



# Western Rail Coal Unloader

## Submissions Report



August 2007



# Western Rail Coal Unloader

## ENVIRONMENTAL ASSESSMENT SUBMISSIONS REPORT

■ August 2007

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Sinclair Knight Merz  
ABN 37 001 024 095  
100 Christie Street  
PO Box 164  
St Leonards NSW  
Australia 1590  
Tel: +61 2 9928 2100  
Fax: +61 2 9928 2500  
Web: [www.skmconsulting.com](http://www.skmconsulting.com)



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**Appendix A Community Responses**

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# 1. Introduction

## 1.1 Overview

This report has been prepared to support Delta Electricity's project application for the construction and operation of the proposed Western Rail Coal Unloader (WRCU). It addresses the responses to the public exhibition of the Environmental Assessment (EA).

The WRCU project is shown in Figures 1.1, 1.2 and 1.3 and comprises the construction and operation of:

- A rail loop comprising a branch rail line off the Wallerawang - Gwabegar Main Line (also known as the Mudgee Line);
- A coal unloader building which would allow coal to be delivered into a hopper located below the rail line;
- A conveyor system which would carry the coal to the existing coal handling facility at the Mt Piper Power Station.

Other components of the project include a locomotive provisioning area (for refuelling and sanding), a rail wagon maintenance area comprising rail sidings, hard stand areas and a shed, an office and amenity area as part of the unloader building and a diesel fuel storage area with access from Pipers Flat Road.

## 1.2 Project Objectives

The objectives of the proposed WRCU are:

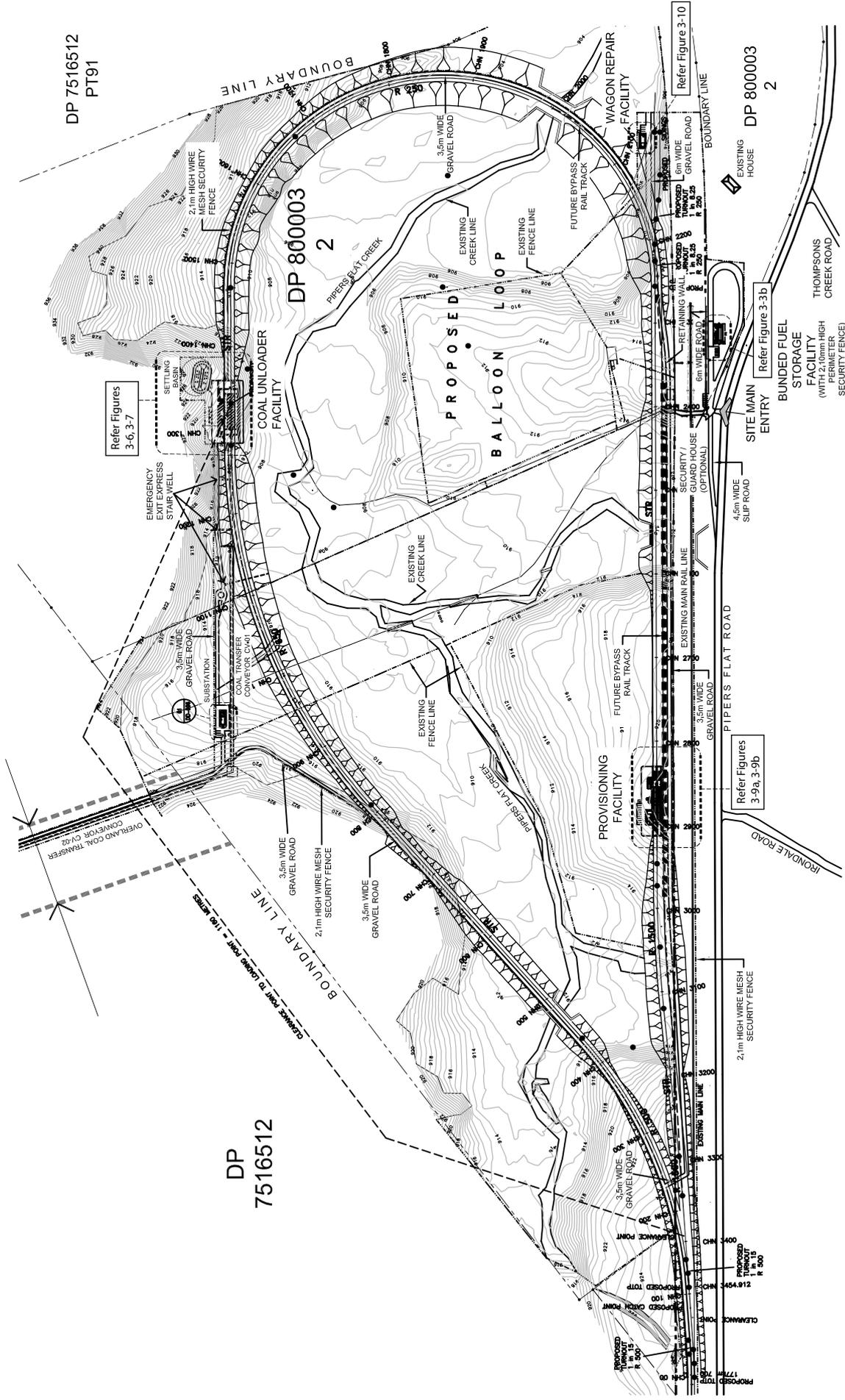
- To increase the security of coal supply for Mt Piper Power Station by enabling the sourcing of coal by rail from more distant mines;
- To minimise the long term impact of coal transport by road to Mt Piper Power Station;
- To minimise and manage any environmental or social impacts which may result from the construction and operation of the proposed rail unloader.



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 February 16, 2007

Figure 1-1 Study Area

DP 7516512  
PT91



DP  
7516512

DP 800003  
2

DP 800003  
2

Figure 1-2 Location Plan

PIPERS FLAT - WESTERN RAIL COAL UNLOADER

Drawing design by



WorleyParsons

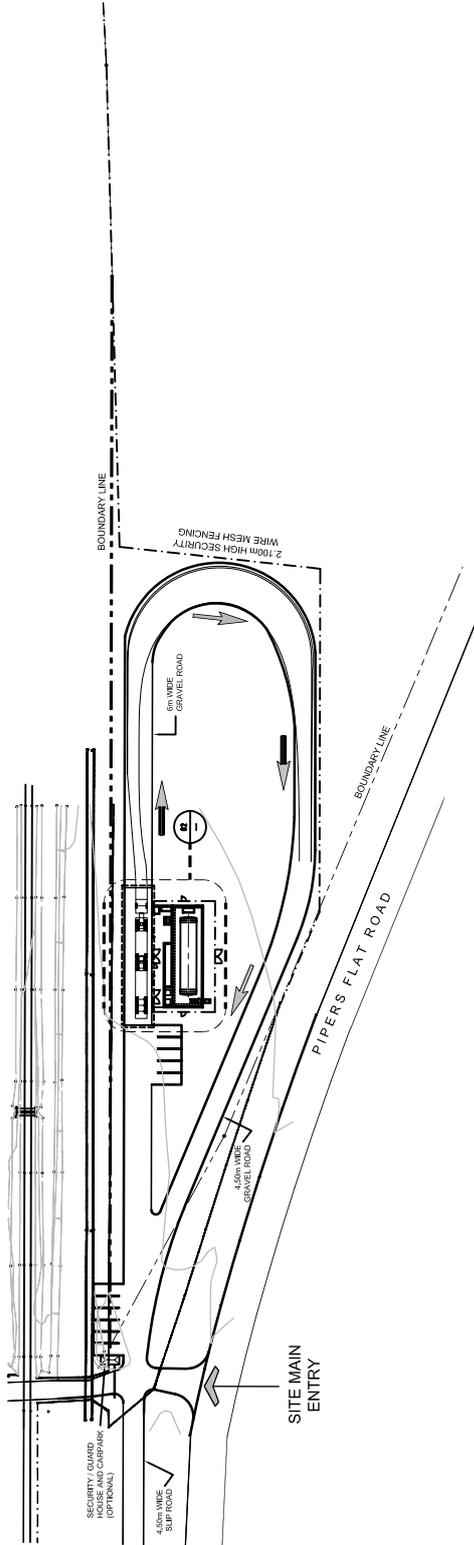
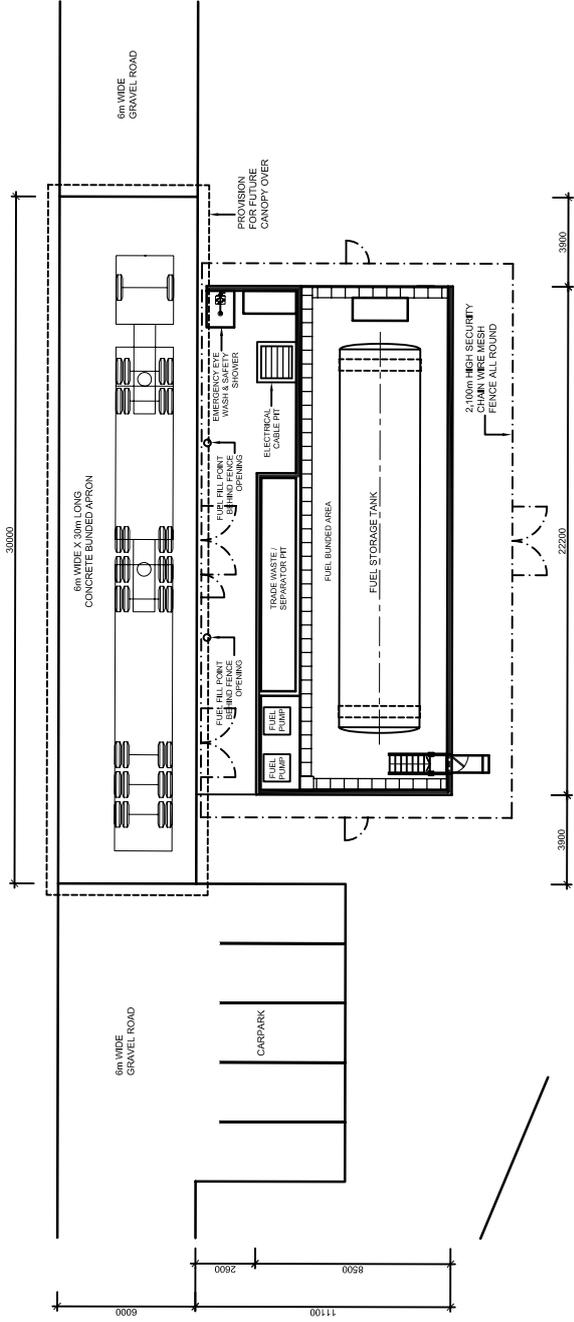


Figure 1-3 Bunded Fuel Facility Area Plan



PIPERS FLAT - WESTERN RAIL COAL UNLOADER

Drawing design by



WorleyParsons

### **1.3 Submissions to the Environmental Assessment**

The Environmental Assessment for the WRCU was placed on public exhibition by the Department of Planning (DoP) from 31 May to 2 July 2007. A total of 60 submissions were received by the Department, comprising:

- Nine submissions from NSW Government agencies, namely the Department of Conservation and Climate Change, the Department of Water and Energy (2), the NSW Mine Subsidence Board, the Roads and Traffic Authority, the Western Region Development Committee, the Sydney Catchment Authority, the Australian Rail Track Corporation and the Department of Primary Industries (Fisheries);
- One submission from Lithgow City Council;
- Fifty submissions from the general community.

The DoP also provided a series of questions seeking clarifications or more information. The Department's information request is addressed in Chapter 2.

Government agency and Lithgow Council submissions are outlined in Chapter 3, and responses provided.

Community responses were put into a data base and sorted according to topics or issues of concern raised in the submissions. The data base is provided in Appendix A. The issues are summarised in Chapter 4 and responses to the issues provided.

## 2. Department of Planning

By letter dated 10 July 2007 and email dated 9 August 2007 the NSW Department of Planning (DoP) required that certain issues be addressed as part of the submissions report. They are addressed below.

### 2.1 Further Justification

#### Comment

Justification for the need, size, scale and scope of the rail provisioning structure, rail wagon maintenance workshop and the diesel storage farm within the context of coal unloading operations needs to be supplied.

#### Response

Discussions with potential operators highlighted a preference for local sanding and fuelling facilities at the WRCU site. This arose from the lack of such facilities between the Pipers Flat site and the coal fields to the north of the power station which would be the likely source of any coal. While the Lithgow yards do have such facilities, utilising them would involve a significant shunting operation at Pipers Flat, increase in train journey times and entanglement with traffic on the main western line. In this regard, it is noted that the recently constructed Antiene unloading facility also incorporated these features, notwithstanding that it is located on a rail network with significantly greater traffic density. Economic analysis undertaken by Delta suggested that provision of these facilities by the constructor of the unloader was a cheaper and more flexible alternative than relying on train operators to do so.

The provisioning building was sized to accommodate two locomotives at one time, as a compromise between the slower rate of provisioning possible with a shorter building and the scale of one to accommodate the total number of locomotives per train. The height is dictated by the size of the locomotives and the need for safe working conditions including adequate ventilation.

The workshop proposed is not a full workshop but simply a facility to undertake minor emergency repairs. The scale is not dissimilar to common rural buildings such as machinery sheds. Full maintenance facilities are provided by rail operators at dedicated facilities elsewhere in the state.

The locomotives on each train carry approximately 32,000 litres of fuel and would require re-fuelling approximately every two trips. Fuel usage requires a tank with around 100,000 litre capacity to be provided to permit sufficient stock on hand for normal operational requirements and represents a balance between a smaller size and more fuel tanker trips

## 2.2 Noise

### Comment

Exceedances of the project specific noise limits are predicted at two receivers and it is unclear how these limits would be met (refer section 5.5.3 of the EA). Specific measures for ensuring that the project specific noise limits would be met at these two receivers must be provided.

### Response

With respect to the predicted exceedance of project specific noise criteria of 2 dB(A) at one location and 4 dB(A) at the other location under adverse meteorological conditions, these are considered marginal exceedances that may or may not eventuate in a real situation; that is, changes in noise levels of +/- 2–4 dB(A) are within the error band of noise models. At this stage it is not possible to advise specific noise controls because the exceedances may not occur. Any controls would need to be in the form of architectural treatments to the affected properties in consultation with the land owner. A more appropriate means of addressing any such issues is the requirement for post-commissioning noise testing at potentially affected properties to determine the level of impact.

### Comment

Further information needs to be provided regarding the impacts associated with rail noise. It is noted that the noise assessment assumes locomotive engine noise to be the predominant noise source and that the predicted noise emissions have been determined on the basis that only two class 40 locomotives would be operational at any one time (refer section 6.3 of Appendix F). Sensitivity analysis of locomotive noise impacts must be provided if it is possible that additional locomotives could also be operational.

### Response

In terms of locomotive noise emissions the EA assumes 2 x 40 class locomotives with an  $LA_{eq}$  sound power level (SWL) of 114 dB(A). In terms of noise emissions from other locomotive classes, ARTC which is responsible for the DECC licensed operation of trains across NSW rail networks has, as a condition of its licence, that all locomotive classes meet the following noise limits:

- 70 dB(A)<sub>MAX</sub> @ 15 m when at idle – SWL approx. 101.5 dB(A); and
- 87 dB(A)<sub>MAX</sub> @ 15 m all operations – SWL approx. 118.5 dB(A).

On the basis that all locomotive operations, 40 class and others, eg, 81, 82, 90 are required to comply with the above limits, the estimate of 114 dB(A) used in the assessment is considered reasonable and conservative, as the trains operating on the coal unloader rail loop will be at low speed, with noise emissions similar to idle conditions, and as such would be expected to be much lower than 114 dB(A).

Recent train noise measurements undertaken for ARTC for low speed trains with up to four locomotives confirm that, irrespective of the locomotive class and whether two, three or four locomotives are used on coal trains gaining access to the loop at low speeds, the sound power level

(SWL) would be no more than 114 dB(A), as assumed in the noise assessment. It was noted that maximum train noise levels most often result from poor maintenance, eg. wheel flats, squeaking brakes and exhaust noise for locomotives with poorly maintained mufflers.

### **Comment**

The noise assessment (refer section 6.3.1 of Appendix F of the EA) indicates that exceedances of ARTC Environmental Protection Licence noise goals may occur at some receivers, however the number of receivers that could be affected has not been quantified nor has information been provided to demonstrate how these goals would be met. This information must be provided.

### **Response**

In Section 6.3.1 of Appendix F the noise from train movements was predicted for nominal distances from the track to indicate the potential for train movements to impact on sensitive receivers. The receivers identified are not likely to be impacted upon by the additional trains within the rail corridor as these train movements will occur prior to the balloon loop. Once on the balloon loop the rail noise is assessed in conjunction with other noise sources against the industrial noise policy criteria.

Movements for the proposed WCRU combined with existing rail movements on the Gwabegar-Wallerawang rail line were modelled for both day and night time scenarios. Predicted noise emissions from the combined operations indicate that there will be an increase of approximately 2 dB(A) over the existing noise levels.

The predicted noise levels indicate that where receivers are 75 metres or less from the rail corridor, they may experience noise levels that are marginally above the ARTC Environmental Protection Licence goals as the result of increased movements on the rail line. An increase of this magnitude is not considered significant and is unlikely to be discernable by most people.

There are no receivers within the specified 75m of the rail line adjacent to the rail loop, so there would be no exceedances of the ARTC Licence goals and there would be no impact beyond the 75m.

### **Comment**

It is evident that sleep disturbance criteria may be significantly exceeded as a result of operational train noises such as shunting, wheel squeal or the use of locomotive horns. It is noted that some measures, such as the provision of a positive track gradient, would be considered as part of detailed design (refer sections 6.3.2 and 8 of Appendix F of the EA) however this is not considered a suitable approach given the predicted level of impact. Specific measures to ensure sleep disturbance criteria is met at potentially affected receivers must be identified with consideration given to any likely residual impacts that may remain after the implementation of such measures.

### **Response**

In terms of sleep disturbance impacts where possible design options will consider the need to reduce impacts noise, (those generally causing sleep disturbance) as far as possible. This includes consideration of a positive gradient track to minimise noise from bunching and stretching wagons, as well as rail track lubricators to minimise wheel squeal. If these measures are required and are implemented, the residual impacts following implementation will be negligible.

In terms of noise from horn sounding there are no feasible mitigation options. Design noise levels for locomotive horns are set to meet relevant safety standards and there is no mechanism available to reduce noise from this source.

### **Comment**

Construction noise impacts are anticipated for a period of 18 months and significant exceedances of DECC construction noise goals are predicted (refer section 7.1.1 Appendix F). Indicative modelling must be provided to demonstrate that proposed mitigation measures would reduce the predicted level of impact to acceptable noise amenity levels.

### **Response**

The construction programme and methodology for the proposed coal loader has not been fully determined at this stage and, therefore, a detailed assessment of noise impacts was not undertaken. A general assessment was made, however, of noise from construction activities that are likely to occur, based on typical levels from construction equipment.

During construction activities, the resulting noise levels at a sensitive receiver would vary according to distance from the works, the type of equipment in operation and any available topographical shielding. General site works would involve daytime construction activities, as well as transport to site of construction materials. Night construction works are not envisaged for this project.

To assess the potential for noise impacts due to normal construction activities during daytime hours, the noise emissions from general works at the site were modelled using the SoundPLAN noise prediction software, with the CONCAWE assessment method.

The noise from general works has been assessed and at all receivers, except Location 6, the estimated construction noise levels would exceed Department of Environment and Climate Change (DECC) construction noise goals.

Noise attenuation by noise walls and other forms of physical barrier are not likely to be effective in the reduction of construction noise impacts at noise sensitive locations. Alternative noise mitigation measures were recommended through the implementation of appropriate noise management strategies during construction. In terms of construction noise impacts, actual mitigation options will be

determined, depending on the exact nature of the construction activities occurring at the time and their impact, and as such it is not possible to provide any modelling assessment of these activities at this stage.

A Construction Noise Management Plan (CNMP) addressing potential noise impacts and mitigation measures will be included in the project Construction Environmental Management Plan (CEMP). The EA sets out detailed construction noise mitigations measures and DECC in their letter dated 10 July 2007 further prescribe measures to reduce construction noise impacts in the form of an Construction Noise Management Plan (CNMP). The detailed construction noise mitigation measures will be applied.

## **2.3 Air Quality**

### **Comment**

Air quality impacts associated with the conveyance of coal are predicted to be within acceptable levels. It is noted however that the air quality assessment assumes the dumping of coal from the rail wagons to be the major source of particulate emissions (refer section 5.4.2 of Appendix E) and therefore other sources have not been included in the model. Information must be provided to support this approach.

### **Response**

The modelling assessment for operational impacts from the rail unloader does not include the dust reducing effects of the proposed mitigation measures, such as enclosure of the rail unloader in a building and the provision of an enclosed conveyor system. The dust extraction system for the unloading facility is yet to be designed. It is noted that the results of this study show that under worst case conditions, i.e. if there was no dust suppression system or if the dust suppression system had failed, impacts remain acceptable. On this basis, the scenarios modelled provided a worst case assessment.

DoP notes that only coal dumping from rail wagons is included in the air quality model. Particulate emissions from other activities such as coal conveying and transfer will be fully mitigated within enclosed conveyors and transfer stations. There will be no appreciable particulate emission from such sources, hence there is no requirement for a modelling assessment of such impacts.

## **2.4 Hazard Analysis**

### **Comment**

It is noted that several recommendations made as part of the hazard analysis, such as the installation of closed circuit television, have not been adopted in the Statement of Commitment. These recommendations should be included.

## **Response**

This is noted and included in the Statement of Commitments.

## **2.5 Visual Amenity**

### **Comment**

Further information is required, relating to visual amenity, as follows:

- Revision of Figure 5-10 such that it is expanded to a 3 kilometre radius from the view item (ie coal unloader structure) and it overlays residences in that area;
- A similar revision to the above but for the rail provisioning structure in isolation;
- A similar revision to the above but for the wagon maintenance area (including hardstand area with repair wagons) in isolation; and
- A figure consolidating the above figures (with residences overlaid).

For each of the figures specify the heights used in terms of metres above existing ground level and height above proposed track level.

### **Response**

The view areas were remodelled, using the following assumptions:

- Height of the coal unloader – 8m above ground level (note that the unloader is cut into the ridge area behind);
- Height of the locomotive provisioning facility – 10m; and
- Height of the wagon repair shed – 5m, on top of a 15m embankment.

The modelling results are shown in Figures 2-1 to 2-4. The conclusions have not changed from those in the EA, in that the visual impact of the proposed structures would be high for the Premier Farms property and to a lesser extent for users of the Pipers Flat Road, as these receivers would experience changes to the visual environment in the foreground. Other properties to the south of Pipers Flat Road would generally have limited views of the coal unloader, due to screening by topography or vegetation. Generally the undulating terrain of the surrounding area and the existing vegetation would prevent significant visual impacts.

Landscape planting is proposed for the rail embankments and for site buildings and screening vegetation along the southern site boundary would assist with screening views from Pipers Flat Road.

On the basis of implementing these mitigation measures, residual visual impacts would be regarded as low.

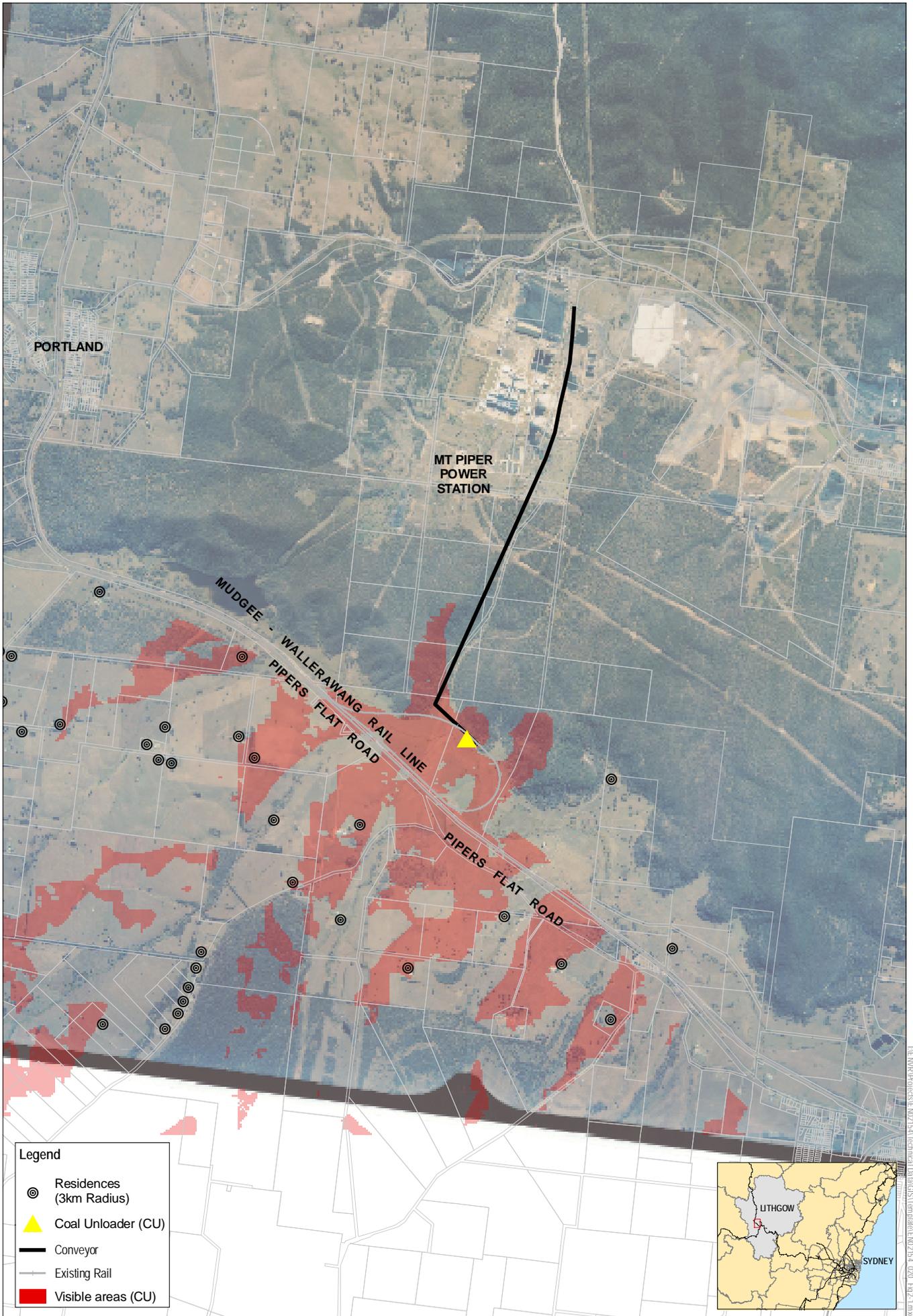


Figure 2-1  
Viewshed from Coal Unloader

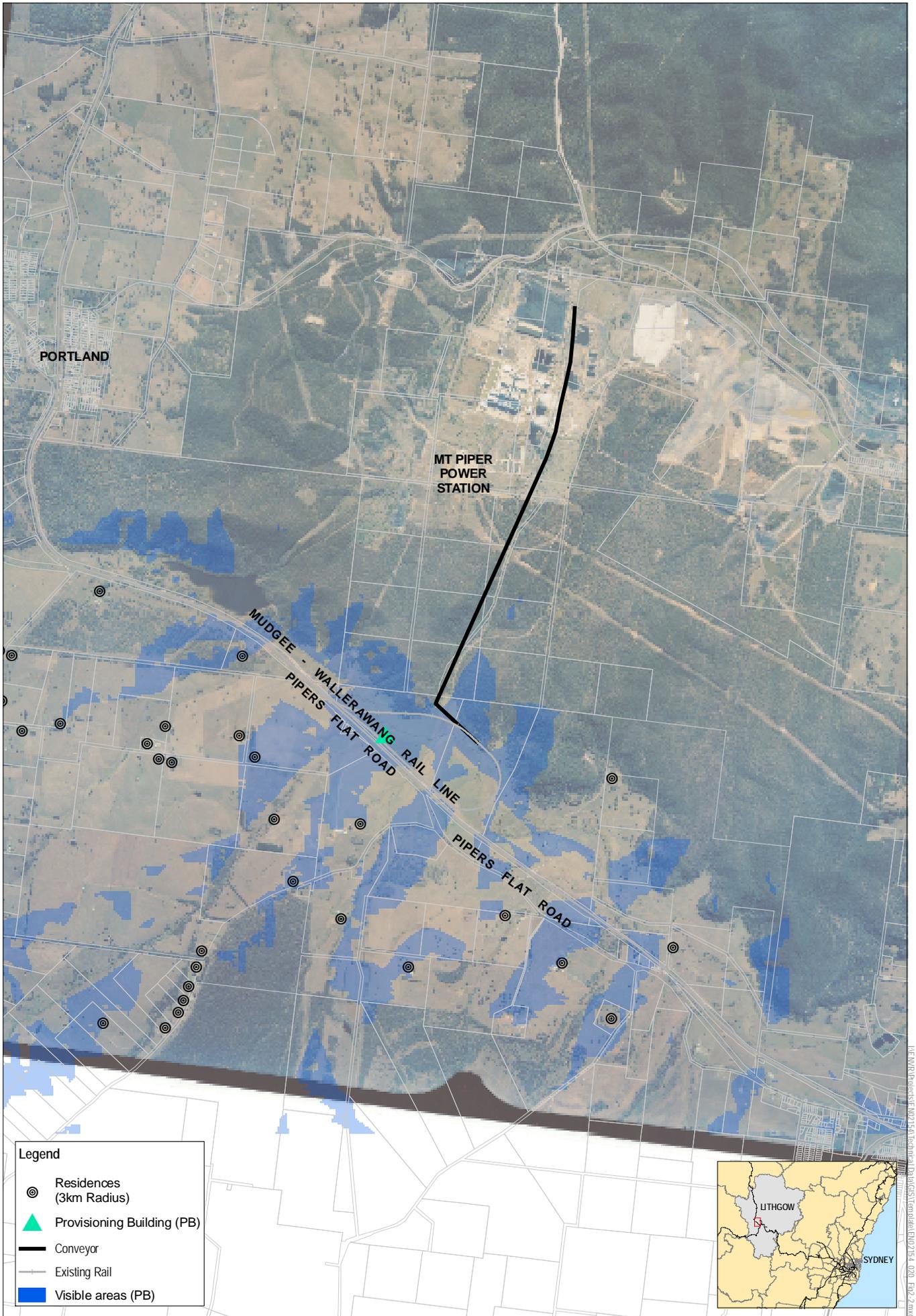


Figure 2-2  
Viewshed from Locomotive Provisioning Building

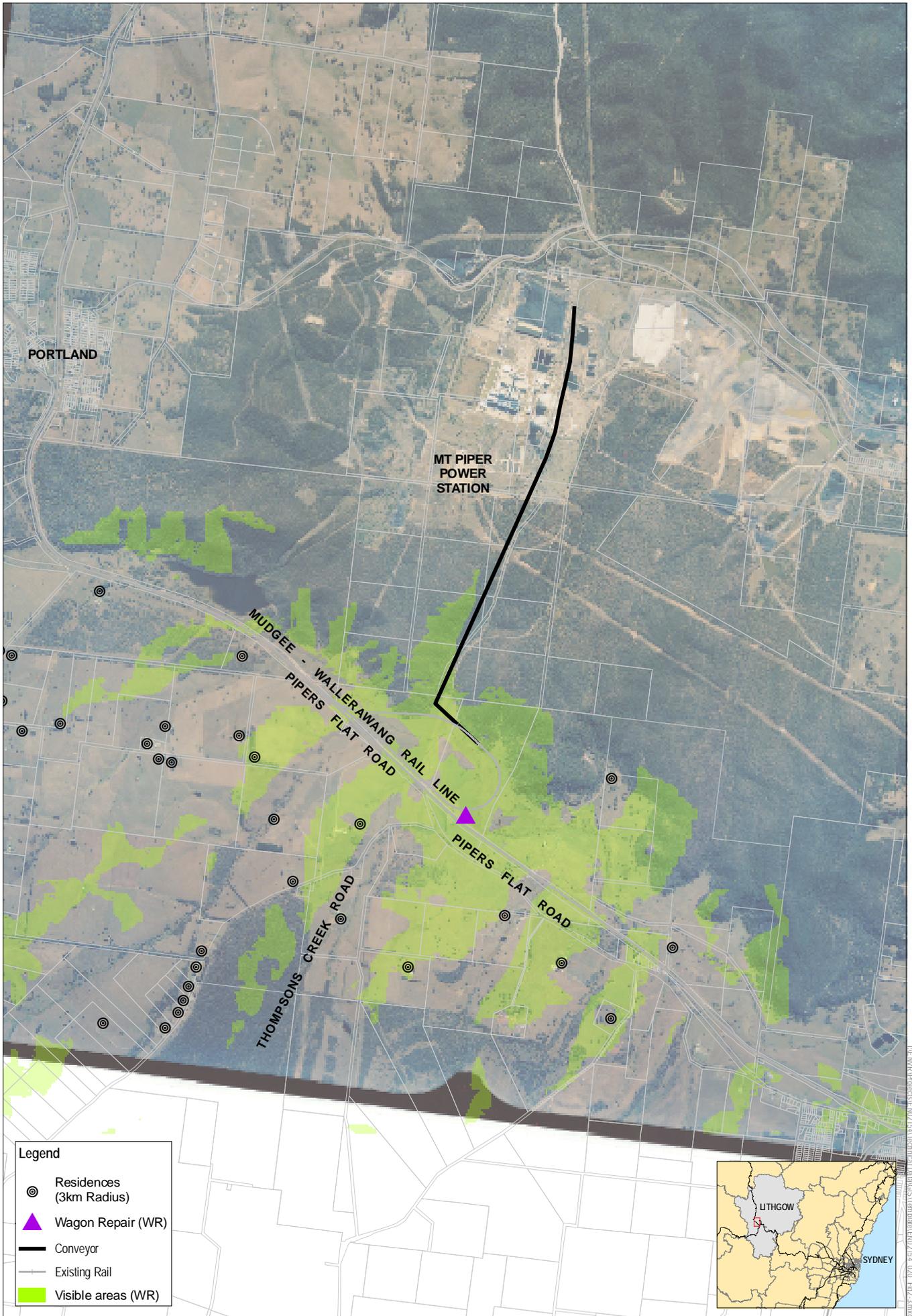


Figure 2-3  
Viewshed from Wagon Maintenance Area

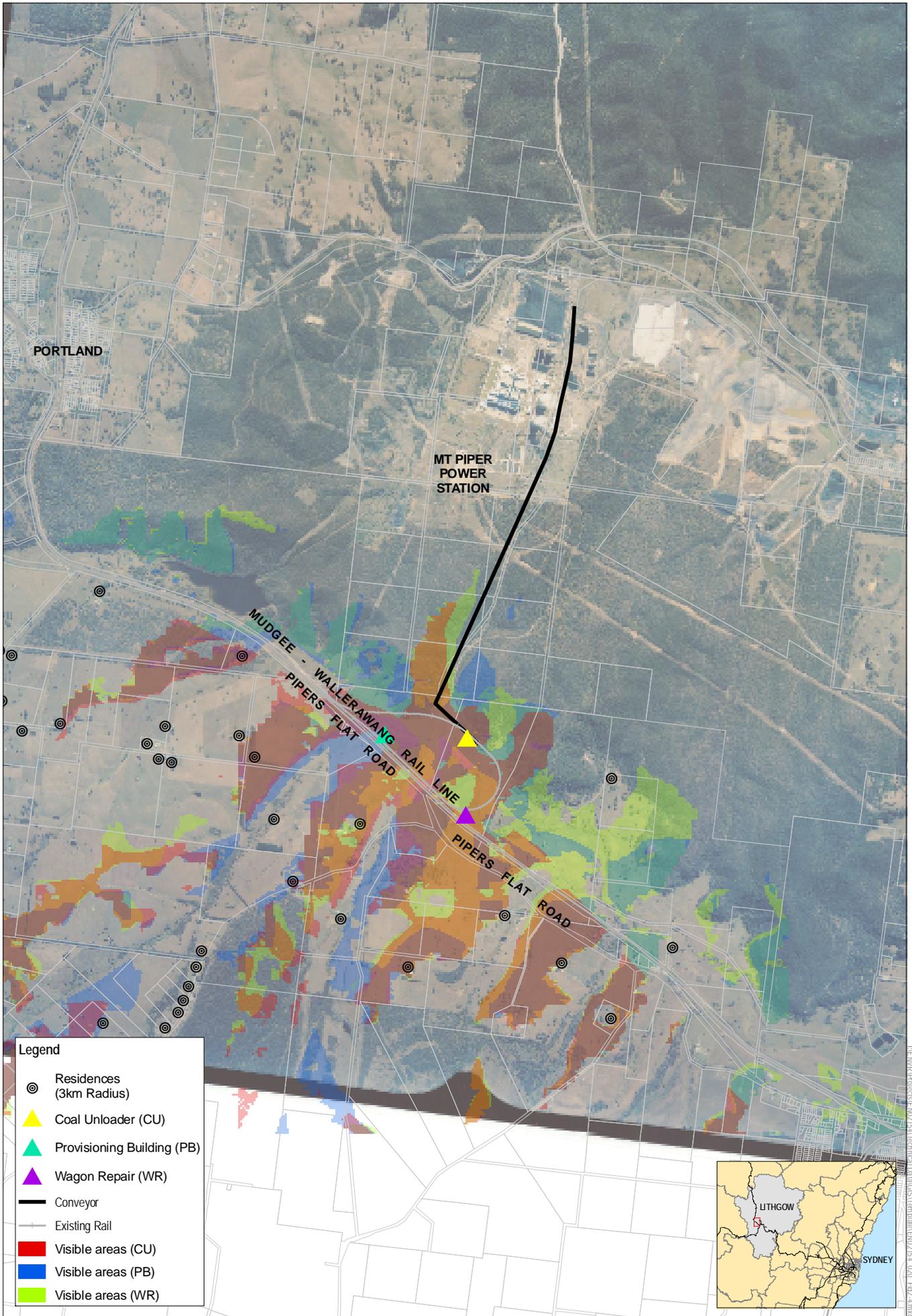


Figure 2-4  
Viewsheds from CU, PB and WR

### **3. Agency Submissions**

Various NSW Government agencies and Lithgow Council provided responses to the exhibition of the Environmental Assessment. These responses are addressed below.

#### **3.1 Department of Environment and Climate Change**

##### **3.1.1 Submission**

The Department of Environment and Climate Change (DECC) has determined that it is able to support the proposal subject to the Department of Planning seeking the amendments to the draft Statement of Commitments, identified in Attachment 1. Attachment 2 contains DECC's assessment of the proposal, including justification for the amendments.

The project will also require an environment protection licence to operate. Specifically, a variation to the existing environment protection licence 766 issued under the Protection of the Environment Operations Act 1997 for the Power Station will be required. The proponent will need to make a separate application to the DECC to obtain this licence once development project approval is granted.

#### **Attachment 1 – Amendments to Statement of Commitments**

DECC recommends that the draft Statement of Commitments including the following amendments should be adopted as conditions of approval for this proposal

##### *Aboriginal Cultural Heritage*

DECC recommends that the addition of the following Objective to the Statement of Commitments in the Design and Construction section with regard to Heritage:

“Preservation of Aboriginal Cultural Heritage”

DECC recommends the addition of the following Actions in relation to the Outcome “Preservation of Aboriginal Cultural Heritage” listed above:

1. The artefact scatter site identified as 45-1-0076 will be completely salvaged, including an archaeological excavation prior to construction works commencing.
2. The salvage and archaeological investigation will be undertaken in consultation with the local Aboriginal community.
3. Information pertaining to the salvage and preservation of artefacts at site 45-1 0076 will be included in the Construction Environment Management Plan.

### *Air Quality*

DECC recommends the addition of the following Actions to the Statement of Commitments in relation to Air Quality in the Design and Construction section:

1. “Monitor gravimetric dust fallout, 24 hour total suspended particles (TSP) and PM10 at Receiver 1 and Receiver 6 as identified in the Environmental Assessment.”
2. “Initiate all dust monitoring a minimum of 3 months prior to the commencement of construction.”

DECC recommends the amendment of the last Action to the Statement of Commitments in relation to Air Quality in the Operational section:

1. “Maintain the dust monitoring program until sufficient data is collected to demonstrate the effectiveness of dust control measures employed. A review of dust monitoring data will be undertaken with DECC before any decision to cease, reduce or modify any dust monitoring is made.”

Details of monitoring conditions for inclusion in any consent granted are detailed in Attachment 2.

### *Biodiversity*

DECC recommends that the addition of the following Objective to the Statement of Commitments in the Design and Construction section with regard to Management of Terrestrial Vegetation and Habitats:

“Biodiversity values will be maintained or improved.”

DECC recommends the addition of the following Actions in relation to the Outcome “Biodiversity values will be maintained or improved” listed above:

4. An area of 6.5ha be identified and agreed for use by DECC as a biodiversity offset area.
5. The preparation, seeding and planting, monitoring and maintenance (including weed control) required to revegetate the offset area will be conducted by the Proponent.
6. Local native species, including the Capertee Stringybark, will be sourced locally and utilised for the revegetation of the offset area.

DECC recommends the addition of the following Actions in relation to the Outcome “Management of Terrestrial Vegetation and Habitats’ in the Design and Construction section:

1. During all operations involving the clearing of mature trees, an ecologist or appropriately trained personnel would be present to check any trees felled for wildlife inhabiting these trees.

2. Provision will be made for several fauna crossings of the conveyor route, the locations of which will be determined by most likely fauna pathways.

DECC recommends that the second Action identified under “Management of Terrestrial Vegetation and Habitats Outcome” in the in the Design and Construction section be altered to read:

“A pre-clearing survey would be undertaken to identify and flag any hollow-bearing habitat trees and threatened species likely to occur in the works corridor, including, but not necessarily limited to Capertee Stringybark, with the aim of avoiding the destruction of these features wherever possible.”

#### *Noise and vibration*

DECC recommends that the action identified under Noise and Vibration – Minimise construction noise impact on surrounding residences in the Design and Construction section be replaced with the following:

‘The proponent must prepare and implement a detailed Construction Noise Management Plan (CNMP) that includes but is not necessarily limited to:

- identification of the specific activities that will be carried out and associated noise sources at the construction site,
- identification of all potentially affected sensitive receivers,
- the construction noise objectives identified in the Environmental Assessment,
- assessment of potential noise from the proposed construction methods (including noise from construction traffic) against the objectives identified in the EA,
- where the objectives are predicted to be exceeded an analysis of feasible and reasonable noise mitigation measures that can be implemented to reduce construction noise impacts,
- description of management methods and procedures and specific noise mitigation treatments that will be implemented to control noise and vibration during construction,
- procedures for notifying residents of construction activities that are likely to effect their noise amenity,
- site contact details easily accessible to the community,
- measures to monitor noise performance and respond to complaints.”

## **Attachment 2**

Assessment of the Proposal and Justification of Proposed Amendments to the draft Statement of Commitments

### *Aboriginal Cultural Heritage*

The DECC notes that the heritage outcomes have been significantly reduced from the first draft of the Environmental Assessment reviewed. In particular, it is noted that for the description for the direct impact to the artefact scatter on the project site (No. 45-1-0076) has changed from “should be able to be avoided” to “would not be able to be avoided”.

As a result, DECC will require the proponent to recover any artefacts at this site to be recovered, recorded and preserved in consultation with the local Aboriginal community.

The DECC recommends that the outcomes and actions presented in the draft Statement of Commitments and the recommended changes detailed in Appendix 1 be included in the conditions of consent to ensure that Aboriginal Cultural Heritage values are maintained.

### *Air Quality*

The first recommended change to the draft Statement of Commitments is required to ensure that the predicted air quality impacts will comply with the Project air quality goals. This is of particular importance during days of adverse weather condition when excessive amounts of dust could be generated. From an air quality perspective, adverse weather conditions include moderate wind speeds prevailing from the north east and west which is the direction of the closest non-project related residence and also the location of the residences identified by the modelling most likely to be affected by the development.

The number and location of monitoring points for dust deposition, TSP and PM10 have not been identified in the Environmental Assessment. As a minimum, these points should include Receiver 1 and Receiver 6 and points on the opposite side of the proposed development to these receivers, to account for any background contributions on months where the prevailing winds are from the development to these receivers.

This monitoring should not cease after an arbitrary period (ie. 12 months) without a review of the data to determine the effectiveness of dust controls implemented at the project site. This review should be conducted in consultation with DECC to determine what components of the monitoring can be phased out, reduced, or modified dependant upon the results.

The Outcomes and Measures identified in the draft Statement of Commitments and the recommended amendment contained in Appendix 1 adequately address the issue of air pollution and should form conditions of consent. The DECC recommends that in regards to air quality monitoring, monitoring for dust deposition, 24 hour TSP and PM10 as presented in the draft Statement of Commitments and the recommended amendment be included in the conditions of consent.

### *Flora and Fauna*

The DECC considers that the draft Statement of Commitments does not adequately address biodiversity conservation issues. Whilst the area impacted by the proposal is relatively small, it does impact on a listed Threatened Species (Capertee Stringybark) and areas that may potentially contain other threatened species of flora. This impact needs to be offset.

No detail of potential offset is contained in the Environmental Assessment. This should be negotiated between the proponent and DECC. DECC would be amenable to using another portion of the project site, or other site under the management of the proponent, that has been previously disturbed, but otherwise suitable to be vegetated with habitat suitable for maintaining and improving the population of Capertee Stringybark.

No provision to check mature trees prior to felling for native fauna was made in the EA. This should be undertaken as a matter of course.

Comments by DECC in response to a draft Environmental Assessment for the project regarding inconsistencies between the Environmental Assessment and Statement of Commitments regarding the pre clearing survey for threatened species other than Capertee Stringybark. In particular, it is noted that Doubletail Buttercup, *Derwentia blakelyi* and Hairy Geebung may occur in the project area. Similarly, the recommendation to include fauna crossing to the conveyor corridor was recommended in the Environmental Assessment, but not included in the final Statement of Commitments.

The DEC recommends that the outcomes and actions presented in the draft Statement of Commitments and the recommended changes detailed in Appendix 1 be included in the conditions of consent to ensure that biodiversity values are maintained or improved.

### *Noise and vibration*

The Environmental Assessment indicates that there is the potential for nearby residents to be impacted by noise during the construction period. The construction period is anticipated to be around 18 months in length and the proponent should take all reasonable and feasible steps to minimise this impact on nearby residents.

The proponent should also have procedures in place for communication with potentially affected residents, response to noise complaints, monitoring of noise levels and review of noise management techniques and procedures.

The DECC recommends that the outcomes and actions presented in the draft Statement of Commitments and the recommended changes detailed in Attachment 1 be included in the conditions of consent to ensure that any noise impacts are managed so as to maintain amenity values of the area.

### 3.1.2 Response

#### Aboriginal Cultural Heritage

A change in the design of the rail loop during the project development, primarily to minimise impacts on Pipers Flat Creek, meant that the loss of the site 45-1-0076 would be very likely. The EA acknowledged the need for the site to be salvaged and this is stated in the amended Statement of Commitments.

#### Air Quality

The modelled impacts for this project are well below the relevant criteria. Nevertheless, Delta will, as specified in the EA, put out gravimetric dust gauges at key locations for monitoring purposes. These locations would be on the boundaries of Delta's site, thus avoiding the need for negotiation with land owners.

We accept that the monitoring should continue post-construction and after 12 months of operation a review will be undertaken of the data to determine the effectiveness of dust controls implemented at the project site. This review should be conducted in consultation with DECC to determine what components of the monitoring can be phased out, reduced, or modified dependant upon the results.

The Statement of Commitments will be modified to reflect this conclusion.

#### Biodiversity

The natural area affected by the proposal is relatively small (up to 2.5 ha), but does impact on a listed Threatened Species (Capertee Stringybark). The proposed site revegetation would be designed to compensate for the natural area to be lost to the site works and should include the area of revegetation proposed for creek banks and corridors through the site. The revegetation would include opportunities for maintaining and improving the population of Capertee Stringybark. The amended Statement of Commitments will reflect the intent to compensate for the loss of the natural area of 2.5 ha.

A provision to check mature trees for native fauna prior to felling will be added to the Statement of Commitments.

Pre clearing surveys for threatened species other than Capertee Stringybark will be undertaken. In particular, it is noted that Doubletail Buttercup, *Derwentia blakelyi* and Hairy Geebung may occur in the project area. Similarly, the recommendation to include fauna crossing to the conveyor corridor will be included in the amended Statement of Commitments, subject to this being shown to be feasible in the detailed design.

#### Noise and Vibration

The proposed amendments to the Statement of Commitments are accepted.

## **3.2 Department of Primary Industries (Fisheries)**

### **3.2.1 Submission**

Under Part 7 of the Fisheries Management Act 1994 (FM Act), the Department of Primary Industries (DPI) has responsibilities to protect aquatic habitat and conserve fish populations within NSW. Part 7A of the FM Act includes in these responsibilities the protection of threatened fish species and their habitat. DPI has specific assessment criteria for EA of aquatic habitat. It is clear from the list that the aquatic habitat assessment did not meet the Department's minimum standards.

It is DPI policy that there should be no net impacts on receiving waterways. Where despite mitigation, significant loss or damage to aquatic habitat is unavoidable, environmental compensation should be provided. This would normally require the creation of new habitat (of the type lost), and on a 2:1 basis to account for any indirect as well as direct impacts from the proposal. In relation to the assessment, the following issues should be noted:

- It is DPI Fisheries policy that consideration be given to the aquatic environment with planning and development of the facility. Issues such as stabilisation of waterways, rehabilitation of riparian vegetation, sediment and effluent control should be addressed.
- The upper Coxs River catchment is habitat to both rainbow and brown trout (both migratory) that regularly use the small streams above Lake Wallace for refuge and during spawning. The various waterways and impoundments are also an important recreational fishery for anglers.
- The Department should be consulted in the design phase of any waterway crossings to ensure that the works are designed and constructed in accordance with best management practice and with minimal impact on the aquatic environment within the immediate vicinity of the proposed works.

Water quality within the localities streams was observed as low at the time of the EA field work. Water quality changes over time in response to many factors. It should not be used as a reason to assume the absence/presence of any particular fish species or to disregard the overall importance of the site to aquatic habitat. Threatened fish species can survive in the most unlikely of situations.

Note: The aquatic habitat assessment is correct in stating there are no Macquarie Perch found in the locality.

### **3.2.2 Response**

No detailed fish studies were undertaken in the EA as none was requested in the Director-General's requirements. Notwithstanding this, the design was modified during the project development to minimise impacts on the creek system. Bridge crossings were provided at key locations, instead of culverts, and the creek alignment was unchanged. The design conforms with design requirements for

Waterway Class 2 Moderate Fish Habitat (see Fairfull and Witheridge, 2003)<sup>1</sup>. No direct impacts on the creeks were proposed and therefore no surveys were needed.

No habitat will be lost and consequently no habitat compensation is required. Stabilisation, rehabilitation and sediment/effluent control were all considered in the EA and will need to be addressed in more detail in the detailed design and the preparation of EMPs. DPI will be consulted during the detailed design, but all waterway crossings will be consistent with Fisheries Guidelines (Fairfull and Witheridge, 2003).

No impacts are likely to occur within the waterway (ie no realignment and no impedance of fish movement), so no impacts are anticipated for rainbow or brown trout. Appropriate management measures will be put in place to ensure the probability of impacts during construction and operation will be minimal.

### **3.3 Mine Subsidence Board**

#### **3.3.1 Submission**

The subject proposal is not within a proclaimed Mine Subsidence District and is not subject to any building restrictions imposed by the Mine Subsidence Board.

The provisions of the Mine Subsidence Compensation Act cover any improvement erected on this land.

SPECIAL NOTE: The proposed conveyor from the coal unloader to Mount Piper Power Station appears to cross over some workings in the Lithgow Seam.

The design of the proposed conveyor must be safe, serviceable and repairable tacking into account the existing mine workings (see attached plan).

#### **3.3.2 Response**

The mine workings plan was reviewed and the conveyor and rail loop will not be built over the site of existing mine workings.

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<sup>1</sup> Fairfull, S. and Witheridge, G. (2003) Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings. NSW Fisheries, Cronulla, 16 pp.

### **3.4 Australian Rail Track Corporation**

#### **3.4.1 Submission**

Under the Country Regional Network Management Agreement, Australian Rail Track Corporation Ltd (ARTC) acts as agent to the NSW Government for the management of the country branch lines in NSW. This includes the Wallerawang–Gwabegar (Mudgee) line which adjoins the proposed development site, being Lots 1 & 2 in DP800003 near Pipers Flat.

From a rail perspective, the project involves:

- Mudgee line siding connection at rail reference 177.650km approx.
- New Balloon Loop facing southbound trains
- Coal unloader
- Upgrade of level crossing 176.545km to lights and bells
- Locomotive provisioning area
- Wagon maintenance area

Those issues which are of concern to ARTC and for which we request Department of Planning to consider in its evaluation of the development proposal are described below.

#### **New Siding Connection for balloon loop**

A siding connection to the rail network requires a formal application to ARTC where the following would be considered without prejudice:

- Risk assessment plan
- Connection Agreement - including the proposed safe working arrangements for trains entering and exiting the balloon loop
- Safety Interface Agreement

#### **Property, Title Searches and Survey**

In order to protect ARTC's facilities, it is important that the Applicant accurately defines and locates the property boundaries between the development and the ARTC's rail corridor, and defines the location of the proposed works development in relation to ARTC's facilities. This requires the Applicant to undertake full title search and physical surveys and to provide the information to ARTC. This information is critical to the assessment by ARTC, of all aspects of the development proposal. It is requested that the consent authority impose the following condition of consent.

The applicant shall provide an accurate survey locating the development with respect to the rail boundary, other boundaries and rail infrastructure. This work is to be undertaken by a registered surveyor, to the satisfaction of ARTC's representative.

### **Level crossing**

With regard to the proposed upgrade of the level crossing (176.545 km) as the main access road for the site. ARTC understands this level crossing was provided at the time of the line's construction for private use only. However, with the proposed redevelopment of the site, the level crossing will be used for a purpose that it was never intended. Therefore to facilitate the change in risk profile of the crossing together with upgrading and ongoing maintenance, ARTC proposes that the crossing be formally closed (Gazetted), with landowner consent, and the enhancement of the crossing and future costs be licensed under an appropriate agreement before construction commences at the site. The upgraded crossing will be provided by the landowner at their cost and licensed by ARTC.

### **Construction Impacts**

During construction, there is a need to ensure that there will be no adverse impact on the integrity of rail's facilities, or the operation of the network. This applies to the overall project together with component parts eg coal unloader, refuelling/provisioning area and other areas of redevelopment adjacent to rail corridor. It is requested that Department of Planning impose the following condition of consent.

A Risk Assessment/Management Plan and detailed Work Method Statements (WMS) for the proposed works are to be submitted to ARTC for review and comment prior to the works commencing on site. It should be noted that ARTC may impose conditions on the methods to be used and require the provision of on-site Safe Working supervision for certain aspects of the works.

- Should any unforeseen risks to rail infrastructure become apparent, the Applicant/Contractor will be required to submit information relating to the attenuation of that risk for approval by ARTC.
- Construction equipment such as scaffolding shall not impinge over the rail corridor.
- No infrastructure or equipment is to be placed or installed on the rail corridor without proper assessment by authorised persons to ensure no impact will occur to rail infrastructure. e.g. signal sighting, safety signage, emergency access.

### **Crane and other aerial operations**

During construction, the use of cranes and other equipment capable of intruding into the airspace above the corridor must be strictly controlled. The developer must demonstrate to the satisfaction of ARTC that all crane and other overhead operations are properly managed, and enter into an agreement with ARTC for such operation.

### **Physical access to rail corridor**

The Applicant may need physical access to the rail corridor in order to undertake the construction and installation works. ARTC needs to ensure that if any access to or works within the rail corridor are

required, that this is done in a safe and controlled manner. The proponent would need to enter into an agreement with ARTC for access to the rail corridor.

ARTC also notes that access to the rail corridor by ARTC, for the purpose of railway maintenance, may be restricted through the proximity of a proposed 2.1m fence to the main line as listed in plan Figure 3-3a, especially near the proposed siding connection. This will require further consultation with ARTC.

### **Drainage**

ARTC wishes to advise that run-off or stormwater discharge from development sites onto the rail corridor is unacceptable, both during and after construction and installation. Any run-off or waste arising from the development activities needs to be properly disposed of and must not be allowed to enter onto the rail corridor.

### **Pipeline — Underground (fuel)**

The proposed underbore of the rail corridor will require a formal application to ARTC. The proponent would need to enter into an agreement with ARTC for the work to proceed and the ongoing occupation of the pipeline.

#### **3.4.2 Response**

These comments are noted and will be discussed further with ARTC prior to detailed design and construction.

### **3.5 Department of Water and Energy**

#### **3.5.1 Submission**

It is noted that the rail loop footprint has changed from the one initially submitted. Although the new footprint is an improvement in relation to the flood plain and creek, the issue of providing adequate spans for openings for flood waters is still very problematic.

### **Hydrology and Flooding**

It is noted that significant flood modelling work still needs to be done in relation to impacts upon the creeks of the site. It is noted that the current preferred option estimates velocities through the proposed openings for Pipers Flat Creek are up to 7m/sec, whereas current stable conditions are 2m/sec. (In the SKM consultants report, (page 31), they say “these results indicate that scour is an issue of concern that may require more consideration”. This is a significant unacceptable increase and any design must reduce this velocity so that the maximum increase should not exceed 50% and there should be little (less than 10%) to no increase in velocity for storms up to 1:20 years. The Department does not consider that extensive armouring of the creek and surrounds is a satisfactory long-term solution. The

best solution is making the opening spans much wider than currently proposed, possibly 3 to 4 times greater.

It is noted that significant velocities for the other creeks will also occur, however if the rail loop is matching the existing openings, then this is reasonable, unless all the current road and rail openings are also expanded.

Any armouring of the creeks and their form, function and maintenance responsibility should be consistent with the guideline: Works and Watercourse Design Guideline, Draft Version 4, April 07.

The statement of commitments (design and construction) is inadequate for this issue.

Using the Landcom publication only is not correct as it is limited in its applications and generally not suitable for instream works:

- For the site generally, describe via a Soil and Water Management Plan (SWP) or Sediment and Erosion Control Plan (SECP) and follow current relevant best practice in accordance with the Landcom publication: Managing Urban Stormwater: Soils and Construction, Vol. 1, 4<sup>th</sup> Edition (2004)
- For high flow areas, use specifically designed controls appropriate for flash flood scenarios.

The statement of commitments (operational) is inadequate for this issue.

Optimum sizing of the openings for Pipers Flat Creek must relate back to a function of tractive forces and velocities that minimise armouring (values as suggested above).

Water quality issues in relation to the 3 to 4 sewerage treatment plants have not been addressed. Water quality for the site should not adversely impact upon the downstream receiving waters. This is particularly important due to the highly permeable soils of the flood plain area of the site.

### **Flora and Fauna.**

The statement of commitments should include the provision of a Vegetation Management Plan for the establishment and maintenance of the proposed revegetation of the creek areas. Restoration of the riparian vegetation should use the current guideline: How to Prepare a Vegetation Management Plan Guideline (DRAFT Version 7: March 2007).

### **General requirements under Parts 2 & 5 of the *Water Act 1912***

If applicable:

- The Water Act 1912 is not a scheduled exemption under section 75U of the Environmental Planning and Assessment Act 1979.

- Excavations that intercept groundwater and bores for dewatering and monitoring purposes require a licence under Part 5 of the *Water Act 1912*. Any application under Part 5 needs to address:
  - The NSW Groundwater Management Policies;
  - Details of any proposed works likely to intercept groundwater;
  - Details of any proposed groundwater extraction, including purpose, location and construction details of all proposed bores;
  - Details of proposed method of disposal of waste water and approval from the relevant approval authority;
  - Details to prevent groundwater pollution so that future remediation is not required; and
  - Details on protective measures for groundwater dependent ecosystems.
- Any proposal to change the course of a river (permanently flowing, third or higher order) or to extract water requires a licence or permit under Part 2 of the *Water Act 1912*. Such proposals require justification in light of the NSW State Rivers and Estuaries Policy and potential environmental impacts.

### 3.5.2 Response

#### Hydrology and Flooding

At the two upstream crossings the increased flood levels are small and will remain on Delta's property. No changes are proposed for the design of the waterway openings at these locations. At the location where the rail loop crosses Pipers Flat Creek downstream, the flood level increases are up to 2.2 m. Although this appears to be a large increase in flood levels, the embankment height of the proposed rail line is more than 15 metres above the peak water elevation for the 100 year design flood. This would be expected to be manageable, but consideration would be given to additional flood capacity through the embankment at the detailed design stage. This may be achieved either through the use of additional flood relief culverts, or through enlargement of the main opening.

Peak flood velocity provides an indication of the likelihood of scour occurring. The largest speed is found through the Thompsons Creek crossing of the proposed embankment where it reaches 4.9 m/s. Through the Irondale Creek crossing of the proposed embankment, the speed reaches 3.7 m/s. Upstream of the rail loop along Pipers Creek, the peak speed reaches 3.3 m/s and as Pipers Creek exits the rail loop, the speed reaches 3.7 m/s. Alternative designs to manage scour potential will be developed at the detailed design stage.

The SWP will assess the need for in-stream controls for flash floods during construction.

As noted in Section 3.2.6 of the EA, all wastewater from the toilet, kitchen, showers will be collected and treated in an aerobic treatment process and used for site irrigation. An irrigation management plan

in accordance with EPA guidelines will be prepared prior to construction beginning. This will be reflected in the Statement of Commitments.

### **Flora and Fauna**

Reference to the vegetation management plan (Version 7, March 2007) will be added to the Statement of Commitments.

### **Water Act**

The construction of monitoring bores for groundwater will require approval under the Water Act, 1912.

## **3.6 Western Region Development Committee**

### **3.6.1 Submission**

The Western Region Development Committee does not oppose the planned development, and offers comments and recommendations as follows:

- The Environmental Assessment (EA) proposes upgrading the existing level crossing to active control through the installation of flashing lights and bells, and suggests that there is sufficient storage to accommodate vehicles waiting to use the crossing or enter Pipers Flat Road. Considering the number of employee and other construction related vehicles accessing the site during construction, and particularly during the peak periods at shift changes, there is a reasonable probability that a queues will form from the level crossing onto Pipers Flat Road whilst a train proceeds through the crossing. This has the potential to create a hazardous situation on Pipers Flat Road. It is also possible for a long vehicle leaving the site and waiting to turn onto Pipers Flat Road to force other vehicles to queue across the level crossing. Therefore, the level crossing should be upgraded before construction at the site begins, and that a queuing treatment be included in the upgrade that accords with Australian Standards AS1742.7 (2007) Box Markings.
- The EA does not provide an indication of the intersection treatment of the site access road and Pipers Flat Road (MR531). However, from the information provided in various areas of the EA, it is envisaged that a channelised right turn lane (Type CHR) and auxiliary left turn lane (Type AUL) will be required to cater for the potential conflict between construction workers accessing the site and other Pipers Flat Road traffic. In addition, the 95% queue length of vehicles accessing the site (and delayed a train) will need to be determined and sufficient storage area clear of though traffic provided on Pipers Flat Road.
- The location of any gate or security/guard house at the entrance to the site will need to be located to ensure queued vehicles can be stored clear of the level crossing.
- The EA proposes access to the site by B-Doubles for fuel deliveries. At present Pipers Flat Road is not a restricted access vehicle route, and will require application and gazettal before use by

vehicles other than general access vehicles. In addition, the access road and intersection will require design and construction to accommodate the two-way movement of these vehicles and cater for concurrent swept paths.

- The access should be sealed to the property boundary, as a minimum. During construction it may be necessary to install a vehicle wheel wash to reduce the quantity of mud and other debris from carriage onto Pipers Flat Road.

### **3.6.2 Response**

The level crossing which will be provided for access to the site will be constructed to meet ARTC requirements. Queuing treatment will be included in this design and it will also include design for road works. These works will be undertaken prior to construction beginning. At this stage it is possible a right turn bay and a left turn deceleration lane will be required, but this will be subject to further traffic analysis. The need for these lanes and associated road works will be addressed in the Traffic Management Plan prepared as part of the design for rail crossing and road access.

It is acknowledged that B-doubles are currently not permitted on Pipers Flat Road as it is not a Restricted Access Vehicle Route. Further evaluation of the need for vehicles other than General Access Vehicles will be undertaken during design. If required, an application for gazettal will be made prior to construction beginning. Any intersection design will allow for two way access of B-doubles and for appropriate turning paths.

The need for a vehicle wheel wash will be evaluated in the context of whether vehicles carrying fill or other earthworks equipment will travel to the site via Pipers Flat Road and the nature of the internal road network during construction.

## **3.7 Roads and Traffic Authority**

### **3.7.1 Submission**

The Roads and Traffic Authority (RTA) does not oppose the proposed development and concurs with the comments and recommendations proposed by the Regional Development Committee Western Region in letter to the Department of Planning dated 5 July 2007.

All works associated with the development and conditions of development consent are to be at no cost to the RTA. Any works within the road reserve of a classified road may require the developer entering into a Works Authorisation Deed with the RTA, and/or the issuing of a Road Occupancy Licence.

### **3.7.2 Response**

It is acknowledged that road works directly associated with the project and which, but for the project, would not otherwise have been undertaken, will not be undertaken at RTA's cost.

Appropriate approvals under the Roads Act will be sought and obtained from RTA prior to construction beginning.

### **3.8 Sydney Catchment Authority**

#### **3.8.1 Submission**

The EA has provided information that addresses the issues of concern to the Sydney Catchment Authority (SCA) during the construction and operation stages of the proposal. These include water-quality impacts, soil and water management practices during construction, assessment of creek crossings and realignment, opportunities for improving the quality of watercourses, controls to prevent coal spillage from polluting waterways, controls to prevent and manage fuel spills and sustainability of systems and management measures over the long term. The SCA notes and supports the following identified in the EA:

- Maintaining the existing creek morphology through the use of appropriately designed flood infrastructure (like culverts and bridges) as the preferred option as against creek realignment works;
- Creek restoration and revegetation of riparian zones on Irondale Creek, Thompsons Creek and Pipers Flat Creek in proximity to the proposed new infrastructure to improve the current level of degradation and minimise adverse impacts due to the proposal;
- Creek crossing structures designed for 100-year Average Recurrence Interval (ARI) event;
- Measures to control erosion and sediment runoff during construction to be documented in a Soil and Water Management Plan (SWMP) in accordance with the guidelines ‘Soils and Construction, (LANDCOM, 2004)’;
- Design considerations and measures to prevent and control coal and fuel/oil/hydrocarbons spillage;
- Proposed surface and groundwater monitoring program;
- Operational systems and management measures relating to long term operational sustainability and management of the site; and
- Preparation of site specific construction and operation Environmental Management Plans (EMPs).

The application is within the Pipers Flat Creek sub-catchment which drains into the Upper Coxs River catchment that is part of Sydney’s drinking water catchment. It is therefore important that the proposed facility is constructed and operated in a manner that does not adversely impact the quality of surface and groundwaters beyond the boundaries of the site.

The EA states that Delta Electricity is investigating opportunities for using furnace bottom ash from the power station to meet fill requirements for the embankments proposed at the site. The SCA is concerned that this may have adverse water-quality impacts on the creek environment. It is therefore

recommended that clean imported fill be used as an alternative material. However, should the use of furnace ash be approved by the Minister, the SCA requests that this be supported by appropriate risk and environmental assessment studies to ensure there are no adverse impacts on the receiving water quality of creeks and the ecological integrity of the environment. The SCA recommends that any imported fill material at this site to be restricted to 'Virgin Excavated Natural Material (VENM) (e.g. clay, gravel, sand soil and rock)' that is not mixed with any other waste and that:

- Has been excavated from areas that are not contaminated, and that does not contain sulphide ores or soils, or
- Consists of excavated natural materials that meet such criteria per the NSW DEC (2004) Environmental Guidelines: Assessment, Classification & Management of Liquid & Non Liquid Wastes.

The SCA would appreciate being involved in further environmental assessment and ongoing consultation processes of the application and have the ability to undertake site inspections as necessary. The SCA requests the following information to be provided with regards to the environmental assessment:

- Risk and environmental assessment studies for adverse impacts on water quality if furnace bottom ash from the power station is proposed to be used as fill material in the embankments;
- Details of the proposed works for SCA's information/comments following the completion of detailed design to enable a review of potential impacts on water quality;
- Details of proposed creek restoration/revegetation works;
- Copies of the SWMP and construction and operation EMPs for review and comments; and
- Copies of submissions received from other agencies and organisations.

### **3.8.2 Response**

Further consideration will be given to the use of furnace bottom ash as part of the fill required for embankments. Should material other than VENM be used for fill, it will be assessed against the requirements of the DEC 2004 guideline noted above. If furnace ash is to be used, appropriate environmental studies will be undertaken to demonstrate minimal chance of impacts on receiving water quality and ecological integrity of the creek system and the results of these studies provided to the Department.

### **3.9 Lithgow Council**

#### **3.9.1 Submission**

I wish to advise that Council has resolved the following.

“That Council not support the location of Coal Unloader until an iron clad guarantee is provided to the Coal Mines at Angus Place and Springvale Colliery, that contracts will be extended.”

I trust that this matter can be taken into consideration and measures can be put in place to alleviate Council’s concerns.

#### **3.9.2 Response**

Delta sources its coal supplies through open, competitive, tender processes and is not, therefore, in a position to guarantee contracts to any particular supplier.

## **4. Community Submissions**

Members of the community responded to the Environmental Assessment in the form of submissions forwarded to the Department of Planning. Fifty submissions were received and responses to these submissions are provided below. The submissions are reviewed according to the subject classification developed in the data base, as outlined in Appendix A.

### **4.1 Air Quality and Trains**

#### **4.1.1 Submissions**

Four of the submissions received addressed this issue.

General concern was expressed about diesel fumes along the rail line past houses, especially in Portland, and on the rail loop at the site.

Comments were also made about coal dust from uncovered coal wagons.

#### **4.1.2 Response**

Air quality from trains on the rail loop was addressed in Section 5.4 and Appendix E of the EA. Emissions from locomotives as part of the site operations were estimated to be small (two to three orders of magnitude less than those of the two power stations) and would result in a very small addition to the emissions from the power station operations. The impact of the existing power station emissions on local air quality was not significant and did not result in any exceedances of air quality criteria in the area. The very small increase in emissions from locomotive exhausts in the site operations would have no significant effect on air quality in the receiver area.

The operation of trains on the rail network through towns like Portland is a matter for the rail operators and the regulators. Train operators would be required to conform with emission criteria from locomotives and with the ARTC Environment Protection Licence for the operation of the rail line. Similarly, the management of coal dust from uncovered wagons would be a requirement for the rail operators.

### **4.2 Consultation Process**

#### **4.2.1 Submissions**

Eight of the submissions received addressed this issue.

The main objections related to the lack of consultation, especially prior to the acquisition of the land, the limited exhibition time provided, inadequate or misinformation about the project, especially in Portland, and a poor response to the option suggested by the community at Baal Bone.

#### **4.2.2 Response**

Delta undertook a site selection process which is outlined in Section 2.2 of the EA. Initial studies were undertaken in 2002, and more detailed selection processes in 2005. The preferred site was identified and the process of land acquisition undertaken during 2006. The commercial nature of land acquisition meant that the general public was not informed during this process.

Once the land for the rail unloader had been acquired and easement negotiations advanced with Centennial Coal for the conveyor alignment, a process of discussion with the community began. The consultation studies were described in Section 4.2 of the EA. This included the distribution of newsletters in Portland, Wallerawang, Pipers Flat, Blackmans Flat, Cullen Bullen and Lidsdale, and the holding of information sessions in 2006. The information provided at these sessions and in the newsletters was as detailed as could be provided at that stage of the project development.

The exhibition of the Environmental assessment was undertaken by the Department of Planning from 31 May to 2 July 2007. This period of time complies with the requirements of the EP&A Act. At this time Delta distributed another newsletter to Portland, Wallerawang, Pipers Flat, Blackmans Flat, Cullen Bullen and Lidsdale and provided an advertisement and information on the project in the Lithgow Mercury.

Section 2.2 indicates that consideration was given in 2002 to an option of railing coal to the site at the Baal Bone colliery and then transporting by road or conveyor to the power station. This option was not carried forward to a more detailed assessment in 2005 due to the wish to avoid trucking and the high cost and environmental impacts of conveyors. During the preparation of the EA, at the request of the community, further consideration was given to the Baal Bone Option. The studies undertaken showed that the Baal Bone option would have a greater environmental impact and cost than the preferred option, and was not considered further.

### **4.3 Climate Change**

#### **4.3.1 Submissions**

Two of the submissions received addressed this issue.

The objections indicated that the EA failed to consider greenhouse emissions from the project site or from the coal to be burnt at Mt Piper Power Station. It was also suggested that the construction of the rail unloader will facilitate the expansion of the Mt Piper Power Station.

#### **4.3.2 Response**

There was no requirement from the Director-General to consider greenhouse gas emissions from the site operation.

It is clear that greenhouse gas emissions would result from the use of diesel to operate trains between coal mines and the unloader and electricity to operate the coal conveyor. Diesel and electricity would also be used for construction of the site.

The use of diesel for trains and electricity for the conveyor would be offset by the reduced number of trucks (and diesel) carrying coal on the roads.

The greenhouse emissions from coal burnt at the power station is not relevant to this project. Regardless of how it gets there, the same amount of coal will be burnt and the impacts of burning any extra coal should be assessed as part of any proposal to expand or upgrade the power station.

The rail unloader project is independent of any possible expansion of the power station. Delta has been investigating the future need for coal supplies, both for minor contracts and in the event that coal is not available (eg through accident or mine management problems) from the major contract locations. A key consideration to obtaining coal from more distant mines is the mode of transportation. Economics limits the use of conveyors to relatively short distances and additional supply via the road system above the current levels does not represent an economically viable or socially desirable option. The installation of a coal rail unloader in close proximity to the power station provides another mode of transport to provide coal for the increase in coal requirements in the short term and for future, long term security of coal supplies.

#### **4.4 Cumulative Effects**

##### **4.4.1 Submission**

One of the submissions received addressed this issue. It was suggested that cumulative effects on Blackmans Flat have not been addressed.

##### **4.4.2 Response**

Cumulative effects of certain key issues, especially noise and air quality, were addressed in the EA. There would be no direct effect on Blackmans Flat from the rail unloader project and there is no need for this study to address the cumulative effects on Blackmans Flat.

#### **4.5 Dust and Air Quality**

##### **4.5.1 Submissions**

Six of the submissions received addressed this issue.

Concerns expressed related to uncovered loads on the site and stored coal (stockpiles). Effects on agricultural lands due to dust clouds spreading were suggested, and lack of dust monitoring at nearby residents was of concern.

## **4.5.2 Response**

Effects from coal dust were addressed in the development of the concept design and in the air quality assessment in Section 5.4 and Appendix E of the EA.

Chapter 3 of the EA notes that:

- The rail unloader will be within an enclosed building, and dust suppression (using water) and ventilation systems will be installed within the building;
- No stockpiling of coal would be allowed outside of the unloader building.

The air study modelled potential impacts on up to 12 sensitive receivers located west, south and east of the site. The parameters assessed were PM<sub>10</sub> and TSP and the results showed that air quality criteria would be met, even without the proposed mitigation measures.

No assessment was made of dust clouds spreading to agricultural lands as no dust clouds would result from the development.

No dust monitoring for existing conditions was undertaken as the assessment methodology does not require this process. Dust gauges will be located at key locations to determine background levels prior to construction and to monitor potential impacts during construction and operation.

## **4.6 Inadequacy of the EA**

### **4.6.1 Submissions**

Twelve of the submissions received considered the EA as inadequate. This comment was in general, but also related to flora and fauna, rail impacts and site selection. A number also commented on wrong naming of roads or rail lines.

### **4.6.2 Response**

The EA was prepared according to the requirements of the *Environmental Planning and Assessment Act, 1979*.

## **4.7 Economic Impacts**

### **4.7.1 Submissions**

One of the submissions received addressed this issue.

It was suggested that the project was a large investment for little local economic gain (in terms of level of employment).

#### **4.7.2 Response**

An economic assessment of the project was not required as part of the EA, although the number of jobs derived from the construction and operation of the project were described.

### **4.8 Effects on Agriculture**

#### **4.8.1 Submissions**

Four of the submissions received addressed this issue.

It was suggested that the project represented a loss of prime agricultural (grazing) land and there was a potential for other grazing land and feed crops for cattle in the area to be contaminated by coal dust.

#### **4.8.2 Response**

The land proposed for the rail unloader is currently used for limited cattle grazing and the loss of the land for that purpose would be of little significance to agricultural production in the region.

The potential effects of coal dust on feed crops was addressed in Section 4.5.

### **4.9 Effects on Flora and Fauna**

#### **4.9.1 Submissions**

Eight of the submissions received addressed this issue.

Concerns were expressed over possible impacts on the Bathurst Copper Winged Butterfly which is known from the region.

General comments on noise impacts on fauna were raised, along with the implications of impacts on a Wildlife Refuge to the west of the project site, effects on forests and streams and on the listed Capertee Stringybark.

The possible effects of the development on Rainbow Trout and Brown Trout which are thought to use Pipers Flat Creek were raised. Of concern was the ability for the species to navigate around the site.

#### **4.9.2 Response**

A full assessment of the potential impacts of the proposal on the Bathurst Copper Winged Butterfly and the Capertee Stringybark was provided in Section 5.2 and Appendix C of the EA.

Potential noise effects on fauna were not considered as the noise levels generated from the proposal would not be such as to affect any particularly noise sensitive animals.

The wildlife refuge is on Centennial Coal's land, adjacent to Pipers Flat Creek well upstream of the project. There is no potential effect from the site construction or operation on the wildlife refuge.

No changes are likely to occur within the waterway, in that no diversions or blockages are proposed. Bridges and suitably designed culverts will ensure that fish passage is not affected and no impacts are anticipated for rainbow or brown trout. Appropriate management measures will be put in place to ensure the probability of impacts during construction and operation will be minimal.

#### **4.10 Effects on Water Quality**

##### **4.10.1 Submissions**

Fourteen of the submissions received addressed this issue.

Major concerns were expressed over:

- Potential impacts on the existing water table and the underground water stream;
- Impacts on a category 1 watercourse and Sydney's drinking water catchment;
- Potential runoff from the areas of fill to be brought to the site;
- Potential increased salinity levels in an area already allegedly subject to excessive salt levels;
- The lack of water sampling and monitoring and the reference to old data from areas other than at the project site;
- The possible effects of flooding on the water catchment;
- The inadequacy of the mitigation measures proposed, especially settling ponds, and the possible effects of fuel leakage or discharge on downstream water quality.

##### **4.10.2 Response**

Water quality was addressed in Section 5.1 of the EA.

It was noted that to manage the water quality in Pipers Flat Creek during both construction and operation of the rail unloader, appropriate water control devices would be required.

During the construction phase general measures to control erosion and sedimentation would be implemented prior to construction beginning. These measures would be documented within a Soil and Water Management Plan (SWMP), prepared as part of the Construction Environmental Management Plan. It would be prepared in accordance with the principles and practices in Soils and Construction (Landcom, 2004).

Appropriate soil erosion and sedimentation controls would need to be in place during the period of construction until all ground surfaces are stabilised and re-vegetated. The SWMP would include detail on all these measures, including locations.

The key operational water quality measure and environmental safeguard would be the capture and treatment of the water discharged from the washdown areas and the dust control areas at the unloader.

It is proposed to contain this runoff within a water quality detention basin that would be located adjacent to the unloader site. Following settlement in the basin, the water would be used for irrigation on the site or discharged directly to the creek.

All exposed surface areas would be revegetated as soon as practicable and these areas maintained during the life of the project. The vegetation program would include grassing of the railway embankments to stabilise the batters against erosion. To assist in managing runoff from the grassed embankments, cut drains and toe drains will be installed along the foot of the embankment. Runoff from these areas will be directed through flow retardation areas and into the creek at specified locations.

Although spills of diesel or coal are very unlikely to occur, some risk of the accidental spillage of hazardous materials would always remain. Diesel would be stored according to the appropriate requirements and clean up provisions provided. Coal spillage would be contained, barriers put in place between the spillage and the creek system and manual clean up processes launched.

The alluvial soils overlying the Permian sandstone at the site have high permeability and could facilitate contaminants reaching groundwater. A coal spill does not pose a significant threat to groundwater as long as it is manually removed prior to a rain event. The major threat to groundwater quality at the site is hydrocarbon spillage/leakage from storage tanks, fuel lines and the bowser. Preventative measures for this scenario, including bunding, pipe welding, and double-walled storage tanks are described in Section 6.2 of this report. Refuelling and fuel transfer should not take place during significant rain events so as to minimise the risk of overflow of bunded areas, should a leak/spill occur. An emergency response plan will be prepared for the unlikely event of a hydrocarbon spill/leak that reaches groundwater. Depending on the volume of hydrocarbons released into the groundwater, the remedial actions may include removal of overlying soils and surface water treatment.

Surface water quality monitoring would be undertaken to ensure that the water quality management devices on site are functioning as expected. The surface water quality monitoring program would comprise samples in Pipers Flat Creek upstream and downstream of the likely discharge from the detention basin.

A groundwater monitoring network will be installed at the project site, consisting of three bores. One bore should be located upgradient of the hydrocarbon storage areas, and two bores should be located downgradient of the hydrocarbon storage locations. These bores should be monitored on at least two separate occasions spaced at least 3 months apart prior to commencement of construction. After construction is complete, annual monitoring is proposed.

## **4.11 Issues with the Environmental Planning and Assessment Act**

### **4.11.1 Submission**

One of the submissions received addressed this issue. It was concerned about the project being inconsistent with the requirements of the Act as it related to competing land uses.

### **4.11.2 Response**

It is acknowledged that the site of the rail unloader will be changed from cattle grazing to the proposed use. The land is zoned Rural (General) 1 (a) under the Lithgow City LEP. This zone provides flexibility while protecting rural lands and other use such as certain industrial development, where appropriate, are permitted. The proposed land use is consistent with the zoning and other local and regional activities.

## **4.12 Health**

### **4.12.1 Submissions**

One of the submissions received addressed this issue. It was concerned with the effects of noise on the physical and mental health of residents.

### **4.12.2 Response**

Noise impacts were assessed in Section 5.5 and Appendix F of the EA.

Sensitive receivers near to the proposed coal unloader currently experience noise levels in the low 20 dB(A) range at night. While the assessment showed that noise emissions would comply with environmental requirements of the INP, large noise increases above existing levels may still be cause for concern with nearby residents, especially during the night time period.

A range of measures will be put in place to minimise the impacts of on-site train noise at night. Noise mitigation measures proposed include actions to reduce noise at source and to consult with the community over means by which noise can be managed, as detailed in Section 5.5. Stress and anxiety associated with perceived impacts can be reduced through communication with the community to inform individuals about the management measures employed to minimise impacts and to provide opportunities for feedback.

## **4.13 Heritage**

### **4.13.1 Submissions**

Five of the submissions received addressed this issue.

The comments received related to the potential impacts on known sites and PADs and the need for further in-depth investigation of those sites. Pipers Flat was identified as of significance to indigenous groups and this should be respected.

#### **4.13.2 Response**

Indigenous heritage issues were addressed in Section 5.3 and Appendix D of the EA. It was clearly identified that all affected sites and PADs will be further studied through a program of archaeological subsurface testing in accordance with guidelines agreed with DECC. The testing will aim to determine the nature and significance of any Aboriginal cultural material present at each location. All work will be undertaken in consultation with the relevant Aboriginal groups.

#### **4.14 In Favour of Project**

##### **4.14.1 Submission**

One of the submissions received was in favour of the project.

##### **4.14.2 Response**

This is acknowledged.

#### **4.15 Land Use**

##### **4.15.1 Submissions**

Six of the submissions received addressed this issue.

Concerns were expressed on the change of land use from rural to industrial. The proposal is not consistent with the rural zoning and the rural ambience of the area and the use of prime agricultural land. It was requested that the proposal should be confined to the land already used by the power station on the northern side of the ridge. A comment was also received about the land being zoned 1A not 1C.

##### **4.15.2 Response**

As noted in an earlier response, the land use at the site of the rail unloader will be changed from cattle grazing to the proposed use. The land is zoned Rural (General) 1 (a) under the Lithgow City LEP. This zone provides flexibility while protecting rural lands and other use such as certain industrial development, where appropriate, are permitted. The proposed land use is consistent with the zoning and other local and regional activities.

Consideration was given during the site selection phase (described in Section 2.2) to using the existing power station land. Other constraints such as access to an existing rail line, conveyor lengths and general access from the rail line to the site made these options less favoured.

The reference to 1( C) zoning related to a discussion that suggested that other Rural Small Holdings are not likely to be developed in the area near the proposed rail unloader and a future land use conflict will not result.

#### **4.16 Noise on the Site**

##### **4.16.1 Submission**

Six of the submissions received addressed this issue.

It was suggested that only limited noise monitoring was done, and it was in inappropriate locations. It was also asked why Blackmans Flat was not included in the assessment, especially in relation to conveyor noise as it passes near the power station. It was suggested that a noise limit of 65 dB(A) was too high, compared with other industries which require only 42 dB(A).

##### **4.16.2 Response**

Noise considerations were addressed in Section 5.5 and Appendix F of the EA.

The noise study was undertaken in accordance with the DECC's Industrial Noise Policy. Monitoring sites were selected to allow an adequate description of the background noise at sensitive receivers and there was no requirement to locate the monitors at specific locations.

Blackmans Flat was not included in the assessment as the potential for impact from this development, including the conveyor operations, was nil.

The only reference to 65 dB(A) in the EA was the ARTC Rail Traffic daytime criterion of  $L_{Aeq\ 15hr}$  of 65 dB(A). The project specific criterion for the rail unloading facility was  $L_{Aeq\ 15hr}$  of 35 dB(A), which is less than the reference to other industries in the submission.

#### **4.17 Noise from Trains**

##### **4.17.1 Submissions**

Fifteen of the submissions received addressed this issue.

Train noise issues raised comprised:

- Train noise though Portland has increased in recent years and this will make it worse;
- The current train activities at night already disturb sleep;
- Only limited noise monitoring was done, and none of that was in Portland. Noise modelling was only done at the site and not at Portland;
- Noise modelling assumed 2 locomotives, but it is likely that 3 locomotives would be used;

- There will be increased train movements through Portland, and this will increase noise levels, especially at night;
- Operation of the site and trains should be confined to day time only.

#### **4.17.2 Response**

Noise considerations were addressed in Section 5.5 and Appendix F of the EA.

The noise assessment for the project related to construction and operational noise from the rail unloader site. There is no requirement as part of this project to assess noise levels from rail operation on an existing, approved rail line. The operation of trains on the rail network is a matter for the rail operators and the regulators, where train operators would be required to conform with noise criteria from locomotives and with the ARTC Environment Protection Licence for the operation of the rail line.

Scheduling of trains is undertaken by or on behalf of the track owners and must take into account a range of factors including the availability of rolling stock, train speeds, the production schedules of suppliers, commitments to a range of customers (e.g. export coal through Newcastle or Port Kembla) requests for paths from a range of train operators and interactions with traffic on other corridors. Nevertheless, Delta will, in seeking coal supplies, state its preference for rail deliveries to the WRCU to be made during day and evening hours.

### **4.18 Not in Favour of the Project**

#### **4.18.1 Submissions**

Twenty six of the submissions stated they were not in favour of the project.

#### **4.18.2 Response**

The reasons for not favouring the project are addressed in other sections of Chapter 4 of this report.

### **4.19 Property values**

#### **4.19.1 Submissions**

Eight of the submissions received addressed this issue. All indicated that property values would decline due to the project, and one at least indicated that a valuation done had already demonstrated that.

#### **4.19.2 Response**

The design and location of the project are such that the impacts on neighbourhood amenity would be minimal. Given the limited impacts predicted from the proposal and the appropriate management of those impacts, there are no reasons why the proposal would affect local property prices.

## **4.20 Road Traffic**

### **4.20.1 Submissions**

Three of the submissions received addressed this issue.

It was noted that B-doubles were not permitted on Pipers Flat Road and there would be an increase in truck traffic if the spoil were to be carried to the site via the public road. One did note, however, that the use of rail would reduce the number of coal trucks on the road.

### **4.20.2 Response**

It is acknowledged that B-doubles are currently not permitted on Pipers Flat Road as it is not a Restricted Access Vehicle Route. Further evaluation of the need for vehicles other than General Access Vehicles will be undertaken during design. If required, an application for gazettal will be made prior to construction beginning. Any intersection design will allow for two way access of B-doubles and for appropriate turning paths.

It is intended to use internal roads to bring spoil to the site and an increase in truck traffic on Pipers Flat Road will only occur if internal roads are not available. Should the transport of fill via the private haulage road not be possible, then an average of 176 trucks per day would be required to use Pipers Flat Road. Although this volume would not cause the nominal capacity of the Pipers Flat Road to be exceeded, the effect on road capacity and amenity through towns like Wallerawang, and the impacts of increased truck numbers on road surface condition, would be assessed before this level of truck activity on public roads is considered.

## **4.21 Site Selection Process**

### **4.21.1 Submissions**

Seventeen of the submissions received addressed this issue.

All submissions suggested that one of the other sites evaluated should have been chosen. Many suggested that a site at Ball Bone colliery would be better, while others recommended Blackmans Flat.

Some of those that suggested Baal Bone Colliery considered that the assessment presented to community representatives at a meeting was inadequate as it did not look at the conveyor alignment wanted.

### **4.21.2 Response**

A preliminary site selection study was undertaken by Delta in 2002 to assess possible locations for coal unloading. The study considered the existing coal supplies and the associated contracts and how these may be supplemented in the future. This future supply was considered on a short term and long term basis.

The sites considered for rail unloading facilities are described Section 2.2 of the EA. Recommendations for preferred sites were not made in this study, but a number of conclusions were able to be drawn, namely:

- Rail loops are preferable to sidings from an operational volume and efficiency (cost) point of view;
- Conveyors are preferred over trucking to transport coal from the unloader to the power station;
- Most options around Wallerawang using existing spur lines require rail access from the Main Western Line, with possible limits to rail operations; and
- Mt Piper is preferred to Wallerawang as it has a longer asset life and better tolerance of fuel specifications.

Delta undertook a detailed feasibility and site selection study in 2005 in which site options identified at the preliminary stage were reviewed and assessed against a set of engineering, environmental and financial (capital and operating) criteria. From this process four options were identified and assessed in detail and ranked to enable a preferred option to be selected.

The feasibility and site selection study found that Option 1 – Cullen Bullen, Option 3 – Pipers Flat and Option 4 – Portland provided potentially favourable options for the facility. Option 2 – Wallerawang was the least favoured location due to the cost and operation of the conveyor and the generally negative environmental effects compared (including on Blackmans Flat) with the other options evaluated.

Section 2.2 indicates that consideration was given in 2002 to an option of riling coal to the site at the Baal Bone colliery and then transporting by road or conveyor to the power station. This option was not carried forward to a more detailed assessment in 2005 due to the wish to avoid trucking and the high cost and environmental impacts of conveyors. During the preparation of the EA further consideration was given to the Baal Bone Option. The studies undertaken showed that the Baal Bone option would have a greater environmental impact and cost than the preferred option, and it was not considered further.

#### **4.22 Train safety, Severance and Level Crossings**

Twelve of the submissions received addressed this issue.

The main objection was that safety at the level crossing in Portland would be a problem and the frequency and duration of trains using the line would result in safety and severance effects and delays for emergency services.

#### **4.22.1 Response**

The safe operation of the level crossing at Portland is a matter for the rail operator and ARTC to consider. Appropriate crossing designs are available, and it is the design would need to consider the frequency of trains using the line.

As noted in Section 3.3 of the EA, in the early years of operation (from 2009 to 2014), it is anticipated that the facility would be required to handle about 2 million tonnes per year, with generally two train services per day for 6 days or 12 services per week. Typical train lengths would be 55 wagons (1,050 m), with each train carrying about 4,250 tonnes of coal.

In the medium term (2015 to 2030) the coal requirements would be about 4 million tonnes per year, with 3 trains per day for 6 days and 2 trains on the 7<sup>th</sup> day, or 20 trains per week. At peak times (ie when coal is not available from local mines) and beyond 2030, volumes may reach up to 8 million tonnes per year, which could result in up to 6 trains per day for 5 days and 5 trains per day for the remaining two days, totalling 40 trains per week.

The facility would be designed to run seven days per week, with the possibility that some deliveries would occur during night time hours due to the availability of train slots. The existing schedule on the line provides slots for 5 trains running north and 5 running south over 24 hours. The delivery of coal to the unloader would be from the north and the operators would need to apply for slot times, consistent with the existing operations on the line.

The frequency of trains identified above suggests that severance would not be a problem on the rail crossing through Portland. Assuming a train speed of 30km per hour, the delay at the crossing for each train would be about 2 -3 minutes. At the very worst case in the longer term there could be 6 trains per day in each direction. This represents 12 train movements which would result in the crossing being closed for about 30-40 minutes in a 24 hour period.

#### **4.23 Visual Impact**

##### **4.23.1 Submissions**

Eight of the submissions received addressed this issue.

Most objections related to the need for the development to be separated from residents by the escarpment which protects them from the existing power station. Some residents suggested that no screening is proposed and they would be able to look into the development, especially at coal stockpiles.

##### **4.23.2 Response**

The visual impact assessment was considered in Section 5.6 of the EA.

The visual impact of the proposed railway loop, coal unloader and coal conveyor would be high for the Premier Farms property and users of the Pipers Flat Road, as these receivers would experience changes to the visual environment in the foreground. Other properties to the south of Pipers Flat Road would generally have limited views of the coal unloader, due to screening by topography or vegetation and the potential impact would be low.

There may be some views of the coal conveyor in the foreground to middle ground. Generally the undulating terrain of the surrounding area and the existing vegetation would prevent significant visual impacts. Further, it would be specified that the colour schemes used for structures associated with the facilities be selected to blend with the natural background. No coal stockpiles will occur.

Landscape planting is proposed for the rail embankments and for site buildings and screening vegetation along the southern site boundary would assist with screening views from Pipers Flat Road. Vegetation would be retained where possible along the route of the coal conveyor, and revegetation undertaken where possible to minimise middle to long range views of this structure as it ascends the ridge.

On the basis of implementing these mitigation measures, residual visual impacts would be regarded as low.

#### **4.24 Water Quality and Flooding**

##### **4.24.1 Submissions**

Four of the submissions received addressed this issue.

It was suggested that the flood assessment was inadequate as the area is prone to flooding and the rail embankments would be scoured and washed away.

##### **4.24.2 Response**

The flood study undertaken for the project was described in Section 5.1 and Appendix B of the EA.

The model results show an increase in 100 year flood levels at several locations, namely:

- upstream of the proposed embankment where Pipers Flat Creek enters the proposed rail loop. This remains on Delta's property;
- upstream of the existing rail embankment at the Thompsons and Irondale Creek crossings. This increase is between the existing rail embankment and the road, on Delta's property and is due to the provision of the new embankment constricting the movement across the floodplain; and
- upstream of the proposed embankment where Pipers Flat Creek exits from the proposed rail loop.

At the last location the flood level increases are up to 2.2 m with regard to flood level. Although this appears to be a large increase in flood levels, the embankment height of the proposed rail line is more

than 15 metres above the peak water elevation for the 100 year design flood. This would be expected to be manageable but consideration would be given to additional flood capacity through the embankment at the detailed design stage. This may be achieved either through the use of additional flood relief culverts, or through enlargement of the main opening.

Peak flood velocity provides an indication of the likelihood of scour occurring. The largest speed is found through the Thompsons Creek crossing of the proposed embankment where it reaches 4.9 m/s. Through the Irondale Creek crossing of the proposed embankment, the speed reaches 3.7 m/s. Upstream of the rail loop along Pipers Creek, the peak speed reaches 3.3 m/s and as Pipers Creek exits the rail loop, the speed reaches 3.7 m/s. Alternative designs to manage scour potential will be developed at the detailed design stage.

The design of the rail loop indicates that flooding can be managed adequately for the 100 year flood, and consequently for flood events up 100 years. Further consideration will be given during detailed design to ensure that the flood levels and peak flow resulting from the design of the bridge/culvert where Pipers Flat Creek leaves the rail loop are satisfactory. If increasing the area results in a more beneficial result in flood levels and flows, this will be considered in the design.

## 5. Statement of Commitments

### 5.1 Introduction

The environmental impacts of the proposal were assessed in the Environmental Assessment (EA) and measures to manage those impacts were outlined and incorporated into the Statement of Commitments. These mitigation measures, along with any conditions of approval issued by the Minister for Planning, would be incorporated into the detailed design as well as, where appropriate, the preparation of construction and operational Environmental Management Plans (EMPs) for the project.

Following consideration of the submissions made to the Environmental Assessment Delta does not propose any changes to the proposed design, construction or operation of the rail unloader. There are, however, a number of changes proposed to the Statement of Commitments, intended to provide a greater degree of environmental protection during the construction and operation of the project.

### 5.2 Construction Environmental Management and Mitigation

Environmental management commitments proposed for implementation during the construction phase are shown in Table 5-1 below. These commitments will be developed during the detailed design phase and included in the construction EMP (CEMP) which would be required prior to any construction activities commencing. The CEMP would detail operating conditions and temporary environmental protection measures to mitigate the impact of construction activities. Other commitments may form part of the terms of contract with the companies or consortium responsible for the project construction, or may be further assessed at the detailed design stage.

**Table 5-1: Environmental Management Measures – Design and Construction**

Objective	Action
<b>Environmental Management</b>	
Manage hours of construction work	Proposed hours of construction are 7.00am – 6.00pm Monday to Friday, 8.00am – 1.00pm Saturday, with no work on Sundays or public holidays. The construction EMP will outline protocols for notifying relevant authorities and local residents prior to any works occurring out of normal construction hours. Out of hours work may be required under certain circumstances (e.g. to minimise impacts on active operational services, to minimise impacts on existing traffic, to respond to emergencies), and unavoidable construction constraints.
Minimise impact of construction on surrounding area	A Construction Environmental Management Plan (CEMP) would be prepared and implemented to guide construction activities as outlined below in the following commitments: <ul style="list-style-type: none"> <li>■ Road Traffic &amp; Transport</li> <li>■ Air Quality</li> <li>■ Hydrology &amp; Water Quality</li> <li>■ Noise &amp; Vibration</li> <li>■ Heritage</li> <li>■ Flora &amp; Fauna</li> </ul>

Objective	Action
	<ul style="list-style-type: none"> <li>■ Landscape &amp; Visual</li> <li>■ Waste Management</li> <li>■ Communication.</li> </ul> <p>All plans and strategies would be developed as part of the CEMP, in consultation with the relevant agencies.</p>
<b>Road Traffic and Transport</b>	
Minimise impact of construction traffic on surrounding road network	<p>A Construction Traffic Management Plan (CTMP) would be prepared and implemented to provide:</p> <ul style="list-style-type: none"> <li>■ A detailed study to address the issue of sight distance for the access. The study will review the accident history on the road to determine if there are potential problems which need to be addressed in the access design;</li> <li>■ A detailed design of the site access intersection. This will identify the need for a channelised right turn (Type CHR) and auxiliary left turn lane (Type AUL). If these lanes are required, they will be described in the plan;</li> <li>■ The queue length of vehicles accessing the site to determine sufficient storage area clear of through traffic on Pipers Flat Road;</li> <li>■ Application and gazettal of Pipers Flat Road as a restricted access vehicle route if other than general Access Vehicles are required;</li> <li>■ An assessment of the use of spoil trucks on the road network should trucks on the public road be required.</li> </ul>
<b>Air Quality</b>	
Minimise dust generation during construction	<p>Develop and implement a Dust Management Plan (DMP) as part of the Construction EMP. In order to minimise dust impacts at the nearest receptors the construction contractor would be required to ensure that the following dust controls are implemented:</p> <ul style="list-style-type: none"> <li>■ Spray water with watercarts and/or hand held hoses on a regular basis, particularly during dry or windy conditions;</li> <li>■ Stabilise worked areas as soon as possible after earth works have been completed eg re-vegetation;</li> <li>■ Construct and maintain cloth fencing around work sites;</li> <li>■ Spray trafficable areas with water using a water cart;</li> <li>■ Cover all materials transported on and off site;</li> <li>■ Remove mud from truck wheels;</li> <li>■ Sweep-up mud or soil tracked onto public roads at the site entrance;</li> <li>■ Ensure adequate water supply is maintained on site for dust suppression;</li> <li>■ Minimise machinery speeds on site;</li> <li>■ Revegetate stockpiles or progressively landscape exposed areas and where material is to remain in situ for a long period of time;</li> <li>■ Monitor gravimetric dust fallout at selected locations. All dust monitoring to be initiated a minimum of 3 months prior to the commencement of construction.</li> </ul>
<b>Hydrology and Water Quality</b>	
No increased sedimentation or other water pollution of nearby waterways	<ul style="list-style-type: none"> <li>■ A Soil and Water Management Plan (SWMP) will be prepared and implemented to reduce the potential water quality impacts from the site during construction. General measures to control erosion of soil and sedimentation would be implemented prior to construction works. These measures would be prepared in accordance with the principles and practices in <i>Soils and Construction</i> (Landcom, 2004) and would be maintained and monitored during the construction phase. For high flow areas specifically designed controls appropriate for flash flood scenarios will be implemented if merited.</li> </ul>

Objective	Action
	<ul style="list-style-type: none"> <li>■ If other than VENM is used for site fill, a detailed assessed of material (such as furnace ash) will be assessed against DECC guidelines.</li> </ul>
<b>Noise and Vibration</b>	
<p>Minimise construction noise impact on surrounding residences</p>	<p>A Construction Noise Management Plan (CNMP) will be prepared and implemented prior to the commencement of works. This Plan would include:</p> <ul style="list-style-type: none"> <li>■ identification of the specific activities that will be carried out and associated noise sources at the construction site;</li> <li>■ identification of all potentially affected sensitive receivers;</li> <li>■ the construction noise objectives identified in the Environmental Assessment;</li> <li>■ assessment of potential noise from the proposed construction methods (including noise from construction traffic) against the objectives identified in the EA;</li> <li>■ where the objectives are predicted to be exceeded an analysis of feasible and reasonable noise mitigation measures that can be implemented to reduce construction noise impacts;</li> <li>■ description of management methods and procedures and specific noise mitigation treatments that will be implemented to control noise and vibration during construction;</li> <li>■ procedures for notifying residents of construction activities that are likely to effect their noise amenity;</li> <li>■ site contact details to be accessible to the community;</li> <li>■ measures to monitor noise performance and respond to community inquiries.</li> </ul>
<b>Heritage</b>	
<p>Preservation of Aboriginal Cultural Heritage</p>	<ul style="list-style-type: none"> <li>■ A program of archaeological subsurface testing would be conducted for the PADs. Testing should aim to determine the nature and significance of any Aboriginal cultural material present at each location;</li> <li>■ The artefact scatter identified as 45-1-0076 will be completely salvaged, including an archaeological excavation prior to construction works commencing;</li> <li>■ The salvage and archaeological investigation will be undertaken in consultation with the local Aboriginal community ;</li> <li>■ Information pertaining to the salvage and preservation of artefacts at site 45-1-0076 will be included in the Construction EMP.</li> </ul>
<p>Protection of Indigenous Heritage relics if uncovered</p>	<ul style="list-style-type: none"> <li>■ In the event that artefacts of indigenous heritage significance are uncovered during the course of construction, works in the immediate area would cease, DECC would be notified and expert advice would be sought from an appropriately qualified professional.</li> </ul>
<p>Investigation of farm site</p>	<ul style="list-style-type: none"> <li>■ Historic site WCU H1 would be subject to an archival level recording prior to its removal from the site.</li> </ul>
<b>Flora and Fauna</b>	
<p>Biodiversity values will be maintained or improved</p>	<ul style="list-style-type: none"> <li>■ An area of up to 2.5 ha on the rail loop site will be identified and agreed with DECC for use as a biodiversity offset area;</li> <li>■ Preparation, seeding and planting, monitoring and maintenance (including weed control) required to revegetate the offset area will be conducted by the Proponent;</li> <li>■ Local native species, including the Capertee Stringybark will sourced locally and utilised for the revegetation of the offset area.</li> </ul>

Objective	Action
Management of terrestrial vegetation and habitats	<ul style="list-style-type: none"> <li>■ The proposed disturbance footprint would be clearly defined on-ground, using temporary fencing, to avoid unnecessary vegetation and habitat removal;</li> <li>■ A pre-clearing survey would be undertaken to identify and flag any hollow-bearing habitat trees and threatened species likely to occur within the works corridor, including but not necessarily limited to Capertee Stringybark, with the aim of avoiding the destruction of these features wherever possible;</li> <li>■ During all operations involving the clearing of mature trees, an ecologist or appropriately trained personnel will be present to check any trees felled for wildlife inhabiting those trees;</li> <li>■ Storage of equipment and stockpiling of resources would be restricted to designated areas in cleared and degraded land to minimise the overall impact of the construction and avoid unnecessary vegetation and habitat removal;</li> <li>■ Appropriate weed management strategies would be implemented during construction to ensure they are not spread throughout the study area and particularly into areas of remnant vegetation adjacent to the proposal area;</li> <li>■ Appropriate sediment and erosion controls would be provided;</li> <li>■ Fallen logs encountered within the proposed disturbance footprint would be relocated to areas of retained remnant vegetation; and</li> <li>■ Timber felled for clearing would be retained on the ground in the area as habitat for terrestrial fauna.</li> </ul>
Minimise likelihood of impacts on aquatic habitats	<ul style="list-style-type: none"> <li>■ Sediment and erosion controls are to be adopted to prevent impacts on water quality. Appropriate measures to store and manage fuels and oils are to be adopted and spill containment equipment would be carried at all times to prevent and contain accidental spills in the creek.</li> <li>■ Creek crossing structures would be designed so as not to impede fish passage. If any culverts are used the base of the culvert will be positioned below the bed of the creek.</li> <li>■ Pipers Flat Creek would be restored by reinstating riparian vegetation and providing connectivity along the creek for movement by terrestrial and aquatic flora and fauna.</li> <li>■ Revegetation of Pipers Flat Creek and surrounding areas would use native species which occur in the local area and are adapted to the local conditions.</li> </ul>
<b>Landscape and Visual</b>	
Improve and manage landscaping	<p>A Landscape Management Plan (LMP) will be prepared during detailed design of the project and implemented during and after the construction period. The plan would include:</p> <ul style="list-style-type: none"> <li>■ Landscaping to be detailed and carried out in accordance with the concepts in the EA.</li> <li>■ Processes for the management of on-site weeds. Noxious weeds at the site would be identified and be removed in accordance to the criteria under the <i>Noxious Weeds Act 1993</i>, and the relevant NSW Department of Primary Industries weed control guidelines;</li> <li>■ Monitoring of vegetation to ensure it becomes established and to identify any further management requirements.</li> </ul>
Minimise visual impacts during construction	<ul style="list-style-type: none"> <li>■ Earthworks would be undertaken in the early stages of construction. Revegetation of these areas would be conducted as soon as practicable during the construction phases.</li> </ul>

Objective	Action
<b>Waste Management</b>	
<p>Minimise waste generated and maximise re-use and recycling. Waste disposal to be undertaken when re-use and recycle is not possible</p>	<p>A Waste Management Plan (WMP) would be prepared and implemented. This would include:</p> <ul style="list-style-type: none"> <li>■ Management of construction waste materials including correct orders, use of recycled material where practicable and reuse or appropriate disposal of surplus materials;</li> <li>■ Waste for disposal would be removed by a licensed waste contractor and disposed of at a licensed landfill facility;</li> <li>■ Use of spoil material on site or appropriate disposal when this is not possible; and</li> <li>■ Appropriate treatment and disposal of green wastes, sewage and domestic wastes.</li> </ul>
<b>Communication</b>	
<p>Establish effective communication with community and relevant agencies</p>	<p>A Construction Communications Plan would be prepared and implemented. This would include:</p> <ul style="list-style-type: none"> <li>■ Establishment of a basis for liaison with the community to deal with construction issues;</li> <li>■ Maintenance of phone line/fax/website to provide opportunity for community input;</li> <li>■ An effective complaints handling procedure to address and respond to issues raised by the community, including investigative monitoring of construction traffic in response to specific complaints.</li> </ul>

### 5.3 Operational Environmental Management and Mitigation

Mitigation and other environmental management measures relevant to the operational phase of the project are provided in Table 5-2. These include the preparation of a site Operational Environmental Management Plan (OEMP) which would be required prior to operations commencing. The OEMP would detail on-going operating conditions and protection measures to mitigate the impact of site operations. Relevant measures would be detailed, as appropriate, in the relevant OEMP to be prepared by site tenants or lessees.

■ **Table 5-2: Environmental Management Measures – Operational**

Objective	Action
<b>Environmental Management</b>	
Minimise impact of operations on surrounding area	<p>An Operational Environmental Management Plan (OEMP) would be prepared and implemented to guide operational activities. It would include:</p> <ul style="list-style-type: none"> <li>■ Environmental Management</li> <li>■ Road Traffic &amp; Transport</li> <li>■ Fuel storage and handling</li> <li>■ Hydrology &amp; Water Quality</li> <li>■ Noise &amp; Vibration</li> <li>■ Heritage</li> <li>■ Flora &amp; Fauna</li> <li>■ Landscape &amp; Visual</li> <li>■ Waste Management</li> <li>■ Energy and Greenhouse</li> <li>■ Water Consumption</li> <li>■ Emergency Response</li> <li>■ Community Liaison</li> <li>■ Environmental Reporting</li> </ul> <p>All plans and strategies would be developed in consultation with the relevant agencies.</p>
General	<p>The OEMP would provide for regular monitoring and periodic performance reviews of key performance criteria for noise to be established for the operation of the site. Performance reviews will be undertaken against noise performance parameters established in the OEMP. The examination and interpretation of results will be undertaken by a suitably qualified professional and any agreed actions implemented within a reasonable timeframe as defined in the OEMP.</p> <p>Hours of operation are 24 hours 7 days per week.</p>
<b>Traffic</b>	
Minimise impact of operational traffic on surrounding road network	<ul style="list-style-type: none"> <li>■ Potential traffic impacts from the operations would be managed by minimising access to the site to those vehicles necessary for the delivery of goods or operation of the site, and the establishment of and appropriate operation of the level crossing access proposed.</li> </ul>
<b>Air Quality</b>	
Minimise dust and other emissions from site	<ul style="list-style-type: none"> <li>■ Restrict traffic to defined roads.</li> <li>■ Maintain low vehicle speeds on unsealed roads (e.g. 40km/h).</li> <li>■ Trucks transporting material to and from the premises on public roads would be covered with tailgates securely fixed to prevent wind blown emissions and spillage. The covering would be maintained until immediately before unloading.</li> <li>■ Ensure trucks exit the site via a wheel cleaning facility established at the exit of the site to prevent any dirt/soil being transported onto external public roads.</li> <li>■ Ensure no incineration or burning of any material on the premises. Prompt action would be taken to extinguish any fire.</li> <li>■ Record and action all air quality complaints</li> <li>■ Floor sweep system for rail unloader, driven by a booster fan for delivery to the collector system</li> <li>■ Ensure onsite conveyor systems remain covered by the overhead gantry</li> </ul>

Objective	Action
	<p>to ensure wind blown dust is kept to a minimum.</p> <ul style="list-style-type: none"> <li>■ Ensure the spray dust suppression system strategically positioned at the train wagon and bin opening interface to minimise coal dust is maintained and working to specification.</li> <li>■ Maintain the dust extraction and ventilation system to prevent the accumulation of coal dust.</li> <li>■ Equipment to be maintained to ensure the best environmental performance in terms of air emissions.</li> <li>■ Maintain gravimetric dust gauge monitoring program until sufficient data is collected to demonstrate the effectiveness of dust control measures employed. A review of the dust monitoring data will be undertaken after 12 months of operation and DECC will be consulted before any decision is made to modify or cease dust monitoring.</li> </ul>
<b>Fuel Storage &amp; Handling</b>	
Minimise risk of on site incidents	<ul style="list-style-type: none"> <li>■ The site operator will be required to prepare and implement operating procedures for the management of diesel and lubricants on the site. These procedures will comprise those identified in the EA, including the provision of Closed Circuit TV monitoring.</li> </ul>
<b>Hydrology and Water Quality</b>	
Manage potential flooding due to the construction of the rail embankments on the site	<ul style="list-style-type: none"> <li>■ Refinement of the 2D model will be undertaken during the detailed design of the project. This will be used to refine the sizing and location of flood relief structures for Pipers Flat Creek. The sizing of the openings will be designed to minimise the need for armouring.</li> </ul>
Manage water quality runoff to waterways	<ul style="list-style-type: none"> <li>■ To capture and treat the water discharged from the washdown areas and the dust control areas at the unloader a water quality detention basin would be located adjacent to the unloader site. Following settlement in the basin, the water would be used for irrigation on the site or discharged directly to the creek.</li> <li>■ Sufficient water quality monitoring would be undertaken to ensure that the water quality management devices on site are functioning as expected. The frequency of maintenance would be determined from the water quality monitoring.</li> <li>■ All exposed surface areas would be revegetated as soon as practicable and these areas maintained during the life of the project. The vegetation program would include grassing of the railway embankments to stabilise the batters against erosion. To assist in managing runoff from the grassed embankments, cut drains and toe drains will be installed along the foot of the embankment. Runoff from these areas will be directed through flow retardation areas and into the creek at specified locations.</li> <li>■ Diesel would be stored according to requirements and clean up provisions provided.</li> <li>■ Coal spillage would be contained, barriers in place between spillage and the creek system, manual clean up processes put in place.</li> <li>■ The use of wastewater reuse systems for the site will be reviewed and assessed against DECC guidelines.</li> </ul>
<b>Noise and Vibration</b>	
Minimise operational noise impact on surrounding residences	An Operational Noise Management Plan (ONMP) would be prepared and implemented and would detail methods available to mitigate noise during the operation of the proposal.

Objective	Action
	<ul style="list-style-type: none"> <li>■ General operational noise emissions would be required to be controlled by implementing appropriate enclosure design for equipment within the dump hopper building. The dump hopper building itself would also require acoustic design input to ensure noise emissions are minimised.</li> <li>■ Take up rollers for the conveyors and coal transfer towers would be designed within acoustic enclosures for drive motors so as to reduce the transmission of noise from equipment and operations to external environment. Gearbox applications and motor speeds would be matched as closely as possible through the correct pole rating of a motor. Any further speed control would then be achieved through the use of gearbox reductions</li> <li>■ To reduce the likelihood of rail/wheel noise, the inclusion of wooden sleepers, track ballast, rail head profiling and cambering of the track would be included in the design considerations. The provision for trackside lubricators would be made in the project design</li> <li>■ Noise mitigation measures will be considered in consultation with the community.</li> </ul>
<b>Heritage</b>	
Maintenance of items on site	<ul style="list-style-type: none"> <li>■ Any identified or potential sites remaining on site will be protected in consultation with the Bathurst LALC.</li> </ul>
<b>Flora and Fauna</b>	
Maintenance of revegetated areas	<ul style="list-style-type: none"> <li>■ Monitoring of the revegetated areas will be undertaken to ensure they are functioning as designed.</li> </ul>
<b>Landscape and Visual</b>	
Minimise impacts on residential amenity	<ul style="list-style-type: none"> <li>■ The selection of colour schemes used for structures associated with the facilities and landscape planting proposed for the rail embankments and for site buildings and screening vegetation along the southern site boundary would assist with minimising any visual impacts.</li> </ul>
<b>Waste Management</b>	
Reduce the generation of waste	<ul style="list-style-type: none"> <li>■ Ensure that initiatives for the sustainable management of waste are given due consideration. Such measures would include reduction of materials being brought onto the site, reuse of wastes where practicable and recycling.</li> </ul>
<b>Water Consumption</b>	
Reduce consumption of water	<ul style="list-style-type: none"> <li>■ Identify opportunities to minimise water consumption on site and potential re-use of washdown water and Envirocycle effluent for irrigation.</li> </ul>
<b>Emergency Response</b>	
Ensure emergency response procedures are adequate	<ul style="list-style-type: none"> <li>■ An Emergency Response and Incident Management Plan (ERIMP) would be prepared to ensure incidents are handled promptly and safely. The ERIMP would outline the appropriate emergency response equipment that would be provided, the mandatory training requirements, the emergency response procedure and the responsibilities of site operators.</li> </ul>
<b>Community Liaison</b>	
Establish effective communication with community	<ul style="list-style-type: none"> <li>■ Establish appropriate means of on-going liaison with the community;</li> <li>■ Establish complaints handling procedures.</li> </ul>

Objective	Action
<b>Environmental Reporting</b>	
Provide clear and appropriate communication about site operations	<ul style="list-style-type: none"> <li>■ During operation, environmental performance and progress will be incorporated as necessary into the respective corporate environmental reporting of Delta Electricity. The reports would ensure relevant authorities have access to important environmental information relating to the new facility. Any shortcomings in environmental performance identified by the reporting process would be addressed by updating the EMPs.</li> </ul>

#### 5.4 Environmental Reporting

Periodic environmental reports would be prepared to measure performance and progress against the CEMP. During operation, environmental performance and progress will be incorporated as necessary into the respective corporate environmental reporting of Delta Electricity. The reports would ensure relevant authorities have access to important environmental information relating to the new facility. Any shortcomings in environmental performance identified by the reporting process would be addressed by updating the EMPs.

#### 5.5 Conclusions

The environmental assessment undertaken for the project identified a number of benefits arising from the project. It also identified potential environmental impacts which may result, especially during the construction works. These impacts were considered in the context of possible mitigation measures which were incorporated, where appropriate, into recommendations for work procedures or design of the project and commitments for environmental management. The potential for impacts to occur is regarded as minor, and this is supported by the environmental management measures identified in the EA. These measures will be further developed in the form of EMPs. The preparation and implementation of those EMPs will provide the procedures by which the environment will be protected from the possibility of those impacts occurring.

## **Appendix A Community Responses**

IssueCategory	Comments	Response	StakeholderID	Name
Air quality from Trains	I am concerned about the impact of increased air pollution from the locomotive engines used to haul coal between coal mines out of our district and the proposed Coal Unloader Facility at Pipers Flat.	4.1	87	, 14
Air quality from Trains	Fumes from diesel trains unloading, and those waiting to unload will pollute the clean air that we have, and wish to maintain.	4.1	110	, 38
Air quality from Trains	There will be diesel fumes polluting the area when trains are unloading or further diesel fumes polluting the area when trains are waiting to get into the unloader. This will disturb the peace of the area during night time as well.	4.1	89	, 17
Air quality from Trains	The coal that will be carted by rail to the coal unloader will be uncovered & unwashed (unlike the export coal which has been through the washery). So when there is a westerly wind blowing, I will cop the coal dust.	4.1	99	, 27
Consultation Process	It is apparent that there has been a complete lack of investigation, consultation and inadequate studies carried out in this area of the assessment report.	4.2	79	, 06
Consultation Process	Also you should note, as we have, with a sense of absolute disgust, that Delta's environmental assessment was issued in April 2007, but WAS NOT MADE AVAILABLE TO LOCAL RESIDENTS UNTIL JUNE, leaving us with virtually a matter of days to compile and submit our objections. We cannot help but feel this was another deliberate ploy by Delta to minimise any objections to their destruction of what is an otherwise pristine area.	4.2	93	, 21
Consultation Process	No input was requested from the people of the area it was just sprung on us approximately 8 months ago.	4.2	109	, 37

Consultation Process	Delta executives have on most occasions been less than forthcoming with information and answers to questions.	4.2	93 , 21
Consultation Process	Inadequate and misinformation disseminated to residents of the affected area adjacent to the proposed site. No such information has to this date been published and distributed to Portland or other townships which will be affected by the increased number of coal trains by either S.K.M. or Delta.	4.2	93 , 21
Consultation Process	An outright lie is the statement on page 4–7 under the heading Community Consultation that a first newsletter of 2,500 copies was distributed in the first week of November 2006 to residents of Pipers Flat, Wallerawang, Cullen Bullen, Lidsdale and Blackmans Flat.	4.2	93 , 21
Consultation Process	All correspondence sited to date has been misleading and contradictorily. This has created a great deal of confusion and mistrust.	4.2	119 , 47
Consultation Process	A residents' committee formed from a public meeting has continually pressed for the unloader to be located on the Baal Bone spur as this would overcome the objections raised. Committee members have met with Delta and asked that a further study be done of the Baal Bone proposal but while they discussed other proposals and explained the reasons for not choosing them Baal Bone was largely ignored.	4.2	98 , 26
Consultation Process	The property purchase had near been completed when the first public meetings were called by Delta and original owners had a code of silence bestowed on them giving the impression of a done deal.	4.2	105 , 33
Consultation Process	Unfortunately, due to a shroud of secrecy I was unaware of the proposed coal unloader facility and therefore was unaware that instead of moving to a quiet rural location I would be moving into an area of heavy industry. I have recently become aware that upon Delta purchasing the site at Pipers Flat a secrecy clause was placed in the contract preventing the then owners from speaking of Delta's intentions. This trend continues to this day with information at Delta's disposal for	4.2	103 , 31

	a considerable time only being released with a view to minimal deadlines for public response. The Environmental Assessment is no exception. This document is believed to have been completed in April 2007 but was only made available at the end of May 2007 with expected public reply at the beginning of July 2007.			
Consultation Process	There was no community consultation before property acquisition.	4.2		105 , 33
Consultation Process	We believe there have been inadequate studies or consultation carried out with regard to noise impacts.	4.2		80 , 07
Cumulative effects	<p>We believe it is grossly misleading, grossly dishonest, criminally negligent, and corrupt of Delta and its supposedly professional Consultants to once again ignore the Cumulative Impacts this proposal will have, in particular for the residents of Blackman's Flat, Castlereagh Hwy, and View Street.</p> <p>DoP has approved 6 hazardous and offensive developments and Council its Solid Waste Landfill in this area in the last 2 years. Each project was treated as a stand-alone development, no. one considered the cumulative impacts, and consequently our lives have been turned to hell, our properties are unsaleable, our residential township is no longer fit for human habitation - and you go approving yet another noise and dust generating development. Will it ever stop? How sick and corrupt are you fucks in DoP?</p> <p>No single cause, but multiple causes usually combine to cause human health, amenity, environmental and ecosystem impacts in the longer term. A comprehensive Cumulative Impact Study should have been undertaken as Dart of this proposal, but it's too late for the residents of Blackman's Flat. We reached saturation point 5 projects ago. Stop approving more filth until you buy us all out and let us get on with our lives in a safer, happier, healthier environment.</p>	4.4		116 , 44
Disagree with burning fossil fuel - Climate Change	The approval of the Western Rail Coal Unloader would undermine attempts to switch NSW to clean energy and move away from coal. We believe the Environmental Assessment has been inadequate in failing to fully consider greenhouse emissions from the project or from the coal that will subsequently be	4.3		123 , 54

	burnt as a result of the project.			
Disagree with burning fossil fuel - Climate Change	We are concerned this development will facilitate a move towards previous plans for major upgrades (1500MW) at Mt Piper Power Station. Previous expansion plans would have added over 8 million tonnes of greenhouse gas to NSW annual emissions.	4.3		123 , 54
Disagree with burning fossil fuel - Climate Change	More important than all the issues above are the impact of carbon dioxide emissions from coal-fuelled power stations and their impact on climate change. Other countries notably Sweden are ten years ahead of Australia leading the way in global clean technology. The coal loader is environmentally a short-term solution having in the intermediate a harsh impact on the environment which will profoundly affect communities, the landscape and the environment for decades to come.	4.3		76 , 03
Dust/Air Quality	Air pollution from uncovered loads and stored coal will have its effect.	4.5		108 , 36
Dust/Air Quality	On no occasion was I approached to have monitoring done on my property and I'm one of the closest.	4.5		105 , 33
Dust/Air Quality	The continual dumping of coal and the creation of stockpiles of coal at the proposed Unloader will create fine particle dust outfall. This cloud of coal dust will drift over surrounding farms and crops, rendering the crops inedible.	4.5		85 , 12
Dust/Air Quality	We would also get a lot more dust than what we are getting now.	4.5		100 , 28

Dust/Air Quality	I don't believe that a coal unloader will arrive in our valley without severely polluting our air quality, I don't care how many controls or measures are developed!	4.5	76 , 03
Dust/Air Quality	There will be dust polluting the area.	4.5	89 , 17
EA inadequate or has mistakes	I believe an inadequate assessment has been done.	4.6	92 , 20
EA inadequate or has mistakes	I feel there has been an inadequate assessment.	4.6	114 , 42
EA inadequate or has mistakes	We believe there has been inadequate assessment on the subject of Flora and Fauna in the environmental assessment.	4.6	90 , 18
EA inadequate or has mistakes	We believe there has been inadequate assessment of the noise aspect of this site.	4.6	106 , 34
EA inadequate or has mistakes	I therefore submit that Delta's Environmental Assessment is inadequate, in a lot of cases inaccurate and deliberately misleading in order to present to your office a picture of an are-a that is at present little more than a partially industrial area, already degraded to some extent and therefore will not suffer unduly from further development. This is not so and both Delta and S.K.M. are to be castigated for their attempts at this implication.	4.6	93 , 21

EA inadequate or has mistakes	I believe there has been inadequate assessment on the abovementioned.	4.6	94 , 22
EA inadequate or has mistakes	We believe the environmental assessment report to be inadequate and misleading. This report investigates potential flood impacts of the proposed rail loop, relative to existing flood behaviour in the Piper's Creek Flood Plain. The line is officially known as Wallerawang to Gwabegar Line. Piper's Creek does not exist in this area.	4.6	83 , 10
EA inadequate or has mistakes	We believe there has been an inadequate assessment on the possible site of the proposed Coal unloader.	4.6	82 , 09
EA inadequate or has mistakes	We believe there has been an inadequate assessment on the possible site of the proposed Coal unloader.	4.6	97 , 25
EA inadequate or has mistakes	I am strongly of the opinion that this is a completely INADEQUATE ASSESSMENT, in that Delta (& their consultants SKM) have not given any consideration to myself or people that live on or near the railway line.	4.6	99 , 27
EA inadequate or has mistakes	We believe there has been an inadequate assessment prepared.	4.6	104 , 32
EA inadequate or has mistakes	We believe there has been an inadequate assessment on the possible site of the proposed Coal unloader.	4.6	96 , 24

Economic Impact Employment/ coal supplies	Delta Electricity is proposed to invest \$60–80m in this development, and proposes to create short-term employment for approximately 150 people during the construction period. However once the facility has been completed, it will only create 10–15 jobs, this large investment provides very little secure long-term local economic gain.	4.7	123 , 54
Effects on agriculture	It is prime land even if it is only used for grazing purposes.	4.8	91 , 19
Effects on agriculture	Stock will not eat grass contaminated with coal dust.	4.8	105 , 33
Effects on agriculture	The land is currently not only grazing land, but considered to be the best grazing land in the district, no doubt from the floods over hundreds of years.	4.8	89 , 17
Effects on agriculture	I am concerned about the impact of pollution of feed crops surrounding the Coal Unloader Facility by fine particle coal dust, rendering the crops inedible for cattle and sheep.	4.8	85 , 12
Environmental - Flora and Fauna	There is no mention of Rainbow Trout who are migratory fish who come up the Cox's River to spawn to Thompson Creek, Irondale, and Pipers Flat and no mention how they must have a clear path past the site to access these spawning areas.	4.9	105 , 33
Environmental - Flora and Fauna	I believe there has been inadequate assessment to threatened fauna species of the Purple Copper Butterfly ( <i>Paralucia spinifera</i> ) also known as the Bathurst Copperwing Butterfly. The Environmental Assessment states that there is "Low Potential. While the habitat is marginal there are several records of this species approx 7-9 km to the southeast of the Mt Piper Station." However the Preliminary Environmental Assessment stated "Several of the listed	4.9	78 , 05

	<p>threatened fauna species could potentially occur within the habitats of the project site; in particular many of the threatened bat and bird species, the Bathurst Copper Butterfly and the Pink-tailed Legless Lizard have potential habitat within the project site area.”</p> <p>As the lifecycle of the Purple Copper emerge as butterflies in Spring (September to October) to mate, lay eggs and die within their two-week adult phase.</p> <p>It is unclear when the survey was carried out and appears to be grossly deficient.</p>			
Environmental - Flora and Fauna	The noise impact that this development and its future operation will have upon the existing native fauna of the area is also of significant concern.	4.9		123 , 54
Environmental - Flora and Fauna	Has parks and wild life been out to determine if its to close to a wild life refuge, what about the copper wing butterfly does it exist on this side of the mountain as they do else where in this district?	4.9		113 , 41
Environmental - Flora and Fauna	Any interference with the underground water system would be very detrimental to the ecology of the area.	4.9		112 , 40
Environmental - Flora and Fauna	Tranquillity and harmony do not go hand in hand with a coal unloader which will destroy our quality of life and enormously devalue property prices, not to mention the environmental impact on the forests and creeks.	4.9		76 , 03
Environmental - Flora and Fauna	This assessment does not show a true picture of the flora and fauna.	4.9		90 , 18
Environmental - Flora and Fauna	Already enormous tracts of eucalyptus have been removed by Delta in the surrounding areas for the power stations at both Wallerawang and Mt Piper; the proposed coal unloader in the Pipers Flat Valley would necessitate the removal of threatened Capertee Stringy Bark which would affect the habitat of many other native animals and insects. Removal of the woodland would also profoundly affect	4.9		76 , 03

	the endangered Bathurst Copper Winged Butterfly ( <i>Paralucia Spinfera</i> ) which is the rarest butterfly species in NSW and vulnerable under the Commonwealth Threatened Species Conservation Act.			
Environmental - Flora and Fauna	I am quite concerned about the migratory actions of the fish. I think the biggest issue is of the Rainbow and Brown Trout who travel up the Cox's River to spawn to Thompson's Creek, Irondale and Pipers Flat. There has been mention of a Macquarie Perch which does not exist in our area. There has been no mention as to whether these fish will have a clear path around the site to access the particular spawning areas.	4.9		115 , 43
Environmental - Water Quality	Water pollution will have an effect.	4.10		108 , 36
Environmental - Water Quality	One of my main concerns is the depth to which the earthworks will have to go to sink the foundations for this huge development. Surely if drilling is to go so far down, through bedrock, no doubt what are the possibilities of you coming in contact with the water table? Have there been studies done of the depth of the water table. Also should there be any malfunction of the equipment above ground and leakage of toxic fluids or minerals is then filtered into the groundwater, this will be a concern for anyone who is accessing the water table for their water supply.	4.10		94 , 22
Environmental - Water Quality	This is a Category 1 Watercourse	4.10		105 , 33
Environmental - Water Quality	They have monitored the water 2 to 3 Kms below the site towards Sydney catchment at a sewerage station? There are no active mines at the site and water quality would have to be better than at a sewerage site. No water from at least 5 to 7 kms below site would be polluted by coal mines until where Cox's River joins. This is typical of this report from SKM, and on telephoning them I was told it wasn't their study. They have not tested the water, just guessed at the site water quality.	4.10		105 , 33

	The studies used in the report for the sewerage works and general area were done in 1988 and 1992 by other consultants over 15 years ago!			
Environmental - Water Quality	The proposed site is on a flood plain. Thompsons Creek, Irondale Creek and Pipers Flat Creek run into the Coxs River catchment area. To my knowledge the water quality at the proposed site is excellent and there are no current working mines in the area. The study in the report is at least 15 years out of date and was done 3 kms approx. downstream, out of the area.	4.10		92 , 20
Environmental - Water Quality	No potential for rainwater to carry fuel into environment – Cannot be 100% guaranteed.	4.10		105 , 33
Environmental - Water Quality	Environmentally both Pipers Flat Creek and Thompson Creek are extremely vulnerable the proposed coal unloader would put more pressure on their already fragile eco systems.	4.10		76 , 03
Environmental - Water Quality	There will be diesel spillage, which will happen from time to time, polluting the water way.	4.10		89 , 17
Environmental - Water Quality	Inadequate, inaccurate and grossly out of date studies of the water quality of Cox River and its tributaries.	4.10		93 , 21
Environmental - Water Quality	The coal unloader's location gives rise to the possibility that pollution may enter Sydney's catchment. Pipers' Flat creek has a category 1 watercourse status as an environmental corridor.	4.10		123 , 54

Environmental - Water Quality	<p>We believe it is grossly misleading, grossly dishonest, criminally negligent, and corrupt of Delta and it's supposedly professional consultants to fail to make any mention anywhere in the environmental impact assessment of the fact that the only water quality treatment proposed, Settlement Ponds, will have absolutely no affect in reducing dissolved salts or salinity in treated water, and hence salinity levels in Piper's Flat Creek, the Cox's River and Sydney's drinking water supply, which will inevitably increase as a result of this proposal.</p> <p>We also seriously question the merit of settling ponds for reducing turbidity levels based on past experience. Delta's Wallerawang Power Station settling pond on the eastern side of Lake Wallace has done little to reduce turbidity levels in that discharge into the Cox's River below Lake Wallace. This filthy grey discharge has consistently exceeded 20 NTU for months if not years, well in excess of the ANZECC (2000) water quality guideline trigger value for turbidity in inland streams of 25 NTU.</p> <p>And we question the proposal to relocate a significant section of Piper's Flat creek.</p> <p>Relocating any natural waterway in this day and age should be a no-no. Delta and the mining industry have stuffed every other river and creek in the catchment above Lake Wallace. Delta should not be allowed to stuff Piper's Flat creek as well.</p> <p>The fact that Delta's has failed to identify these high salinity and turbidity levels to date suggests that their water quality monitoring procedures, as well as the accountability of that monitoring, are highly suspect and in urgent need of review before this proposal can be approved.</p>	4.10		116 , 44
Environmental - Water Quality	<p>Delta Electricity proposes to build embankments varying in heights up to sixteen metres (16 metres) at the eastern end of the rail loop. 600,000 cubic metres of fill material would be transported to the site from Mt. Piper Power Station ash dam and new Lambert's Gully open cut coal mine. This in wet time would create an environmental problem with fill washing into Piper's Flat Creek, which is part of Sydney Water Catchments area.</p>	4.10		82 , 09
Environmental - Water Quality	<p>When the land floods, if the unloader is built, obviously the floodwaters flow into the Sydney Water Catchment and will pollute the water.</p>	4.10		89 , 17

Environmental - Water Quality	The chosen site (formerly run as a farm) is the headwaters of the Cox River, which forms part of the Warragamba Dam catchment.	4.10	93 , 21
Environmental - Water Quality	Any factory waste on the land during time of excess rain will travel towards the Sydney Catchment Area.	4.10	110 , 38
Environmental - Water Quality	On the property there is, I believe, a bore for water, and that was found at a depth very close to the proposed 15 metres.	4.10	112 , 40
Environmental - Water Quality	Water quality impacts on the 2 creeks on the subject property, I believe have not been adequately assessed. A refuelling facility and locomotive movements have potential to be a disaster for water quality there and downstream.	4.10	111 , 39
Environmental - Water Quality	I am concerned about the impact of increased potential for water and soil pollution from the locomotive engines used to haul coal between coal mines out of our district and the proposed Coal Unloader Facility at Pipers Flat, and the potential pollution to our waterways and soil structures from the Unloader itself.	4.10	86 , 13
EP + A Act	<p>Inconsistent with the NSW Environmental Planning and Assessment Act 1979 This proposal is clearly in conflict with the objects and intent of the NSW Environmental Planning and Assessment Act, which are to establish processes to regulate competing land uses.</p> <p>There can be few more competing land uses than an industrial Rail Coal Unloader, associated Coal Conveyor and Maintenance Facilities inclusive of noise, dust, and artificial lighting 24 hours a day in a quiet peaceful rural zone area.</p> <p>The Department of Planning has an obligation to regulate competing land uses under the EP&amp;A Act through 'environmental planning instruments' (EPI), of which there are 3 types:</p> <p style="padding-left: 40px;">Local Environmental Plans (LEPs);</p>	4.11	116 , 44

	<p>Regional Environmental Plans (REPs), and State Environmental Planning Policies (SEPPs)</p> <p>This proposal is clearly in conflict with:</p> <p>The Lithgow Local Environmental Plan 1994 LLEP 1994 Rural (General) 1(a) Zone;</p> <p>SEPP 58 - Threat to Sydney's Water Supply - because it will not have a 'neutral or beneficial' affect on water quality in Piper's Flat Creek or the Cox's River catchment and Sydney's drinking water supply;</p> <p>Draft REP for Protecting Sydney's Drinking Water Supply - because it will not have a 'neutral or beneficial' affect on water quality in Piper's Flat Creek or the Cox's River catchment and Sydney's drinking water supply;</p> <p>SEPP 33 - Hazardous and Offensive Development - because Delta and its Consultants have failed to identify that this proposal is regarded by everyone in the local community as most definitely a hazardous and offensive development.</p> <p>The NSW Department of Planning has already illegally and corruptly turned the residential township of Blackman's Flat into the most heavily industrialised area in the Lithgow region - by dumping six (6) hazardous and offensive developments on our town in the last 2 years - without having any of the required 'environmental planning instruments' (EPI) in place to support these decisions - without one word of explanation, apology, remorse, or attempt to compensate affected property owners.</p> <p>If DoP approves the Western Rail Coal Unloader in Piper's Flat you will once again be illegally and corruptly turning that area into an industrial zone, without having any of the required 'environmental planning instruments' (EPI) in place.</p> <p>The illegal and corrupt abuse of the Environmental Planning and Assessment Act by DoP in the Lithgow region is absolutely obscene - sooner or later, individually and collectively, by legal or any other means, you will all be made accountable for your actions. You thugs have had your laughs kicking the crap out of vulnerable residents in this area - but even the lowest of low-life thug knows that sooner or later they must stop - this proposal may be an appropriate time to do just that.</p>			
Health	Over an extended period of time what is the long-term effect of this noise pollution on the mental and physical health of residents?	4.12		84 , 11

Heritage	I refer to 5.3 Heritage. It states that the coal unloader site will directly impact on one Aboriginal site and six areas of Aboriginal Potential Archaeological Deposit and the conveyor on one PAD. If the destruction or further degradation of these sites is allowed to take place it will be a major loss to our local Aboriginal history and our connection with our heritage.	4.13	101 , 29
Heritage	It has been identified in the EA that over the years a number of archaeological surveys have been undertaken within the proposed development location. Thirteen Heritage recordings were reviewed in the EA, each of which provided evidence of indigenous or early European settlement in the study area. As this development may impact upon each of them, further in-depth investigations should be taken into serious consideration as to identify the real anthropogenic heritage value of the site.	4.13	123 , 54
Heritage	The Pipers Creek Valley has been an interaction zone between the Wiradjuri, the Dharug and the Gundungurra Tribes; a large Aboriginal settlement has been described as being located at Pipers Flat (Lithgow and District Family Historical Society). The area of Pipers Creek has Aboriginal significance where Aboriginal heritage and values must be respected.	4.13	76 , 03
Heritage	We believe there has been inadequate assessment of the heritage portion of this site. We are against the position where the proponent Delta Electricity propose to build the facility. Background research indicates that two aboriginal sites 45-1-0075 and 45-1-0076 and an area of archaeological potential being PAD 7 had previously been recorded as occurring in the Piper's Flat study area. A single isolated find WCU-I and seven areas of potential archaeological deposits WCU-PAD 1 — 7 were identified in the course of the field survey of the area. In our opinion all these sites should be extensively tested to determine the nature and significance of any aboriginal cultural material that is present at each of the locations. Material discovered from any of these locations should be noted before any approval is given. Not as they propose in this assessment that the sites will be checked during the construction process. The Bathurst Local Aboriginal Land Council is supportive of conducting additional archaeological investigation in the identified areas. Therefore we believe if significant findings are made on the above site the coal	4.13	81 , 08

	unloaded should not be approved in this area. We believe the assessment of this site to be inadequate.			
Heritage	I am concerned about the issue of the destruction of indigenous aboriginal artefacts and history by the construction of the Western Rail Coal Unloader facility at Pipers Flat.	4.13		88 , 16
In Favour of Project	I support the proposal for a rail coal unloader for Mt Piper power station.	4.14		75 , 01
Land use	Change from Beef Grazing to Coal Unloader - No significance or impact on agriculture (SKM). Considering the property would be completely stopped from producing cattle, I'd say that's a 100% impact on it producing beef cattle and surrounding grazing land, as stock won't eat coal-covered grass.	4.15		105 , 33
Land use	Why damage a serene, peaceful farming and small-holding locality and the area should not be turned into a 24-hour a day industrial area.	4.15		104 , 32
Land use	This area is not a factory area.	4.15		89 , 17
Land use	Antipathetic to the Objectives of the Rural (General) 1(a) Zone. We contend that this proposal does not comply with the objectives or intent of the Rural (General) 1(a) Zone under the Lithgow Local Environmental Plan 1994 ("LLEP 1994"). The Lithgow City Council Local Environmental Plan 1994 states that: The objective of the 1(a) Rural (General) zone is to promote the proper management and utilisation of natural resources by ... protecting, enhancing and conserving ..., localities of significance for nature conservation, including places with rare plants, wetlands and significant wildlife habitat, and ... providing for the	4.15		116 , 44

	<p>separation of conflicting land uses.”</p> <p>A Rail Coal Unloader, associated Coal Conveyor and Maintenance Facilities and the associated noise, dust and visual impacts 24 hours per day is:</p> <p>Clearly inconsistent with the enhancement of the rural ambience of the Piper's Flat locality, which is characterised by small rural residential holdings, small to medium-scale agricultural pursuits, and a peaceful quiet rural lifestyle;</p> <p>Clearly inconsistent with the land uses adjoining the site, which because of their rural location and relative isolation enjoy a very high amenity value and are acutely sensitive to noise disturbances;</p> <p>Clearly in conflict with existing businesses, and potential future business opportunities, such as intensive agriculture, B&amp;Bs and other Tourist Accommodation, adventure and recreational based tours, and other agricultural, tourism and business ventures that are likely to establish in the Piper's Flat area;</p> <p>Clearly has inadequate separation distances and buffer zones between these conflicting land uses.</p> <p>The appropriate location for a Rail Coal Unloader, associated Coal Conveyor and Maintenance Facilities is in an area appropriately zoned for this type of a facility, such as Industrial Zone land, not on Rural (General) 1(a) Zone land in Piper's Flat.</p>			
Land use	Contradicts state and local council LEP on preservation of Prime Agricultural Land.	4.15	105	, 33
Land use	This acreage certainly is in the top 64% of agricultural grazing and in our case minimum Lot subdivision here is 40ha not 400ha as stated.	4.15	105	, 33
Land use	This generalizing of our area as consistent to land use already is a false statement. We are talking about a 10 km undisturbed radius area south of the Mt Piper barrier. Why not start with Delta and keep this project on the north side of the mountain barrier along with the coal mines, The new Lithgow Dump and Deltas over flowing ash dam and not spread the contamination to the only pristine area we have left?	4.15	105	, 33

Land use	No proposal before council to rezone or change rural property status	4.15	105 , 33
Land use	No where in this southern side of Mt Piper is there an installation like this proposal. Land use has been industrial on the northern, eastern and western side of this proposal, this, the southern side of Mount Piper is virtually undisturbed and the last direction on the compass we have left. The barrier around Mt Piper isolates this important clean area from the rest, In this 10kms radius on the southern side.	4.15	105 , 33
Land use	On page 2–15 under Zoning and future land use Delta-states “The proposed use is consistent with other land uses in the area, given the major land ownership on the property boundary by a coal company suggests a future of coal mining nearby.” Certainly neighbouring land may be owned by a coal company but the old mine on the property has been defunct for many years as the coal seam has long ago played out. This piece of truth-stretching is followed by “The wider area comprises Mt. Piper power station, Wallerawang power station and many coal mines and associated infrastructure;” this is certainly drawing a very long bow as none of these are in the immediate or visible vicinity. The first paragraph under the same heading states that the proposal is “permissible with consent in this zone”. As Lithgow Council is the governing body in this case, (LEP 1994) has consent been sought and obtained from council?	4.15	93 , 21
Land use	How can they justify the statement that the chosen site is consistent with other land use in the area?	4.15	96 , 24
Land use	Lithgow Council suggests 700 lots IC subdivision available suggests we wouldn't miss this site. Unloader site is zoned Rural IA, not IC and cannot be subdivided under 40 ha unlike IC lots until whole area is rezoned, unlike the 700 lots of IC, we are not losing IC lots but prime land zoned IA	4.15	105 , 33

Noise - Site	We believe the only noise assessment meters were placed at 3 different locations along Pipers Flat Road. Noise travels and we believe we will be greatly affected by the noise.	4.16	104 , 32
Noise - Site	Of particular interest to me and my family are issues concerning the potential for increased train noise.	4.16	103 , 31
Noise - Site	The consultants located two noise monitors in positions we regard as incorrect for the unattended noise monitoring. They indicate background noise levels were measured at locations near the coal unloading facility .The purpose is to provide noise level data to characterise the implication of the extent of the noise sources in the vicinity.	4.16	106 , 34
Noise - Site	On all locations no reports of monitoring in people's bedrooms, this is where they sleep, not on a fence 40 metres from someone's house.	4.16	105 , 33
Noise - Site	Your location of noise monitors bemuses us, a monitor 40m from Turners residence will be protected from direct noise exposure by the natural topography. Our property will be directly exposed to noise being omitted with no physical barrier or screening proposed to the South East & East of the proposal. No mention of the proposed noise levels to be omitted from the maintenance facility to which we are the closest property.	4.16	117 , 45
Noise - Site	One report of monitoring (2 of) 1 at Turners and one on a fence, considering nobody lives on the fence, and the other is behind a mountain buffer at Turners house, they have been placed in unreasonable and inappropriate places.	4.16	105 , 33
Noise - Site	We believe it is grossly misleading, grossly dishonest, criminally negligent, and corrupt of Delta and its supposedly professional Noise Consultant SKM to once again pretend that the township of Blackman's Flat doesn't exist, and won't be affected by noise from the Coal Conveyor part of this proposal. The noise study was focused entirely on the Piper's Flat area only, and on rail operations only, not on the coal conveyor part of the facility.	4.16	116 , 44

	<p>Yet the Coal Conveyor will be crossing a high ridge between Piper's Flat and Blackman's Flat, which means that any noise will be propagated over a much wider area due to the elevation, in particular under prevailing south-westerly winds towards Blackman's Flat, Castlereagh Hwy, and View Street residents. Residents in these areas are already affected by noise from the existing Centennial Coal Conveyor, in particular where it discharges into a metal bin, and noise from bulldozers and other machinery working on Delta Mount Piper Power Stations coal stockpile and fly-ash repository, particularly at night.</p> <p>We went to the trouble of attending the public consultation meeting about this proposal in Portland - specifically to raise the Conveyor Noise issue. We subsequently also raised this issue in a Feedback form - which we duly completed and posted to Delta's consultant for this proposal. Yet once again our concerns have been totally ignored.</p> <p>We point out that SKM's Noise Study for the Modification of Mount Piper Power Station (MOD-1-1-2006-1) approved by Sartor last year was also totally inadequate with regard to noise impacts on Blackman's Flat township. Their noise monitoring equipment was located such that a diesel pump at Lambert's Gully mine which ran for the entire duration of that study drowned out all other noise, making that study worthless. We made the DoP aware of this at that time, but as usual you thugs totally ignored us again.</p> <p>We demand that Delta undertake a credible noise study of the true impact noise from the Coal Conveyor component of this facility will have on the residents of Blackman's Flat, Castlereagh Highway, and View Street before this proposal is approved.</p> <p>We are absolutely appalled that a 65 Decibel Noise Limit is being proposed for this facility, when all other industry in the local area is supposed to comply with a 42 dB noise limit, which they routinely ignore. And now Delta has plucked a 65dB noise limit from somewhere, which they won't comply with anyway, and intend to impose that on a vulnerable community in a peaceful quiet Rural (General) Zone 24 hours a day, seven days a week?</p> <p>The abuse of power and contempt for the rights of local residents by Delta, a government agency, absolutely obscene, unconscionable, appalling. A 42 decibel noise limit must be imposed as part of this proposal.</p>			
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Noise - Site	On no occasion was I approached to have monitoring done on my property	4.16	105 , 33
Noise - Trains	I have lived here for the past 40 years and have witnessed a number of trains through Portland increase and very noisy.	4.17	100 , 28
Noise - Trains	There has been inadequate assessment done for the monitoring of noise levels. Only two sites were monitored, being two properties within the direct vicinity of the proposed unloader. There has been no mention of how the noise levels will affect the township of Portland, and residents along the rail corridor. I am gravely concerned with the noise from train movements travelling along the ridgeline and cleared flat areas of Pipers Flat.	4.17	118 , 46
Noise - Trains	The noise of the trains coming through the cutting will be intolerable.	4.17	91 , 19
Noise - Trains	How do you screen an embankment some 11m in height with a train on it omitting noise. I am awakened with train movements on still nights at present, this exposure is minimal to that what is proposed.	4.17	117 , 45
Noise - Trains	The railway line that runs through Portland has one of the steepest gradients of any railway line in N.S.W. and as a result the trains that travels through Portland fully loaded with coal and under full throttle, at night the noise is horrendous.	4.17	99 , 27
Noise - Trains	The assessment has given scant consideration to the effects of rail noise and traffic on the residents of Portland.	4.17	98 , 26

Noise - Trains	I am concerned about the impact of extensive and sustained noise pollution from increased train movements between coal mines out of our district and the proposed Coal Unloader Facility.	4.17	84 , 11
Noise - Trains	The following quotations are of great concern "To continuously unload" "Seven days per week" "Deliveries during night hours"	4.17	117 , 45
Noise - Trains	I live less than one kilometre from the site and object on the grounds of excessive noise on my property and noise and traffic disruption at Portland.	4.17	98 , 26
Noise - Trains	Train noise near the subject locality will be increased and further ruin the current peace and quiet of the rural area.	4.17	111 , 39
Noise - Trains	I object strongly to the coal unloader operating & the running of the coal trains on the basis of 24/7. I believe that the hours of operation should be restricted to daylight hours only (say from 6am to 7pm).	4.17	99 , 27
Noise - Trains	Modelling for train noise has been assessed on two 40-class locomotives. Trains to carry the amount of coal that Delta Electricity requires have three 40-class locomotives.	4.17	106 , 34
Noise - Trains	If approved people who have purchased farming land nearby, with the view of having a peaceful lifestyle will have train bells ringing every time a train passes through a crossing.	4.17	89 , 17

Noise - Trains	We the above would like to express our objection to the proposed Delta Development.	4.17	117 , 45
Noise - Trains	Noise pollution will have an effect with excessive rail movement.	4.17	108 , 36
Noise - Trains	Additional crossing bells are proposed, and that means more noise.	4.17	110 , 38
Noise - Trains	It has totally disregarded noise levels at the level crossing of East Portland. At that location there is a large number of residential houses, some of which are only a matter of some 60 to 70 metres away from the rail line.	4.17	103 , 31
Noise - Trains	Last but not least is the noise factor associated with extra trains.	4.17	122 , 52
Noise - Trains	I also don't believe that trains approaching and unloading will not be making any noise – of course they will. How do we not also know that the number of trains won't be increased in the future?	4.17	76 , 03
Noise - Trains	DELTA have not done any noise assessment in Portland to asses the impact noise on myself or people living on or near the railway line.	4.17	99 , 27

Noise - Trains	Akin to this concern is another residence, which is also on the Wallerawang Road some 500 metres further south past my place. I see that this house and another next to it has its yard adjoining the rail siding with the houses being 20 meters or less away from the rail line itself. I understand that no noise level meters were placed at the location. If studies of noise levels had been done at these homes the information provided in the environmental assessment would have been vastly different. The same could be said if the noise level meters were utilized at or near the East Portland level crossing.	4.17	103 , 31
Noise - Trains	This study I believe is flawed as it only addresses concerns of the trains passing the proposed site, which by this time have finished climbing past the township of Portland and are coasting along relatively flat straight ground. It does not factor in the noise associated with the slowing of the trains to enter the loop and the subsequent dumping of the coal at the unloader.	4.17	103 , 31
Noise - Trains	I submit this objection in good faith and ask that the minister take these issues into account when assessing this application and ask that at a minimum strict operating hours and conditions be put on rail haulage through the township of Portland because of the steep grade through the town. This may make our life bearable.	4.17	77 , 04
Noise - Trains	If the coal unloader goes ahead we will need acoustic barriers on each side of the line to keep the noise down a little bit.	4.17	100 , 28
Noise - Trains	On no occasion was I approached to have noise monitoring done which I think should be done to hear the squeal past my house	4.17	100 , 28
Noise - Trains	The number of rail movements and the negative noise impacts associated with this project are of major concern as our property runs parallel to the Gwabegar Rail Line. At no stage of the assessment process have we been approached by SKM Consultants or Delta to evaluate current noise monitoring from our property let alone the anticipated future noise predictions, vibration and diesel fume pollution emitted from locomotives. There are two rail crossings within close proximity to our home and the	4.17	80 , 07

	<p>locomotives will be required to blow their horns as a warning when approaching. The trains will be 55 carriages in length (which equals approx 1.4 kms). This is in addition to the trains that currently use the rail line. The coal trains will eventually run on a 24 hour x 7 day basis. As residents how are we suppose to live with this continual noise? We believe there have been inadequate studies or consultation carried out with regard to noise impacts.</p>			
Noise - Trains	<p>I see NO reference or assessment in regards to the noise impact on the township of Portland due to the increase in rail traffic through our town, (which is 5 to 6 kms north of the Unloader site) and will endure the extra train movements through it on route to the Unloader site.</p> <p>The EA sets out that in the early years of operation there would be 2 x 55 Wagon trains (no mentions of how many Engines it will take to haul the wagons) per day 12 per week, than jumping to 3 per day @ 20 per week than 5 per day @ 40 a week (again NO mention of how many Engine will be hauling these wagons). I note the EA states "The coal receiving facility would be designed to run 7 days per week, with the potential for deliveries during night time hours". This is on top of the current 45 wagon trains hauled by 4 Engines out of Baal Bone Colliery that are taken to Port Kembla.</p> <p>If you do the maths it's impossible NOT to run these trains through the night considering the unloading times etc they have quoted for the round trip. And may I say the stated figures do not reference the fact that these trains will have to return to the coal mines which will in fact DOUBLE every rail movement.</p> <p>Sir what is not being told is that the railway line climbs past Portland to Piper Flat which is the high point of the Great Dividing Range than falls away as you near the proposed Coal Unloader Site. Because of this the trains roar through Portland at the moment with only 45 wagons let alone 55.</p> <p>I question how many Engines it will take to pull 55 wagons over the range? Will the trains have to move through Portland in two goes (because they will be too heavy to do it in one go) in effect doubling the amount of train movements? If they can move the train over the range in one go how much more noise will be emitted than at present because of the extra Engines that will have to be used. (I am being told by railway men that the same class of engines will be used so its only natural that extra engines will be used to haul 10 more wagons)? Are we in Portland going to be subjected to this deafening roar 24 hrs a day 7 days a week?</p>	4.17	77	, 04

	<p>Is there some sort of community standard that people should expect to live their lives by?</p> <p>Have any of these issues been assessed in the EA or can people just be lumbered with anything that big business want to throw at them?</p> <p>Sir in my opinion there has been a totally inadequate Assessment provide in regards to the noise generated by the train movements through Portland.</p> <p>Surely people should be able to expect to sleep at night until a reasonable hour in the mornings, and after a reasonable hour at night be able to hear their TVs and have conversations with their family without having to wait for trains to pass.</p>			
Not In Favour of Proposal	I would like to register my objection to the above proposed project.	4.18		87 , 14
Not In Favour of Proposal	I would like to register my objection to the above proposed project.	4.18		124 , 15
Not In Favour of Proposal	I am writing this letter to object to the proposal for the coal unloader at Pipers Flat.	4.18		91 , 19
Not In Favour of Proposal	I write to object to the above proposal to construct a coal unloading facility at Pipers Flat.	4.18		111 , 39
Not In Favour of Proposal	There is a clear case for the rejection of the proposal.	4.18		123 , 54

Not In Favour of Proposal	I wish to submit my strongest objections to the proposal of the Pipers Flat Coal unloader.	4.18	114 , 42
Not In Favour of Proposal	I would like to lodge an objection against the proposed COAL UNLOADER AT PIPERS FLAT.	4.18	118 , 46
Not In Favour of Proposal	We wish for the Department of Planning to formally record our total opposition to the proposed Western Rail Coal Unloader (Reference Number 06-0271) in its currently proposed location.	4.18	116 , 44
Not In Favour of Proposal	I am writing to say that I object to the approval of the application to build this coal unloader.	4.18	89 , 17
Not In Favour of Proposal	We are vehemently opposed to Delta construction of a rail coal unloader at Pipers Flat.	4.18	76 , 03
Not In Favour of Proposal	I would like to register my objection to the above proposed project.	4.18	84 , 11
Not In Favour of Proposal	I would like to register my objection to the above proposed project.	4.18	86 , 13

Not In Favour of Proposal	As residents of Pipers Flat we wish to register our objection to the proposed Western Rail Coal Unloader.	4.18	80 , 07
Not In Favour of Proposal	I would like to lodge an objection against the proposed COAL UNLOADER AT PIPERS FLAT.	4.18	119 , 47
Not In Favour of Proposal	I therefore strongly object to the Western Coal Unloader at Pipers Flat	4.18	92 , 20
Not In Favour of Proposal	I would like to register my objection to the above proposed project.	4.18	85 , 12
Not In Favour of Proposal	I wish to register my objection to the Western Rail Coal Unloader proposed for Pipers Flat.	4.18	78 , 05
Not In Favour of Proposal	We wish to submit our objection to the above proposal.	4.18	79 , 06
Not In Favour of Proposal	I would like to lodge an objection against the proposed Coal Unloader at Pipers Flat.	4.18	120 , 48

Not In Favour of Proposal	I would like to register my objection to the above proposed project.	4.18	88 , 16
Not In Favour of Proposal	I am writing to lodge an objection to the installation of a coal unloader at Pipers Flat as proposed by Delta Electricity.	4.18	110 , 38
Not In Favour of Proposal	I wish to object most strongly to the proposed rail coal unloader at Pipers Flat	4.18	93 , 21
Not In Favour of Proposal	Sir this is to state my absolute opposition to Delta's coal unloader.	4.18	109 , 37
Not In Favour of Proposal	I wish to lodge my strongest objections to the Pipers Flat Delta Coal Unloader proposal.	4.18	105 , 33
Not In Favour of Proposal	We strongly object to the proposal.	4.18	104 , 32
Preferred Site.	We are against the position where the proponent Delta Electricity propose to build the facility. Delta Electricity site location is Lots 1 & 2, DP 800003, 708 Portland Road, Wallerawang.	4.21	83 , 10

Property Values	Pipers Flat Road between Wallerawang and Portland follows the escarpment; it is one of the most beautiful valleys in our area. Many have settled here because of that beauty to farm the land, raise children or just to live in the county and enjoy the surrounding peace and tranquillity. Tranquillity and harmony do not go hand in hand with a coal unloader which will destroy our quality of life and enormously devalue property prices.	4.19	76 , 03
Property Values	Residents already have written valuations and even a proposal like this has had a devaluation on future possible sales.	4.19	105 , 33
Property Values	You are about to devalue people's homes.	4.19	107 , 35
Property Values	Portland is a great little rural community of about two thousand residents. I have only been a part of the community for a short time. In that time I have seen some beautiful homes, which have been recently built. There are a number of new estates containing small acreages that are ideally suited to people who have or want to seek a tree change away from the ravages of industry and commercialism that the big cities provide. It demonstrated to me that this was a location worthy of my real estate investment as it appeared to be thriving.	4.19	95 , 23
Property Values	The township of Portland will be completely cut in half during 4,000 tonne train movements.	4.19	105 , 33
Property Values	Owning a business in Lithgow I found myself in a position where I needed to reinvest money into the business upon applying for finance at our bank 7 months ago, a valuation on my home was carried out. I was advised by my bank that due to the proposed development of heavy industry in the area they were unable to at this time help me.	4.19	108 , 36

Property Values	I implore you to seek further input from the residents at Portland as they are the ones who will be affected not only in harrowed living standards but also in decreased property values as a result.	4.19	103 , 31
Property Values	Anything of this nature has a decrease in property values.	4.19	105 , 33
Property Values	We are highly offended that Delta and its consultants can dishonestly and corruptly claim that property values will not be affected by this proposal. Turning a peaceful rural setting into a dusty, 65dB, 24 hour-a-day 7-day-a-week industrial wasteland will wipe out property values for existing property owners in Piper's Flat, and those residents affected must be bought out and/or fairly compensated.	4.19	116 , 44
Property Values	A recent land valuer's report stated that land values in the Pipers Flat area would be significantly affected if the coal unloader were to go ahead at Pipers Flat. There are other options that would have far less impact on residences and land values. The cheapest option is not always the best option.	4.19	120 , 48
Road traffic	B Doubles are not allowed on these roads surrounding this proposal, Only Great Western Highway and Castlereagh Highway to Mudgee not allowed past Tunnel Hill at Lithgow.	4.22	105 , 33
Road traffic	Piper's Flat Road is designated by the N.S.W. Roads and Traffic Authority (R.T.A) as main road 531, at this time B-Double's are not permitted on main roads without R.T.A. or Council giving special permission and at this time no permission has been given by either party. If Delta Electricity is not able to transport fill for the site which they propose to carry on a private over the mountain on the line of the proposed Coal Conveyer, they would then have to transport the fill from their sites to the site of the Coal Unloader on main roads in the area. They then should have to apply for permission especially when they have indicated there would be 176 truck movements per day. i.e. one every 5 minutes. This would increase the amount of traffic either through Portland or Wallerawang along Piper's Flat Road and increase the	4.22	97 , 25

	<p>average annual daily traffic volume. In our opinion the road should be widened to supply extra traffic lanes at the site entry.</p>			
Road traffic	<p>I think that if it keeps coal trucks off public roads then it will be safer for local residents.</p>	4.22		75 , 01
Salinity and drinking water quality	<p>We believe it is grossly misleading, grossly dishonest, criminally negligent, and corrupt of Delta and it's supposedly professional consultants to fail to make any mention anywhere in the environmental impact assessment about the serious salinity problem currently existing in upper Cox's River Catchment, or fail to mention that this salinity problem is directly related to Delta and its activities. Delta is fully aware, and its consultants should be aware, that the Australian Drinking Water Guidelines (NHMRC &amp; NRMCC 2004) recommend a desirable upper salinity limit for drinking water of 800 <math>\mu\text{S}/\text{cm}</math>, and specify a requirement of &lt;1500 <math>\mu\text{S}/\text{cm}</math> to minimise adverse biological impacts on rivers, streams and wetland ecosystems. The World Health Organization similarly recommends a desirable upper limit for drinking water of 800 EC, and &lt;1500 EC to minimise adverse biological impacts.</p> <p>Delta is fully aware, and its consultants should be aware, that it has been massively exceeding its POEO licence discharge limit of 1500<math>\mu\text{S}/\text{cm}</math> for Electrical Conductivity or Salinity into the Cox's River immediately below Lake Wallace for years. Turbidity levels from this filthy grey discharge have consistently exceeded 20 NTU, well in excess of the ANZECC (2000) water quality guideline trigger values for turbidity in inland streams of 25 NTU.</p> <p>Delta is fully aware, and its consultants should be aware, that it has been massively exceeding its POEO Licence discharge limit for salinity and turbidity into Huon Creek and Nuebeck's Creek for years.</p> <p>Delta is fully aware, and its consultants should be aware, that Lake Wallace and Lake Lyell have both exceeded the ADWG upper salinity limit for drinking water quality of 800 S/cm for months if not years, and are amongst the saltiest dams in the region, certainly much saltier than Oberon Dam, Ben Chifley Dam, and Windermere Dam, and much saltier than some smaller dams including Glenbrook</p>	4.24		116 , 44

Lagoon, Wentworth Falls Lake, Marrangaroo Dams, Clarence Dams and Bungleboori Dam.

Delta is fully aware, and its consultants should be aware, that over the last 12 months the upper Cox's River has been one of the saltiest rivers in the region, certainly much saltier than the Nepean River at Penrith, Macquarie River at Bathurst, Turon River at Sofala, Fish River at Tarana, and Cudgegong River at Rylstone.

Delta is fully aware, and its consultants should be aware, that the upper Cox's River has salinity levels which are significantly higher than the 13 sites on 9 major NSW rivers, including the Lachlan, Murrumbidgee, Barwon, Bogan - Darling, Macquarie, Castlereagh, Namoi, Mehi, Macintyre, and Hunter, monitored as part of a DNR study for the New South Wales State of the Environment 2006 (SoE 2006).

As members of Lithgow Environment Group and Blue Mountains Conservation Society, we have been actively involved with the Sydney Catchment Authority Streamwatch Program. We have been actively involved in monitoring water quality in every major stream and tributary of the upper Cox's River above Lake Lyell since September 2006, including Piper's Flat Creek downstream of the proposed Western Rail Coal Unloader at Bray's Lane, for the last 9 months. This includes the original watercourse of Piper's Flat Creek at Bray's Lane (1st Causeway), and the artificial channel created by Council several decades ago for the Wallerawang Sewage Treatment Plant outfall several decades ago (2nd Causeway). The 1st Causeway has exceeded the ADWG upper salinity limit for drinking water quality of 800  $\mu\text{S}/\text{cm}$  every single month for the last 9 months, and exceeded the industry discharge limit and <1500  $\mu\text{S}/\text{cm}$  limit above which adverse biological impacts may occur (and) for 7 of those 9 months. The 2nd Causeway has also been close to the ADWG upper salinity limit for drinking water each month.

We seriously question whether Piper's Flat Creek can sustain an additional salinity load which will inevitably be associated with bringing in millions of tonnes of coal from outside the area, especially when added to the cumulative impact of salinity in water from Thompson's Creek dam which delta tops up from a highly saline Lake Lyell.

We believe that Delta must be required to do the following before this proposal can be approved:

	<p>1. Undertake a detailed study of the long-term effects of high salinity on stream ecosystems and aquatic fauna and flora in the upper Cox's River catchment, particularly including effects on Platypus and its macro-invertebrate food source;</p> <p>2. Undertake a detailed study of the long-term human health implications for Sydney Water's consumers of drinking increasingly more salty water;</p> <p>3. Undertake a detailed study into whether current industry discharge limits of 1500 µS/cm into the Cox's River by the coal mining and coal-fired power generation industries are environmentally sustainable, or need to be reviewed given the cumulative impact from multiple point sources directly and indirectly related to Delta's activities, the prolonged drought, and the projected lower rainfall for SE Australia envisaged through Climate Change:</p> <p>4. Whether a scheme similar to the Hunter River Salinity Trading Scheme needs to be implemented as a matter of urgency for industry in the upper Cox's River catchment before this proposal can be approved;</p> <p>5. Whether it may not be more environmentally responsible to locate this facility outside the Cox's River catchment and Sydney's drinking water supply, to the north of Portland where any water discharged will flow into the Macquarie River Catchment.</p>			
Site Selection process.	Delta should be made look one of the other 10 sites that they have in front of them.	4.21		99 , 27
Site Selection process.	Choice of site does not have a good environmental and social outcome compared with other options	4.21		120 , 48
Site Selection process.	We are against the position where Delta Electricity proposes to build the facility.	4.21		82 , 09

Site Selection process.	Finally is the Minister aware that there are alternative locations for the Coal Unloader on the Northern side of Portland which would prevent all the rail movement through our town and spare the townfolk of Portland the grief that this project is going to bring.	4.21	77 , 04
Site Selection process.	The site was chosen because of low cost and good environmental and social outcome.	4.21	105 , 33
Site Selection process.	At the outset may I say that I am not really against the Western Coal Unloader itself, I realise that we need this type of development. What I do object to Sir is the location of the proposed development when alternative sites are available.	4.21	77 , 04
Site Selection process.	Baal Bone spur on the North side has all of the above already and no towns, no people or no pollution concerns or possible disasters if done properly. It is 2/3 possible as done by Delta's own studies on Routes 2, 3, 4 Route selection review by joining this together to form Route 1, the study we asked to be done and the only one they didn't do.	4.21	105 , 33
Site Selection process.	In our opinion this site chosen for the Coal Unloader should be relocated to the Northern area where Mt. Piper Power Station and the local Coalmines are situated.	4.21	96 , 24
Site Selection process.	It should be relocated to a location Delta has considered before, being the Baal Bone Spurline.	4.21	105 , 33
Site Selection process.	I am not against a coal unloader but there are other places, the best being the baal bone spur on the north side: no people, no noise and no pollution.	4.21	100 , 28

Site Selection process.	There was another site available for consideration. This site involved, as I understand it, a nine kilometre conveyer directly from the rail loop already in existence south of Ben Bullen directly into the Baal Bone Mine site, which is already set up for conveyance of coal to the Mt Piper Power Station. To date we have heard nothing further in having this option explored. In fact other investigations have been made concerning three other options near this site. They have done anything but what was asked of them. Would you please urgently direct further studies to be made of this option? I don't understand why it is being overlooked as it offers usage of already existing infrastructure and does not adversely impact on the townships of Cullen Bullen and Portland or any resident as I understand it.	4.21	102 , 30
Site Selection process.	I wish to firstly register my objection to the site chosen by Delta to place this latest piece of infrastructure for the transference of coal from distant coal mines. Secondly, having attended the meeting with Lithgow City Council Members and Local Member of Parliament present and hearing that there were in all eleven sites available to choose from, why desecrate another pristine area? This is an exceptionally beautiful area, with spectacular cliff lines and vegetation.	4.21	94 , 22
Site Selection process.	The R.A.C.U.F. committee requested Delta to do a full study on the BAAL BONE to MT PIPER - 9Km - direct line "as the crow flies". Delta has done other studies, but so far has not done the one requested.	4.21	92 , 20
Site Selection process.	Blackmans Flat is another venue that you are considering, and it would make more sense for you to build it there rather than Pipers Flat. It would make lots of sense to build at Baal Bone Spur, away from the townships.	4.21	107 , 35
Site Selection process.	Use Blackmans Flat as an alternative and relocate the residents of Blackmans Flat to an alternative site.	4.21	91 , 19
Site Selection process.	At no time has anybody told Delta that we do not want them to be able to increase and operate a larger facility. Just that there are better and for them, much more convenient rail-unloader options. These options have been pointed out to Delta executives on more than one occasion. For reasons known only to themselves	4.21	93 , 21

	Delta has chosen to ignore them.			
Site Selection process.	Other options are available and more time must be given to exploring those options, eg Baal Bone and Blackmans Flat – an area already badly damaged by industry.	4.21		109 , 37
Site Selection process.	There are other parts of the area, already desecrated by mining activities where this unloader could be built.	4.21		89 , 17
Site Selection process.	There is other land, already polluted by coal mining, and nearby to Mount Piper Power Station that can be used, if this facility is needed.	4.21		110 , 38
Site Selection process.	We are against the actual position where the proponent Delta Electricity propose to build the facility.	4.21		90 , 18
Trains - Safety/Severence/Level Crossing	The railway divides east Portland from the centre of Portland where all amenities are located including doctors, hospital and fire service. The increased rail activity would hinder access to these facilities.	4.22		98 , 26
Trains - Safety/Severence/Level Crossing	I am concerned about the issue of the safety of the rail level crossing at East Portland. With increased coal train movements through this level crossing transporting coal to the Unloader Facility, the issue of safety of local residents using this level crossing is paramount. Currently there are no boom gates on this crossing to protect residents - this level crossing is used by cars, children on bikes, pedestrian traffic and school buses etc. In light of the recent level crossing accident at Kerang in Victoria where 10 people were killed - we need to put better safety provisions in place. Residents	4.22		124 , 15

	need the safety of this level crossing to be upgraded.			
Trains - Safety/Severence/Level Crossing	Trains, which will feed the unloader will pass through East Portland, and that area will be cut off from Portland proper for six minutes each time a train passes through	4.22		89 , 17
Trains - Safety/Severence/Level Crossing	East Portland residents can only travel to Portland town centre via Williewa Street through the railway gates. Every day we are kept waiting for coal trains laden with many, many carriages to pass through. If we are travelling further to Wallerawang we have to move very quickly or we will again be held up at the railway gates at Wallerawang. When these trains pass through Portland and/or Wallerawang it means a lot of sitting and waiting each time at the railway crossings. This is a major inconvenience several times a day now — imagine what it will be like if more trains are passing through as a result of the proposed coal loader. I am also concerned at the safety aspect as a lot of children live in East Portland and both local schools are located in the town centre. A lot of children walk or ride their bikes through the railway gates. East Portland residents are also totally cut off from the hospital when the trains are passing through.	4.22		122 , 52
Trains - Safety/Severence/Level Crossing	The proposal will isolate Portland and East Portland with 24-hour operation train movements. Also the length of the trains estimated at 55 carriages will cause extensive time delays at the East Portland level crossing. Also of particular concern is the possibility of emergency services (fire, ambulance, police etc) not being able to get across the rail line because of the trains. These delays could be life threatening to the many families and residents of East Portland.	4.22		79 , 06
Trains - Safety/Severence/Level Crossing	Trains required to feed this facility will block the road for periods, much more often than now occurs, and will severely change the lifestyle of the East Portland residents.	4.22		110 , 38

Trains - Safety/Severence/Level Crossing	At the present time I have two concerns; one is that the residents of East Portland will be cut off from the township on an increasing basis over the coming years and the secondly; and more importantly, I am concerned about the safety of the East Portland Railway Crossing which only relies on bells, which you cannot see sometimes due to the position of the sun.	4.22	121 , 49
Trains - Safety/Severence/Level Crossing	Dividing this community in half would add an extra 20 minutes to travel to the hospital, fire stations, etc. and could mean the difference between life and death. It would add crucial times to the arrival at these places in the event of an emergency.	4.22	114 , 42
Trains - Safety/Severence/Level Crossing	The trains will divide Portland in two.	4.22	91 , 19
Trains - Safety/Severence/Level Crossing	I believe that if you build the CUL at Pipers Flat, access to East Portland will be limited.	4.22	107 , 35
Trains - Safety/Severence/Level Crossing	Excessive rail movement affectively cutting the town of Portland in half.	4.22	108 , 36
Trains - Safety/Severence/Level Crossing	Additional train traffic through East Portland will be detrimental to safety at the level crossing.	4.22	111 , 39
Trains - Safety/Severence/Level Crossing	I feel Portland is going to be spilt in tow.	4.22	100 , 28

Visual Impact	Further misinformation and glossing-over of how this proposal will affect the chosen site are the “artists impressions” as shown in miniscule photographs in the latest Delta newsletter.	4.23	93 , 21
Visual Impact	The escarpment along Pipers Flat Road is the last vestige between Mt Piper Power Station and Pipers Flat Road, the escarpment gives us relief from the visual pollution of the Mt Piper Power Station now Delta is proposing to have that on both sides of the escarpment.	4.23	76 , 03
Visual Impact	There are visual effects of the building proposed on passing traffic.	4.23	89 , 17
Visual Impact	The area is an untouched rural landscape. The rural amenity of the area will be destroyed forever.	4.23	111 , 39
Visual Impact	There is nothing in close proximity it is totally and visually out of context, and other mining, buildings, conveyor belts, coal sites etc are over the mountain that surrounds Mt Piper towards Blackmans Flat and the new Lithgow Dump. North, again there is nothing of this nature south of Mt Piper barrier.	4.23	105 , 33
Visual Impact	Mt Piper Power Station is in a perfect position so why spread the contamination over our undisturbed valley, keep it within Delta’s acreage which they have ample.	4.23	105 , 33
Visual Impact	The size of this building will be an eyesore.	4.23	110 , 38

Visual Impact	Is another major concern from where we sit for meals we look directly over the proposed site, no mention of this impact on our property in the report for proposal. Fig 5 - 11a clearly exposes this fact, the lack of screening as depicted in Fig 5-11B clearly shows no screening to obscure the site from our property. There is no screen to the South East and East of the proposal.	4.23	117 , 45
Visual Impact	Eventually there would be a visible stock pile of coal and ash. Already the Blackmans Flat has been completely ruined. Why ruin a beautiful mountain range at Pipers Flat.	4.23	104 , 32
Water Quality - Flooding	This area is subject to floods.	4.24	110 , 38
Water Quality - Flooding	It is in the wrong place being the start of the Sydney basin catchment of eastern flowing waters, Pipers Flat, Thompsons Creek, Irondale Creek and Cox's River located in a flood-prone area.	4.24	105 , 33
Water Quality - Flooding	This project is in the middle of a flood plain, where four creeks merge to start Sydney water basin.	4.24	105 , 33
Water Quality - Flooding	In an area which is prone to peak flood levels and flows with the potential to flood and scour the whole site during any excavation and fill work for the rail embankments. The main creek in the area is Piper's Flat Creek, flowing from the south you have Thompson's Creek and within two kilometres you have Irondale Creek and Winters Creek entering this flood plain where Delta Electricity propose to construct the Coal Unloader and associated infrastructure. In the flood study reference is made to: 1) 4.5 inlet for existing conditions 2) 4.6 outlet for proposed conditions 3) 4.7 outlet for existing conditions 4) 4.8 outlet for proposed conditions	4.24	82 , 09

	<p>All this study referenced to Piper's Creek also peak flow speeds refer to Piper's Creek.</p> <p>Piper's Creek does not exist in this area. Therefore reference in the Flood study report where they refer to Piper's Creek and Piper's Flat Creek should be rectified in the Major Infrastructure assessment and then re-submitted.</p>			
Water Quality - Flooding	<p>It is proposed to use land that floods. Local residents of long standing can say that the subject land has been known to be in flood for periods of up to three weeks. The creeks that feed into the land collect storm water runoff from over one thousand acres of land. Obviously the original consultant failed to adequately assess this point.</p>	4.24		89 , 17