td>
<td>Date</td>
<td>Title</td>
<td>Abbreviated Name</td>
<td>Location</td>
</tr>
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</tr>
<tr>
<td>13</td>
<td>19 January 2017</td>
<td>Response to Department of Primary Industries (DPI)-Water Queries</td>
<td>DPI Response</td>
<td>Appendix H</td>
</tr>
<tr>
<td>14</td>
<td>10 February 2017</td>
<td>Response to Environment Protection Authority (EPA) Queries</td>
<td>EPA Response</td>
<td>Appendix I</td>
</tr>
<tr>
<td>15</td>
<td>February 2017</td>
<td>Addendum Report State Significant Development Wallarah 2 Coal Project (SSD 4974)</td>
<td>DP&amp;E Addendum Report</td>
<td>DP&amp;E website</td>
</tr>
<tr>
<td>16</td>
<td>February 2017</td>
<td>Response to DPE – Department of Health</td>
<td>Email</td>
<td>Appendix J</td>
</tr>
</tbody>
</table>
## 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

<table>
<thead>
<tr>
<th>Query</th>
<th>Where Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirmation of area of disturbance for the Tooheys Road Site.</td>
<td>3.1</td>
</tr>
<tr>
<td>Have NSW Health issues been closed out.</td>
<td>3.2</td>
</tr>
<tr>
<td>How have we considered the economic costs of the DLALC development?</td>
<td>3.4</td>
</tr>
<tr>
<td>Which is the closest receptor to the transfer point.</td>
<td>3.6.1</td>
</tr>
<tr>
<td>What is the decibel reduction from the noise wall?</td>
<td>3.5</td>
</tr>
<tr>
<td>What is the current unemployment rate (overall and youth)?</td>
<td>3.7</td>
</tr>
<tr>
<td>Provide landownership figure with contours around the Tooheys Road Site and location of Cross property on Bushells Ridge Rd.</td>
<td>3.6.2</td>
</tr>
<tr>
<td>Provide figure showing CCWS catchment and longwall mining area.</td>
<td>3.8</td>
</tr>
<tr>
<td>Provide details on continued access for DLALC to Nikko Road.</td>
<td>4.2.6</td>
</tr>
<tr>
<td>What is the Amendment biodiversity offset ratio.</td>
<td>3.2</td>
</tr>
<tr>
<td>Please provide details in terms of your community engagement methods and records or a consultation register in relation to the amended application.</td>
<td>Appendix N</td>
</tr>
<tr>
<td>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.</td>
<td>3.10</td>
</tr>
<tr>
<td>Please provide a drawing(s) to show the predicted angle of draw which will apply to the longwall panels. Central Coast Council raised concerns about the potential subsidence impact on the Buttonderry Waste Management Facility. Speakers at the Public Hearing pointed out that the Hue Hue Road Mine Subsidence Area only allows first workings. Please comment.</td>
<td>3.11.1</td>
</tr>
<tr>
<td>Central Coast Council 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 on future road network planning. Have other options been considered to maintain these roads open and public?</td>
<td>3.11.2</td>
</tr>
<tr>
<td>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?</td>
<td>0</td>
</tr>
<tr>
<td>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.</td>
<td>4.7.4</td>
</tr>
<tr>
<td>The Commission would like your further comments on the Environmental Justice Australia submission as presented at the Public Hearing, forwarded with this email.</td>
<td>4.11</td>
</tr>
<tr>
<td></td>
<td>4.32</td>
</tr>
</tbody>
</table>
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>
<thead>
<tr>
<th>Vegetation Community</th>
<th>Original Project</th>
<th>Amended Project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Impact Area (ha)</td>
<td>Offset Area (ha)</td>
</tr>
<tr>
<td>Wet Sclerophyll Forests</td>
<td>7.6</td>
<td>16.9</td>
</tr>
<tr>
<td>Dry Sclerophyll Forests</td>
<td>50.1</td>
<td>180.2</td>
</tr>
<tr>
<td>Forested Wetlands</td>
<td>2.9</td>
<td>10.6</td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>Probability of Rezoning</th>
<th>0%</th>
<th>20%</th>
<th>50%</th>
<th>80%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact on Darkinjung Land ($M)</td>
<td>$0.0</td>
<td>$0.1</td>
<td>$0.2</td>
<td>$0.4</td>
<td>$0.5</td>
</tr>
</tbody>
</table>
“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 enquiries 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 Project’s 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.
FIGURE 3

Setback from Blue Haven
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](image)

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.
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](image-url)
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 pf 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 Response2 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 WACJVs 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:
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

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) 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 Wallarah 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 is 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 Caroona 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 DUNSTOP – 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 Binosawan.
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.


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 ASSOCATION (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 form 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.4). 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 PM2.5 (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, PM_{10} 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 PM_{10} and PM_{2.5} equivalent to the Ambient-Air NEPM. There was no change to the impact assessment criterion for 24-hour average PM_{10}.

The impact assessment criterion for annual average PM_{10} 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 2017), and as such do not apply to the amended Project. Notwithstanding the non-applicability of the new impact assessment criterion for annual average PM_{10} 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 PM_{10} criterion with a maximum cumulative annual average PM_{10} 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 PM_{10} concentrations in the area have exceeded the state and national standards in recent years (p.17). Annual average PM_{10} 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 PM_{10} concentrations have exceeded the national standard of 50ug/m³ (p18). The mine is predicted to increase PM_{10} 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 µg/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 µg/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 µg/m$^3$, not 25 µg/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 µg/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 7µg/m3 (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 7µg/m3.

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 µg/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 DOUGLES (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.

* * *

For

HANSEN BAILEY

---

Dianne Munro
Principal Environmental Consultant

James Bailey
Director
### 5 ABBREVIATIONS

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Amendment</td>
<td>Change to Project sought and accepted under clause 55 of the EP&amp;A Act</td>
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<td>Air Quality Greenhouse Gas Assessment</td>
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<td>AQMP</td>
<td>Air Quality Management Plan</td>
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<td>APZ</td>
<td>Asset Protection Zone</td>
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<td>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2005)</td>
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<td>Biodiversity Management Plan</td>
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<td>Development Application</td>
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<td>DLALC</td>
<td>Darkinjung Local Aboriginal Land Council</td>
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<tr>
<td>DP&amp;E</td>
<td>Department of Planning and Environment (formerly DP&amp;I)</td>
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<td>DPI-Water</td>
<td>Department of Primary Industries - Water</td>
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<td>EA Report</td>
<td>DP&amp;E’s EA Report (Feb 2014)</td>
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<td>Environment Protection Authority</td>
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<td>GWCWA</td>
<td>Gosford-Wyong Councils Water Authority</td>
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<td>Hectare</td>
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<td>Independent Environmental Scientific Committee</td>
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<td>NSW Land and Environment Court</td>
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<td>MSD</td>
<td>Mine Subsidence District</td>
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<tr>
<td>Mtpa</td>
<td>Million tonnes per annum</td>
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<td>Office of Environment and Heritage</td>
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<td>PAC1</td>
<td>Planning Assessment Commission held 2014</td>
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<td>PAC2</td>
<td>PAC held 2017</td>
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<tr>
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<td>Wallarah 2 Coal Project Amendment Response to Submissions</td>
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<td>Subsidence Impact Limit</td>
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<td>State Significant Development</td>
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<td>Trigger Action Response Plan</td>
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<td>VLAMP</td>
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<td>WACJV</td>
<td>Wyong Areas Coal Joint Venture</td>
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<td>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2016)</td>
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6 REFERENCES

- Department of Planning and Environment, 2016. *Central Coast Regional Plan 2036.*
- Darkinjung Local Aboriginal Land Council v Wyong Coal Pty Limited (No 2) [2014] NSWLEC 71.
- MSEC, 2013. *Subsidence Predictions and Impact Assessments’ of the EIS.*
Appendix A

Public Hearing Speakers List
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.

COMMISSION SECRETARIAT
Level 3, 201 Elizabeth Street SYDNEY, NSW 2000
TELEPHONE (02) 9383 2100 FAX (02) 9383 2133
pac@pac.nsw.gov.au

Planning Assessment Commission Hearing
Wallarah 2 Coal Project, Wyong
Date & Time: 9:00am, Wednesday 5 April 2017
Place: Wyong Golf Club, 319 Pacific Hwy, Wyong NSW 2259

<table>
<thead>
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<tr>
<td>9:00 am Opening Statement from the Chair – Robyn Kruk AM</td>
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<tr>
<td>Registered Speakers: 1. Tanya Obrien Unit Manager Development Assessments &amp; Bileen Nel Senior Manager Water &amp; Sewer (Central Coast Council)</td>
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<tr>
<td>2. Sean Gordon (Darkinjung Aboriginal Land Council)</td>
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<td>3. Martin Hodgson (Hodgson Quarries &amp; Plant)</td>
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<td>4. Laurie Eyes</td>
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<td>5. Kelia Keogh</td>
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<td>6. Mathew Stidolph</td>
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<td>7. Lynne Hamilton</td>
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<td>8. Craig Dunshea (CS Trade PTY LTD)</td>
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<td>9. Ken Greenwald</td>
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<td>10. Alan Hayes (Australian Coal Alliance)</td>
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<td>11. Roderick Campbell (The Australia Institute)</td>
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<tr>
<td>12. Paul Robert Burton (Our Land Our Water Our Future)</td>
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<td>13. Abigail Boyd (Central Coast Greens)</td>
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pac@pac.nsw.gov.au
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):

<table>
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<tr>
<th>Description</th>
<th>Value</th>
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<tr>
<td>Business Opportunities 40 years @ $5Mpa</td>
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<tr>
<td>Land value (rateable)</td>
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<tr>
<td>Youth Education 45 years @ $50kpa</td>
<td>$2,250,000</td>
</tr>
<tr>
<td>Apprenticeships 45 years @ $120kpa</td>
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<tr>
<td>Total</td>
<td>$215,650,000</td>
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10 April 2015
Appendix C

DLALC Final Offer
17 April 2015

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

Dear Peter,

Wallarah 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 Plan\(^1\), 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.

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

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

Dear Sir

**Wyong Areas Coal Joint Venture (Wyong Coal)**
**Wallarah 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 Council 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 paragraph 2)" 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" in a supplementary report on the proposed changes to SSD 4974.

The C&F Letter asserts that:

- "(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.

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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”.

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5 Urbis Pty Ltd v Sutherland Shire Council [2001] NSWLEC 147.
6 Dyldam Developments P/L v Holroyd City Council [2001] NSWLEC 204.
8 Ebsworth v Sutherland Shire Council [2005] NSWLEC 603.
9 At paragraph 35.
In the Radray case\textsuperscript{10} Her Honour Jagot J expressed agreement with Talbot J in the Ebsworth case\textsuperscript{11} 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 lodging of a new development application"\textsuperscript{12}.

1.2 Variation Outside Boundary\textsuperscript{13}

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 \textit{Scrap Realty Pty Limited v Botany Bay City Council}\textsuperscript{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 justice\textsuperscript{15}

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
immediate way"\(^{16}\) by the exercise of the statutory power\(^{17}\). 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 to 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 Line\(^{18}\) 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 reserve\(^{19}\) 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 east and other land adjoining that land 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 plan. 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 1210468 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, RailCorp, and the Crown. It is not known what arrangement (if any) DLALC has with RailCorp or the Crown 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 1064536. 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.

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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 1064536 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 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”.

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.
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 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. 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.

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.

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 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.** The defect can be cured at any time prior to the grant of development consent. 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) (Wallarah 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.”

**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
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

Oliver Høfm
Executive Director
Resource Assessments and Compliance
22 April 2016

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.
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.
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.

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.

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 recommencement 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.

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 its land and infrastructure. Nikko Rd is important to Darkinjung as no other access is available to Lots 60, 197, 196 or 201.

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\(^1\) The current proposal anticipated a maintenance road on either side of the entire length of the rail corridor: see for example Figure 19, *Wallarah 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) (Wallarah 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) (Wallarah 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. 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].
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. 552 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*
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

[Signature]

15/06/2016

Department of Planning & Environment
23-33 Bridge Street Sydney NSW 2000 | GPO Box 39 Sydney NSW 2001 | T 02 9228 6333 | F 02 9228 6455
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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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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 day 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.

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 defendable 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.
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 Ecobiogogical (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 railing 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 three would be approximately 147 lots with a > 45 dB noise level which represents as 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, WACJVs 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 Gantries;
- 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

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 with 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](image-url)
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) 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);

(d) 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.
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 Wallarah 2 Coal Project. Wyong Coal will however consider this further if:
  o DLALC confirms the area under consideration;
  o Provides further information to allay Wyong Coal’s concerns;
  o Provides proposed commercial terms; and
  o 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 Wybong 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.
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

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Contributions</th>
<th>Intended Use / Public Purpose</th>
<th>Timing/Payment details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Works In Kind to complete the whole of the subject works OR, Monetary Contribution: $4,000,000 minus the value of any Works In Kind to partially complete the subject works.</td>
<td>Toohys Road upgrade - to reconstruct the entire length to a sealed road standard (Commercial &amp; 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 &amp; Transport Impact Assessment.</td>
<td>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 Toohys Rd site.</td>
</tr>
<tr>
<td>2</td>
<td>Works In Kind to complete the whole of the subject works OR, Monetary Contribution: $700,000 minus the value of any Works In Kind to partially complete the subject works.</td>
<td>Buttonderry access intersection upgrade as shown in Figure 7.2 on page 113, Wallarah 2 Coal Project EIS – Appendix Q Traffic &amp; Transport Impact Assessment.</td>
<td>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.</td>
</tr>
<tr>
<td>3</td>
<td>Works In Kind to complete the whole of the subject works OR, Monetary Contribution: $1,404,000 minus the value of any Works In Kind to partially complete the subject works.</td>
<td>Brothers Forest Road/Little Jilbity Road intersection upgrade and upgrade of Brother Forest Road from the Little Jilbity Road intersection to the Ventilation Shaft site access to sealed road standard (Commercial &amp; 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 &amp; Transport Impact Assessment.</td>
<td>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).</td>
</tr>
<tr>
<td>Item No.</td>
<td>Contributions</td>
<td>Intended Use / Public Purpose</td>
<td>Timing/Payment details</td>
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</tr>
</tbody>
</table>
| 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 works of the subject works OR,  
  **Monetary Contributions:** $1,170,000 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. |
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, 2016b. Wallarah 2 Coal Project Amendment to Development Application SSD-4974.


Appendix A

Impact of 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 km$^2$) 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](image)
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:

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.

Wyong 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 DALK 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
Wallarah 2 Coal Project
PO Box 3039 TUGGERAH NSW 2259
M: 0417 737 657
P: 02 4352 7500  |  F: 02 4352 7599
www.wallarah.com.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

Appendix C

Acoustics - Response to DLALC Letter
Hansen Bailey  
127-129 John Street  
SINGLETON NSW 2330

Attention: Andrew Wu

13 January 2017

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 WAJCV 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_{50} 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 for Bedrooms (35+10) and L_{Aeq} 50dBA for 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

<table>
<thead>
<tr>
<th>Description</th>
<th>Noise Reduction (dB)</th>
<th>LAeq, 9 hours</th>
<th>LAeq, 15 hours</th>
<th>LAeq, 9 hours</th>
<th>LAeq, 15 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open windows/doors</td>
<td>10</td>
<td>35</td>
<td>40</td>
<td>45</td>
<td>50</td>
</tr>
<tr>
<td>Closed windows/doors</td>
<td>20</td>
<td>35</td>
<td>40</td>
<td>55</td>
<td>60</td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>NCA</th>
<th>Reference Address</th>
<th>Off-Set</th>
<th>Predicted Sound Pressure Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCA02U</td>
<td>24 Campbell Street, North Gosford</td>
<td>18</td>
<td>L(<em>{\text{Amax}}) 95dBA \ L(</em>{\text{Aeq 24 hr}}) 62dBA \ L(<em>{\text{Aeq 15hr}}) 62dBA \ L(</em>{\text{Aeq 9hr}}) 63dBA</td>
</tr>
<tr>
<td>NCA021</td>
<td>4 Campbell Street, North Gosford</td>
<td>50</td>
<td>84 \ 55 \ 55 \ 56</td>
</tr>
<tr>
<td>NCA04D</td>
<td>87 Showground Road Narara</td>
<td>120</td>
<td>79 \ 54 \ 53 \ 54</td>
</tr>
</tbody>
</table>

18.0 The predicted night time L\(_{\text{Aeq 9 hour}}\) levels in Table 1 show that the external trigger level of L\(_{\text{Aeq 9 hour}}\) 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\(_{\text{Aeq 9 hour}}\) 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\(_{\text{Aeq 9 hour}}\) 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 $L_{Aeq\ 9\ hour\ 56\ dB(A)}@50m$, the external noise trigger level of $L_{Aeq\ 9\ hour\ 45\ dB(A)} (35+10)$ 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)$_{L_{eq(15min)}}$ 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 FNM model.

<table>
<thead>
<tr>
<th>Noise Category</th>
<th>Project Noise Levels</th>
<th>Number of Lots (approximate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Moderate</td>
<td>41-43 dB(A)$<em>{L</em>{eq(15min)}}$</td>
<td>36</td>
</tr>
<tr>
<td>4. Significant</td>
<td>&gt;43 dB(A)$<em>{L</em>{eq(15min)}}$</td>
<td>240</td>
</tr>
<tr>
<td>5. Significant*</td>
<td>&gt;45 dB(A)$<em>{L</em>{eq(15min)}}$ (suburban)</td>
<td>147</td>
</tr>
</tbody>
</table>

* Noise contours may overestimate the $L_{eq(15min)}$ 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 $L_{Aeq\ 9\ hour\ >45\ dB(A)}$ 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 in 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 hour} noise contours would be 3dB less than the predicted L_{Aeq,15min} levels.

29.0 For comparison and assuming one (1) coal train per night the equivalent L_{Aeq,9 hour} noise contours would be 7-8dB less than the predicted L_{Aeq,15min} levels.

30.0 Reviewing the L_{Aeq,15min} adjustment assuming three coal trains per night (~3dBA), the predicted L_{Aeq,9 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>
<thead>
<tr>
<th>Noise Category</th>
<th>Project Noise Levels</th>
<th>Recommended Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negligible</td>
<td>0-2 dB(A) above PSNL</td>
<td>Not a discernible noise impact – no action required</td>
</tr>
<tr>
<td>Marginal</td>
<td>3-5 dB(A) above PSNL and project contributes less than 1 dB at residence</td>
<td>Mechanical ventilation and air conditioning</td>
</tr>
<tr>
<td>Moderate</td>
<td>3-5 dB(A) above PSNL and project contributes more than 1 dB at residence</td>
<td>Mechanical ventilation, air conditioning and facade upgrade</td>
</tr>
<tr>
<td>Significant</td>
<td>More than 5 dB(A) above PSNL at residence</td>
<td>Mechanical ventilation, air conditioning and facade upgrade, property acquisition</td>
</tr>
<tr>
<td>Significant</td>
<td>More than 5 dB(A) above amenity limit over 25% of land area</td>
<td>Property acquisition</td>
</tr>
</tbody>
</table>

Table 2 quantifies the relevant noise categories (3 - 5) in Table 1 based on a right time criterion (PSNL) of 38 dB(A) of 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

<table>
<thead>
<tr>
<th>Residual noise exceeds INP criteria by</th>
<th>Characterisation of impacts</th>
<th>Potential treatments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2dB(A) above project specific noise level (PSNL).</td>
<td>Impacts are considered to be <strong>negligible</strong></td>
<td>The exceedances would not be discernable by the average listener and therefore not warrant receiver based treatments or controls</td>
</tr>
<tr>
<td>3-5dB(A) above PSNL in the INP but the development would contribute less than 1dB to the total industrial noise level</td>
<td>Impacts are considered to be <strong>marginal</strong></td>
<td>Provide mechanical ventilation/comfort condition systems to enable window to be closed without compromising internal air quality/amenity</td>
</tr>
<tr>
<td>3-5dB(A) above PSNL in the INP and the development would contribute less than 1dB to the total industrial noise level</td>
<td>Impacts are considered to be <strong>moderate</strong></td>
<td>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</td>
</tr>
<tr>
<td>&gt;5dB(A) above the PSNL in the INP</td>
<td>Impacts are considered to be <strong>significant</strong></td>
<td>Provide mitigation as for moderate impacts and see voluntary land acquisition provisions below.</td>
</tr>
</tbody>
</table>

**ATKINS ACOUSTICS & ASSOCIATES PTY LTD.**
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
<table>
<thead>
<tr>
<th>Date</th>
<th>Contact</th>
<th>Issue</th>
<th>Response and comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 August 2016</td>
<td>Letter from: DLALC Planning Manager</td>
<td>Letter received requesting further information/plans for W2CP DA amendment to be provided by 14 August 2016</td>
<td>Provided by Wyong Coal 14 August 2016</td>
</tr>
<tr>
<td>14 August 2016</td>
<td>Email to: DLALC Planning Manager</td>
<td>Provision of information as requested</td>
<td>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</td>
</tr>
<tr>
<td>15 August 2016</td>
<td>Email from: DLALC Planning Manager</td>
<td>Acknowledge receipt of information</td>
<td>Information provided as per written request of 1 August 2016</td>
</tr>
<tr>
<td>17 August 2016</td>
<td>Email from: DLALC via DPE</td>
<td>Wyong Coal advised of request made by DLALC to DP&amp;E on Monday 15 August 2016 for further information.</td>
<td>Information not requested direct from Wyong Coal despite DLALC open invitation on 22 February 2016 DA amendment briefing.</td>
</tr>
<tr>
<td>17 August 2016</td>
<td>Telephone messages to: DLALC CEO and Planning Manager</td>
<td>Request from Wyong Coal to meet DLALC</td>
<td>DLALC CEO responded 17 August 2016</td>
</tr>
<tr>
<td>17 August 2016</td>
<td>Telephone message from: DLALC CEO</td>
<td>Response to meeting request from Wyong Coal</td>
<td>DLALC CEO unavailable for meeting</td>
</tr>
<tr>
<td>17 August 2016</td>
<td>Email to: DLALC</td>
<td>Request for meeting as per unavailability of CEO</td>
<td>No response</td>
</tr>
<tr>
<td>18 August 2016</td>
<td>Telephone message and emails to: DLALC Planning Manager</td>
<td>Further request for meeting with DLALC as per request for additional information via DPE for 19 or 20 August 2016.</td>
<td>DLALC Planning Manager returned call. Meeting offer rejected.</td>
</tr>
<tr>
<td>19 August 2016</td>
<td>Email from: DLALC</td>
<td>Advice from DLALC that they would contact to arrange meeting after 24 August 2016.</td>
<td>No contact received from DLALC at COB 24 August 2016.</td>
</tr>
<tr>
<td>25 August 2016</td>
<td>Telephone message to: DLALC</td>
<td>Message left reiterated outstanding meeting request from Wyong Coal</td>
<td>No response</td>
</tr>
<tr>
<td>26 August 2016</td>
<td>Telephone contact from: DLALC</td>
<td>Meeting proposed for 7 September 2016</td>
<td>Wyong Coal accepts meeting date but requests DLALC reconsider an earlier meeting</td>
</tr>
<tr>
<td>29 August 2016</td>
<td>Email to: DLALC CEO</td>
<td>Email outlined that Wyong Coal had provided DLALC the information requested via DP&amp;E</td>
<td>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</td>
</tr>
<tr>
<td>Date</td>
<td>Contact</td>
<td>Issue</td>
<td>Response and comments</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>29 August 2016</td>
<td>Email from: DLALC CEO</td>
<td>Acknowledging receipt of information from Wyong Coal</td>
<td>Response failed to acknowledge request for earlier meeting</td>
</tr>
<tr>
<td>30 August 2016</td>
<td>Telephone and email to: DLALC</td>
<td>Follow-up on earlier meeting request</td>
<td>No response</td>
</tr>
<tr>
<td>31 August 2016</td>
<td>Telephone messages to: DLALC</td>
<td>Wyong Coal following up on request to arrange meeting</td>
<td>Further request to meet earlier than 7 September 2016. Requested DLALC for outlook invite. Response email 31 August 2016</td>
</tr>
<tr>
<td>31 August 2016</td>
<td>Email from: DLALC</td>
<td>Response to earlier meeting request</td>
<td>Rejected earlier meeting, failed to forward outlook invite to Wyong Coal as requested</td>
</tr>
<tr>
<td>7 September 2016</td>
<td>Meeting: DLALC and Wyong Coal</td>
<td>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. <strong>DLALC proposed reverting to original rail spur route on their land and offered to provide commercial terms upon written request from Wyong Coal.</strong></td>
<td>Wyong Coal agreed to further consider DLALC request upon receipt of detailed information on proposal from DLALC</td>
</tr>
<tr>
<td>8 September 2016</td>
<td>Email to: DLALC CEO</td>
<td>Thank you for meeting</td>
<td>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</td>
</tr>
<tr>
<td>12 September 2016</td>
<td>Email to: DLALC CEO and Planning Manager</td>
<td>Reminder email</td>
<td>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</td>
</tr>
<tr>
<td>12 September 2016</td>
<td>Email from: DLALC CEO</td>
<td>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.</td>
<td>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).</td>
</tr>
<tr>
<td>12 September 2016</td>
<td>Email to: DLALC CEO</td>
<td>Acknowledge reply to email from DLALC CEO</td>
<td>Waiting for minute completion</td>
</tr>
<tr>
<td>12 September 2016</td>
<td>Email from: DLALC Planning Manager</td>
<td>Response to tentative meeting request</td>
<td>Will respond when minutes accepted</td>
</tr>
<tr>
<td>Date</td>
<td>Contact</td>
<td>Issue</td>
<td>Response and comments</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>12 September 2016</td>
<td>Email to: DLALC Planning Manager and CEO</td>
<td>Request from Wyong Coal to set a tentative meeting date whilst finalising meeting minutes</td>
<td>No response from DLALC</td>
</tr>
<tr>
<td>13 September 2016</td>
<td>Email from: DLALC Planning Manager</td>
<td>Meeting minutes of 7 September 2016 attached</td>
<td>Receipt acknowledged by Wyong Coal and review timing advice provided</td>
</tr>
<tr>
<td>13 September 2016</td>
<td>Email to: DLALC Planning Manager</td>
<td>Minutes and audio</td>
<td>Acknowledge minutes receipt, request meeting audio</td>
</tr>
<tr>
<td>13 September 2016</td>
<td>Email from: DLALC Planning Manager</td>
<td>Audio request from Wyong Coal</td>
<td>Response, confidentiality agreement (CA)</td>
</tr>
<tr>
<td>14 September 2016</td>
<td>Telephone (TXT) to: DLALC Planning Manager</td>
<td>Meeting minutes matters</td>
<td></td>
</tr>
<tr>
<td>14 September 2016</td>
<td>Email to: DLALC Planning Manager</td>
<td>Meeting minutes mark up</td>
<td>Email recalled</td>
</tr>
<tr>
<td>14 September 2016</td>
<td>Email to: DLALC Planning Manager</td>
<td>Meeting minutes mark up</td>
<td>Final minutes mark-up</td>
</tr>
<tr>
<td>15 September 2016</td>
<td>Email to: DLALC Planning Manager</td>
<td>Notation regarding marked up minutes of meeting 7 September 2016 returned to DLALC by Wyong Coal</td>
<td>Clarification of minutes version 1 - disregard</td>
</tr>
<tr>
<td>15 September 2016</td>
<td>Email to: DLALC CEO</td>
<td>Wyong Coal requested meeting for 21 September 2016</td>
<td>No response received.</td>
</tr>
<tr>
<td>15 September 2016</td>
<td>Email from: DLALC Planning Manager</td>
<td>Advice minutes accepted with minor changes</td>
<td></td>
</tr>
<tr>
<td>15 September 2016</td>
<td>Email to: DLALC Planning Manager</td>
<td>Advice minute changes acceptable to Wyong Coal</td>
<td></td>
</tr>
<tr>
<td>15 September 2016</td>
<td>Email to: DLALC Planning Manager</td>
<td>Wyong Coal request timing for meeting</td>
<td>Response from DLALC Planning Manager</td>
</tr>
<tr>
<td>15 September 2016</td>
<td>Email from: DLALC Planning Manager</td>
<td>Unable to meet until after 19 September 2016</td>
<td></td>
</tr>
<tr>
<td>16 September 2016</td>
<td>Email from: DLALC Planning Manager</td>
<td>Final minutes of 7 September 2016 meeting distribution</td>
<td>Disseminated to Wyong Coal attendees</td>
</tr>
<tr>
<td>Date</td>
<td>Contact</td>
<td>Issue</td>
<td>Response and comments</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>16 September 2016</td>
<td>Email from: DLALC Planning Manager</td>
<td>Advice DLALC will contact Wyong Coal after Board Meeting of 19 September 2016</td>
<td></td>
</tr>
<tr>
<td>16 September 2016</td>
<td>Email to: DLALC Planning Manager</td>
<td>Minutes of meeting 7 September 2016</td>
<td>Acceptance by Wyong Coal</td>
</tr>
<tr>
<td>19 September 2016</td>
<td>Email to: DLALC Planning Manager</td>
<td>Notification of signed minutes of meeting from Wyong Coal</td>
<td>Additional request for audio CA</td>
</tr>
<tr>
<td>19 September 2016</td>
<td>Telephone message from: DLALC CEO</td>
<td>Message from DLALC regarding media attention.</td>
<td>Wyong Coal responded to message 19 September 2016.</td>
</tr>
<tr>
<td>19 September 2016</td>
<td>Email and phone call to: DLALC CEO</td>
<td>Response to previous message from DLALC CEO and meeting request</td>
<td>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.</td>
</tr>
<tr>
<td>19 September 2016</td>
<td>Email from: DLALC Planning Manager</td>
<td>CA regarding audio</td>
<td>Response from DLALC Planning Manager to request for CA</td>
</tr>
</tbody>
</table>
| 22 September 2016 | Telephone call from: DLALC CEO | DLALC CEO contacted Wyong Coal by telephone. Advised:  
1. DLALC had a meeting with Marcus Ray, DP&E the previous afternoon  
2. DLALC on the way to talk to Alan Blackman, Department of Minister and Cabinet about Wyong Coal/DLALC proposal (DPC)  
3. 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:  
1. Reversion to rail spur on DLALC land  
2. Original route offer now removed by DLALC, replaced with another option on their land  
3. DLALC regional planning aspirations | DLALC requested Wyong Coal consider its latest plan to use their land |
<p>| 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. |</p>
<table>
<thead>
<tr>
<th>Date</th>
<th>Contact</th>
<th>Issue</th>
<th>Response and comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 September 2016</td>
<td>Email to: DLALC CEO</td>
<td>Wyong Coal responded to email from DLALC CEO of 27 September 2016</td>
<td>Request from Wyong Coal for DLALC to provide a written letter outlining their offer and thoughts on process steps and timing</td>
</tr>
<tr>
<td>28 September 2016</td>
<td>Email from: DLALC CEO</td>
<td>DLALC CEO response to email of 28 September 2016</td>
<td>Response failed to provide the requested information for WACJV consideration</td>
</tr>
<tr>
<td>28 September 2016</td>
<td>Email to: DLALC CEO</td>
<td>Wyong Coal response to DLALC CEO email</td>
<td>Further request for written proposal from DLALC as indicated at meeting 7 September 2016. No acknowledgement of this email was received.</td>
</tr>
<tr>
<td>4 October 2016</td>
<td>Email to: DLALC Planning Manager</td>
<td>Hansen Bailey (on behalf of Wyong Coal requested access to DLALC Bushells Ridge land</td>
<td>Request to take photographs (for photomontages requested by DP&amp;E to address matters raised by DLALC). Response from DLALC Planning Manager 5 October 2016</td>
</tr>
<tr>
<td>4 October 2016</td>
<td>Email from: DLALC Planning Manager</td>
<td>Hansen Bailey advised request forwarded to office for attention</td>
<td>Arrangements made to pick up key from DLALC administration</td>
</tr>
<tr>
<td>5 October 2016</td>
<td>Attend DLALC Office</td>
<td>Access to DLALC Land</td>
<td>Key picked up from DLALC offices on 5 October 2016 by Hansen Bailey and returned the same day</td>
</tr>
<tr>
<td>6 October 2016</td>
<td>Letter to: DLALC Planning Manager</td>
<td>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</td>
<td>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</td>
</tr>
<tr>
<td>6 October 2016</td>
<td>Unscheduled meeting/discussion: DLALC and Wyong Coal</td>
<td>Office of Central Coast Parliamentary Secretary – DLALC CEO requested for meeting by Wyong Coal</td>
<td>DLALC CEO indicated Wyong Coal would be contacted for meeting on the 10 October 2016</td>
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<td>7 October 2016</td>
<td>Wyong Coal attend DLALC Office</td>
<td>Access to DLALC land</td>
<td>Key picked up from DLALC offices on 7 October 2016 by Wyong Coal and returned same day</td>
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<td>11 October 2016</td>
<td>Letter from: DLALC CEO to Hansen Bailey (dated 10 October 2016)</td>
<td>Letter dated 10 October</td>
<td>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</td>
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<tr>
<td>11 October 2016</td>
<td>Email from: DLALC CEO</td>
<td>Letter regarding access to DLALC land</td>
<td>DLALC advised that access had been undertaken as facilitated by their Planning Manager and was now complete</td>
</tr>
<tr>
<td>Date</td>
<td>Contact</td>
<td>Issue</td>
<td>Response and comments</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>11 October</td>
<td>Email to:</td>
<td>No contact from DLALC on 10 October 2016 as offered at meeting of 6</td>
<td>Wyong Coal again request written detail of offer and request meeting with DLALC and its planners to consider proposal. DLALC response 13 October 2016</td>
</tr>
<tr>
<td>2016</td>
<td>DLALC CEO</td>
<td>October 2016.</td>
<td></td>
</tr>
<tr>
<td>12 October</td>
<td>Email to:</td>
<td>Unavailable dates for meetings</td>
<td></td>
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<tr>
<td>2016</td>
<td>DLALC CEO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 October</td>
<td>Email from:</td>
<td>Letter invite to meeting</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>DLALC CEO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 October</td>
<td>Meeting:</td>
<td>Wyong Coal, DLALC and DLALC planners (ADW Johnson) meeting.</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>DLALC and Wyong</td>
<td>Address Wyong Coal concerns regarding achievability of latest DLALC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coal</td>
<td>proposal</td>
<td></td>
</tr>
<tr>
<td>20 October</td>
<td>Email to:</td>
<td>Confirming Wyong Coal position and preferred option</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>DLALC CEO</td>
<td></td>
<td>Wyong Coal expresses willingness to further consult. Requested confirmation from DLALC of their latest plan. No response from DLALC</td>
</tr>
<tr>
<td>26 October</td>
<td>Email to:</td>
<td>Follow-up on email of 20 October 2016</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>DLALC CEO</td>
<td></td>
<td>Repeated request for information from DLALC. No response</td>
</tr>
<tr>
<td>27 October</td>
<td>Letter from:</td>
<td>Withdrawal of discussions</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>DLALC CEO</td>
<td></td>
<td>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</td>
</tr>
<tr>
<td>29 October</td>
<td>Email to:</td>
<td>Wyong Coal response to DLAC email of 27 October 2016.</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>DLALC CEO</td>
<td></td>
<td>No response received</td>
</tr>
<tr>
<td>5 November</td>
<td>Email to:</td>
<td>Advise to DLALC.</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>DLALC CEO</td>
<td></td>
<td>Wyong Coal advised that Response to Submissions complete, and offering meeting to guide DLALC through responses. No response received</td>
</tr>
<tr>
<td>15 November</td>
<td>Email to:</td>
<td>Email following DLALC media</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>DLALC CEO</td>
<td></td>
<td>Repeating offer to meet and guide DLALC through Wyong Coals Response to Submissions. Response from DLALC CEO 15 November 2016</td>
</tr>
<tr>
<td>15 November</td>
<td>Email from:</td>
<td>Acknowledge email offer from Wyong Coal</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>DLALC CEO</td>
<td></td>
<td>Advised DLALC will respond in due course. No request for meeting received by Wyong Coal</td>
</tr>
<tr>
<td>29 November</td>
<td>Email to:</td>
<td>Email again offering opportunity to consult</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>DLALC CEO</td>
<td></td>
<td>Further request from Wyong Coals to consult regarding Response to Submissions before 9 December 2016, or if unable, anytime thereafter with Project Manager.</td>
</tr>
<tr>
<td>Date</td>
<td>Contact</td>
<td>Issue</td>
<td>Response and comments</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>29 November 2016</td>
<td>Email from:</td>
<td>Acknowledged email offer of further consultation</td>
<td>Email acknowledged 29 November 2016</td>
</tr>
<tr>
<td></td>
<td>DLALC CEO</td>
<td></td>
<td>No request for meeting received by Wyong Coal</td>
</tr>
<tr>
<td>20 December 2016</td>
<td>Email to:</td>
<td>Further offer to meet and discuss Wyong Coal response to Submissions,</td>
<td>DLALC CEO responded 20 December 2016</td>
</tr>
<tr>
<td></td>
<td>DLALC CEO</td>
<td>and further discuss matters raised by DLALC during recent correspondence with DPE</td>
<td></td>
</tr>
<tr>
<td>20 December 2016</td>
<td>Email from:</td>
<td>Response to meeting request from Wyong Coal</td>
<td>Unable to meet before Christmas, will be away until 16 January 2017</td>
</tr>
<tr>
<td></td>
<td>DLALC CEO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 December 2016</td>
<td>Email to:</td>
<td>Request for access to information by Wyong Coal</td>
<td>No response received</td>
</tr>
<tr>
<td></td>
<td>DLALC CEO</td>
<td>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 DEO requested to provide some guidance on the matter before close of business today (23 December 2016)</td>
<td></td>
</tr>
</tbody>
</table>
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 steams 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 Wallarah 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 Wallarah 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

<table>
<thead>
<tr>
<th>Project Year</th>
<th>Vertical leakage (ML)</th>
<th>Loss to crack storage (ML)</th>
<th>Shallow alluvial transfers (ML)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Construction</td>
<td>0.00</td>
<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>2 – Construction</td>
<td>0.00</td>
<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>3 – Construction</td>
<td>0.00</td>
<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>4 – (Year 1 of Mining)</td>
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<td>0</td>
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<tr>
<td>5</td>
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</tr>
<tr>
<td>28</td>
<td>7.12</td>
<td>1.04</td>
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</tr>
</tbody>
</table>
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 steams 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
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 (e.g. 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
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:

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 Wallarah 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

<table>
<thead>
<tr>
<th>Standard Construction Hours</th>
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</thead>
<tbody>
<tr>
<td><strong>Monday to Friday</strong></td>
</tr>
<tr>
<td>7:00 am to 6:00 pm</td>
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</table>
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 WAJCV 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 predicted 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 earthworks. 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

<table>
<thead>
<tr>
<th>Major Staging</th>
<th>Timing</th>
<th>Description</th>
<th>Figure</th>
<th>Out of Hours Justification</th>
<th>Separate Approval Required</th>
<th>Duration, frequency and predicted exceedance</th>
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<tr>
<td>1. Site Establishment</td>
<td>Q3 2018 - Q4 2018</td>
<td>Clearing, mulching, fencing, access roads, compounds</td>
<td>N/A</td>
<td>Unlikely to be required</td>
<td>No</td>
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<tr>
<td><strong>Conveyor Systems</strong></td>
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<td>2. Conveyor Construction (CH 00 to CH 2280)</td>
<td>Q1 2019 - Q3 2019</td>
<td>Footing preparation, concrete pours, steel and structure erection</td>
<td>1</td>
<td>May only be required where potential business interruptions to Boral require out of hours</td>
<td>Yes</td>
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<td>3. Conveyor Construction (over MNRL)</td>
<td>Q1 2019 – Q3 2019</td>
<td>Footing preparation, concrete pours, steel and structure erection</td>
<td>2</td>
<td>Needs to be completed in a track possession coordinated by Sydney Trains.</td>
<td>Yes</td>
<td>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</td>
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<td><strong>Rail Spur</strong></td>
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<tr>
<td>4. Bridge at CH 112080</td>
<td>Q3 2019 – Q4 2019</td>
<td>Earthworks, footing preparation, steel preparation, concrete pours</td>
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<td>Only require where required by Sydney Trains</td>
<td>Yes if required</td>
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<td>5. Bridge at CH 112480</td>
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<td>Preparation, steel preparation, concrete pours</td>
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<td>Only require where required by Sydney Trains</td>
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<td>6. Bulk Earth Works</td>
<td>Q4 2019 – Q1 2020</td>
<td>Cut and fill, drainage</td>
<td>All</td>
<td>Only require where required by Sydney Trains</td>
<td>Yes if required</td>
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<td>7. Construction of Train Load Out CH112780</td>
<td>Q4 2019 - Q12020</td>
<td>Footing preparation, concrete pours, steel and structure erection</td>
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<td>Only require where required by Sydney Trains</td>
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<td>8. Conveyor Construction along MNRL</td>
<td>Q4 2019 – Q2 2020</td>
<td>Footing preparation, concrete pours, steel and structure erection</td>
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<td>9. Track Construction</td>
<td>Q2 2019 – Q2 2020</td>
<td>Ballast, sleeper and rail installation</td>
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<td>10. Decommissioning</td>
<td>Q4 2019 – Q2 2020</td>
<td>Removal redundant equipment, compounds and work areas</td>
<td>N/A</td>
<td>Unlikely to be required</td>
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Ref: 170331 Wallarah Response to PAC Queries Noise.docx
### Table 3

#### Table 27 from NIA

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<tr>
<th>Work Stage</th>
<th>Scenario</th>
<th>Reference Receiver</th>
<th>RBL Day/Evening/Night</th>
<th>Construction Noise Management Level LAeq 15 min</th>
<th>Predicted Noise Level LAeq 15 min</th>
<th>Predicted Exceedance of Noise Management Level (dB)</th>
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</table>
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.

5. 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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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
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 RU8 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**

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<thead>
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<tr>
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<tr>
<td>Land Parcel</td>
<td>Part Lot 204 DP 1117900</td>
</tr>
</tbody>
</table>

**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**: 
- **Regional / Sub Regional Strategy**: Central Coast Regional Strategy
- **Release Area Name**: 
- **Consistent with Strategy**: No
- **Date of Release**: 
- **Type of Release (eg Residential / Employment land)**: Both
- **Area of Release (Ha)**: 95.00
- **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**: Yes

**Have there been meetings or communications with registered lobbyists?**: No

**If Yes, comment**: 

Page 2 of 14
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
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 :  
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 Stratgey 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 RUS6. 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 zoned 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:
- 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.
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
devlopment 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 Nural 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
**Assessment Process**

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<td>Delegation</td>
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**Public Authority**

- 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

**Is Public Hearing by the PAC required?**

No

**Should the matter proceed?**

Yes

**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, Doyalsn

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

<table>
<thead>
<tr>
<th>Document File Name</th>
<th>Document Type Name</th>
<th>Is Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Proposal_Wyong_005_Proposal Council Letter.pdf</td>
<td>Proposal Covering Letter</td>
<td>Yes</td>
</tr>
<tr>
<td>19042016 Updated Planning Proposal - Post JRPP Determination-revised.pdf</td>
<td>Proposal</td>
<td>Yes</td>
</tr>
<tr>
<td>Planning Proposal_Wyong_005 Mapping.pdf</td>
<td>Map</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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 Rural Indigenous Inc.
• Jemena
• NSW Rural Fire Service
• Fire and Rescue NSW
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: [Signature]

Printed Name: [Name] Date: [Date]
Appendix L

Conditions – DLALC Rezoning Application
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

[Signature]

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 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 Nural 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
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)

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Central Coast</th>
<th>Greater Sydney</th>
<th>NSW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>148,100</td>
<td>2,466,900</td>
<td>3,664,200</td>
</tr>
<tr>
<td>2014-15 employment growth</td>
<td>-0.7%</td>
<td>1.9%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Participation rate</td>
<td>57.5%</td>
<td>65.7%</td>
<td>63.3%</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>6.1%</td>
<td>5.2%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Youth unemployment rate</td>
<td>15.2%</td>
<td>11.4%</td>
<td>12.8%</td>
</tr>
</tbody>
</table>
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)
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 Census: Gosford (100%); Swansea (42%); Terrigal (100%); The Entrance (100%); and Wyong (100%).

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.
Central Coast labour force trends

- 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

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>Full-time employed</td>
<td>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.</td>
</tr>
<tr>
<td>Labour force</td>
<td>The total number of employed and unemployed persons.</td>
</tr>
<tr>
<td>Participation rate</td>
<td>The labour force expressed as a percentage of the civilian population in the same age group.</td>
</tr>
<tr>
<td>Part-time employed</td>
<td>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.</td>
</tr>
<tr>
<td>Unemployed</td>
<td>Persons aged 15 years and over who were not employed during the week of the Labour Force Survey, and:</td>
</tr>
<tr>
<td></td>
<td>- 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</td>
</tr>
<tr>
<td></td>
<td>- 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.</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>The number of unemployed persons expressed as a percentage of the labour force.</td>
</tr>
<tr>
<td>Youth population</td>
<td>Persons aged 15 to 24</td>
</tr>
</tbody>
</table>
Related Research Service publications:

- Western Sydney: an economic profile (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
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
Our project is moving forward—and so are the community projects!

The Wallarah 2 community projects for 2014 have been announced and are aimed at strengthening community engagement, providing educational opportunities, and promoting economic development. We aim to continue to explore opportunities to engage with local communities and promote sustainable economic development.

Welcome to the big autumn issue of the Wallarah 2 Coal Project newsletter. This issue includes a range of updates on the project's progress, community engagement initiatives, and insights from local stakeholders. We hope you find the information valuable and informative.

Peter Walter
Manager

WALLARAH 2 COAL PROJECT - NEWSLETTER DISTRIBUTION AREAS
• FACTS NOT FICTION Community flyer
  o 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)

• **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
DEPARTMENT OF MINERAL RESOURCES
NOTICES


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—Wyong; 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 particularly 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 NERDCC (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), NERDCC (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 Jilliby Creek and Little Jilliby 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 PM$_{10}$ 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 PM$_{10}$ 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, PM$_{10}$ 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 ‘Wallarah 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

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

Wyong Shire Council
CENTRAL COAST

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.

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<td>March 2011</td>
<td>Development application for the Project is refused by the Minister for Planning due to:</td>
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<td>• Uncertainty around subsidence;</td>
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<td>• Inadequate characterization of potential impacts to surface water quality, ecology (particularly in the western portion of site), cultural heritage; and</td>
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<td>• The Project was not considered to be consistent with the principles of sustainable development.</td>
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<tr>
<td>November 2011</td>
<td>WACJV lodges a new application for development consent of a mining lease.</td>
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<tr>
<td>January 2012</td>
<td>NSW Government issues new Director General’s Requirements (DGRs) for the Project (‘New DGRs’) to supplement DGRs issued in 2009. The new DGRs outline issues requiring comprehensive evaluation during the environmental assessment for Project approval.</td>
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<tr>
<td>July 2012</td>
<td>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.</td>
</tr>
<tr>
<td>April 2013</td>
<td>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.</td>
</tr>
<tr>
<td>April 2013</td>
<td>Draft EIS is placed on public exhibition from 26 April 2013 to 21 June 2013.</td>
</tr>
<tr>
<td>September 2013</td>
<td>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.</td>
</tr>
<tr>
<td>October 2013</td>
<td>Hansen Bailey on behalf of WACJV prepares a subsequent Residual Matters Report.</td>
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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 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:

- Wallarah 2 Coal Project Response to Submissions (2013);
- Wallarah 2 Coal Project Residual Matters Report (2013);
- Wallarah 2 Coal Project Review of the 2013 EIS (2013);
- Wallarah 2 Coal Project Environmental Assessment: Volumes 1 to 6 (2013) and technical appendices;
- Wallarah 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.

|------------------------|----------------|-----------------------|-------------------|----------------|-----------------------------------------------|------------------------|
| Structure and Approach | 1              | EIS does not adequately assess construction impacts; in particular related to air quality, water quality and transport. | No, air quality and water quality impacts are further commented on, but the deficiencies are not addressed. | Air Quality:  
“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.”  

Water Quality:  
“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.”  

“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 Tooneys Road Site during Year 1. Groundwater inflows to the underground commence in Year 2 of the Project,” | Section 3.5.1, 3.3.6, 3.11.7, 3.11.8 | 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 exceedences are anticipated during operations, thus the assumption that construction impacts will necessarily be compliant with emissions criteria cannot be justified with certainty.  
Ambient conditions for 24-hour PM$_{10}$ 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.  
Emission factors for the construction phase were taken from USEPA (1995) and NERDC (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).  
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. |
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<td>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.*</td>
<td>Section 3.22</td>
<td>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.</td>
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<td>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.</td>
<td>Section 3.17.2, 3.27.18</td>
<td>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.</td>
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<td>1</td>
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<td>EIS does not adequately consider closure planning and no assessment of potential closure impacts has been undertaken.</td>
<td></td>
<td>&quot;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.&quot;</td>
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<td>2</td>
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<td>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.</td>
<td></td>
<td>&quot;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.&quot;</td>
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<td>&quot;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</td>
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<td>3</td>
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<td>Lack of Environmental Management System or a commitment to develop one.</td>
<td>Partially addressed. A description of Environmental Management System was not provided, however an indication to develop one was included.</td>
<td>“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&amp;I which shall comprise (at least) 17 strategies / plans.</td>
<td>Section 3.25, Table 11 of Section 4.</td>
<td>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.</td>
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<td>4</td>
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<td>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.</td>
<td>Partially addressed. A commitment to undergo Independent Environmental Audits is stated, however no indication of regularity or frequency provided.</td>
<td>“WACJV will commission Independent Environmental Audits in accordance with any conditions of Development Consent.”</td>
<td>Section 3.27.14, Table 11 of Section 4</td>
<td>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.</td>
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<td>Stakeholder Engagement</td>
<td>5</td>
<td>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</td>
<td>No. No additional information is provided to determine if stakeholders were adequately engaged or if their concerns were accurately captured and addressed in the</td>
<td>“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.”</td>
<td>Section 3.24.1</td>
<td>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</td>
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| Water                  | 6              | EIS does not assess impacts on surface water quality or provide potential management and mitigation measures including a contingency planning for uncontrolled discharge. | No. Impacts on surface water quality have not been assessed. | “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. “  

“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.”  

“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.” | Section 3.3.1, 3.3.6 | 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. |
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<th>Water</th>
<th>7</th>
<th>No assessment of potential acid and metalliferous drainage (AMD)</th>
<th>No. No assessment of AMD has been conducted.</th>
<th>“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</th>
<th>Section 3.23.3</th>
<th>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</th>
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<td>Water</td>
<td>8</td>
<td>Lack of immediate downstream sampling point of proposed Wallarah Creek tributary discharge site.</td>
<td>No. A WTP monitoring point will be located at the release point; however this will not provide baseline data for basis of comparison.</td>
<td>“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.”</td>
<td>Section 3.3.3</td>
<td>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.</td>
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<td>Water</td>
<td>9</td>
<td>Lack of contingency for potential overflow of untreated mine water from the Mine Operations Dam</td>
<td>No. No contingency plan is provided.</td>
<td>“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 conditions.”</td>
<td>Section 3.3.1</td>
<td>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 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 conditions.”</td>
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<td>Water 10</td>
<td></td>
<td>Insufficient groundwater parameters measured during baseline (i.e. only pH, conductivity and TDS were measured).</td>
<td>No. There is no justification or indication for the limited parameters measured.</td>
<td>“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.”</td>
<td>Section 3.2.5</td>
<td>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.</td>
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<td>Water 11</td>
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<td>Limited groundwater mitigation measures presented requiring better articulation of groundwater quality mitigation.</td>
<td>No. No groundwater mitigation measures developed.</td>
<td>“…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.”</td>
<td>Section 3.2.5</td>
<td>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.</td>
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<td>Water 12</td>
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<td>EPBC Act ‘Water Trigger’ Amendment (2013) has not been Yes. The RTS indicates a pending decision regarding application of the</td>
<td>“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</td>
<td></td>
<td>Section 3.28.6</td>
<td>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</td>
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<td>Air Quality</td>
<td>13</td>
<td>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. Construction impacts and impacts associated with certain climatic conditions are not clearly outlined.</td>
<td>water trigger to the Project.</td>
<td>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.</td>
<td>Section 3.5.2</td>
<td>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.” 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. Maximum daily PM_{10} used a Monte Carlo statistical simulation to randomly select values, rather than use maximum available PM_{10}. 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.</td>
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### Air Quality

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<td><strong>Predicted Project-related emission concentrations from dispersion modelling assume Project implementation of best practices.</strong> 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.</td>
<td>14</td>
<td>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.</td>
<td>No. No clear explanation provided.</td>
<td>&quot;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.” &quot;As outlined in Section 11.3 of the AQGGA, the existing monitoring network will be updated or augmented with a number of continuous PM_{10} / 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.&quot; &quot;Continuous monitoring stations are not intended to be</td>
<td>Section 3.5.5, 3.5.6</td>
<td>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 PM_{10}/PM_{2.5} 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.</td>
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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.
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<td>Greenhouse Gas</td>
<td>15</td>
<td>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.</td>
<td>Partial. Commitments not thoroughly described.</td>
<td>“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. 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).”</td>
<td>Section 3.6.4</td>
<td>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.</td>
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<td>Noise and Vibration</td>
<td>16</td>
<td>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</td>
<td>Partially addressed.</td>
<td>“The Noise and Vibration Impact Assessment (Appendix N of the EIS) for the proposed development predicts that there will be no change in the LAmax noise level and only a marginal change in the LAeq, 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</td>
<td>Section 3.8.1</td>
<td>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.</td>
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<td>Noise and Vibration</td>
<td>17</td>
<td>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.</td>
<td>No. Predicted exceedences not addressed.</td>
<td>“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.”</td>
<td>Section 3.8.1</td>
<td>Mitigation measures specific to the Project Specific Noise Criteria (PSNC) are not addressed in the RST and therefore mitigation measures specific to these exceedences are not provided.</td>
</tr>
<tr>
<td>Ecology</td>
<td>18</td>
<td>Although an overall adequate ecological baseline was provided, it lacks detail in regard to threatened species</td>
<td>Yes, Additional flora and aquatic surveys were conducted in 2013. Although sufficiently detailed</td>
<td>“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 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.</td>
<td>Section 3.9.2, 3.9.3, 3.10</td>
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### Findings of EIS Review

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<td>19</td>
<td>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.</td>
<td>Partially addressed. No calculations of offsets for threatened species were provided in the RST to support the response.</td>
<td>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 (Tetratheca juncea), listed as Vulnerable under the EPBC Act; and Spotted-tail Quoll (Dasyurus maculatus) and Giant Barred Frog (Mixophyes</td>
<td>Table 11 of Section 4, Section 3.9.5, 3.9.9</td>
<td>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.</td>
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#### Earth Systems

- **Finding number:** 19
- **Finding:** 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.

#### Findings

1. **Finding:** Population distribution and abundance estimates. Ecological surveys should have been conducted over a broader survey area to reflect impacts associated with all project components.

2. **WACJV Response:** Surveys provided a total of 30 additional quadrats.

3. **WAJCV Reference (Response to Submissions, 2013):** 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.

4. **Assessment of Response:** Additional surveys for threatened species would improve the existing knowledge base of their population and distribution and may lead to discovery of additional species.

5. **Finding:** Surveys for threatened species were not conducted for flora and fauna, the Project is assuming their respective occurrence.

6. **WACJV Response:** Population distribution and abundance estimates. Ecological surveys should have been conducted over a broader survey area to reflect impacts associated with all project components.

7. **WAJCV Reference (Response to Submissions, 2013):** Population distribution and abundance estimates. Ecological surveys should have been conducted over a broader survey area to reflect impacts associated with all project components.

8. **Assessment of Response:** Population distribution and abundance estimates. Ecological surveys should have been conducted over a broader survey area to reflect impacts associated with all project components.
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<td>Traffic and Transport</td>
<td>20</td>
<td>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.</td>
<td>Yes.</td>
<td>“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.”</td>
<td>Section 3.12</td>
<td>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.</td>
</tr>
<tr>
<td>Visual</td>
<td>21</td>
<td>The visual assessment conducted for the</td>
<td>Yes.</td>
<td>“Appendix E of the EIS provides plan and elevation drawings for the relevant infrastructure items. The 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.</td>
<td>Section 3.15</td>
<td>No further issues identified in the review of the RTS.</td>
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iterateus), listed as Endangered under the EPBC Act. 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).”

“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.”

“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.”
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<td>Amenity</td>
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<td>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.</td>
<td>Visual Impact Assessment considered these drawings in its assessment.</td>
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<td>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.</td>
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<td>Archaeology and Cultural Heritage</td>
<td>22</td>
<td>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.</td>
<td>Yes.</td>
<td>“WACJV will continue to consult with the Aboriginal community during the construction and operation of the Project.”</td>
<td>Section 3.13.1</td>
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<tr>
<td>Community Health and Safety</td>
<td>23</td>
<td>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 addressed</td>
<td>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.</td>
<td>“Wallarah 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</td>
<td>Section 3.3.6, 3.5.1, 3.5.5</td>
<td>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.</td>
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<td>Impacts beyond DGRs</td>
<td>24</td>
<td>Contingency plans for potential disasters, whether naturally occurring or human induced, have not been included in the EIS. This is an oversight.</td>
<td>No. A Disaster Risk Management Plan was not developed.</td>
<td>“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.”</td>
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<td>Impacts beyond DGRs</td>
<td>25</td>
<td>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.</td>
<td>No. Inadequate justification provided for disregarding potential environmental risks associated with the proximity of the facility to the project.</td>
<td>“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.”</td>
<td>Section 3.27.8</td>
<td>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.</td>
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<tr>
<td>Management and Monitoring</td>
<td>26</td>
<td>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.</td>
<td>No. No ESMMP has been developed and a specific timeframe or description of proposed plans part of the EMS not provided.</td>
<td>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.</td>
<td>Table 11 of Section 4</td>
<td>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.</td>
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Table 3-2. Review of WACJV’s response to recommendations identified by Earth Systems in the 2013 EIS.

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<td>Air quality</td>
<td>Air quality impacts are assessed utilising relevant methodologies to ensure that detailed impact assessments of project phases are conducted effectively.</td>
<td>No. The assertion that the impact assessment is conducted according to approved methods (DECC, 2005) is inaccurate.</td>
<td>“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.”</td>
<td>Section 3.5.1</td>
<td>The impact assessment did not sum the combined effects of Project emissions and ambient conditions (total impact); therefore estimates of exceedences are not valid. The cumulative impacts was not calculated with maximum background concentrations as is required for Level 1 Assessment (DECC, 2005). The cumulative impact assessment does not consider future development in modelling.</td>
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<td>Greenhouse gas</td>
<td>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</td>
<td>Partially addressed.</td>
<td>“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).”</td>
<td>Section 3.6.1</td>
<td>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.</td>
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<td>Water quality</td>
<td>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.</td>
<td>No. Surface water quality was not investigated further and AMD assessments were not conducted.</td>
<td>“There are no recorded events of AMD issues associated with contamination of water which has emanated from mines operating in the Newcastle Coal Measures.”</td>
<td>Section 3.23.3</td>
<td>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.</td>
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<td><strong>EPBC ‘Water Trigger’ Amendment (2013)</strong></td>
<td>The EPBC Act Water Trigger Amendment (2013) is considered by the Proponent.</td>
<td>Yes. The RTS indicates a pending decision regarding application of the water trigger to the Project.</td>
<td>“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.”</td>
<td>Section 3.28.6</td>
<td>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.</td>
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<tr>
<td><strong>Ecology</strong></td>
<td>Further detailed surveys for biodiversity are conducted, including extended flora survey to establish a robust flora baseline for the Subsidence Impact Limit.</td>
<td>Yes. Additional flora surveys were conducted in 2013.</td>
<td>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 Toohey’s Road and Buttonerry Sites, as well as in the proposed Hue Hue and Toohey’s Road offset areas. The July 2013 surveys provided a total of 30 additional quadrats.”</td>
<td>Section 3.9.2, 3.9.9</td>
<td>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.</td>
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<tr>
<td><strong>Ecology</strong></td>
<td>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.</td>
<td>Yes. The Biodiversity offset Package (BOP) was re-assessed.</td>
<td>“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.” “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.” “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 (Tetratheca juncea), listed as Vulnerable</td>
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### Mine Design and Layout

Internal haulage routes are confirmed to allow assessment of potential impacts of heavy vehicle movement.  

**No.** No indication provided for the future assessment of heavy vehicle traffic on internal haulage roads.  

"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."

**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

A robust Stakeholder Engagement Plan is developed that is inclusive of commitments to ongoing consultation and a structured grievance procedure.  

**No.** The RTS does not indicate a Stakeholder Engagement Plan and grievance procedure are not specified.  

"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."

**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

A comprehensive Rehabilitation and Closure Plan is prepared.  

**No.** A Rehabilitation and Closure Plan has not been prepared.  

"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."

**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

The Risk Assessment and Cost Benefit Analysis are reviewed and revised based on detailed findings of further recommended work.  

**No.** The risk assessment and cost benefit analysis has not been re-rated.  

"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."

"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."

**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.
| Disaster Risk Management | The risk assessment was undertaken in accordance with the DGRs which required they identified the key issues for further assessment. | 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: “Disaster risk management for naturally occurring or human-induced events have been overlooked in the EIS. These include environmental emergencies such as uncontrolled discharge during high rainfall events, water storage dam wall failure, and bushfires. Other disasters could include those associated with spontaneous combustion or blasting accidents.

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.” |
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<td>Community Health and Safety</td>
<td>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. No. A Disaster Risk Management Plan was not developed.</td>
<td>No. Identified data gaps and uncertainties which have the potential to impact community health</td>
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and safety have not been adequately addressed in the RTS as referenced throughout this report. **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 that the construction phase of the Project would also comply with the air quality criteria under all modelled climatic conditions.”

“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.”

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 | Potential impacts upon the Buttorderry Waste Management Facility associated with the development of the Project are fully considered. | 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 Buttorderry Waste Management Facility. Each of the Waste Management Facility and the Buttorderry 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. This is a potential oversight. |
| Management, Monitoring and Reporting | 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. | Partially addressed. Management and Monitoring Plans are intended to be developed, no timeline is provided. | “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:
- 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 | An independent expert is commissioned by the Proponent to conduct Environmental Audits of the project on a regular basis throughout the project life cycle. | An indication to conduct Environmental Audit is also provided. | (EMS);  
- 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);  
- Management Procedure);  
- Land Management Plan;  
- Bushfire Management Plan;  
- Waste Management System; and Landscape Management Plan*  
| Management, Monitoring and Reporting | An Environmental Management System based on ISO14001:2004 ‘Environmental management systems - Requirements with guidance for use’ is developed and implemented for the Project. | No. No reference to ISO14001:2004 given. | 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. |
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.


IAIA (1999) *Principles of Environmental Impact Assessment Best Practice*. In cooperation with the Institute of Environment Assessment, UK.


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.


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)  Peter Smith (Wyong Coal)
Lynne Hamilton (Darkinjung)  Kevin Reed (Wyong Coal)
Tony Simpson (Darkinjung)  Kenny Barry (Wyong Coal)
Brooke Harb (Darkinjung)  Min ParK (Wyong Coal)
Peter Allonby (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
11 April 2017

Kenny Barry
Project Manager
Wallarah 2 Coal Project
PO Box 3039 Tuggerah NSW 2259

Dear Kenny

Re: Response to The Australia Institute's 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, PM2.5, 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."
WALLARAH 2 COAL PROJECT – AMENDMENT TO SSD-4974
RESPONSE TO PAC2 ON CENTRAL COAST COUNCIL QUERIES
for
Wyong Areas Coal Joint Venture

1 INTRODUCTION

This document responds to a letter provided by the Planning Assessment Commission (PAC2) on 20 April 2017 from Central Coast Council (CCC) in relation to further queries on the Wallarah 2 Coal Project (the Project) as Amended. The majority of issues in the CCC letter were responded to in the document ‘Wallarah 2 Coal Project Amendment to Development Application SSD-4974 Public Hearing 2 Response’ (Hansen Bailey, 20 April 2017) (PAC2 Response) as indicated below. This document also provides a response to the few issues in the CCC letter where not previously responded to.

Inputs to the responses have been provided by technical specialists, and Wyong Areas Coal Joint Venture (WACJV) where required.

1.1 CENTRAL COAST COUNCIL’S POSITION ON THE APPLICATION.

1.1.1 Issue

“The Central Coast Council’s position is no different to that of the former Wyong Shire Council and the former Gosford City Council who both objected to the development. … “

1.1.2 Response

Noted.

1.2 WATER RESOURCES

1.2.1 Issue 1

a. The percentage of water that goes to the Central Coast supply system from alluvial aquifers, surface water (streams & creeks), groundwater from the coal measures and piping from the Hunter.

The Central Coast Water Supply operates as an integrated system of various sources that contribute different amounts of water based on their particular attributes, operating rules and the prevailing climatic conditions. The primary source of water is the local streams.

The groundwater systems are estimated to provide approximately 5ML/ year when operating. However, this has not been tested long term under drought conditions.
The Central Coast has a large population that relies on a relatively small water resource base. The region is a major growth area for the state with the population anticipated to grow substantially (by 75,000 conservatively) over the operating life of the Wallarah 2 mine.

Given the large and growing community of the Central Coast and the limited water resource base available to the water supply, any loss of water will impact the ability to supply the water needs of the community and place that community at greater risk during drought.

1.2.2 Response

Noted.

1.2.3 Issue 2

b. A plan that shows the Wyong weir catchment area and the location of the proposed mine site in relation to the catchment area.

Refer attachments 1 and 2.

1.2.4 Response

Noted.

1.2.5 Issue 3

c. Council’s plan to future proof the water supply for the expected population growth to 2036 and beyond.

Council is currently reviewing the long term water supply strategy for the Central Coast. This review is being undertaken in parallel with the next evolution of the Lower Hunter Water Plan.

Issues that affect the long term water security of the Central Coast include the long term operation of the link between the Hunter and Central Coast, changes to water availability associated with review of water sharing plans, and a review of drought risks.

The water supply reviews for both the Hunter and Central Coast are scheduled to be completed in mid-2020.

1.2.6 Response

Noted.

1.2.7 Issue 4

d. Comment on the 2014 PAC Review recommendations and the Department Addendum Report including the draft conditions.
Overarching comments in relation to the Central Coast Water Supply

The PAC report of 2014 considered the whole project including the mine generally addressed the water supply concerns of Council.

In particular the discussion and recommendations contained in section 3.3.1.4 are considered by Council to be particularly pertinent for the preparation of the conditions of consent in the event the proposal was to gain approval.

The key items to be incorporated into the conditions of consent are:-

- Specific requirement that the project be required to meet a no net impact performance outcome on the catchment water resources available to the Central Coast Water Supply (CCWS).

- Requirement to compensate the Central Coast Water Supply for any loss of water access caused by the mining activity. The compensation measure will need to provide a real and equivalent amount of water to the CCWS as that lost due to mining impacts.
  
  o The preferred mechanism to compensate for any water loss is to provide appropriately treated water downstream of the mining impacts at an appropriate point for the CCWS.
  
  o An alternative mechanism in the event of insurmountable constraints in providing the compensatory water is the provision of financial contributions for the Central Coast Water Supply Authority to augment the water supply infrastructure to achieve and equivalent supply amount.
  
  o Purchasing of water licenses should be specifically excluded as a compensatory mechanism.
  
  o A minimum compensatory water amount of 300ML/annum shall be in place and operational before mining is permitted beyond LongWall 5N.

- A monitoring system capable of confirming catchment losses from mine related impacts is to be developed and implemented. The monitoring system must be acceptable to the Central Coast Council (as the Central Coast Water Supply Authority) which shall have an approval role in the water monitoring system.

1.2.8 Response

These issues were responded to in detail in Section 2.2 of the PAC2 Response. It is WACJV’s option that the conditions of consent do not require any amendment to incorporate the comments above.

See further comments in Section 1.2.11 below.
## 1.2.9 Issue 5

<table>
<thead>
<tr>
<th>CCC ISSUE</th>
<th>WACJV RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definitions</strong></td>
<td></td>
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<tr>
<td>AEP – Annual Exceedance Probability</td>
<td>Amendment to this condition is not required.</td>
</tr>
<tr>
<td>Verification that no connective cracking has occurred between the base of the alluvium and the underground workings may be difficult in practice. There should be a requirement for testing of connective cracking following subsidence events and periodically thereafter. Any results showing that connective cracking has resulted should result in stop work and further environmental assessment and approval prior to any further mining operation re-commencing.</td>
<td>The Extraction Plan (EP process) and associated TARPS at Schedule 3 Condition 6 provides detail on required monitoring and actions. Further regular reporting will be required under the Mining Act 1992 that will include this information.</td>
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<tr>
<td>The combination of this performance measure with clause 2 offsets as currently drafted means that only CCWS water losses in excess of 300ML/annum are offset/compensated. This was not the intent of the PAC in 2014. It would be more appropriate to change the performance measure to “no net loss of water available to the Central Coast Water Supply”.</td>
<td>Amendment to this condition is not required. The Project has predicted to take up to 300 ML/annum and will seek licences under the Water Management Act 2000. This issue is responded to in detail in Section 2.2 of PAC 2 Response and in Section 1.2 below.</td>
</tr>
<tr>
<td>Given the implications for the ongoing monitoring review and offsets associated with the impacts of the mine, the Water Management Plan should be subject to the approval (not just consultation) of the EPA, DPI Water and the Central Coast Council. The Water Management Plan should make specific reference to the appropriate management of acid mine drainage (AMD) and include requirements to develop appropriate trigger levels associated with AMD.</td>
<td>Amendment to this condition is not required. The consultation and approval process for this plan is correctly consistent with all other coal mine planning approvals. See detailed response on AMD which confirms “there is no area which contains a high probability of PASS and ASS forming within the Project Boundary” (see Section 2.3.2 of Appendix P of PAC2 Response).</td>
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<td>Given the implications for the ongoing monitoring review and offsets associated with the impacts of the mine the Water Monitoring Program should be subject to the approval (not just consultation) of the EPA, DPI Water and the Central Coast Council.</td>
<td>Amendment to this condition is not required. The consultation and approval process for this program is correctly consistent with all other coal mine planning approvals.</td>
</tr>
<tr>
<td>Given the implications for the ongoing monitoring review and offsets associated with the impacts of the mine the Central Coast Water Supply Monitoring Program should be subject to the approval (not just consultation) of the EPA, DPI Water and the Central Coast Council (as the Central Coast Water Supply Authority).</td>
<td>Amendment to this condition is not required. The consultation and approval process for this plan is correctly consistent with all other coal mine planning approvals.</td>
</tr>
<tr>
<td>CCC ISSUE</td>
<td>WACJV RESPONSE</td>
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<tr>
<td>Water Monitoring Program 9 Central Coast Water Supply Monitoring Program 9(c)</td>
<td>Should the reference to 5 (g) be 6(g) (iii) instead?</td>
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<tr>
<td>9(e)(iv)</td>
<td>Whilst the assessment of baseflow losses are important, so are the changes to flows greater than the baseflow. The water supply is supplemented during times of higher water flows. The water supply extracts water from the Wyong River (which Jilliby Jilliby Creek flows into over a broad range of streamflows). The monitoring plan should monitor and report on all water losses to the water supply not just from base flow losses. Compensation should be based on all losses incurred.</td>
</tr>
<tr>
<td>Schedule 4 Condition 16.</td>
<td>The PAC Report 2014, Section 3.3.1.4 discusses the basis and issues around the application of compensatory water for the CCWS. The conditions should include explicit requirements to reflect the PAC Report 2014  - Explicitly exclude the purchase of water licences as a compensatory measure.  - Compensatory water shall be operational to provide a minimum amount of 300ML/a before mining beyond LongWall 5N occurs. The amount of compensatory water shall be adjusted based on the monitoring results to achieve no net impact. The burden of proving the monitoring results rests with the proponent in the event that a reduction of the compensatory water amount below 300ML/annum is proposed.  - Compensatory water is not required to be provided after the cessation of mining operations but only if the proven permanent water loss is less than 36.5ML/annum.</td>
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1.2.10 Issue 6

Comments on the Department of Planning and Environment Addendum Report February 2017

The Department argues that only water losses to the Central Coast Water Supply in excess of 300ML/a require compensation. Council is currently reviewing its long term water supply strategy where preliminary investigations indicate that the cost to replace 300ML/a of water supply is likely to cost in the order of $4m if part of a scheme with considerable economies of scale. In addition to the capital cost it is noted that these options have higher operating costs than water sourced from Wyong River.

Council has been concerned with the potential for the transfer of both risk and costs from the proponent of Wallarah 2 Coal mine to the Central Coast community.

Council considers the approach taken by the PAC in their report of June 214 as more appropriate for the Central Coast Community than that argued by the Department of Planning and Environment and requests that the draft conditions of consent be amended to be consistent with those recommended by the PAC in 2014.

1.2.11 Response

Section 2.2 of the PAC2 Response responds to this issue in detail.

The predicted 300 ML/annum is a maximum worst-case prediction and includes both baseflow and general runoff, which will be monitored. The monitoring will determine any losses of streamflow (including baseflow and Runoff components) which will represent the actual impact of the Project.

WACJV will seek licences under the Water Management Act 2000 for its "take".

Further Section 4.4.1 of the PAC2 Response states ""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."

A review of available licences has confirmed that a total unregulated combined units of 5,136 (Jilliby Jilliby Creek Water Source 1,029 and Wyong Water River 4,107) are available.

As previously discussed, WACJV already holds 185 units from the Jilliby Jilliby Creek Water Source. As such, there are available licences with medium to large share components across the area which would undoubtedly be available for trade to make up the 115 units required to make up to maximum worst-case prediction of 300 ML.
As such, should WACJV impact up to 300 ML from the system in any year, the acquisition of licences will effectively redistribute the water already “taken” by that licence holder (i.e. the Project will not take additional water from the system). Therefore, compensation to CCC is not required for the redistribution of the water use from the existing user to WACJV for the Project.

The WACJV believes it manifestly unreasonable for CCC to recommend it be treated differently to other water users (both private and business), who own and utilise share units from the Central Coast Unregulated Water Source.

1.2.12 Issue 7
e. Any information in relation to “a gazetted water protection zone in the 1950s” which was referred to in the public hearing.

The Wyong catchment (including the Jilliby Jilliby sub catchment) was proclaimed a Catchment District in 1950 under the then Local Government Act 1919. This act was replaced by the Local Government Act 1993.

1.2.13 Response
Noted.

1.2.14 Issue 8
f. Need for water quality guarantees.

Much of the focus of the impact of the mine has been on the potential impact on water availability. Safeguards are also required to manage the potential for affecting water quality of the regions water resources.

The EIS indicates minimal risk associated with saline and acid discharges, there remains a potential for impact on water quality. Both these potential sources of pollution require appropriate performance monitoring, and mitigation measures in the event the mining activities does impact on water quality.

1.2.15 Response
Noted.

1.3 SUBSIDENCE

1.3.1 Issue 1
a. Comment on issues that Council considers have not been adequately addressed in the 2014 PAC Review recommendations and the Department’s draft conditions attached to the 2017 AR Report.

Previous reporting undertaken on behalf of Council found that the subsidence modelling amount was conservative, meaning that subsidence amounts are likely to be greater. It is noted that subsidence events may also vary across the subsided area due to geological features.

Any increase in anticipated subsidence will increase flood impacts in the locality and increased and unacceptable isolation of homes within the district.
It is suggested that a condition should be added to require a post subsidence survey to be undertaken to verify the resultant landform levels, and require the flood mitigation measures to be increased accordingly. This would include adjusting the flood mitigation measures to both public and private land and asset owners affected by any levels of subsidence which were greater than anticipated.

1.3.2 Response

See response in Section 1.2.9.

1.3.3 Issue 2

b. Flooding and related issues including increase in maintenance cost as a result of proposed mitigation measures on roads.

The flood modelling is based upon subsidence information which is acknowledged to be an estimate. Previous reporting undertaken on behalf of Council found that the subsidence modelling amount was conservative, therefore the flood impacts on the locality as a result of the development are likely to be worse than modelled.

The development will therefore result in greater and prolonged isolation events for people within the locality. The increase in the frequency and duration of flood affectation of the local roads will lead to accelerated deterioration of Council’s roads assets by having wetter pavement materials (including subgrade) for larger periods and more frequently.

It is noted that some road raising is proposed to alleviate this and provide flood free access.

1.3.4 Response

Subsidence modelling for the Project is conservatively estimated (not under-predicted as suggested above). Associated subsidence impacts and the ongoing inaccuracies of CCC’s subsidence “specialist” are refuted in detail in Section 3.11 of the PAC2 Response.

Flooding impacts are assessed in the EIS and specifically Section 3.4 of the RTS1.

Appendix G of the PAC2 Response provides the agreed CCC Voluntary Planning Agreement (VPA) which totals $17,000,000, a significant proportion of which is for road contributions. Further discussion on road impacts is included in Section 1.5.6.

1.3.5 Issue 3

Due to the uncertainty of the subsidence and resultant flood levels, it is recommend that the conditions require the applicant to provide the extent of road raising currently proposed, but to also undertake survey and flood modelling to verify the flood levels post subsidence events and extend/further raise those roads if required. Such works would need to be proposed/designated and undertaken by the applicant and agreed to by the road authority and other appropriate stakeholders.

The appropriate remediation/augmentation to drainage infrastructure is required where any changes to overland surface water or underground drainage systems (eg culverts) occur as a result of the mining. This also must be considered and approved by Council.
Any changes to surface stormwater flows and changes to ground levels as a result of the proposal may result in additional road maintenance. While the raising of roads may be required for flood mitigation measures, there may be additional maintenance costs in the road pavement and drainage maintenance. Table drains often get overgrown and require vegetation management as well as the periodic cleaning of the drains. These measures need to be factored in.

1.3.6 Response

Schedule 2 Condition 13 adequately addresses these comments. As such, no further changes to the condition are required.

1.4 WASTE FACILITY

1.4.1 Issue

a. A plan to show the proposed final footprint of the Buttonderry Waste Management facility.

The proposed mine footprint adjoins the Buttonderry Waste Management property. Concerns are raised that the mine will impact on the operational capacity of the facility, and that the weight /impact of the landfill has not been appropriately accounted for.

Refer attachments 3, 4 and 5.

b. Comment on potential impact on the facility.

Impacts on integrity:

Council’s initial response requested that the project proposal should consider the potential impacts upon Buttonderry Waste Management Facility and in particular the subsidence impacts on the leachate collection systems and landfill gas (methane) management systems. It is Councils view that these matters have not been adequately addressed.

It is unclear whether the subsidence caused by the proposed mining may impact the current and future operations of Buttonderry Waste Management Facility in terms of geological impacts, but also any reduction in trafficable access to the site will cause operational impacts on the facility. Refer to attached figures.

It also appears that there may not have been any allowance made by the proponent project assessment for the future quantities and locations of waste placement, surface loadings and future landfill extensions at Buttonderry Waste Management Facility and the impacts that this additional weight may have upon each other. The surface load will be significant and will be in the order of an additional 30 million m3 or tonnes of waste.

- Current cell area 4 has an estimated total capacity of 12 million m3
- Future cell area 5 (to the west of creek) estimated at 100ha has an approximate capacity of 30 million m3.
Buttonderry Waste Management Facility has substantial future capacity to serve the Central Coast community for the next 100 years+. The operations of this proposal should not be allowed to impact the facility.

This additional loading needs be considered in the planning, not just the landform present now. Should subsidence occur, a substantial concern remains which is that the leachate and landfill gas (methane) gas management systems could be compromised that might lead to environmental impacts.

In summary,

- The mining area should be designed to avoid undermining the Buttonderry Waste Management Facility
- The facility should be located outside the 26.5 angle of draw, and
- The facility should not be subject to vertical subsidence.

Access:

Hue Hue Road is the only effective access point to the Buttonderry waste facility. If the section of Hue Hue Road across Buttonderry Creek adjacent to the Wallarah site was to subside to the predictions, then it would result in more frequent flooding and impact on access to this essential service.

1.4.2 Response

The Project will not impact the Buttonderry Waste Management Facility.

Section 3.11.2 of the PAC Response2 responds to this issue again and refers to where this issue was responded to in significant detail in RTS1 in 2013.

The longwall panels in the Extraction Area are located over 1 km from the Buttonderry Waste Management Facility (BWMF). 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. It should also be noted that the Project would commence longwall mining at its closest location to the BWMF (see Figure 1).

The figure provided with the CCC submission on the figure titled “Proximity of Buttonderry Waste Management Facility (BWMF) to the project boundary BWMP property is rectangular and is shown edged heavy navy” is not correct.

**Figure 1** shows the land owned by CCC at the BWMF, the existing facility and the outline from the “Site Staging Plan” (future BWMF) provided with the submission.
As previously stated in several responses and as shown again on Figure 1 it is clear that for both the existing facility and potential future BWMF:

- The Project **does not** undermine them:
  - The existing facility is over 1,770 m from the SIL; and
  - The potential future BWMF is over 380 m from the SIL;
- Are **outside** the Project’s angle of draw; and
- Are **outside** the Project’s vertical subsidence impacts.

Any impacts from subsidence to roads will be managed in accordance with condition 13 of the development consent and the *Mine Subsidence Compensation Act 1961* (or latest version).

As previously stated in several responses to the CCC and as shown again in Figure 1, the SIL **does not** encroach upon Hue Hue Road.
1.5 REGIONAL PLANNING FOR THE AREA

1.5.1 Issue 1

a. Progress of the planning proposals after gateway determination.

**RZ/14/2014**

**Wallarah**

Rezoning from RU6 Transition to IN1 General Industrial (approximately 42 ha) and E2 Environmental Conservation (approximately 45 ha)

1. Council endorsement 13/5/2015
2. Gateway determination requested 9/11/2016, received 9/12/2016
3. Proponent undertaking investigative studies – nil supplied to Council to date. It is noted that these studies will need to include 12 months of seasonal flora and fauna study. Advice indicates that these studies will also incorporate the other DLALC proposal sites.

1.5.2 Response

Noted.

1.5.3 Issue 2

**RZ/4/2014** *(2 site progressing under a single planning proposal)*

**Site 1 - 425 Bushells Ridge Road, Bushells Ridge**

Rezoning from IN1 General Industrial and E2 Environmental Conservation to R2 Low Density Residential and R5 Large Lot Residential.

**Site 2 - 10 Wyee Road, Doyalson**

Rezoning from RU6 – Transition and E2 Environmental Conservation to R2 Low Density Residential and B1 Neighbourhood Centre.

1. Council endorsement 24/2/2016 (accepting RPA role for PP post JRPP consideration on 15/11/2015 and advice of 15/01/2016)
2. Gateway determination requested 24/2/2016, received 2/5/2016
3. Proponent undertaking investigative studies. It is noted that these studies will need to include 12 months of seasonal flora and fauna study. Advice indicates that these studies will also incorporate the other DLALC proposal sites.

1.5.4 Response

Noted.
1.5.5 Issue 3

6. Nikko Road

   a. Future planning and connectivity to the existing road network.

   It is a normal release area planning approach to utilise existing road reserves within the road network. Due to their size and location, they often present opportunities for connectivity. In utilising an existing road reserve, there is a requirement to factor in the construction costs (i.e., physical road and drainage work within the allocated road reserve) however there is no need to purchase the road corridor.

   Sale of this road to a private company transitions the land into private ownership and foregoes this opportunity as a future connection. It also means that as part of any future release area planning for the area, that the additional “land component” cost will be added to the release area and thereby reducing affordability.

   It is noted that the Voluntary Planning Agreement does not address this matter as it did not form part of the original proposal. As such an alternative arrangement would be required which could be imposed via a condition if approved.

1.5.6 Response

See detailed response to this issue in Section 3.12 of the PAC2 Response including public access.

The VPA should not be amended to include Nikko Road. It is currently not formed, not owned by CCC, has no current practical access and is not indicated as a potential new road in any planning document (including the 2036 Plan). Any payment for the closure of the road would be to DPI Crown Lands, as required.

Further, as indicated in Section 3.12 of the PAC2 Response, WACJV will “… 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).”

1.6 BIO DIVERSITY

1.6.1 Issue 1

   a. Any new/updated study that has identified additional species that have not been included in the assessment of the amended application.

   All relevant species have been included in the assessment of the amended application, i.e., there have not been any new or updated studies that have identified additional species in the locality that Council is aware of.

1.6.2 Response

Agreed.
1.7 VPA

1.7.1 Issue 1

a.  *Comment on the VPA signed in 2014 and any changes which Council will require.*

It is noted that the Voluntary Planning Agreement related to the development as originally proposed, and not as modified. As such the disbenefit of the loss of Nikko Road as a public road (and future connection) was not factored into the agreement. The mine developer should be required to offset the loss of this public road asset, and the requirement could be imposed via a condition if approved.

Such a condition should establish that the developer must provide a cash contribution to the Central Coast Council to the equivalent value of the Nikko Road parcel. The purpose of the contribution is to offset the loss of Nikko Road as it will no longer be available for use as a public road. The VPA should be modified to provide for this contribution.

1.7.2 Response

The VPA should not be amended to account for the closure of Nikko Road. See considered response in Section 1.5.6.

1.8 BUSHFIRE

1.8.1 Issue

a.  All APZ / bushfire reduction measures need to be located within the property subject of the application. It is noted that a bushfire management plan should be developed outlining how the mine will respond to bushfire events and the assistance that will be provided to the RFS during these events. This plan needs to be developed in conjunction with and approved by the local RFS. Any loss of vegetation as a result of the APZ needs to be considered as part of the biodiversity offsetting requirements.

1.8.2 Response

See response in Section 1.10.18.

1.9 POST MINING

1.9.1 Issue

a.  The EIS indicates minimal risk associated with saline and acid discharges, there remains a potential for impact on water quality. Both these potential sources of water pollution require appropriate performance monitoring, and mitigation measures in the event the mining activities does impact on water quality. It is noted that once operations cease and the mine is filled with ground water, there is potential for highly saline or otherwise affected waters to decant from the mine into the surrounding areas and waterways. A condition is required to ensure that the waters which exit the site both during mining and post mining operations are of a quality which matches that of the receiving waters.
Conditions should also be imposed that require that the mine operator is responsible for the longer term impacts of the mining operation. It is suggested that a bond may be an appropriate mechanism.

1.9.2 Response

“Post mining, the velocity of migration is predicted to be lower than 1E-03 m/day beyond the area disturbed by mining, resulting in a travel time of more than 8,000 years before any increase in salinity might be observed near surface. However at this low velocity, it is improbable that any increase in salinity would be observed since shallow unconsolidated deposits are subjected to high rates of rainfall recharge.”

As such, a bond is not required.

1.10 DRAFT CONDITIONS

a. Comments on the draft conditions attached to the Department’s 2017 Addendum Report.

1.10.1 Schedule 1 Administrative Conditions Condition 16 Planning agreement
Add wording at the end of the existing sentence to read:

The applicant must implement the Voluntary Planning Agreement made on 7 July 2014 with Wyong Shire Council and Wyong Coal Pty Limited as amended per the following:

The developer must provide a cash contribution to the Central Coast Council to the equivalent value of the Nikko Road parcel. The purpose of the contribution is to offset the loss of Nikko Road as it will no longer be available for use as a public road.

1.10.2 Response
This condition does not require amendment. See response in Section 1.5.6.

1.10.3 Schedule 3 Specific Environmental Conditions - underground mining Condition 1 – Table 1 – Water Supply
Add the following dot points:

- All water losses to the Central Coast water supply are to be compensated to achieve no net impact.

- A minimum amount of 300ML per year compensatory water shall be operational before mining beyond Long Wall 5N occurs.

1.10.4 Response
This condition is not required to be amended.

See discussion in Section 1.2.11.
1.10.5 Condition 3 – Performance Measures – Built Environment – Table 2 – Key Public Infrastructure
Add the following dot points to the Key Public Infrastructure Row:

- Buttonderry Waste Management Facility
- Hue Hue Road

1.10.6 Response
This condition does not require update as the Project will not impact either. See detailed response in Section 1.4.2.

1.10.7 Condition 10 – Independent Audits of Subsidence impacts
Add the following:

(f) consider whether the impact of the mine on subsidence, surface water, and or ground water, is greater than predicted in the EIS and will have a significant environmental or social impact.

1.10.8 Response
This condition does not require update.
The existing Condition 10 c-e already facilitate this requirement as follows:

“(c) examine the subsidence, surface water, and ground water impacts of the development;
(d) compare these impacts against the relevant impact assessment criteria and predictions in the EIS; and, if necessary; and
(e) recommend measures to reduce, mitigate, or remediate these impacts.”

1.10.9 Condition 11 – Independent Audits of Subsidence impacts
Add the following:

(d) consult with Council, the Consultative committee and asset holders regarding the results and proposed mitigation measures.

(e) stop mining operations on the site where the Independent Audit results show that the impact of the mine on subsidence, surface water, and or ground water, is greater than predicted in the EIS and will have a significant environmental or social impact, until an environmental audit has been undertaken and the impacts of such and the proposed remediation measures have been put in place to the satisfaction of the secretary.

1.10.10 Response
This condition does not require update.
Schedule 6 Condition 6 requires the operation of a Community Consultative Committee (CCC) which should include a CCC representative. The CCC must be operated “… in general accordance with the Department’s Community Consultative Committee Guidelines State Significant Projects (2016) or its latest version.”
Further, condition 7 states “7. The Applicant must immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.”

An Incident is defined in the draft conditions as “A set of circumstances that: ·causes or threatens to cause material harm to the environment; and/or · breaches or exceeds the limits or performance measures/criteria in this consent”.

1.10.11 New condition after Condition 11 but before Condition 12
Add the following

Condition 11A

Within 6 months of the results of the audit of subsidence impacts and where the subsidence impacts are greater than anticipated, the flood study for the locality is to be revised to verify whether additional flood mitigation measures are required to offset the flood impacts of the development. Additional flood mitigation measures may be required to mitigate flooding impacts on both public and private land and asset owners. All works are to be proposed/designed and undertaken by the applicant and agreed to by the road authority and other appropriate stakeholders.

1.10.12 Response
This condition is not required to be updated.

Schedule 3 Condition 6 requires the preparation of an Extraction Plan and requires “… provide up-to-date information (including subsidence and flooding predictions) to the State Emergency Service and Council regarding privately-owned residences that could be adversely affected by lack of access during 1% AEP flood events;”

Schedule 3 Condition 10 enables the subsidence auditor to “…(d) compare these impacts against the relevant impact assessment criteria and predictions in the EIS; and, if necessary; and (e) recommend measures to reduce, mitigate, or remediate these impacts.”

Further WACJV notes that an increase in subsidence does not always relate to increased flooding impacts. Any response should be in proportion to the threat, and as such, the issue would be covered in required management plans approved by DP&E which incorporate the application of approved Targeted Action Response Plans (TARPS).

1.10.13 Schedule 4 Specific Environmental Conditions – General Condition 14 – Compensatory Water Supply
Add the following:
Compensatory Water is not required to be provided after the cessation of mining operations only if the proven permanent water loss is less than 36.5ML per annum.

The purchase of water licences is not considered an appropriate compensatory measure for Central Coast Water Supply.
1.10.14 Response
WACJV does not agree with these statements and the condition does not require update.
See detailed response in Section 1.2.11.

1.10.15 Condition 16 – Central Coast Water Supply Compensatory Arrangement
Delete point (a) as this is not an acceptable compensatory measure.

1.10.16 Response
WACJV disagrees with this requested change as discussed in Section 1.2.11.

1.10.17 Condition 20 – Biodiversity Offset Strategy – Table 7
Add a row to the table which requires that the loss of any endangered species resultant from any clearing undertaken for the required asset protection zones is appropriately compensated.

1.10.18 Response
WACJV disagrees with this suggestion.

The Biodiversity Offset Strategy (BOS) has been undertaken for all cleared areas, including the Amendment. Asset Protection zones are therefore already included and have been compensated for in the BOS which has been agreed upon with OEH and DoEE which are the appropriate regulators responsible for ecological matters.

1.10.19 Condition 30 – Bushfire Management
Add the following:

Prepare a bushfire management plan in consultation with and to the satisfaction of the RFS in relation to procedures undertaken in the event of a bushfire threat or event in the locality.

1.10.20 Response
This suggested condition is not required.

As outlined in the EIS Section 8 Management and Mitigation Summary of the EIS, WACJV has committed to developing an Environmental Management System which includes the preparation of management plans in consultation with the relevant regulators which shall include a Bushfire Management Plan.

WACJV has reiterated this commitment in each and every response to CCC since 2013.

1.10.21 Condition 33 Rehabilitation objectives – Table 8 – Water Quality
Include additional dot point:

- All water existing the property is to be at the rate of pre-development flows, are to be dissipated appropriately and are to be of an equivalent quality to the receiving waters.

1.10.22 Response
WACJV disagrees with this suggestion.
Table 6 of the draft development consent requires the proponent to “Design, install and maintain mine water storage infrastructure to ensure no unlicensed or uncontrolled discharge of mine water off-site” which clearly facilitates discharges in accordance with a “licence” (e.g. any Environment Protection Licence (EPL) granted).

Discharge facilities will be designed in consultation with relevant regulators where appropriate parameters will be agree.

Further, Schedule 4 Condition 18 requires a water management plan be prepared which has various references to “discharge” requirements.

1.10.23 Schedule 6 Environmental Management, Reporting and Auditing Condition 3
Revision of Strategies, Plans and Programs

Add the following:

(e) a change of any licence requirement

1.10.24 Response

WACJV disagrees with this suggestion.

This condition is a standard DP&E condition.

Further, the suggestion of “any licence” is vague. Condition 3 provides significant opportunity for the relevant regulator to ensure required updates to management plans.

1.10.25 Condition 8 Regular reporting

Amend the condition to require the following particular reports to be made public:

- Noise monitoring – as per condition 5 of Schedule 4;
- Air quality monitoring station results - as per condition 11 of Schedule 4;
- Biodiversity management plan monitoring – as per condition 22(g) of Schedule 4; and
- Waste management annual review – as per condition 29 of Schedule 4.

1.10.26 Response

WACJV disagrees with this suggestion. This condition is a standard DP&E condition and already allowed for.

Further, Schedule 6 condition 12(a) of the draft development consent already facilitates this and states “Within 6 months of the date of commencement of this consent, the Applicant must: … comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;…”

Further Schedule 6 Condition 8 states “..8. The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.”
1.10.27 Condition 11 Independent Environmental Audit

Amend the condition to require that a copy of the Independent Environmental Audit also be provided to council.

1.10.28 Response

WACJV disagrees with this suggestion as it is already allowed for in the condition.

Schedule 6 Condition 11 already allows for this to occur and stages “Within 12 weeks of commencing each audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of any measures proposed to address the recommendations.”

* * * * *

For

HANSEN BAILEY

Dianne Munro
Principal
Dear Mr Van Den Brande

Comment on draft water conditions for proposed Wallarah 2 Coal Project

Reference is made to your email dated 28 April 2017 requesting DPI to provide comment on particular water-related aspects of the proposed Wallarah 2 coal project (refer Attachment A).

Please note that this response has been prepared based on review of the 2014 PAC Report and the draft conditions of consent prepared by Department of Planning and Environment (DPE). The comments provided herein specifically address the PACs questions in the attached email (refer Attachment A). The following general comments are provided. Additional detail is provided in Attachment B.

The PAC has requested comment on the following:

a) Water supply performance measures
b) Water supply compensatory arrangements for Central Coast Water Supply
c) Suitability of using water licenses to compensate for the predicted loss in a water catchment area.

Water Supply Performance Measures
PAC 2014 Report recommended that the project be required to meet no net impact performance outcome on catchment water resources during the life of the mine, and that consideration be given to augmentation of CCWS supply by return of treated mine water to compensate for the estimated losses during the life of the mine (or by other agreed measures).

Consideration should be given the intent of the recommendation, and clarification of whether the intent it to achieve ‘no net impact’ or ‘no net loss’ of catchment water. Demonstration of ‘no net impact’ is likely to require different indicators than ‘no net loss’. To effectively implement either of these conditions, clear indicators, triggers and methods of measurement would need to be established.

It is noted that the figure of 300ML/year is derived from the model prepared for the EIS. This value may change in future as the model is refined. DPI considers that the proposed Water Supply Performance Measures allow catchment loss of up to
300ML/year and are not considered commensurate with “no net impact”. Additional considerations are detailed in Attachment B.

**Water Supply Compensatory Arrangements**
The draft conditions of consent in relation to augmentation of CCWS (draft conditions 15 and 16) are considered to meet the intent of the 2014 PAC recommendations. DPI notes that details of such arrangements would need to be clearly defined in appropriate management plans, to the satisfaction of all relevant parties.

**Compensating loss with water licences**
Use of water licenses to compensate for the predicted 300ML loss satisfies the requirements of the *Water Management Act 2000*. However, it is not considered suitable compensation to meet the intent of the 2014 PAC recommendations for managing impacts on other users during low flow periods.

The impacts (resulting from subsidence-induced seepage) cannot be controlled by access restrictions (cease to take water sharing plan rules on Water Access Licences). Therefore in periods of low flow, the CCWS and other users may experience reduced water access despite the proponent holding sufficient licensed entitlement.

Additionally, compensation with water licences does not address the potential increased demand in town water supply as a result of population increase. Licences obtained by the proponent to account for subsidence-induced water losses would be removed from the water trading market for the duration of those losses occurring, rendering them unavailable for trade and potential purchase by CCWS.

DPI considers it is reasonable that a combination of water licenses and other compensatory measures be applied to ensure security of water supply to all users in drought periods to meet the intent of the 2014 PAC recommendations.

If you require further information, please contact Alison Collaros, A/Director Planning Policy and Assessment Advice Alison.Collaros@dpi.nsw.gov.au.

Yours sincerely

Alison Collaros  
A/Director Planning Policy & Assessment Advice  
DPI Strategy & Policy

<table>
<thead>
<tr>
<th>Attachment</th>
<th>Title</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>Email from Planning Assessment Commission</td>
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<tr>
<td>B</td>
<td>Detailed Comments</td>
</tr>
</tbody>
</table>
Attachment A: Email from Planning Assessment Commission
### PAC 2014 Recommendation

<table>
<thead>
<tr>
<th>Recommendation 11: the project be required to meet a no net impact performance outcome on catchment water resources during the life of the mine</th>
</tr>
</thead>
</table>
| **Performance Measure**
For Central Coast Water Supply including Wyong River and Jilliby Jilliby Creek and their tributaries:
- Combined water loss of equal to or less than 300 megalitres per year.
- No greater environmental consequence greater than predicted in the EIS or as permitted under the performance measures for water courses above. |
| **DPI Comment**
- Loss of up to 300ML/year is not considered to be commensurate with the recommendation of “no net impact”.
- Loss of up to 300ML/year may impact on the security of CCWS and other users during drought periods.
- “No Net Impact” will be difficult to implement to without clear definitions and triggers.
- Clear definition of ‘impacts’ is required to ensure impacts can be identified, measured and managed.
- Consideration should be given to whether “no net impact” is the only acceptable level of impact. It may be determined that some level of impact is considered acceptable. |

<table>
<thead>
<tr>
<th>Recommendation 12: Consideration be given to augmentation of CCWS supply by return of sufficient minewater treated to the required standards for raw water supply to compensate for the estimated losses during the life of the mine.</th>
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<tbody>
<tr>
<td><strong>Condition 15:</strong> Prior to the approval of any Extraction Plan that authorises extraction of Longwall 6N, the applicant must, in consultation with Council and DPI Water, develop a Central Coast Water Supply Compensatory Arrangement to compensate for the measured losses of water to the Central Coast Water Supply caused by</td>
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</table>
| **DPI Comment**
DPI considers Condition 15 is generally consistent with the spirit and intent of the 2014 PAC recommendations. Detail would need to be provided on how losses would be measured and ensure losses can be attributed to the appropriate cause (eg mining, climatic conditions etc). |
| Condition 16: The Compensatory Arrangement must consider all reasonable and feasible measures to compensate for the measured losses of water to the Central Coast Water Supply until the cessation of, including, but not limited to the:
  (a) Purchase of appropriate water licences
  (b) Supply of treated mine water to Council or directly to other water users; and
  (c) Contribution of funds to Council to assist in funding scheduled works, To the satisfaction of the Secretary. | DPI considers Condition 16 is generally consistent with the spirit and intent of the 2014 PAC recommendations. |
WALLARAH 2, SSD 4974

RESPONSE TO QUESTIONS RAISED BY PLANNING AND ASSESSMENT COMMISSION
DURING APRIL TELECONFERENCE

1. Central Coast Council’s position on the application.

The Central Coast Council’s position is no different to that of the former Wyong Shire Council and the former Gosford City Council. This position was confirmed by the Central Coast Council by resolution at the meeting of 14 September 2016 where the Council resolution was to adopt the draft submission (attached) in relation to Wallarah 2. At this meeting, Council resolved the following:

RESOLVED on the motion of Mr REYNOLDS:

337/16 That Council adopt the draft submission prepared in relation to the Wallarah 2 Coal Project (SSD 4974).
338/16 That Council request the Chief Executive Officer lodge the submission with the Director Resource Assessments – Department Planning and Environment.

2. Water resources

a. The percentage of water that goes to the Central Coast supply system from alluvial aquifers, surface water (streams & creeks), groundwater from the coal measures and piping from the Hunter.

The Central Coast Water Supply operates as an integrated system of various sources that contribute different amounts of water based on their particular attributes, operating rules and the prevailing climatic conditions. The primary source of water is the local streams.

The Central Coast has a large population that relies on a relatively small water resource base. The region is a major growth area for the state with the population anticipated to grow substantially (by 75,000 conservatively) over the operating life of the Wallarah 2 mine.

Given the large and growing community of the Central Coast and the limited water resource base available to the water supply, any loss of water will impact the ability
to supply the water needs of the community and place that community at greater risk during drought.

b. A plan that shows the Wyong weir catchment area and the location of the proposed mine site in relation to the catchment area.

Refer attachments 1 and 2.

c. Council’s plan to future proof the water supply for the expected population growth to 2036 and beyond.

Council is currently reviewing the long term water supply strategy for the Central Coast. This review is being undertaken in parallel with the next evolution of the Lower Hunter Water Plan.

Issues that affect the long term water security of the Central Coast include the long term operation of the link between the Hunter and Central Coast, changes to water availability associated with review of water sharing plans, and a review of drought risks.

The water supply reviews for both the Hunter and Central Coast are scheduled to be completed in mid-2020.

d. Comment on the 2014 PAC Review recommendations and the Department Addendum Report including the draft conditions.

Overarching comments in relation to the Central Coast Water Supply

The PAC report of 2014 considered the whole project including the mine and generally addressed the water supply concerns of Council.

In particular the discussion and recommendations contained in section 3.3.1.4 are considered by Council to be particularly pertinent for the preparation of the conditions of consent in the event the proposal was to gain approval.

The key items to be incorporated into the conditions of consent are:-

- Specific requirement that the project be required to meet a no net impact performance outcome on the catchment water resources available to the Central Coast Water Supply (CCWS).
- Requirement to compensate the Central Coast Water Supply for any loss of water access caused by the mining activity. The compensation measure will need to provide a real and equivalent amount of water to the CCWS as that lost due to mining impacts.
The preferred mechanism to compensate for any water loss is to provide appropriately treated water downstream of the mining impacts at an appropriate point for the CCWS.

- An alternative mechanism in the event of insurmountable constraints in providing the compensatory water is the provision of financial contributions for the Central Coast Water Supply Authority to augment the water supply infrastructure to achieve and equivalent supply amount.

- Purchasing of water licenses should be specifically excluded as a compensatory mechanism.

- A minimum compensatory water amount of 300ML/annum shall be in place and operational before mining is permitted beyond Longwall 5N.

- A monitoring system capable of confirming catchment losses from mine related impacts is to be developed and implemented. The monitoring system must be acceptable to the Central Coast Council (as the Central Coast Water Supply Authority) which shall have an approval role in the water monitoring system.

### Specific Comments

<table>
<thead>
<tr>
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Water Monitoring Program 9 Central Coast Water Supply Monitoring Program 9(c) | Should the reference to 5 (g) be 6(g) (iii) instead?

9(e)(iv) | Whilst the assessment of baseflow loses are important, so are the changes to flows greater than the baseflow. The water supply is supplemented during times of higher water flows. The water supply extracts water from the Wyong River (which Jilliby Jilliby Creek flows into over a broad range of streamflows). The monitoring plan should monitor and report on all water losses to the water supply not just from base flow losses. Compensation should be based on all losses incurred.

Schedule 4 Condition 16. | The PAC Report 2014, Section 3.3.1.4 discusses the basis and issues around the application of compensatory water for the CCWS. The conditions should include explicit requirements to reflect the PAC Report 2014
- Explicitly exclude the purchase of water licences as a compensatory measure.
- Compensatory water shall be operational to provide a minimum amount of 300ML/a before mining beyond Longwall 5N occurs. The amount of compensatory water shall be adjusted based on the monitoring results to achieve no net impact. The burden of proving the monitoring results rests with the proponent in the event that a reduction of the compensatory water amount below 300ML/annum is proposed.
- Compensatory water is not required to be provided after the cessation of mining operations but only if the proven permanent water loss is less than 36.5ML/annum.

Comments on the Department of Planning and Environment Addendum Report February 2017

The Department argues that only water losses to the Central Coast Water Supply in excess of 300ML/a require compensation. Council is currently reviewing its long term water supply
strategy where preliminary investigations indicate that the cost to replace 300ML/a of water supply is likely to cost in the order of $4m if part of a scheme with considerable economies of scale. In addition to the capital cost it is noted that these options have higher operating costs than water sourced from Wyong River.

Council has been concerned with the potential for the transfer of both risk and costs from the proponent of Wallarah 2 Coal mine to the Central Coast community.

Council considers the approach taken by the PAC in their report of June 214 as more appropriate for the Central Coast Community than that argued by the Department of Planning and Environment and requests that the draft conditions of consent be amended to be consistent with those recommended by the PAC in 2014.

e. Any information in relation to “a gazetted water protection zone in the 1950s” which was referred to in the public hearing.

The Wyong catchment (including the Jilliby Jilliby sub catchment) was proclaimed a Catchment District in 1950 under the then Local Government Act 1919. This act was replaced by the Local Government Act 1993.

f. Need for water quality guarantees.

Much of the focus of the impact of the mine has been on the potential impact on water availability. Safeguards are also required to manage the potential for affecting water quality of the regions water resources.

The EIS indicates minimal risk associated with saline and acid discharges, there remains a potential for impact on water quality. Both these potential sources of pollution require appropriate performance monitoring, and mitigation measures in the event the mining activities does impact on water quality.

3. Subsidence

a. Comment on issues that Council considers have not been adequately addressed in the 2014 PAC Review recommendations and the Department’s draft conditions attached to the 2017 AR Report.

Previous reporting undertaken on behalf of Council found that the subsidence modelling amount was conservative, meaning that subsidence amounts are likely to be greater. It is noted that subsidence events may also vary across the subsided area due to geological features. Any increase in anticipated subsidence will increase flood impacts in the locality and increased and unacceptable isolation of homes within the district.
It is suggested that a condition should be added to require a post subsidence survey to be undertaken to verify the resultant landform levels, and require the flood mitigation measures to be increased accordingly. This would include adjusting the flood mitigation measures to both public and private land and asset owners affected by any levels of subsidence which were greater than anticipated.

b. Flooding and related issues including increase in maintenance cost as a result of proposed mitigation measures on roads.

The flood modelling is based upon subsidence information which is acknowledged to be an estimate. Previous reporting undertaken on behalf of Council found that the subsidence modelling amount was conservative, therefore the flood impacts on the locality as a result of the development are likely to be worse than modelled.

The development will therefore result in greater and prolonged isolation events for people within the locality. The increase in the frequency and duration of flood affectation of the local roads will lead to accelerated deterioration of Council’s roads assets by having wetter pavement materials (including subgrade) for larger periods and more frequently.

It is noted that some road raising is proposed to alleviate this and provide flood free access.

Due to the uncertainty of the subsidence and resultant flood levels, it is recommend that the conditions require the applicant to provide the extent of road raising currently proposed, but to also undertake survey and flood modelling to verify the flood levels post subsidence events and extend/further raise those roads if required. Such works would need to be proposed/designed and undertaken by the applicant and agreed to by the road authority and other appropriate stakeholders.

The appropriate remediation/augmentation to drainage infrastructure is required where any changes to overland surface water or underground drainage systems (eg culverts) occur as a result of the mining. This also must be considered and approved by Council.

Any changes to surface stormwater flows and changes to ground levels as a result of the proposal may result in additional road maintenance. While the raising of roads may be required for flood mitigation measures, there may be additional maintenance costs in the road pavement and drainage maintenance. Table drains often get overgrown and require vegetation management as well as the periodic cleaning of the drains. These measures need to be factored in.
4. Waste facility

a. A plan to show the proposed final footprint of the Buttonderry Waste Management facility.

The proposed mine footprint adjoins the Buttonderry Waste Management property. Concerns are raised that the mine will impact on the operational capacity of the facility, and that the weight /impact of the landfill has not been appropriately accounted for.

Refer attachments 3, 4 and 5.

b. Comment on potential impact on the facility.

Impacts on integrity:
Council’s initial response requested that the project proposal should consider the potential impacts upon Buttonderry Waste Management Facility and in particular the subsidence impacts on the leachate collection systems and landfill gas (methane) management systems. It is Council’s view that these matters have not been adequately addressed.

It is unclear whether the subsidence caused by the proposed mining may impact the current and future operations of Buttonderry Waste Management Facility in terms of geological impacts, but also any reduction in trafficable access to the site will cause operational impacts on the facility. Refer to attached figures.

It also appears that there may not have been any allowance made by the proponent project assessment for the future quantities and locations of waste placement, surface loadings and future landfill extensions at Buttonderry Waste Management Facility and the impacts that this additional weight may have upon each other. The surface load will be significant and will be in the order of an additional 30 million m$^3$ or tonnes of waste.

- Current cell area 4 has an estimated total capacity of 12 million m$^3$
- Future cell area 5 (to the west of creek) estimated at 100ha has an approximate capacity of 30 million m$^3$.

Buttonderry Waste Management Facility has substantial future capacity to serve the Central Coast community for the next 100 years +. The operations of this proposal should not be allowed to impact the facility.

This additional loading needs be considered in the planning, not just the landform present now. Should subsidence occur, a substantial concern remains which is that the leachate and landfill gas (methane) gas management systems could be compromised that might lead to environmental impacts.
In summary:

- The mining area should be designed to avoid undermining the Buttonderry Waste Management Facility
- The facility should be located outside the 26.5 angle of draw, and
- The facility should not be subject to vertical subsidence.

Access:

Hue Hue Road is the only effective access point to the Buttonderry waste facility. If the section of Hue Hue Road across Buttonderry Creek adjacent to the Wallarah site was to subside to the predictions, then it would result in more frequent flooding and impact on access to this essential service.

5. Regional planning for the area

a. Progress of the planning proposals after gateway determination.

**RZ/14/2014**

**Wallarah**

Rezoning from RU6 Transition to IN1 General Industrial (approximately 42 ha) and E2 Environmental Conservation (approximately 45 ha).

1. Council endorsement 13/5/2015
2. Gateway determination requested 9/11/2016, received 9/12/2016
3. Proponent undertaking investigative studies – nil supplied to Council to date. It is noted that these studies will need to include 12 months of seasonal flora and fauna study. Advice indicates that these studies will also incorporate the other DLALC proposal sites.
4. Gateway determination lapses 16/6/2018

**RZ/4/2014 (2 site progressing under a single planning proposal)**

**Site 1 - 425 Bushells Ridge Road, Bushells Ridge**

Rezoning from IN1 General Industrial and E2 Environmental Conservation to R2 Low Density Residential and R5 Large Lot Residential.

**Site 2 - 10 Wyee Road, Doyalson**

Rezoning from RU6 – Transition and E2 Environmental Conservation to R2 Low Density Residential and B1 Neighbourhood Centre.

1. Council endorsement 24/2/2016 (accepting RPA role for PP post JRPP consideration on 15/11/2015 and advice of 15/01/2016)
2. Gateway determination requested 24/2/2016, received 2/5/2016
5. Proponent undertaking investigative studies. It is noted that these studies will need to include 12 months of seasonal flora and fauna study. Advice indicates that these studies will also incorporate the other DLALC proposal sites.

3. Gateway determination lapses 2/11/2017

6. **Nikko Road**

   a. Future planning *and* connectivity to the existing road network.

   It is a normal urban release area planning approach to utilise existing road reserves within the road network. Due to their size and location, they often present opportunities for connectivity. In utilising an existing road reserve, there is a requirement to factor in the construction costs (ie physical road and drainage work within the allocated road reserve) however there is no need to purchase the road corridor.

   Council would like the imposition of a condition that reflects the following:

   At the cessation of mining operations, the following shall occur in Nikko Road:

   - Removal of all structures associated with the coal loading facility;
   - The land is to be remediated in accordance with State Environmental Planning Policy No 55- Remediation of Land and the Contaminated Land Planning Guidelines; and
   - The land is to be reinstated back to its original condition. All rectification works shall be monitored on a 6 monthly basis for a period of 2 years with a report submitted to Council at the end of each period for information. This report shall identify any necessary works carried out during the 6 month period e.g. remediation, stabilisation, erosion and sedimentation control, reinstatement of vegetated areas, monitoring of water quality and turbidity etc
   - The land shall be dedicated to the Central Coast Council free of charge.

7. **Biodiversity**

   a. Any new/updated study that has identified additional species that have not been included in the assessment of the amended application.

   All relevant species have been included in the assessment of the amended application, i.e. there have not been any new or updated studies that have identified additional species in the locality that Council is aware of.
8. VPA
   a. Comment on the VPA signed in 2014 and any changes which Council will require.
      No change proposed to existing VPA.

9. Bushfire
   a. All APZ / bushfire reduction measures need to be located within the property subject of the application. It is noted that a bushfire management plan should be developed outlining how the mine will respond to bushfire events and the assistance that will be provided to the RFS during these events. This plan needs to be developed in conjunction with and approved by the local RFS. Any loss of vegetation as a result of the APZ needs to be considered as part of the biodiversity offsetting requirements.

10. Post mining
    a. The EIS indicates minimal risk associated with saline and acid discharges, there remains a potential for impact on water quality. Both these potential sources of water pollution require appropriate performance monitoring, and mitigation measures in the event the mining activities does impact on water quality. It is noted that once operations cease and the mine is filled with ground water, there is potential for highly saline or otherwise affected waters to decant from the mine into the surrounding areas and waterways.
    A condition is required to ensure that the waters which exit the site both during mining and post mining operations are of a quality which matches that of the receiving waters. Conditions should also be imposed that require that the mine operator is responsible for the longer term impacts of the mining operation. It is suggested that a bond may be an appropriate mechanism.

11. Draft Conditions
    a. Comments on the draft conditions attached to the Department’s 2017 Addendum Report.

Schedule 1 Administrative Conditions

Schedule 3 Specific Environmental Conditions - underground mining

Condition 1 Table 1 Watercourses

Verification that no connective cracking has occurred between the base of the alluvium and the underground workings may be difficult in practice. There should be a requirement for testing of connective cracking following subsidence events and periodically thereafter. Any
results showing that connective cracking has resulted should result in stop work and further environmental assessment and approval prior to any further mining operation re-commencing.

**Condition 1 – Table 1 – Water Supply**

The combination of this performance measure with clause 2 offsets as currently drafted means that only CCWS water losses in excess of 300ML/annum are offset/compensated. This was not the intent of the PAC in 2014. It would be more appropriate to change the performance measure to “no net loss of water available to the Central Coast Water Supply”.

Add the following dot points:

- All water losses to the Central Coast water supply are to be compensated to achieve no net impact.
- A minimum amount of 300ML per year compensatory water shall be operational before mining beyond Long Wall 5N occurs.

**Condition 3 – Performance Measures – Built Environment – Table 2 – Key Public Infrastructure**

Add the following dot points to the Key Public Infrastructure Row:

- Buttonderry Waste Management Facility
- Hue Hue Road

**Condition 6 –Extraction Plan (g) (iii) Water Management Plan.**

Given the implications for the ongoing monitoring review and offsets associated with the impacts of the mine, the Water Management Plan should be subject to the approval (not just consultation) of the EPA, DPI Water and the Central Coast Council.

The Water Management Plan should make specific reference to the appropriate management of acid mine drainage (AMD) and include requirements to develop appropriate trigger levels associated with AMD.

**Condition 6 - Monitoring Program 8**

Given the implications for the ongoing monitoring review and offsets associated with the impacts of the mine the Water Monitoring Program should be subject to the approval (not just consultation) of the EPA, DPI Water and the Central Coast Council.

**Condition 9 - Central Coast Water Supply Monitoring Program**
A) Given the implications for the ongoing monitoring review and offsets associated with the impacts of the mine the Central Coast Water Supply Monitoring Program should be subject to the approval (not just consultation) of the EPA, DPI Water and the Central Coast Council (as the Central Coast Water Supply Authority).

c) Should the reference to 5 (g) be 6(g) (iii) instead?

**Condition 10 – Independent Audits of Subsidence impacts**

Add the following:

(f) consider whether the impact of the mine on subsidence, surface water, and or ground water, is greater than predicted in the EIS and will have a significant environmental or social impact.

**Condition 11 – Independent Audits of Subsidence impacts**

Add the following:

(d) consult with Council, the Consultative committee and asset holders regarding the results and proposed mitigation measures.

(e) stop mining operations on the site where the Independent Audit results show that the impact of the mine on subsidence, surface water, and or ground water, is greater than predicted in the EIS and will have a significant environmental or social impact, until an environmental audit has been undertaken and the impacts of such and the proposed remediation measures have been put in place to the satisfaction of the secretary.

**New condition after Condition 11 but before Condition 12**

Add the following:

Condition 11A

Within 6 months of the results of the audit of subsidence impacts and where the subsidence impacts are greater than anticipated, the flood study for the locality is to be revised to verify whether additional flood mitigation measures are required to offset the flood impacts of the development. Additional flood mitigation measures may be required to mitigate flooding impacts on both public and private land and asset owners. All works are to be proposed/designed and undertaken by the applicant and agreed to by the road authority and other appropriate stakeholders.

**Schedule 4 Specific Environmental Conditions - General**

**Condition 15 – Compensatory Water Supply**
The PAC Report 2014, Section 3.3.1.4 discusses the basis and issues around the application of compensatory water for the CCWS. The conditions should include explicit requirements to reflect the PAC Report 2014

- Explicitly exclude the purchase of water licences as a compensatory measure.
- Compensatory water shall be operational to provide a minimum amount of 300ML/a before mining beyond Longwall 5N occurs. The amount of compensatory water shall be adjusted based on the monitoring results to achieve no net impact. The burden of proving the monitoring results rests with the proponent in the event that a reduction of the compensatory water amount below 300ML/annum is proposed.
- Compensatory water is not required to be provided after the cessation of mining operations but only if the proven permanent water loss is less than 36.5ML/annum.

Add the following:

Compensatory Water is not required to be provided after the cessation of mining operations only if the proven permanent water loss is less than 36.5ML per annum.

The purchase of water licences is not considered an appropriate compensatory measure for Central Coast Water Supply.

**Condition 16 – Central Coast Water Supply Compensatory Arrangement**

Delete point (a) as this is not an acceptable compensatory measure and include a comment that the purchase of water licences is not considered an appropriate compensation measure.

**Condition 20 – Biodiversity Offset Strategy – Table 7**

Add a row to the table which requires that the loss of any endangered species resultant from any clearing undertaken for the required asset protection zones is appropriately compensated.

**Condition 30 – Bushfire Management**

Add the following:

Prepare a bushfire management plan in consultation with and to the satisfaction of the RFS in relation to procedures undertaken in the event of a bushfire threat or event in the locality.

**Condition 33 Rehabilitation objectives – Table 8 – Water Quality**

Include additional dot point:

- All water exiting the property is to be at the rate of pre-development flows, are to be dissipated appropriately and are to be of an equivalent quality to the receiving waters.
Schedule 6 Environmental Management, Reporting and Auditing

Condition 3 Revision of Strategies, Plans and Programs

Add the following:

(e) a change of any licence requirement

Condition 8 Regular reporting

Amend the condition to require the following particular reports to be made public:

- Noise monitoring – as per condition 5 of Schedule 4;
- Air quality monitoring station results - as per condition 11 of Schedule 4;
- Biodiversity management plan monitoring – as per condition 22(g) of Schedule 4; and
- Waste management annual review – as per condition 29 of Schedule 4.

Condition 11 Independent Environmental Audit

Amend the condition to require that a copy of the Independent Environmental Audit also be provided to council
Water catchment areas
Little Jilliby water catchment area
Attachment 3

Buttonderry Waste Management Facility (BWMF) Landfill cell locations shown coloured
Buttonderry Waste Management Facility (BWMF) Landfill mounding shown in red.
Proximity of Buttonderry Waste Management Facility (BWMF) to the project boundary

BWMF property is rectangular and is shown edged heavy navy
Ms Robyn Kruk  
Chairperson  
Wallarah 2 Coal Project Review Panel  
NSW Planning Assessment Commission  
Level 3, 201 Elizabeth Street  
Sydney NSW 2000  

Dear Ms Kruk  

Wallarah 2 Coal Project (SSD 4974)  

On the 20th April 2017 the Department of Planning and Environment received correspondence from the Planning and Assessment Commission requesting further comment on the Wallarah 2 Coal Project, in response to comments provided by the Central Coast Council, as part of the Commission’s review of the project application.  

The Department reviewed the Central Coast Council’s comments and has prepared a response, appended to this letter as Attachment A.  

If you have any enquiries about this matter, please contact me on 8217 2054 or via email at matthew.sprott@planning.nsw.gov.au.  

Yours sincerely  

Matthew Sprott  
A/Director  
Resource Assessments
<table>
<thead>
<tr>
<th><strong>Central Coast Council Responds to Planning Assessment Commission’s Request</strong></th>
</tr>
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<tbody>
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<td><strong>Attachment A</strong></td>
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</table>

**Commission:**

The Department notes that this was provided to the

**Department Response:**

...
The Department does not support Council's proposal to publicise the water losses of other WCWYs, as they are a part of the Department's process of determining the water losses of each WCWY. The Department has therefore proposed a condition of the WS Act, 1975, to require the WCWY to report water losses to the Department.

Schedule 3

Comprehensive management framework (See conditions 15-16 of the WS Act, 1975, 1980 and 1987) to include a WCWY

The Department has therefore proposed a condition of the WS Act, 1975, to require the WCWY to report water losses to the Department.

Water Supply Authority, to augment the water supply to the WCWY, to increase the water supply to the WCWY.

The Department has therefore proposed a condition of the WS Act, 1975, to require the WCWY to report water losses to the Department.

In addition, the Department has recommended that all WSAs should provide a comprehensive management framework for the WCWY, to include:

1. A comprehensive management framework for the WCWY, to include:
2. A comprehensive management framework for the WCWY, to include:
3. A comprehensive management framework for the WCWY, to include:
4. A comprehensive management framework for the WCWY, to include:

The Department has therefore proposed a condition of the WS Act, 1975, to require the WCWY to report water losses to the Department.

Comment on the 2014 DPC Report indicating the draft conditions

Water supply resources for both the Hunter and Central Coast are scheduled to be completed in mid-2020.
The Department considers that these conditions, in combination with the requirements outlined in the Watercourses, are the basis of ongoing mining operation for these watercourses.

### Definitions

- **AEF** - Annual Exceedance Probability

### Watercourses

- Any further mining operation for these watercourses.
- Any further underground workings within the area of the Watercourses.
- Any further underground workings beyond the Longwall.
- Any further underground workings not associated with the Watercourses.

### Schedule 2: Table 1

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<thead>
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### Schedule 3: Table 1

- Verification that no contaminant is introduced between the mine and the surficial environment.

### Schedule 4: Table 1

- Non-compliance with the mining system.

### Schedule 5: Table 1

- Approval role in the water monitoring system.

### Schedule 6: Table 1

- Beyond Longwall SN-0.
- A minimum component water amount of 300ML/million.
- A minimum component water amount of 300ML/million.

### Schedule 7: Table 1

- A minimum component water amount of 300ML/million.
The recommended consultation and approval process is:

- The Environment Protection and Management Plan should make specific reference to the development management of each mine, the Water Management Plan, and the Water Management Plan.

- Approval is required to develop appropriate Future Water Requirements for Forestry (AFR) and mining activities. This is consistent with other state planning processes.

- The Water Management Plan should be consistent with the Water Management Plans and those associated with the Department's Water Management Plans.

The recommended consultation and approval process includes:

- The Department notes that the predicted water demand for the Water Management Plan is consistent with other state planning processes.

- The Water Management Plan is subject to the approval of the Regional Council (DPI Water) and the Central Coast Council for the proposal.

- The Water Management Plan should be consistent with the predicted water demand for the Water Management Plan.

The combination of this performance measure with clause 3 offers an additional water stock, which should be considered for the Secretary to request the condition.

- The Department considers that the proposal for the Water Management Plan is subject to the conditions (10 and 11) of Schedule 4. These revisions would also address the environmental consequences of the proposal for the Water Management Plan.

- The Water Management Plan is subject to approval.

The recommended consultation and approval process includes:

- The Water Management Plan should be consistent with the predicted water demand for the Water Management Plan.

- The Water Management Plan is subject to the approval of the Regional Council (DPI Water) and the Central Coast Council for the proposal.

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- The Water Management Plan is subject to the approval of the Regional Council (DPI Water) and the Central Coast Council for the proposal.

- The Water Management Plan should be consistent with the predicted water demand for the Water Management Plan.

The combination of this performance measure with clause 3 offers an additional water stock, which should be considered for the Secretary to request the condition.

- The Department considers that the proposal for the Water Management Plan is subject to the conditions (10 and 11) of Schedule 4. These revisions would also address the environmental consequences of the proposal for the Water Management Plan.

- The Water Management Plan is subject to approval.
<table>
<thead>
<tr>
<th>Schedule 3 Exception</th>
<th>Monitoring Program</th>
<th>Program 9 Central Coast Water Supply Monitoring Program should be subject to the approval (not just consultation) of the Department of Water and the Central Coast Council.</th>
</tr>
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<tr>
<th>Section</th>
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</tr>
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<tbody>
<tr>
<td>2.1</td>
<td>The Department notes this advice.</td>
</tr>
<tr>
<td></td>
<td>Government Act 1993. This act was replaced by the local Government Act 1999.</td>
</tr>
<tr>
<td></td>
<td>The Wyong Catchment (including the Jilliby and the Wyong Creek) was considered to be in use.</td>
</tr>
<tr>
<td></td>
<td>1950s, which was referred to in the public hearing.</td>
</tr>
<tr>
<td></td>
<td>Any information in relation to a proposed water protection zone in the region.</td>
</tr>
<tr>
<td>2.2</td>
<td>Those recommended by the PA in 2014.</td>
</tr>
<tr>
<td></td>
<td>Council considered the approach taken by the PA in their report of 2014.</td>
</tr>
<tr>
<td></td>
<td>Council was concerned with the potential for the transfer of both water sources.</td>
</tr>
<tr>
<td></td>
<td>Could have been addressed in this table (see above).</td>
</tr>
</tbody>
</table>
|         | The Department notes Council's comments and has addressed them elsewhere in this table (see above).

The Department notes Council's comments and has addressed them elsewhere in this table (see above).
The Department considers that the proposed model, to manage and monitor potential impacts, is an appropriate and comprehensive approach to forecasting and applying management frameworks to review, identify, and mitigate potential impacts.

Recommendation:
The Department notes that the subsidence modeling for the project is conservative. As such, it is recommended that the conditions require the applicant to provide the following:
- The subsidence modeling for the project is conservative.
- The project is conservatively modeled for the subsidence potential.
- The Department recommends that the conditions require the applicant to provide the following:
  - The subsidence modeling for the project is conservative.
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    - The subsidence modeling for the project is conservative.
    - The project is conservatively modeled for the subsidence potential.

Due to the uncertainty of the subsidence and residual flood levels, it is recommended that some flood risks be considered to mitigate these risks.

It is noted that some flood risks are proposed to be mitigated through:
- Measures including mitigation of floods and storm surges.
- The development will be modified to result in greater and prolonged isolation.
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- The development will be modified to result in greater and prolonged isolation.

The Department acknowledges the need for increased monitoring and reporting of local flood levels. The Department recommends increased monitoring and reporting of local flood levels. The Department recommends increased monitoring and reporting of local flood levels. The Department recommends increased monitoring and reporting of local flood levels.

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may impact the current and future operation of projects. It is

addressed. It is unclear whether the subsidence caused by the proposed mining

is covered. It is noted that these matters have not been adequately

collection systems and involved gas (methane) management systems. It

considered the potential impacts on Bully Ponds. The department

Concurs initial response requested that the proposal proposal should

be made on mitigating

impact on the facility.

facility has not been appropriately accounted for. Commission on potential

management property concerns and raised that the mine will impact on the

the operational capacity of the facility and that the weight impact of the

management property. Concerns are raised that the mine will impact on

proposed mine conditions. The Bully Ponds Waste

Management Facility.

A plan to show the proposed final location of the Bully Ponds Waste

management facility.

The department notes that this was provided to the

Commission.

The department notes that should be recorded in the

county's database management. As well as periodic cleaning or

environmental and engineering maintenance. These changes can also

may be additional maintenance costs in the facility. While the raising of roads may be required for road improvement

result of the proposal may result in additional road maintenance

may change to erosion control measures and changes to ground levels.

may be considered and approved by Council.

The appropriate remediation/plantation to stabilize and

required when any changes to existing structures or underground

workplace needs. These would need to

extend further. These needs and model to verify the needs of the project and

extent of land currently proposed, but also undertake surveys

regardless of the above, the department has

outside the predicted vertical subsidence impacts.

outside the angle of draw and also

unpredictable to impact the waste facility as it would not be

As part of the original assessment report. In summary, the

waste facility have been thoroughly assessed to

The department is satisfied that the potential impacts to

trimming of such features.
The facility should not be subject to vertical subsidance.

- The facility should be located outside the 50 ft. angle of draw, and
- The mining area should be designed to avoid undermining the facility.

To prevent potential issues, the facility should be maintained in the planning and design stage to ensure it is not impacted by the facility.

In summary:

The facility should be located outside the 50 ft. angle of draw, and the mining area should be designed to avoid undermining the facility.

Environmental Impacts:

1. The facility will not be affected by the horizontal or vertical subsidance synergies which will impact the landfills and gas. The design and construction of the facility should be considered to avoid any negative impacts.

2. The facility should be designed to prevent any potential impacts on the facility.

3. The facility will not be affected by the surrounding landfills and gas. The design and construction of the facility should be considered to avoid any negative impacts.

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10. The facility will not be affected by the surrounding landfills and gas. The design and construction of the facility should be considered to avoid any negative impacts.
Surrounding land uses, subdivisions must also incorporate consideration of potential impacts of the project. The Department notes this advice and has assessed the potential impacts in this area, as indicated by the Gateway proposal. A staggered approach to the Gateway study, advice indicates that these studies will also incorporate the study advice. Advice indicates that these studies will also incorporate the planning proposals.  


3. Proprietary undertaking investigation studies - all supplied to Council to date. The need for these studies will need to include 12 months of seasonal flora, fauna and fauna.  


SITE 2 - WYEE ROAD, DOVSSION

Residential to RU1 General Rural Industrial and NZ Environmental Conservation to RU1 - 425 Business Ridge Road, Business Ridge (ENV)  

Progress of the planning proposals after Gateway determination.
document. Any contract for the closure of the road, if not included as a potential new road in any planning
commissions, is not required to be notified to the Director of Planning and Development.
Furthermore, Niihau Road is currently not formed, not
are already underway.

The Department understands that discussions to this effect
Department considers that the application should not be refused. The

The VPA is a signed mechanism and the Department
will require a condition if approved. Requirement is imposed via a condition if approved.

is aware of

Any new/updated study that has identified additional species that have

is a condition if approved.

and the Department.

is a condition if approved. It is noted that the Voluntary Planning Agreement does not address this

the release area. In such an instance, a condition will be added to the release agreement. It also

where there is no need to purchase the road corridor.
position road and drainage work within the allocated road reserve.
reserve there is a constraint to be taken into consideration. As such an existing road

they reserve within the road corridor. Due to the size and location, they

il is normal practice to use planning application to utilise existing road

future planning and connectivity to the existing road network.
The VPA contains a signed mechanism and the Department notes that it has recommended a mining operation. It is suggested that a permit may be in accordance with the mining Act as several requirements under the mining Act are also prescribed in the recommendation plan. There are also conditions and conditions for the rehabilitation of the mining area affected by the Department. The Department notes that it has recommended a mining operation. It is suggested that a permit may be in accordance with the mining Act as several requirements under the mining Act are also prescribed in the recommendation plan. There are also conditions and conditions for the rehabilitation of the mining area affected by the Department. The Department notes that it has recommended a mining operation. It is suggested that a permit may be in accordance with the mining Act as several requirements under the mining Act are also prescribed in the recommendation plan. There are also conditions and conditions for the rehabilitation of the mining area affected by the Department.

The application must implement the Voluntary Planning Agreement made on 7 July 2014 with Wyong Shire Council and Wyong Coal Pty Limited.

Add working at the end of the existing sentence to read:

Schedule 1

Condition 16.

10.3. The IS indicates minimal risk associated with surface and acc...
The Department considers that these conditions, the

measures taken to mitigate the impacts,

will have a significant environmental or social impact.

(f) Consider whether the impact of the mine on subsistence, surface

water, and ground water is greater than predicted.

The Department does not consider this change

necessary as the assessment has shown that the impact

would not exceed those for the proposed conditions.

See discussion in table above.

The developer must provide a cash contribution to the central coastal community.
<table>
<thead>
<tr>
<th>Schedule 4</th>
<th>Condition 16</th>
</tr>
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<tr>
<td><strong>Scope</strong></td>
<td>The purchase of water licences is not considered an appropriate measure for Central Coast Water Supply.</td>
</tr>
<tr>
<td><strong>Condition</strong></td>
<td>The purchase of water licences is not required to be provided after the cessation of mining operations only if the proven perennial water loss is less than 35 ML per annum.</td>
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<th>Condition 4</th>
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<td><strong>Add the following:</strong></td>
<td>See responses in Table A. The Department does not support the proposed condition.</td>
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<td><strong>New Condition 11A:</strong></td>
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<td><strong>Add the following:</strong></td>
<td>The Department considers that this monitoring, reporting, review and auditing framework provides a robust oversight and adaptive management framework.</td>
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- Compensation measure for Central Coast Water Supply.
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- See responses in Table A. The Department does not support the proposed condition.
- The Department considers that this monitoring, reporting, review and auditing framework provides a robust oversight and adaptive management framework.

The Department notes this advice.

made public

mentioned above. The draft report is also required to be requested a copy of the draft report in addition, and as recommended condition already allows for Council to recommend condition is satisfied that the existing.


The conclusion remains in opposition to the mine proposal.

Environmental Audit also be provided to Council.

Schedule 6

Condition 11.

Amend the condition to require that a copy of the Independent


Schedule 4.

Wastewater management annual review – as per condition 29 of Schedule 4.

Schedule 4.

Risk assessment and monitoring plan monitoring – as per condition 22(9)

Schedule 4.

Air quality monitoring station results - as per condition 11 of Schedule 4.

Schedule 4.

Noise monitoring – as per condition 5 of Schedule 4.

Amend the condition to require the following particular reports to be

made public.

Covered by this condition.

see condition 6 of Schedule 6. The Department

suggestions that the suggestion is already adequately

require updated documentation and information.

The Department does not support the suggested change.

sensitivities and the Commission's recommendations.

Coal Project where performance measures; adaptive