

# **SOCIAL IMPACT ASSESSMENT**

**Lidsdale Siding Upgrade Project**

**PREPARED FOR: CENTENNIAL COAL**

**MAY 2012**

**SOCIAL IMPACT ASSESSMENT  
CENTENNIAL COAL****LIDSDALE SIDING UPGRADE PROJECT**

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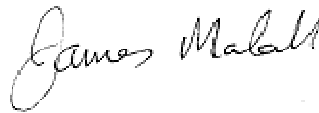
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# EXECUTIVE SUMMARY

This Social Impact Assessment has been undertaken to identify what impacts (positive and negative; intentional and unintentional) may arise from the Lidsdale Siding Upgrade.

Consultation with community stakeholders has identified that the development of mine related infrastructure is generally supported. This is because it demonstrates longevity of the industry, surety of employment and a positive contribution to the economy.

Consultations also identified noise, dust, odour and visual impacts as factors which would adversely affect the quality of life of people who live and work in the community. On review of the various consultants' reports it is found that:

-  The project will have an overall positive economic contribution at a regional level and also to the local community.
-  Noise levels will be similar to or less than those which currently occur from the site and the proposed development is therefore considered to be acceptable.
-  The project is not expected to have a significant impact on the ecology of the study area, including threatened flora, threatened fauna or endangered ecological communities that are known or expected to occur therein.
-  The upgraded project operations are likely to provide a measurable improvement in air quality in the local area and will unlikely contribute to any exceedances of the respective NSW OEH criteria for the pollutants assessed.
-  The expected visual impacts of the project will be moderate. This means that mitigation strategies are warranted in order to reduce the visual impacts of the development which can be achieved by vegetation buffers.

Given the above, impacts to residents, in particular noise, can be addressed on a case by case basis should they arise.

There is no adverse social impact identified to prevent the Lidsdale Siding Upgrade from being undertaken.

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# 1. INTRODUCTION

## 1.1 Overview

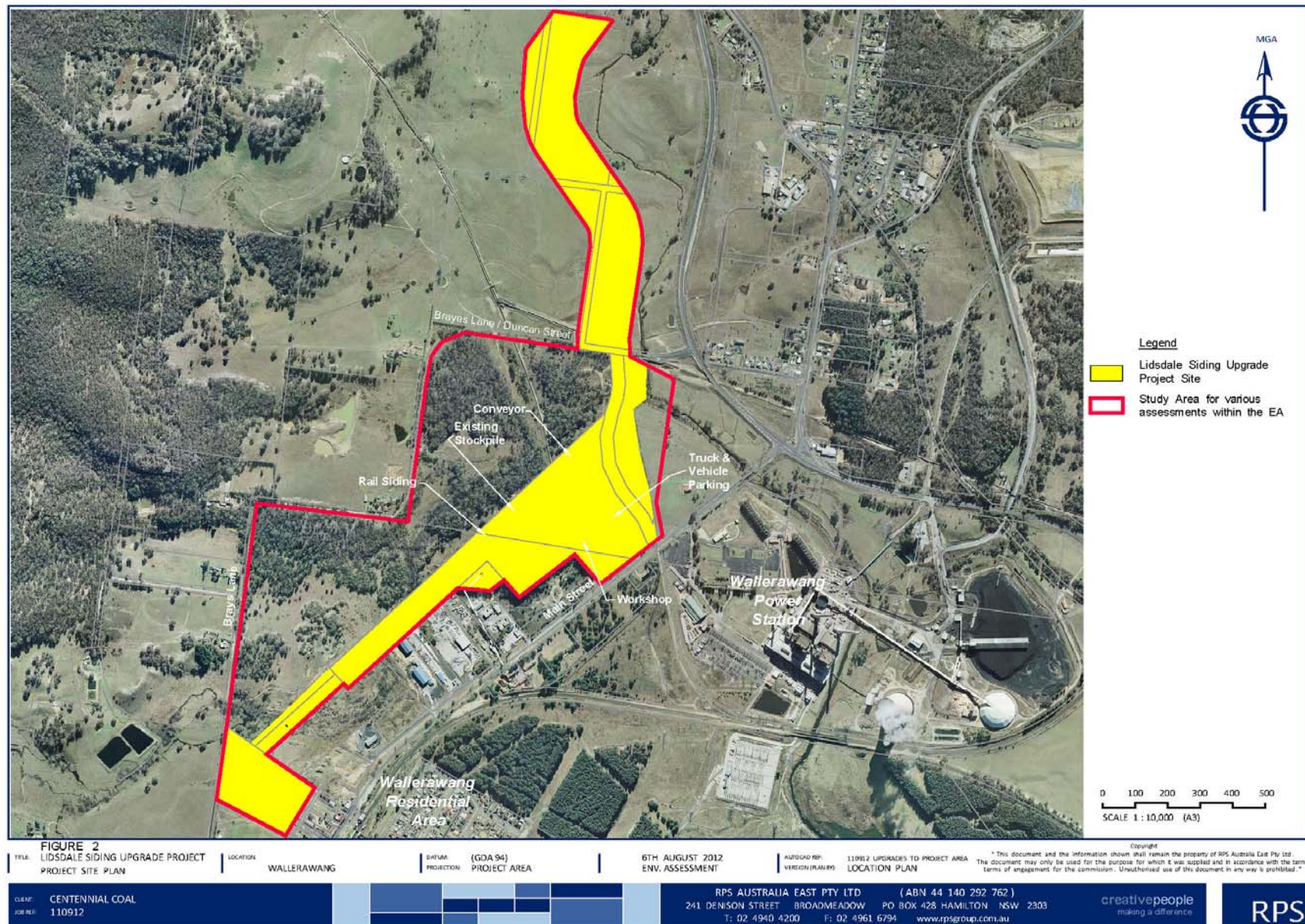
Lantz Marshall has been engaged to undertake a Social Impact Assessment for a proposed upgrade of the existing Lidsdale Siding rail loading facility. In summary, the scope of this proposal includes:

- ☞ Upgrading the coal handling system to include automated coal stacking and underground feeder system and train loading bin;
- ☞ Extending the existing rail line by a further 180 m to the southwest behind the existing industrial area of Wallerawang;
- ☞ Increasing the total throughput from 2 Mtpa to 6.3 Mtpa with associated increase in the number of trains being loaded; and
- ☞ Ceasing coal transport by road into the siding.

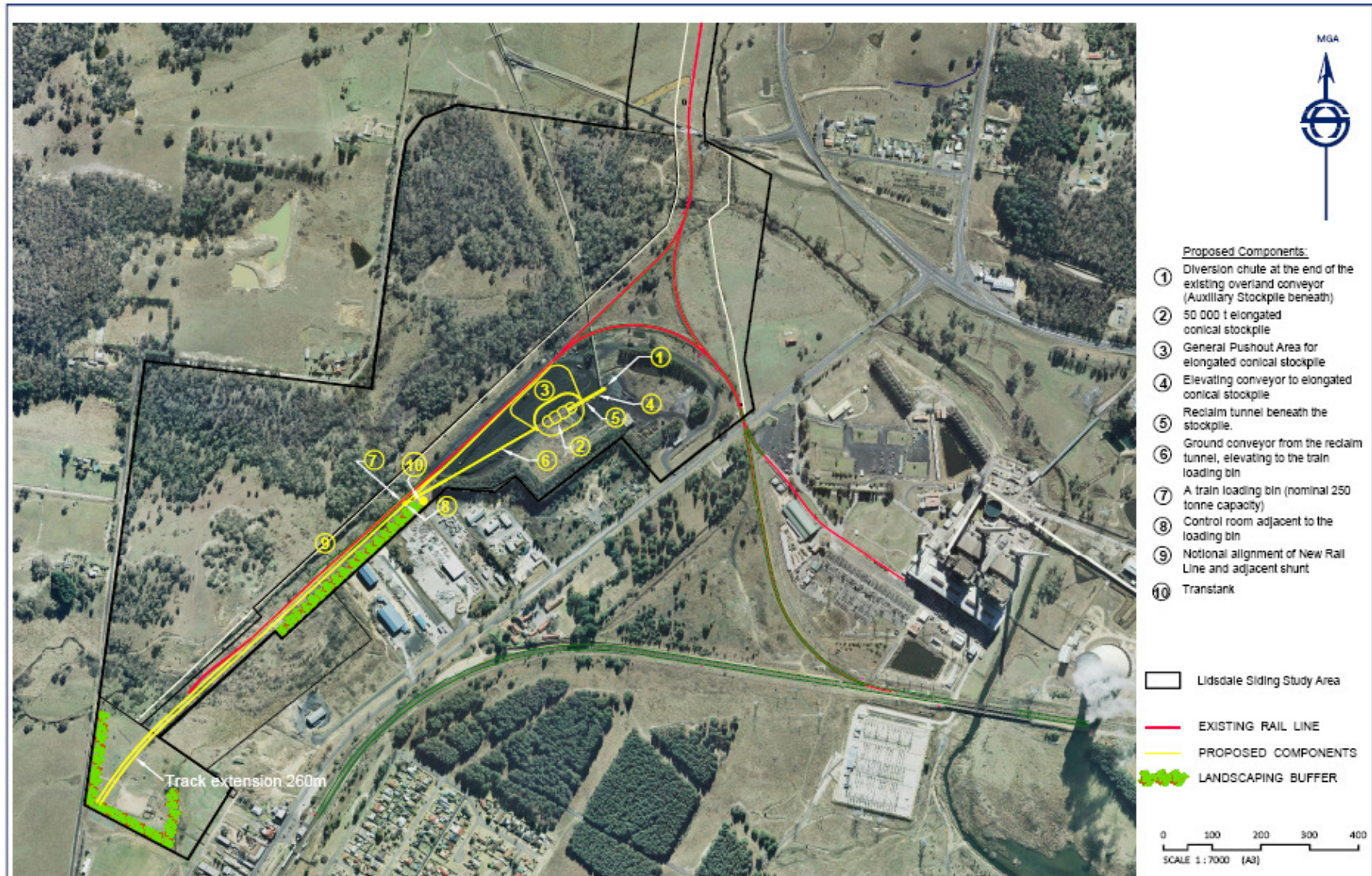
This would significantly reduce the need for mobile plant and equipment to load rail wagons by establishing a main elongated conical stockpile with underground reclaimers feeding a ground conveyor elevating to a train loading bin. Trains would then be automatically loaded in a continuous operation as the train drives away from the bin. Centennial Ivanhoe has a number of objectives in upgrading the Lidsdale Siding rail loading facility:

- ☞ To significantly reduce the need for mobile plant and equipment to load rail wagons and for stockpile management.
- ☞ To reduce the operating costs on a per tonne basis.
- ☞ To minimise environmental impacts such as noise from stockpile and loading operations and dust generation.
- ☞ To provide access to the export market for production capacity from the local area above future domestic sales.
- ☞ To assist in the provisioning and storage of the rolling stock and locos required for coal transport to port.

The Lidsdale Siding Project Area is shown in Map 1 and the Project Components shown in Map 2.



Map 1: Lidsdale Siding Project Area



Map 2: Lidsdale Siding Project Components

## 1.2 Methodology - Social Impact Assessment

A Social Impact Assessment is a systematic, staged approach of enquiry that identifies who may be affected by the project and how they are affected. It takes into account the scope of the development and how the development will impact on the needs, issues, values and aspirations of the surrounding community stakeholders. Therefore the purpose of the Social Impact Assessment is to:

-  Assess the social impacts of the project including any impacts on local infrastructure and services,
-  Assist in establishing the full facts about the development, to support a well-informed decision about the appropriateness of the development proposal,
-  Recommend mitigation measures to minimise adverse impacts and maximise benefits of the project,
-  Assess the impacts of the development on future generations,
-  Inform the community and facilitate participation by the community in the planning and development assessment process,
-  Facilitate the consideration of alternative development proposals, and
-  Enhance existing data to inform the planning and development assessment process.

The approach for this Social Impact Assessment references the 'Techniques for Effective Social Impact Assessment: A Practical Guide (Office of Social Policy, NSW Government Social Policy Directorate)'; Section 79(c) Environmental Protection and Assessment Act and recognised industry approaches for undertaking such work. The core steps are:

1. Profiling: This involves understanding the scale and scope of the project, parameters of the Social Impact Assessment and identifying the stakeholders (determined by the areas of affectation).
2. Scoping: This involves identifying the likely impacts arising from the development and includes consultation and feedback from identified stakeholders. Consultation is undertaken in a range of ways and may include informal consultation, stakeholder engagement, surveys etc.
3. Assessment: This section explores the likely impacts that will arise. The scope of the assessment is determined by the likely impacts and as a guide may include (but not be limited to):
  -  Changes to the population and characteristics of the area
  -  The community structure, its character or beliefs
  -  The health and safety of those living and working in the vicinity of the development
  -  An assessment of safety as it relates to crime, anti social and nuisance behaviour
  -  Social cohesion, in particular the quality of life of those living in the vicinity of the development
  -  Cost of living, including housing affordability
  -  Accessibility
  -  Sense of place and community
  -  The impact on existing services, including tourism etc
4. Management: All impacts should be identified and those that are identified as having an adverse or detrimental affect need to be managed and mitigated where possible. It is not always possible to manage all adverse impacts however identification of these impacts and how they can be managed must be taken into account. Similarly, impacts that are identified as being positive need to also be identified and capitalised upon where possible and appropriate. This allows for an assessment as to whether the proposal meets net community benefit criteria.

5. Monitoring: Strategies to monitor identified impacts may need to be identified to ensure that management strategies are adhered to and those cumulative impacts are identified, monitored and taken into account with further development.

### **1.3 Consultation and Engagement**

A range of consultation has been undertaken regarding the Lidsdale Siding Upgrade. These consultations have been managed independently through the course of the development of specialist consultant's reports and also by Centennial Coal staff.

The process of undertaking the Social Impact Assessment involves an understanding of the needs, issues, values and aspirations of the community so the impacts (positive and /or negative) can be identified. Information and data is gathered from a range of sources which includes informal and formal consultations with residents living within the Wallerawang and Lidsdale area, residents of the broader Lithgow community (ie LGA wide); businesses who operate both within Wallerawang / Lidsdale and those based outside of the project area, including real estate agency's; manufacturing; tourist operators, retail; etc.

Outcomes from previous consultations have also been reviewed, including, but not limited to, Centennial Coal's consultation strategy; consultations undertaken throughout the development of Lithgow City Council's Land Use Strategy since 2006; consultations undertaken by the Department of Planning in early 2011 and other sources of data relevant to this report.

The Social Impact Assessment process has also included a review of the specialist sub-consultants reports to identify the likelihood and extent of impacts arising from the proposed Lidsdale Siding Upgrade.

Centennial Coal staff has undertaken direct consultation regarding this project since 2008. The upgrade of Lidsdale Siding was first raised with Government and community stakeholders in 2008. Liaison continued during 2009 and early 2010 however the project was delayed to allow for further options evaluation. The consultation program was recommenced in mid 2011 and will continue throughout 2012 while the project is evaluated and assessed by government. The liaison process forms part of a Stakeholder Engagement Plan which will continue during the construction and operation of the upgraded facility. The following sections detail the framework of the engagement program and consultation activities to date.

#### **Community Consultation**

A first community newsletter informing the local community of the proposed Lidsdale Siding Upgrade was circulated in February 2009. This newsletter provided a background to the Project and outlined the environmental studies that would be undertaken as part of the original application to the Department of Planning.

The newsletter also provided details of a community information evening to be held where local residents or those interested in the Project could attend to find out further details. The contact details of Centennial Ivanhoe's Project Manager and Regional Environmental Officer were also provided.

The first community information evening was held at the Wallerawang Country Women's Association Hall on 24 February 2009 between 4.30pm and 8.00pm. Members of the community were able to view static information displays of the proposed Lidsdale Siding Upgrade and ask questions of Centennial staff that were present during the evening. The main issues raised in this initial session involved noise and dust impacts from the future upgraded project.

The consultation was expanded in early 2012 in conjunction with other Centennial projects (Coal Services Upgrade, Springvale Mine and Angus Place Colliery developments). This comprised:

A letter box drop of leaflets during early March 2012 inviting the regional community to;

- ☞ Community Information Sessions;
- ☞ An article placed in the Lithgow Mercury, in Centennial's Local Lithgow Project Update to provide the regional community with an update on the four projects in the area;
- ☞ Further project updates in the Lithgow Mercury advertising the three forthcoming Community Information Sessions; and
- ☞ A further advertisement placed in the Lithgow Mercury on 17 March 2012.

Community Information Sessions were subsequently held at the Country Women's Association in Wallerawang on:

- ☞ Wednesday 14 March, evening session from 4pm to 8pm
- ☞ Saturday 17 March, morning session 9am to 1pm
- ☞ Tuesday 20 March, morning session 9am to 1pm

Centennial representatives were present at all three sessions. Information boards with project plans and illustrations were on display. The sessions were then reported in an article in the Lithgow Mercury on 21 April 2012.

Issues raised during the Community Information Sessions specifically regarding the Lidsdale Siding Upgrade included:

- ☞ Noise – there was a recognition that the removal of the reversing alarms on the Front End Loaders was an improvement however night time loading was still audible, particularly the bell ringing when the trains crossed Main Street.
- ☞ Wallerawang is still considered a “railway” town and there is a general acceptance of train noise.
- ☞ The future elimination of truck deliveries were welcomed.
- ☞ Length of time Brays Lane is blocked by trains. This was particularly a concern during the recent flooding which also blocked the Main Street end of Brays Lane.

There was a generally acceptance of the rail facility as an historic part of the town and the important role that coal mining plays in the district. The majority of residents attending the sessions understood the link between coal mining and ongoing prosperity but also expressed the desire to maintain environmental values of the region. The extension of the siding closer to the town was discussed but no specific issues or matters of concern were raised.

Issue raised by the community in relation to the wider regional developments included general visual impacts, particularly from open cut mining, intensification of mining activities and the recognition of impacts from sources other than Centennial such as other mining operations and the two power stations.

### **Stakeholder Engagement Plan**

Centennial has developed and implemented a Stakeholder Engagement Plan for the Lidsdale Siding Project. The Plan identifies relevant government and community stakeholders, the methods of engagement and the desired outcomes. It is recognised that effective engagement is a key deliverable for the project and forms an integral part of the ongoing operation of the project.

Centennial recognises that community engagement goes beyond making information available or gathering information about opinions or attitudes, rather it is about active exchanges of information and viewpoints. These exchanges provide an understanding of the community's needs, issues, values and aspirations which is required not only to assess the social impacts of the project but to maintain effective long term working relationships. These relationships are integral to Centennial's approach to business and its Sustainable Development Strategy.

## Government Consultation

Effective relationships with government agencies also form part of the Stakeholder Engagement Plan. Each agency has been separately recognised and their information requirements identified.

Consultation with government agencies commenced in June 2008 when the upgrade project was first developed. As the project progressed, a series of additional meetings were held in early 2012. The results of this consultation is provided in the following table.

**Table 1: Government Consultation**

| Agency                                       | Date of Consultation           | Type or From/To                            | Topics                                                                   | Issues Raised                                                                                                                                                                                                                                                                              |
|----------------------------------------------|--------------------------------|--------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Department of Primary Industries/Forests NSW | 28 February 2012               | Presentation and meeting                   | Centennial presented each of the four projects to Forests NSW delegates. | Although Lidsdale Siding upgrade was raised in this meeting, no issues relevant to Forests NSW were raised.                                                                                                                                                                                |
| Land and Property Management Authority       | 29 February 2012               | Presentation and meeting                   | Centennial presented each of the four projects to LPMA                   | No specific issues relevant to Lidsdale Siding project                                                                                                                                                                                                                                     |
| OEH                                          | 2 March 2012                   | Presentation and meeting                   | Centennial presented each of the four projects to OEH delegates.         | Issues relevant to Lidsdale Siding included existing noise and dust impacts and general assessment criteria for the operation.                                                                                                                                                             |
| DTIRIS (Division of Resources and Energy)    | 8 March 2012                   | Presentation/ meeting and field inspection | Centennial presented each of the four projects to DTIRIS.                | Although Lidsdale Siding is not covered by a Mining Lease, general rehabilitation requirements for environmental assessment was discussed. The Department's standard DGR's for Rehabilitation needs to be addressed.                                                                       |
| Sydney Authority Catchment                   | 2 March 2012 and 19 March 2012 | Meeting and Field inspection               | As part of the four Centennial projects, SCA visited Lidsdale Siding     | Issues raised included general water management controls, cleaning up of the northern side of the rail siding, removal of Willows within Pipers Flat Creek, flooding issues and general sediment movement and controls on site. Need to undertake Neutral or beneficial effect assessment. |
| NSW Office of Water                          | 4 April 2012                   | Presentation and Meeting                   | Briefing on all four projects                                            | Need to determine site water balance, determine sources of water, interaction with other water users and general discussion on water sharing plans and status. A coordinated approach is required between operators and agencies regarding the upper Coxs River Catchment                  |
| Roads and Maritime Service                   | 28 February 2012               | Presentation and Meeting                   | Specific briefing on Lidsdale Siding                                     | Key issues related to rail crossings over Main Street and Brays Lane. ALCAM is the tool for assessment of rail crossings and control requirements. RMS considers that passive controls are generally not preferred for road/rail crossings. Preference for active controls                 |

| Agency                                    | Date of Consultation | Type or From/To                | Topics                                | Issues Raised                                                                                                          |
|-------------------------------------------|----------------------|--------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------|
|                                           |                      |                                |                                       | such as lights and audible controls. RMS would need to signoff of construction traffic management plan.                |
| Department of Planning and Infrastructure | Various since 2008   | Discussions and correspondence | General briefing and DGR finalisation | Issues specific to EA preparation and assessment requirements as listed in DGR's                                       |
| Lithgow City Council                      | 16 April 2012        | Presentation and meeting       | Briefing on all four projects         | General discussion regarding Voluntary Planning Agreement. No specific issues raised regarding Lidsdale Siding Upgrade |

## 2. COMMUNITY PROFILE

### 2.1 Overview

Reviewing the community's history and characteristics is an important way to understand the community's needs, issues and aspirations and therefore provide a basis for undertaking the Social Impact Assessment.

The Lithgow Local Government Area (LGA) is a relatively large geographical area of 4,551 sq km, located about 140 kilometres west of the Sydney CBD and within the eastern part of the Central West Region. The Lithgow LGA lies almost wholly within the Wiradjuri Aboriginal nation, with the Gundungurra nation situated to the south and the Darung nation to the east.

The Lithgow LGA is made up of one large urban centre called Lithgow, two townships called Portland and Wallerawang and numerous villages, hamlets and rural localities of varying proximity to Lithgow.

The vision for the LGA was developed in collaboration with the community and adopted by Council in 2006. It sets a vision for the next 10 to 20 years for the Local Government Area. The overarching vision statement is:

*A centre of Regional excellence that:*



*Encourages community growth and development*



*Contributes to the efficient and effective management of the environment, community and economy for present and future generations.*

### 2.2 Mining history

Lithgow has a long history with mining. Lithgow is situated in the Western Coalfield which is located between Katoomba in the south-east and runs north-westerly through Hartley, Lithgow, Wallerawang & Cullen Bullen to Kandos and Ulan.

Mining in Lithgow dates back to the mid 1800's where coal was initially mined for domestic use. The completion of the railway between Sydney and Lithgow resulted in an increase in the industrial activity in Lithgow and the district.

Today, the economic base of Lithgow is still recognised as being the energy and resources sector. Both sectors have long been major employers and subsequently make a significant contribution to the overall economy. Currently there are eight coal mines in operation and two Delta Electricity sites (power generation) in the Lithgow area.

Based on ABS Census figures from 2006, the largest employer in Lithgow is the mining industry, employing 12.3% of the workforce in the Lithgow Local Government Area. According to research undertaken in 2010, over 1200 people are employed by the mining sector alone - an increase of 24% on 2006 figures.

Considerable growth has been experienced in the local energy and resources sectors particularly with the expansion of a number of mines. This is providing a diverse range of opportunities for local support services and the resident workforce. Therefore direct and indirect employment opportunities occur across a number of non energy and resources sectors; including retail and accommodation.

## 2.3 Local Characteristics

Areas within the vicinity of this proposal include Wallerawang and Lidsdale. These areas are characterised by mining and power generation, evidenced by the physical (and therefore visual) presence of mine related infrastructure, power stations and associated business / industry. The employment profile also reflects that of the local industry.

Wallerawang and Lidsdale include a main township (Wallerawang) and surrounding rural areas. The area is bounded by the locality of Blackmans Flat, Coxs River and the locality of Wolgan Valley in the north, the Wolgan River and the localities of Springvale and Marrangaroo in the east, Coxs River, the locality of Rydal, Solitary Creek and the locality of Mount Lambie in the south, and Thompsons Creek Road, Pipers Flat Road and the locality of Portland in the north west.

Wallerawang is named from an Aboriginal word thought to mean "water on rocks" or "plenty of water". Settlement of the area dates from the 1820s, with land used mainly for farming. Population was minimal until the 1860s, with growth during the late 1800s, aided by the opening of the railway line in 1871. Significant development did not occur until the late 1950s, spurred by the opening of a power station in 1957. The population declined slightly from the mid 1990s. This was a result of few new dwellings being added to the area, and a decline in the average number of persons living in each dwelling.

Primary access to Wallerawang is along Main Street via the Castlereagh Highway. Wallerawang Power Station sits at this intersection as does Lidsdale Siding. The Wallerawang CBD is located on Main Street, approximately 1.5 km from the Castlereagh Highway intersection. The CBD is well defined and contains a range of retail and commercial outlets to support day to day needs of residents with higher order commercial and retail needs being met in the Lithgow urban area.

Residential housing is located to the south and south west of the CBD. Closer to the CBD is older housing of fibro, timber and brick veneer construction. Towards Lake Wallace is newer residential housing and further along the Wallerawang Rydal Road is large lot rural residential.

Lidsdale sits to the east of the Castlereagh Highway intersection and residential housing is located primarily along the Wolgan Road.

Major features of the area include Lake Wallace, Wallerawang Power Station, Wallerawang Oval, several state forests and one school. Key services for the area include:

-  Community facilities: Council library and depot; medical and community health centres; recreational facilities including PJ Hall Memorial Park, Lake Wallace, playing fields and skate park; police, fire services; Country Women's Association; churches; primary school; bowling club.
-  Retail and commercial facilities /services: supermarket; post office (with a pharmacy prescription service (drop in (am) and pick up (pm))); bank; newsagent; bakery; butcher; service stations; hotels; takeaway store; hairdresser.
-  Lidsdale facilities: Rural Fire Service; tennis courts; Ted Hughes Memorial Park; church.



**The main retail centre of Wallerawang**



**Wallerawang Library**

## ***2.4 Population Characteristics***

Population characteristics are an important means of identifying who lives in a particular area, housing costs, family type, employment profile and socio-economic status.

### ***2.4.1 Lithgow LGA***

The 2006 Census recorded a population of 19,756 people living in the Lithgow LGA. The population of the Lithgow LGA has undergone some changes from the period 1991 to 2006 (refer Table 2). There was a decrease between the 1991, 1996 and 2001 census periods and the 2006 census recorded a slight increase. The amalgamation of the Lithgow LGA, to include small areas of the former Rylstone and Evans LGA's, are one reason for the population increase given its history of decline over the past 15 years. Employment opportunities in the immediate area will bring about fluctuations in population numbers.

A summary of key changes within the population characteristics for the LGA are listed below:

1. The population has increased by 583 people between 2001 and 2006. This represents a total of 3% for the five year period or an average of 0.6% per annum since 2001 and 2006.

The growth over this period is significantly less than the articulated target moderate growth scenario of 1% - 2% documented in Councils strategic plan.

2. The median age of the LGA has increased from 37 years to 40 years.
3. There has been a slight increase in the 15 – 24 year age group and a more significant increase in the 55 + year age group. The population in other working age groups has decreased.
4. The occupation characteristics has remained relatively similar however there has been an increase in people working as labourers. The main occupations have remained the same with coal mining being the most common occupation in Lithgow. There has been an increase in school education, public order and safety services and also electricity generation.
5. There is an increasing proportion of the population living in rural communities. From 2001 to 2006 the proportion of persons living in urban areas has decreased from 95% to 80%. The predominant urban areas being Lithgow, Portland and Wallerawang.

**Table 2: Population Lithgow LGA 1991 - 2006**

| Year | Population |
|------|------------|
| 1991 | 20,253     |
| 1996 | 19,248     |
| 2001 | 19,197     |
| 2006 | 19,756     |

Source ABS Census data

## 2.4.2 Wallerawang / Lidsdale

In the 2006 Census, there were 1,904 persons usually resident in Wallerawang and Lidsdale: 970 persons (50.9%) were males and 934 (49.1%) were females. Of the total population in Wallerawang 2.7% were Indigenous persons, compared with 3.1% Indigenous persons for the LGA. 23.6% of the population were children aged between 0-14 years, and 22.2% were persons aged 55 years and over. The median age was 36 years, compared with 40 years for persons in the LGA.

The following is a general summary of the characteristics for Wallerawang / Lidsdale.

- ☞ Marital status: In the 2006 Census, 52.7% of persons aged 15 years and over were married, 31.5% never married, 10.9% separated or divorced and 4.8% widowed.
- ☞ Labour Force: 833 people aged 15 years and over were in the labour force. Of these, 58.3% were employed full-time, 26.1% were employed part-time, 3.8% were employed but away from work, 3.1% were employed but did not state their hours worked and 8.6% were unemployed compared with 8.5% for the LGA. There were 571 usual residents aged 15 years and over not in the labour force.
- ☞ Occupation: The most common responses for occupation for employed persons were Technicians and Trades Workers 20.0%, Machinery Operators And Drivers 17.0%, Labourers 14.3%, Clerical and Administrative Workers 14.2% and Community and Personal Service Workers 12.2%.
- ☞ Industry of Employment: The most common industries of employment for persons aged 15 years and over were Coal Mining 12.5%, Public Order and Safety Services 5.0%, Electricity Generation 4.5%, Road Freight Transport 4.3% and Cafes, Restaurants and Takeaway Food Services 3.3%.
- ☞ Income: The median weekly individual income for persons aged 15 years and over who were usual residents was \$350, compared with \$353 for the LGA. The median weekly household income was \$908, compared with \$738 for the LGA. The median weekly family income was \$1,092, compared with \$1,026 for the LGA.

- Family Characteristics: There were 512 families in Wallerawang: 49.0% were couple families with children, 34.4% were couple families without children, 15.0% were one parent families and 1.6% were other families.
- Dwelling Characteristics: There were 704 occupied private dwellings; 94.2% were separate houses, 2.4% were semi-detached, row or terrace houses, townhouses etc, 1.6% were flats, units or apartments and 1.8% were other dwellings.
- The median weekly rent was \$130, compared to \$135 for the LGA. The median monthly housing loan repayment was \$1,150, compared to \$1,107 for the LGA. The average household size was 2.6 compared with 2.4 for the LGA and the average number of persons per bedroom was 1.1 which is on par with the LGA.
- Tenure Type: 35.8% of occupied private dwellings were fully owned, 33.5% were being purchased and 26.6% were rented.
- Household Composition: 72.2% of occupied private dwellings were family households, 23.3% were lone person households and 2.3% were group households.
- Landlord Type: Of the occupied private dwellings being rented, 29.4% were rented from a real estate agent, 41.7% were rented from a State or Territory housing authority and 26.7% were rented from other landlord type. In comparison, in Australia 50.5% were rented from a real estate agent and 14.9% from a state or territory housing authority.

With reference to Wallerawang and Lidsdale, data from the 2006 census tells us that:

- The predominant occupation relates to Technicians and Trades Workers (20%); Machinery Operators and Drivers (17%) and Labourers (14.3%).
- 13.5% of the workforce is employed in the mining sector which is higher than the LGA generally; 9.8% in manufacturing; 9.7% in Health Care and Social Assistance; 9.2% in Public Administration and Safety and 9.1% in Retail Trades. 7.5% of the population are employed in Electricity, Gas, Water and Waste Services.
- There is a higher than average weekly household income than that of the LGA.
- There are a high proportion of families with children.
- Nearly 70% of the population either own or are purchasing their home, suggesting a relatively stable population.
- Data also indicates an emerging retail sector. The growth of the retail sector has resulted from the 'spend' generated by local residents. Given the employment profile it demonstrates an inter-connection between sectors, rather than the emergence of a stand-alone retail sector.
- Between the 2001 and 2006 census periods, there has been a slight decrease in population. The main decline in population is found with children and young people aged 0 – 17 years.
- Household size has also decreased from 2.81 persons per household in 2001 to 2.63 persons in 2006. This is influenced by both an ageing population and a slight increase in families without children.
- There is a growing proportion of people aged 55 years and over. This has primarily been generated by the in-migration of people from the Blue Mountains and Western Sydney basin due to the affordability and availability of aged care housing (self supported accommodation for people aged over 55 years).

## **2.5 Land Use Characteristics**

### **2.5.1 Overview**

Wallerawang/Lidsdale is the second largest urban area in the LGA. The residential areas are clearly defined and basically contained within a defined geographic area. There are examples of

large lot rural residential occurring on the fringes of the residential areas with new examples found to the south of Wallerawang along the Wallerawang Rydal Road.



**Examples of new residential housing in Wallerawang. Wallace Lake is to the right of the photo.**



**Examples of older fibro and brick veneer housing.**

Industry such as Wallerawang Power Station, Lidsdale Siding and other examples of mine related infrastructure such as trucks, over land conveyors, related industry are highly visible within proximity to the residential areas,



**Wallerawang Power Station is the backdrop to the town of Wallerawang**

Agricultural lands and forests are the dominant land uses of the LGA. Immediately surrounding the residential and industrial areas at Wallerawang and Lidsdale is agricultural lands. The rural residential areas found within proximity to Wallerawang and on the fringe of the project area (for example along Brays Lane and Duncan Street, and Wolgan Road in Lidsdale). Due to distance, topography and vegetation, visual impacts are reduced however there are noise impacts arising from industry. Centennial Coal has engaged with local residents and undertaken strategies to mitigate these impacts.



**Looking west from Brays Lane. The Lidsdale Siding is less than 2 klm to the east.**



**Overland conveyer, Duncan Street**

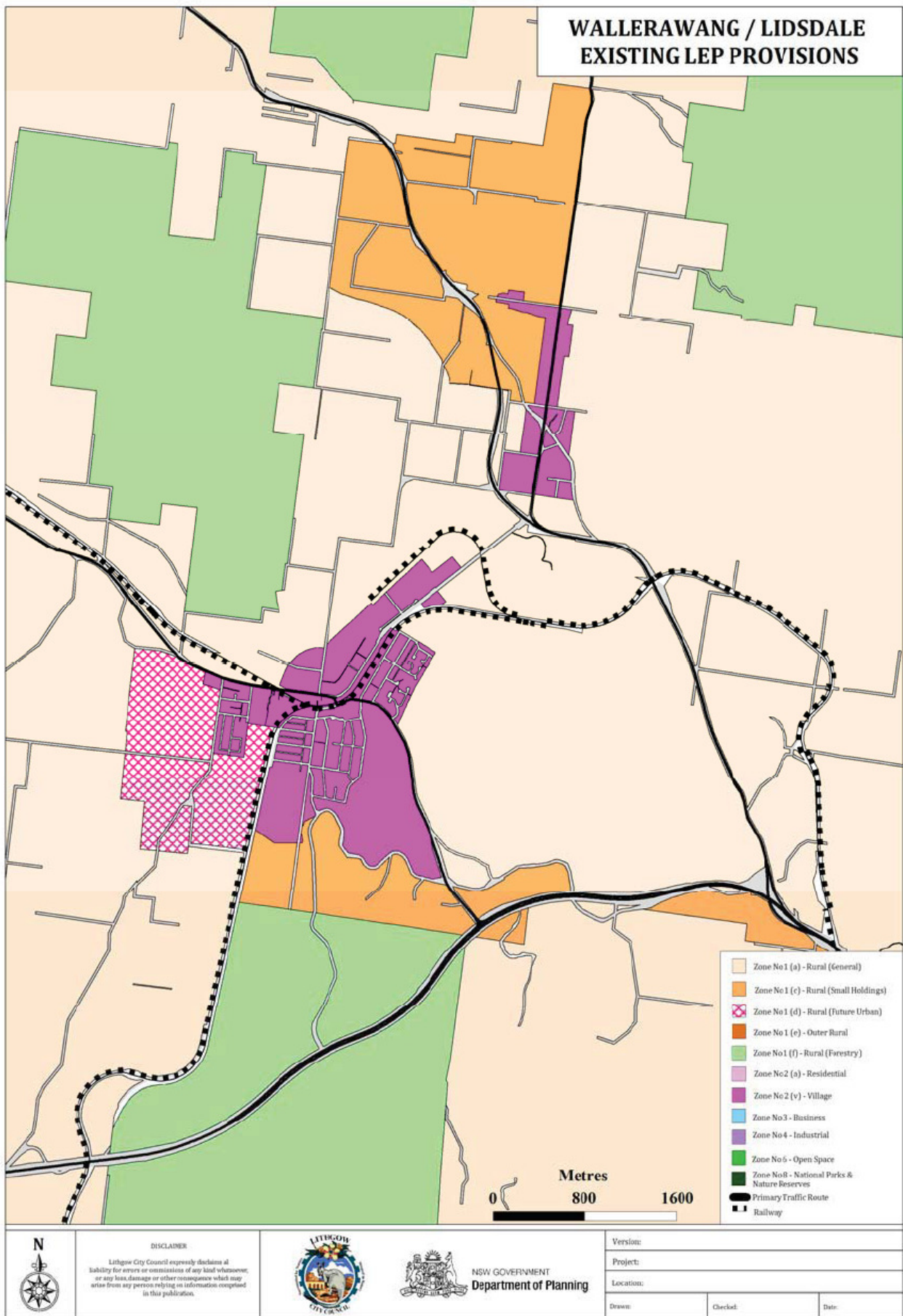
### **2.5.2 Land Use Strategy**

The current LEP identifies Wallerawang and Lidsdale as villages. The Village Zoning of Wallerawang and Lidsdale are inclusive of the residential area and commercial and industrial areas located along Main Street (refer to map below). During consultation some residents and business operators identified the area as being a village or town; and this was identified as being the character of the area.

When discussing the impacts of industry, one resident who was also a business owner stated that the encroaching industry should acknowledge the village nature (as per the Zoning) and operate in a manner which is conducive to this character. Noise and dust were specifically identified.

Another local business (accommodation) operator recognised the direct benefit they receive from local industry, in particular mining, however also stated that the industry also has a negative impact on their business due to noise.

It is evident that the general nature of the current zoning has contributed to land use conflict in both Wallerawang and Lidsdale. The land use conflict relates to noise, dust and visual impacts, all of which impact on individual and community amenity. Amendments to the zoning may provide some surety for developers however existing land use conflict between industry and other land holders will remain.



Existing LEP Provisions: Wallerawang / Lidsdale

### 2.5.3 Lithgow LGA – Land Use Strategy

In the development of its Land Use Strategy, Lithgow City Council consulted with the Wallerawang community in March 2006. The following values and aspirations were identified;

-  Increasing job opportunities for their children;
-  Improved infrastructure for Wallerawang;
-  Preventing Sydney type sprawl in the area;
-  Preserving scenic landscapes;
-  Maximising opportunities for sustainable business development;
-  Promoting tourism.

The planning principles that have been taken forward from these initial consultations and also via the development of the Land Use paper has found that;

-  There needs to be a consolidation of the town centre
-  Provide a land use structure cognisant with its current and future land use
-  Large lot residential to remain on the fringes of the urban areas
-  Regards for industrial nature and environmental constraints when considering future land uses.

Taking into consideration these identified values and aspirations and information contained in the Land Use Issues Paper a Strengths, Weaknesses, Opportunities and Threat analysis (SWOT) was developed. The full SWOT can be found in Appendix 2 however the points that were identified via consultations, and are consistent with the draft LUS are listed below:

#### **Strengths**

-  Established retail and commercial precinct within Wallerawang that meets the day to day needs of residents.
-  Within close proximity to the Lithgow CBD which provides higher order services.
-  Existing employment opportunities within established industries based around mining and power generation.

#### **Weaknesses**

-  Fragmentation of land due to industrial development occurring in rural lands.
-  Impacts on amenity by existing industrial/power generating development.
-  Land constraints as a result of location of industry, railway, slope and topography etc.

#### **Opportunities**

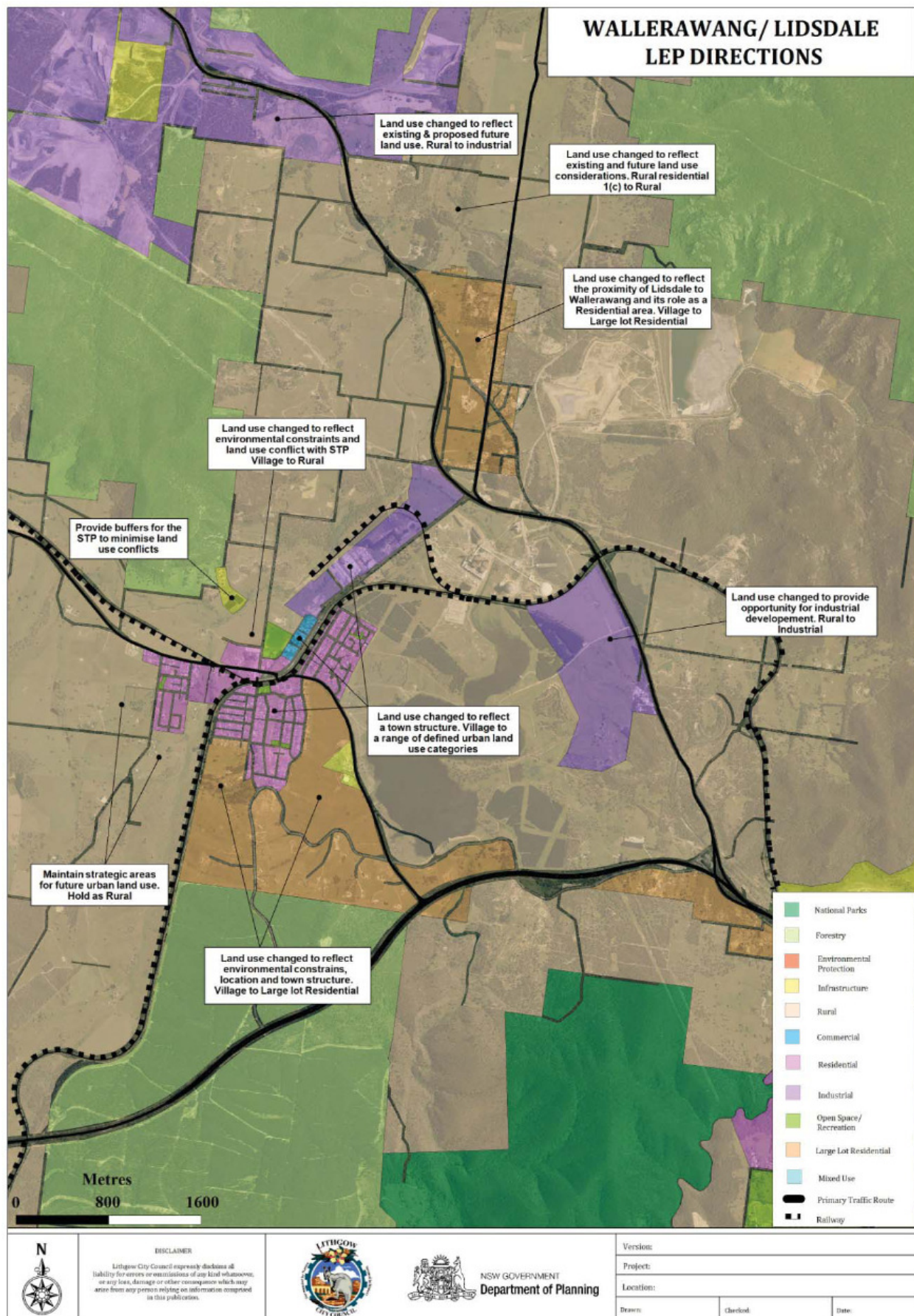
-  Potential for further industrial development in the area and subsequent associated industrial and commercial spinoffs.
-  Capitalise on construction activity associated with the proposed expansion of Mt Piper Power Station.
-  Opportunities for the development of short term accommodation options to meet the demand created by itinerant workers.

#### **Threats**

-  Land use conflict.

Feedback from consultations consistently highlighted the importance of mining and power generation with regards to the local economy. It was also highlighted that the ongoing development of industry should not be at the cost of residential amenity and put at risk opportunities to capitalise on non industrial business opportunities. The above values and aspirations and SWOT highlight some of these distinctions.

With this in mind, the proposed LEP map has been prepared and is shown below.



**Wallerawang / Lidsdale: Proposed LEP Provisions**

The above LEP provisions aim to address these concerns by providing zonings that recognise the current land use structure and is an important step to address where and how future development can occur.

## **2.6 Former NSW Government's Coal and Gas Strategy: Lithgow Regional Forum 25 February 2011**

The former NSW Government presented a number of regional forums at the beginning of 2011 to discuss and explore the NSW Coal and Gas Strategy (now replaced with the Regional Strategic Land Use Strategy). The purpose of the Coal and Gas Strategy was to:

- ☞ Guide sustainable development of the industry – greater certainty for everyone
- ☞ Better balance & minimise impacts – environmental, health, agricultural, and land use
- ☞ More effective and efficient regulation of the industry
- ☞ Better communication between the industry, Government and communities.

The forum presented the following key issues for the Western Area:

- ☞ Managing cumulative impacts - Moolarben – Wilpinjong (Mudgee LGA)
- ☞ Noise, Dust, rehabilitation, biodiversity etc.
- ☞ Managing expansion into new areas
- ☞ Greater certainty for communities
- ☞ Protection of Biodiversity and Aboriginal Heritage
- ☞ Protecting water systems
- ☞ Protecting agricultural land
- ☞ Transport Infrastructure
- ☞ Rail capacity upgrades
- ☞ Regional road network upgrade
- ☞ Impacts on regional towns
- ☞ Planning for jobs, housing and community facilities
- ☞ Funding regional community infrastructure.

The following as a summary of key issues raised by stakeholders relating to the development of the NSW Coal and Gas Strategy (as noted by the Department of Planning on the 25<sup>th</sup> February 2011):

- ☞ Needs to be improved regulation of exploration licenses and the way they are issued.
- ☞ There is a strong need to take into consideration the particular values of a local and regional area – eg clean environment, food security, housing opportunities, building of communities etc.
- ☞ Long term environmental impacts and protecting valuable lands and land uses - particularly food production for future generations.
- ☞ Consideration of alternative energy sources and how this will affect the demand for coal into the future.
- ☞ Need to recognize and protect the values and opportunities of certain areas – particularly around tourism, housing, clean environment.
- ☞ Consideration needs to be given to the effects of mining on the tourism industry.
- ☞ Improved processes need to be considered including better base line data before decision area made and adaptive management.

### **2.6.1 Summary of Issues Raised**

A summary of relevant and key themes raised by speakers included:

#### **Issues relating to Coal Mining.**

- ☞ Coal mining can affect landowners and environmental issues in the area may have resulted from coal burning.

- ☞ In relation to mining there should generally be better controls around impacts on the environment.
- ☞ There should be buffer zones where mining does not occur that provide clean zones for better lifestyle. We need to protect the ecology and biodiversity of an area.
- ☞ Mining can be very divisive in local and regional communities.
- ☞ We can't just look at the anti mining concerns – the Strategy needs to look at a set of balanced outcomes.
- ☞ The benefits of mining cannot be underestimated.

## **Social and Community Impacts**

- ☞ Given the Sydney Basin is almost exhausted for housing, the western areas (eg including in and around Lithgow) provides an opportunity to house people – mining may compromise that opportunity.
- ☞ There is a need to take into account the needs of future generations in terms of health, housing, ageing population etc., and provide suitable environments for them to live.
- ☞ The issues for balance and certainty for communities is an important issue that needs to be addressed.
- ☞ There is a reluctance of industry to embrace the protection of other values.
- ☞ Serious consideration needs to be given to the assumptions and values that we place on the growth of energy demand and its importance in terms of jobs.
- ☞ In 20 years time we may be talking about shortages of food – The question of what are our long term goals and priorities for the use of our land should be an important consideration in the development of a Coal and Gas Strategy.
- ☞ Tourism – local and regional tourism would be devastated by mining.
- ☞ We need to model costs/benefits/value associated with good lifestyle areas, tourism and ecological aspects.
- ☞ People are concerned about the health impacts and want to ensure they have a positive quality of life, health, food water and social connectivity to the community.
- ☞ We need to make sure all the values of different land uses, lifestyle opportunities, health benefits, food security etc are recognised.
- ☞ Don't forget disastrous effects and families on jobs – it was not long ago that there were protests about job losses in Lithgow due to mine closures.
- ☞ Legislation needs to change so that property owners know they are likely to be affected before the license is issued.
- ☞ There needs to be a better contribution towards the needs of communities cost of infrastructure needs to be met and contributed to.
- ☞ Need baseline data before we go forward to gauge cumulative impacts.
- ☞ Communities have been calling for independent studies for a long time.
- ☞ Local communities are being devastated by mining (churches, fire services, schools etc are losing people).
- ☞ If there is so much value for the state, will there be consideration to covering the community against the costs of these major developments?
- ☞ Social impact assessment should be undertaken to gauge impacts

## **2.7 Community Profile – Key Themes and Values**

Information gathered from the community profile and feedback from consultations has identified a number of key points which are relevant to the social impacts relating to the Lidsdale Siding Upgrade. These are summarised below.

- ☞ Mining and power generation are a significant feature of the LGA as are agriculture and national parks.
- ☞ Continued growth in mining and power generation is a major contributor to the economy and progress in these sectors is considered essential.
- ☞ Mining and power have been a significant source of employment via both direct and indirect employment. Many towns and villages emerged as a result of the local mining industry and local businesses articulate the benefit they receive from 'the mines'.

- ☞ There is growth in some sectors in the economy, for example retail, which is a result of mining and power related employment.
- ☞ There is a strong connection to mining by community in this (Wallerawang) area. However this connection is not shared across the entire LGA, especially in areas where there is less reliance on the mining industry. For example in areas where people live primarily for agriculture and life style reasons, such as the Blue Mountains and western portion of the LGA, there is opposition to mining.
- ☞ Previous land use planning has not provided adequate protection from land use conflict resulting in numerous examples of land use conflict across the LGA.
- ☞ Despite the connection to power and mining, residents do not want to be adversely impacted upon by industry when they are not working. It would therefore be a risk to presume that a strong connection to mining and power means that it is acceptable to expand without considering social impacts.
- ☞ Amenity is still an important factor to quality of life and noise, dust and visual impacts arising from industry could have adverse effects on residential amenity.
- ☞ Identified benefits arising from mining such as construction of additional infrastructure, maintenance of existing and creation of additional jobs, role in the export economy etc does not outweigh the impact on community amenity even if the industry (eg mine) operates within approved limits.

In summary, consultation with community stakeholders has identified that the development of mine related infrastructure as being generally positive due to the positive contribution to the economy.

Consultations also identified noise, dust, odour and visual impacts that are generated by mining as factors which would adversely affect the quality of life of people who live and work in the community.

## 3. SOCIAL IMPACTS

### 3.1 Overview

A social impact assessment (SIA) framework has been used to identify the impacts of the proposal. Social impacts can be positive and negative; intentional and unintentional.

The above profile of the community; and input by people who live and work in the area, identified via a range of consultation processes, are used to assess the potential social impact.

The operation of extractive industries is often a contentious issue regardless of whether or not they have been operating for a period of time. However it was found that residents and local business operators in Wallerawang and Lidsdale will talk freely about the importance of mining and clearly articulate the positive impact in relation to jobs and the flow on effect to other non-mine related businesses.

The construction of additional infrastructure such as the Lidsdale Siding Upgrade represents progress and therefore job security. The impact of mine closure was also discussed to articulate this point and (whether accurate or not) it was often quoted that there is a loss of 2.6 indirect jobs for every direct mine related job lost.

The impact of industry in Wallerawang and Lidsdale has not been without any adverse effects. Some residents are concerned about noise, dust, odour and visual impacts; which collectively relate to residential amenity. Furthermore, it was not uncommon for residents to express concern for others who they know are impacted upon by the surrounding industry.

The impact of Centennial's operations has been acknowledged and the company has taken steps to mitigate identified impacts on residents.

### 3.2 Social Impact Checklist

As previously stated, SIA is a systematic, staged approach of enquiry that identifies who may be affected by the project and how they are affected. Key areas that are explored are discussed below.

#### 3.2.1 Population Impacts:

The population characteristics of the area are important to assess as major changes may bring about the need to increase infrastructure to the area to cater with increased demand and / or relates generally to the population / community groups that will be impacted upon by the proposal.

The Lidsdale Siding upgrade will not result in changes to the population characteristics for the area. Therefore there will be no impact (for example change in demand) on existing services or facilities brought about by this project.

#### 3.2.2 Community Structure, Character and Beliefs:

The community structure, character and beliefs relate to the impacts the development may bring about on relationships between people due to their customs, beliefs and attitudes. Influencing factors may include employment, lifestyle, religious beliefs etc.

As previously stated, mines and mine related infrastructure have been part of Lithgow and the Wallerawang / Lidsdale communities for many years. Mining and electricity generation is a major source of employment and there are a high proportion of residents living in the local area who are employed in these sectors.

This project is generally viewed as being positive and is not identified as being in conflict with the general amenity of the area. The project is recognised as an indication of progress and brings

surety of employment. This is articulated by a range of community stakeholders such as residents and local business owners.

### **3.2.3 Health and Safety:**

Provides an overview of how the development will impact on the health of those affected by the development. This can include direct health impacts from dust / pollution and also impacts to general amenity brought about by visual impacts.

The impact of noise, dust and visual impacts were the key issues identified by some residents living in the vicinity of the development. This included a nearby business (accommodation) and some residents living along Brays Lane. The business operator did not want the project to disrupt guests staying at the facility as they thought it would have an adverse impact on their business.

Residents of the nearby Brays Lane have been impacted on by noise and did not want this impact to increase. Centennial has undertaken mitigation strategies to address these impacts.

### **3.2.4 Sense of Place and Community:**

Sense of place and community relates primarily with the aesthetics of the surrounding neighbourhood / residential character. The key area of analysis here is whether it complements the existing character, is the design in keeping with its surrounds.

As previously identified mine and power generation infrastructure is a dominant feature of the landscape. However away from the main township there are large portions of agricultural land.

It became evident that people living in more rural areas wanted to preserve this character. For example, some residents along Brays Lane identified that noise has been an issue and strategies to address this impact have been undertaken. These residents were not opposed to mining or this project, however did not want the project to impact on their quality of life.

### **3.2.5 Amenity**

Impacts such as noise, dust / pollution each have a negative impact on the general amenity of the community and therefore a negative impact on quality of life. Factors that influence this would be any increase in noise, dust, visual / loss of scenic values to the general community; loss of convenience to residents (eg increase in rail movements) and the development encroaching onto other land (eg via the extension).

As discussed before, the community in general may have a level of acceptance of mining and power generation, however this does not mean that residents will want to experience / or will tolerate any adverse impact in this regard. The Land Use Strategy has proposed specific land use zones, in effect ensuring clear land use objectives (and boundary) within each zone to minimise conflict between land uses. However the operation of the Lidsdale Siding may encroach on non-industrial zoned land.

A review of the sub-consultants reports has identified visual and noise impacts as having the potential to result in an adverse social impact on community amenity.

### **Visual Impacts**

For example, the Visual Impact Assessment identifies that the main project elements that will be visible from outside the current site include the main stockpile and overhead gantry, rail loading bin and the track extension.

The stockpile is likely to be viewed from various vantage points along Main Street and Brays Lane and the rail extension will be visible from the rear of the Wallerawang shops as well as residents in Blackberry Lane.

The extension of the rail siding also has the potential to adversely impact on the general amenity (visual) of the immediate area. The view from Blackberry Lane across to Brays Lane is free from

evidence of industry. The encroachment of the rail line in this area is an adverse impact which would require adequate buffers. The vegetation is largely willows which is understood will be progressively removed and replaced by a native vegetation screen.

### **Noise Impacts**

Noise of train movements arising from the trains banging (referred to as Rail in and Rail out or Ri-Ro noise) may improve as each train currently goes through 20 start/stop movements making a two second 'clanging' noise as the carriages move together or move apart and hit each other. Under the new arrangements each train would only do this 11 times because of the continuous loading. However there will be more trains (up to seven per 24 hour period).

Additional noise from the trains operation could be generated from the activation of warning lights at the rail crossing at Main Street, adjacent to the Lidsdale Siding.

A dozer / front end loader will be required to manage the new stockpile which will improve the current situation however will still have a noise impact when operating at night.



**View across vacant land between Blackberry and Brays Lane.**



**The existing rail siding has been effectively buffered by both natural vegetation and industry.**

### **3.2.6 The Cost of Living (Employment and Housing)**

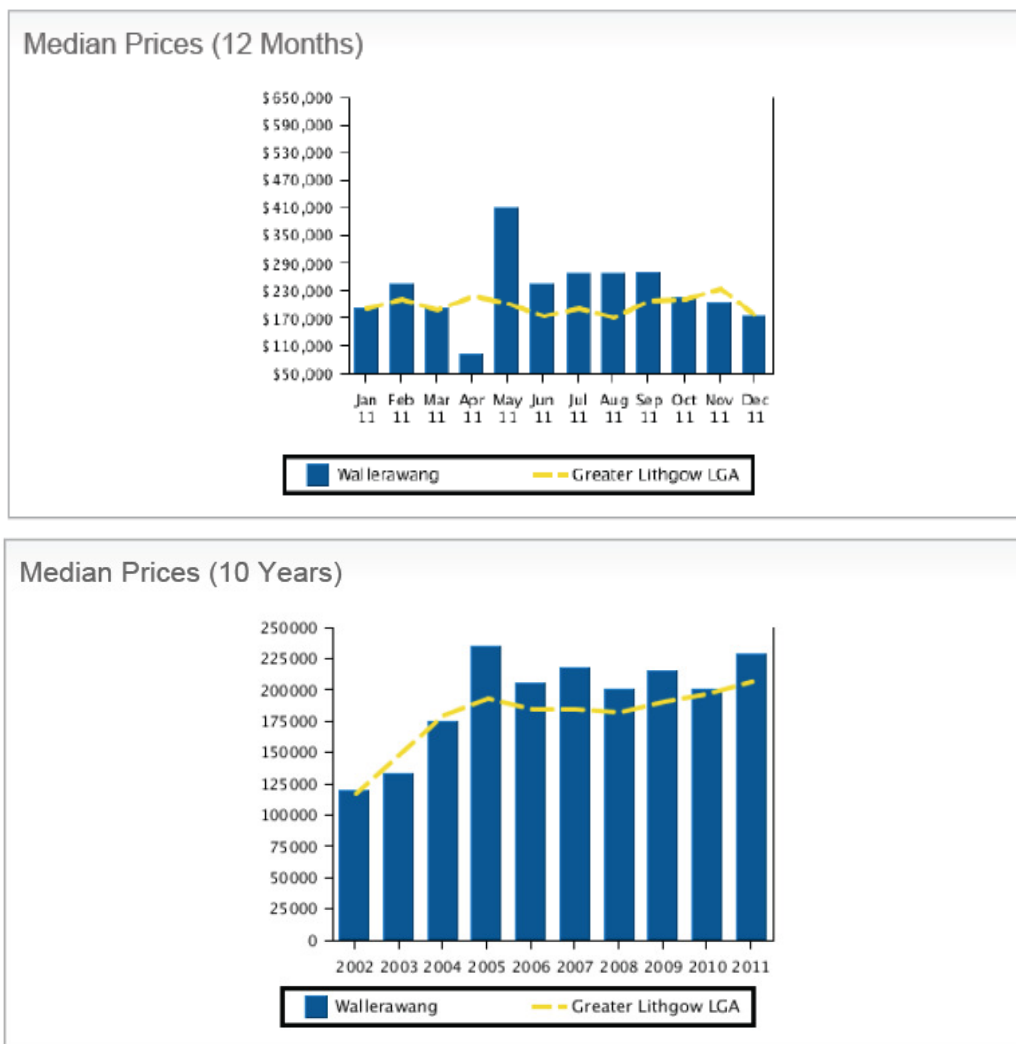
Consultation with real estate agents identified that property sales in the Wallerawang and Lidsdale areas have been steady, if not slow. This is indicative of the market generally rather than resulting from the negative impact of industry. However, residential land prices will be adversely impacted upon where the infrastructure encroaches on residential land. The use of land use zones provides

a degree of surety to land owners and developers in a physical sense, however adverse impacts on the amenity of the area is not contained within those boundaries.

Loss of property / business value is often presented as a key concern. However the loss of value is often not financially related or market driven, but is related to intrinsic value. In this context, intrinsic value is the value individuals place on why we move into an area – it may be because of the rural setting, views and the peace and quiet.

The impact of the view across Blackberry Lane towards Brays Lane is an example of intrinsic value which may be lost. It may not be shared by many people, however represents a significant loss to those who it affects.

**Table 3: RP Data Median Residential House Prices (12 months; 3 years and 10 years).**



### 3.3 Areas of Affection

Taking the above factors into account there is a general acceptance of mining and power generation by the community and the project was generally supported.

The project does not have an adverse impact on the broader community, however there will be localised impacts arising primarily from noise and visual impacts.

**Table 4: Areas of Affection and Anticipated Impacts.**

| Area of Affection | Contextual Definition and Considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Anticipated Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Primary.          | <p>Primary area of affection is determined by the impact of the operation of the project having a direct affect on the day to day living of residents and business operations.</p> <ul style="list-style-type: none"> <li>➤ Adjoining land holders.</li> <li>➤ Residents who live in the immediate vicinity of the project area.</li> <li>➤ Business operators who would be adversely impacted upon (eg tourist etc).</li> <li>➤ Residents who would utilise the surrounding land.</li> <li>➤ Visitors who utilise services and facilities in the immediate area. For example accommodation may be affected by noise.</li> </ul> <p>Impact would include dust, noise and visual impacts.</p> | <p>The impact will arise from the extension of the rail line parallel to the Main Street approximately 180m closer to the town. While it is noted that there are some effective buffers (light industrial area) between Main Street and the existing rail line, there will be increase in train activity and therefore noise.</p> <p>Noise impacts were identified as being key issues to people living in the immediate area and by those who are already impacted upon by industry in the area.</p> <p>There appears to be some ongoing impact to the areas that already experience noise and while this may improve, the impact of noise will continue.</p> <p>As per the Visual Impact Assessment, the main project elements that will be visible from outside the current site include the main stockpile and overhead gantry, rail loading bin and the track extension.</p> |
| Secondary.        | <p>The secondary area of affection is determined by those living in the vicinity (not direct neighbours) of the project that may be affected by dust, noise and visual impacts.</p> <p>Affected communities can also be those who have strong connections with the land and in this case may include people who have moved to the area for lifestyle reasons, residents on large lot residential / land primarily used for agriculture.</p>                                                                                                                                                                                                                                                  | <p>The rail line extension will potentially result in an increase in noise, especially during night loading. This will potentially result in a broader impact to parts of Wallerawang.</p> <p>Visual impacts resulting from the extension of the rail line.</p> <p>Noise generated by the activation of warning lights at the rail crossing at Brays Lane and also adjacent to the Lidsdale Siding.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

### 3.4 Response

A review of each of the consultant's reports has been undertaken to assess the actual impact arising from the project.

### 3.4.1 Economic

It is estimated that the peak year of construction of the Lidsdale Siding Upgrade Project will result in impacts on the regional economy of up to:

- ☞ \$5M in annual direct and indirect output;
- ☞ \$2M in annual direct and indirect regional value added;
- ☞ \$2M in annual direct and indirect household income; and
- ☞ 20 direct and indirect jobs.

**Comment:** This is a positive impact to the local community.

### 3.4.2 Noise

All new sources of noise have been designed to include noise control engineering within them, through either selection of quiet motors and gearboxes, special enclosure and damping of transfer chutes, side barrier enclosure of the rail loading area. Operation of the loading will be up a grade of 0.5%, to minimise the potential for Ri-Ro noise during minor speed changes, and by having loaded wagons closest to the houses of Wallerawang. If a train has a locomotive at the southern end (that is two locomotives at the front - northern end and one at the southern – tailend, the southern single locomotive will be turned off during loading to further minimise noise emissions to Wallerawang residences.

On the basis of the above, it is considered that the construction and operation of the proposed new development at the Lidsdale Siding can be achieved within the recommended noise criteria and have a low potential for noise annoyance. Reductions in total noise emissions are expected by the change of loading from front-end-loader and truck to automatic stockpiling and rail loading-bin.

Noise levels will be similar to or less than those which currently occur from the site. The number of impact sounds from the site caused by train Ri-Ro movements and FEL loading of coal wagons will be significantly reduced by removal of unshielded wagon loading and the reduction in number of train stops and starts at the site.

The Noise Assessment Report states that on the basis of the above, with achievement of PSNLs for most conditions for the new continuous operating plant, and reduced sound levels and impacts for existing sources, the proposed development is considered to be acceptable.

**Comment:** This is a positive outcome. However any noise impact will have an adverse impact on community amenity especially at night. It is considered that the impact will remain localised to nearby residences and businesses (in particular provision of accommodation).

### 3.4.3 Visual

The upgraded site is likely to be more visually prominent from surrounding areas as a result of the additional infrastructure within the site. The two main elements of the upgraded site that are likely to be visible from some locations are the main elongated conical stockpile with additional conveyor section, and the rail bin and associated elevated conveyor.

The main conical stockpile when at its maximum capacity would have a nominal height of 28 m. The conveyor feeding the stockpile will be located above it, giving a total height of over 30 m. The rail bin would be approximately 30 m high with the conveyor feeding the bin rising to this height from ground level from the underground feeders beneath the main stockpile.

Parts of Wallerawang will be impacted upon by the rail siding extension. This would be both visual and noise.

The expected impacts of the project will be moderate. This means that mitigation strategies are warranted in order to reduce the visual impacts of the development.

**Comment:** The visual impacts are identified as being moderate and arise from elongated conical stockpile with additional conveyor section; the rail bin and associated elevated conveyor and rail line extension. This impact can be potentially addressed by screening.

#### 3.4.4 Air Quality

The report concluded that the upgraded Project operations are likely to provide a measurable improvement in air quality in the local area and will unlikely contribute to any exceedances of the respective NSW OEH criteria for the pollutants assessed.

**Comment:** There is an identified measurable improvement in air quality.

## 4. CONCLUSION

The SIA has been undertaken to identify if there are any impacts (positive and negative; intentional and unintentional) arising from this project.

It is found that the general community in the area of this project have a general acceptance for mining, power generation and associated industry.

The adverse impacts arise if the quality of life of people who live and work in the community are adversely affected. It has been identified that this would be brought about by noise, dust, odour and visual impact.

These impacts are localised to near neighbours.

To assess the potential extent of the impact, consultant's reports have been assessed and it is found that:

- ☞ The project will have an overall positive economic contribution at a regional level and also to the local community.
- ☞ Noise levels will be similar to or less than those which currently occur from the site and the proposed development is therefore considered to be acceptable.
- ☞ The project is not expected to have a significant impact on the ecology of the study area, including threatened flora, threatened fauna or endangered ecological communities that are known or expected to occur therein.
- ☞ The upgraded project operations are likely to provide a measurable improvement in air quality in the local area and will unlikely contribute to any exceedances of the respective NSW OEH criteria for the pollutants assessed.

Despite this the main impacts on residential amenity will be due to visual and noise impacts.

### **Visual Impact**

The site is likely to be more visually prominent from surrounding areas as a result of the additional infrastructure within the site. The two main elements of the upgraded site that are likely to be visible from some locations are the main elongated conical stockpile with additional conveyor section, and the rail bin and associated elevated conveyor.

Parts of Wallerawang will be impacted upon by the rail siding extension. This would be both visual and noise.

The expected visual impacts of the project will be moderate. This means that mitigation strategies are warranted in order to reduce the visual impacts of the development which can be achieved by vegetation buffers.

### **Noise Impact**

Noise of train movements arising from the trains banging (referred to as Rail in and Rail out or Ri-Ro noise) may improve as each train currently goes through 20 start/stop movements making a two second 'clanging' noise as the carriages move together or move apart and hit each other. Under the new arrangements each train would only do this 11 times because of the continuous loading. However there will be more train movement in / out of the site each 24 hour period.

Additional noise from the trains operation could be generated from the activation of warning lights at the rail crossing at Main Street.

A dozer / front end loader will be required to manage the new stockpile which will improve the current situation however will have an adverse impact when the dozer is operating, especially at night.

In conclusion, it is found that the Lidsdale Siding Upgrade will generally result in a positive social impact to the local community.

The potential adverse impacts, potentially arising from noise are found to be limited to the immediate area. Issues that arise can be addressed on a case by case basis which has been the practice of Centennial Coal to date.

With that in mind, no adverse social impact has been found that should prevent the proposed Lidsdale Siding Upgrade from proceeding.