



## Wollongong Coal

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6 October 2017

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ASX Code: **WLC**

### **CORRECTION TO COMPANY ANNOUNCEMENT RELEASED 5 OCTOBER 2017**

Wollongong Coal Limited (ASX: WLC) wishes to update the market in relation to a correction to the announcement released to the ASX on 5 October 2017 (Corporate Update 5 October 2017) (**Previous Announcement**). The Previous Announcement contained an error in that information relating to the Wongawilli Colliery was inadvertently omitted from the Previous Announcement, together with governance and internal controls and competent person/s statements.

These omissions have now been corrected in this Corporate Update dated 6 October 2017. This should be read in substitution of the Previous Announcement.

Wollongong Coal Limited (ASX: WLC) wishes to update the market in relation to

- Potential Sale of Non-Core Land; and
- Resource and Reserve Statement

### **POTENTIAL SALE OF NON-CORE LAND**

WLC has been investigating potential sale of the non-core land owned by WLC.

#### **WLC's landholding**

WLC's total landholding comprises 455.24 hectares (Ha) located at Wongawilli – 15 kilometres southwest of Wollongong. Of this total landholding, WLC considers approximately 279.98 Ha as necessary for WLC's coal mining operations. WLC considers the balance of the land is suitable for sub-division redevelopment over the short, medium and long term (**Non-Operational Land**).

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To this end, WLC has undertaken a preliminary analysis, including engaging advisors and canvassing interest from developers, in relation to the potential sale of part of the Non-Operational Land.

### **Reasons for potential sale of Non-Operational Land**

WLC's priority is and remains its mining operations.

However, WLC has been investigating divesting of the Non-Operational Land for the following reasons:

1. given the state of the real estate market in Wollongong and the prices at which adjacent properties to the Non-Operational Land have been sold, WLC could derive substantial proceeds from the sale of the Non-Operational Land;
2. these proceeds could then be used to reduce WLC's financial indebtedness which would substantially improve WLC's financial position and also be used to cover its operation costs (subject to approval from the secured lenders); and
3. the sale of the Non-Operational Land will not impact on the core mining operations of WLC and WLC has no intention to compromise its mining operations.

### **Approvals required for sale for Non-Operational Land**

WLC notes that the zoning of the Non-Operational Land allows for residential sub-division and housing, i.e. a rezoning is not required for the majority of it, which allows reduced planning risk for potential purchasers of the land.

However, there are two important further planning consent steps that will need to be taken before a developer can move onto the Non-Operational Land and sub-divide in order to sell individual lots to home builders and home buyers, being:

1. Neighborhood Plan (NP): a sub-division showing the number and location of future sub-division lots and approved by the local Council a consent authority; and
2. Development Application (DA) Approval: this approval is the final permission step to proceed with sub-division.

In addition, WLC is in consultation with the ASX as to whether shareholder approval may be required in relation to the potential sale of the Non-Operational Land.

### **Proposed sale of Initial Lots**

At this stage and in order to test the market for the sale of the Non-Operational Land, WLC has identified (with the assistance of advisers) an initial parcel of 33 lots/6.34 ha (Initial Lots) as the part of the Non-Operational Land that is likely to be most attractive for sale because it is adjacent to land that has already been developed and sold by third parties as residential real estate. WLC has entered into a conditional agreement for the sale of the Initial Lots which is subject to a number

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of conditions mentioned above and clearance from the secured lenders. WLC has lodged an application for DA with the Council in respect of the Initial Lots.

### **Updates**

The proposed sale of the Initial Lots is not material and does not require shareholder approval. Nevertheless, WLC will provide updates as and when further developments occur in relation to the potential sale of the Initial Lots and the Non-Operational Land and, particularly, if shareholder approval is required.

## **RESOURCE AND RESERVE STATEMENT FOR WOLLONGONG COAL as at 31<sup>st</sup> August 2017**

### **Introduction**

WLC has not, since its annual report for the financial year ended 30 June 2011, provided an updated Resources and Reserve statement which was in compliance with the JORC Code 2012. Accordingly, WLC provides below an updated Resource and Reserve statement in respect of the Russell Vale and Wongawilli Collieries in compliance with the 2012 JORC Code and ASX Listing Rule 5.21.

WLC conducted a detailed review of all available data for the economic coal seams within its Russell Vale and Wongawilli Collieries in early 2017. As part of this detailed review the selected mining section for the coal seams were revised based on economic criteria. As a result of this review there has been an increase in its reportable 2012 JORC Code compliant resources for its Wongawilli Colliery and a reduction of resources for Russell Vale Colliery.

In regards to the Russell Vale colliery, the previously assessed Balgownie seam has been removed due to thin seam thickness, economical criteria and unlikely prospects for extraction. For the Bulli seam, the resource has slightly decreased due to mining attrition. The resource of the Wongawilli seam has increased from 182.8MT to 241.3MT (24% increase).

For Wongawilli Colliery, the Bulli seam resource has increased from 36MT to 59MT (39% increase), while the Wongawilli and Tongarra seams show a very slight increase (0.01% and 0.09% respectively).

The estimation of Reserves is currently under review by WLC in consultation with a mining consulting company. Due to the more rigorous requirements of the 2012 JORC Code the current mine plans for both Russell Vale and Wongawilli Collieries are not of sufficient detail to meet the required standard.

It is anticipated WLC will be in a position to release updated Resource and Reserve estimation for the Russell Vale and Wongawilli collieries by the end of FY2017-18.

### **Russell Vale Colliery**

For the Russell Vale mine an application for a Mining approval modification to continue operations was stalled by the Public Assessment Commission (PAC) and as such all mining ceased at Russell Vale Colliery in early September 2015 with the lapse of its mining approvals. The mine is currently on care and maintenance. A revised

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modification to the UEP (Underground Expansion Project) is currently being prepared for submission to the Department of Planning.

## **Coal Resources**

### **1. Geology**

Russell Vale Colliery is located in the Southern Coalfield, which is the southern portion of the Permo-Triassic Sydney Basin and contains the Illawarra Coal Measures of Late Permian Age. Overlying the Illawarra Coal Measures are sandstones, shales and mudstones of the Narrabeen Group, which in turn are overlain by the Hawkesbury Sandstone, a massive quartzose sandstone unit. The Wianamatta Group, stratigraphically above the Hawkesbury Sandstone, is the top most unit in the Southern Coalfield.

Within the Illawarra Coal Measures the Bulli Coal is the uppermost coal member and has been extensively mined at Russell Vale Colliery. The Balgownie Coal, stratigraphically some 9 metres below the Bulli Coal has been mined at Russell Vale by the longwall method in the 1970's and more recently (early 1990's) by bord and pillar operations (Gibson's Colliery). The Bulli to Wongawilli Coal interval averages 27 metres. Although consistent in thickness, averaging 10 metres, the Wongawilli Seam has significant deterioration in quality in its upper section. An economic basal section of 2.4m to 3.1m is targeted for mining.

### **2. Sampling and Sampling Techniques**

Target coal seams are identified by a qualified geologist who will do an initial brief log of the drill core (63mm in diameter) and in most instances will have either the full coal seam or representative sections of the coal seam placed in gas canisters for gas desorption testing. Remaining core is placed in core trays for transportation to the field office where the geologist will measure, log, photograph and sample the cored strata and coal seams that were not placed in gas canisters.

The Bulli and Wongawilli Seams are the target seams during drilling with other intersected coal seams being subject to partial analysis where deemed appropriate. The Bulli Seam is sampled over its full section while a potential basal section of the Wongawilli Seam is selected for analysis. Core recovery is targeted at >95%. A detailed underground strip sample programme for the Wongawilli Seam is used for short term detailed modelling.

Sampling procedure developed by WLC is followed by the field geologist. Borecore treatment procedures also developed by WLC are followed by the analysing laboratory.

### **3. Drilling**

All recent drilling has used HQT core drilling with water / mud circulation. Standard practice is to open hole to approximately 30m above the first target coal seam, the Bulli Seam, and usually finishes below the base of the lower most economic coal seam, the Wongawilli Seam. A 6.0m core barrel is used for almost all coring, with occasionally a 3.0m barrel used for specific requirements. Regional planning has

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some holes cored to intersect the lower Tongarra Seam for gas testing and coal quality purposes. Historical drilling has involved limited coring of large diameter PQ (100mm) holes to varying depths.

#### **4. Resource Criteria**

All recent drill hole collars are surveyed by registered contract surveyors using GPS and agree with DTM (to < 5m). In the past boreholes have been located by odometer on traverses (1960's) or surveyed using theodolite or EDM (1970's-1980). Coordinate system used for surveying is Geodetic Datum Australia (GDA94) with collar reduced level to Australian Height Datum (AHD) and grid system using Map Grid Australian Zone 56 (MGA).

Topographic data used was acquired from Airborne Laser Scanning (LiDAR) conducted in 2009 with an accuracy of +/- 0.5m Drill hole spacing for Bulli and Wongawilli Seam Measured Resources is a maximum of 700m apart with Indicated Resources a maximum of 1000m apart. Inferred Resources are estimated from drill hole spacing up to 2000m apart but not more than 1000m past the outermost seam intersection. Geostatistical analysis supports the spacing of the above Point of Observation.

Drill hole locations are dependent on natural landform features such as storage water reservoirs and topographic relief across the entire mining lease. Hole spacing is sufficient to establish coal seam continuity across the mining lease to the relevant Resource estimations undertaken.

Sample compositing is not undertaken for the Bulli Seam but is routinely done so for the Wongawilli Seam.

#### **5. Sampling Methodology**

Target coal seam sample pre-treatment involves drop shatter and size adjustment prior to wet tumbling. The coal is then screened at 16.0 mm and 0.5 mm ww and float sunk at relative densities 1.30, 1.35, 1.375, 1.40, 1.425, 1.45, 1.50, 1.60, 1.70, 1.80 and 2.00 with yield and ash determined on each fraction. Tree flotation is carried out on the - 0.5 mm ww fraction. A coking coal composite is prepared and analysed for: - Volatile Matter, Sulphur, Phosphorus, CSN, AA Dilatation, Geisler Plastometer, and Petrographic Analysis. There is also a thermal product which is prepared and analysed. All coal pre-treatment and analysis is processed in NATA approved laboratories.

There is no regular formal Quality Assurance or Quality Control procedure on the exploration data collected. Whilst there is no evidence of there being issues, nor is there any out of compliance issues, it is planned to develop a QA/QC procedure for each piece of exploration data that is collected such that an understanding of the precision and accuracy of the data being collected is developed.

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## 6. Estimation Methodology

Data acquisition undertaken both currently and in the past has involved exploration techniques of surface drilling, a surface Mini-Sosie seismic survey, aeromagnetic surveys, electromagnetic surveys, geophysical logging of surface drill holes and information available from surrounding collieries, both operating and non-operating. All reliable data gathered from these sources has been reviewed as reliable by the Resource Competent Person. Data is entered into a Ventyx Minescape 4 (windows based, running version 4.119) Geological system where borehole lithology data and quality and washability data is stored in table files in the Minescape module. Interpretations of structure from seismic surveys, surface and underground mapping and underground mining survey data also reside in the Minescape module. Data has been modelled extensively both in Minescape and AutoCad to validate its accuracy and / or consistency with seam variations either by the Resource Competent Person or under his guidance.

## 7. Grade Parameters

A minimum thickness of 1.5m and >35% insitu ash has been applied to the Bulli Seam full seam mining section and a portion of the Bulli Seam has been classed as uneconomic under these criteria. The Wongawilli Seam has been modelled using a cut-off of >35% insitu ash and only the basal portion of the seam has an economic mining section. Some areas of both seams were excluded due to geological structures.

## 8. Mining and Modifying Factors

The Coal Resource estimation is based on the mined product being sold into the global coal market as an unwashed coking coal. No beneficiation plant exists for the washing of the ROM product on site. Previous operations involved superficial screening of the mined product to remove oversize, nominally the +63mm material. The majority of the previous production has been sold to WLC's parent company for beneficiation in India where all of the material is utilised either within the coke making industry, power generation or other industrial processes. Long term planning will see the construction of a washing facility off site to produce coking and thermal coals.

## 9. Resource Reconciliation

For Russell Vale colliery the previously assessed Balgownie seam has been removed due to thin seam thickness, economical criteria and unlikely prospects for extraction. For the Bulli seam the resource has decreased slightly due to mining attrition. The resource of the Wongawilli seam has increased from 182.8MT to 241.3MT (24% increase).

**9.1 Bulli Seam** – Full revision of all the borehole data available on the Bulli Seam was undertaken for the 2017 Resource estimation. Some additional data including stratigraphic logs, geophysical logs and quality data was uncovered for several boreholes. The results of the revision and inclusion of the additional data has resulted in movement of some Inferred resources into the Indicated category. A decrease in Measured Resources and overall

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decrease in total Resources is due to mining attrition and sterilisation of some remnant pillar areas when mining ceased in the Bulli seam in June 2011.

**9.2 Balgownie Seam** – Mine planning and economic evaluation undertaken since the 2010 Resource estimation has focused on extraction of the Bulli and Wongawilli seams only. Given the nature of the Balgownie seam (thin section and possible poor clean coal yields due to dilution) and the implication of the impact of seam integrity with extraction of the overlying (Bulli) and underlying (Wongawilli) coal seams it is considered that there is little likely hood of any future mining being undertaken within the Balgownie seam. Because of this the Balgownie seam has been deemed uneconomic to mine and has not been assessed in the 2017 Resource estimation.

**9.3 Wongawilli Seam** - Full revision of all the borehole data available on the Wongawilli Seam was undertaken for the 2017 Resource estimation. Some additional data including stratigraphic logs, geophysical logs and quality data was uncovered for several boreholes. Also the revision of the mining section to be used was undertaken, not on a single common mining section but one that met the criteria for economic mining. This revision resulted in an increase in the mining height for all of the resource categories, ranging from an increase of 0.35m for Measured to 0.58m and 0.62m for Indicated and Inferred respectively. With this increase in mining height there was also an increase in the insitu density. The results of this revision and inclusion of the additional data has resulted in an increase in the total Resource tonnes of 58.5Mt from the 2010 estimation.

## **Wongawilli Colliery**

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Events involving difficult geological conditions and financial issues saw the Wongawilli mine go into care and maintenance in July 2014. The Wongawilli mine recommenced operations in August 2016 under the contractual operation of Delta SBD. Delta used the split and lift bord and pillar method and mined the Wongawilli Seam until going into administration at the end May 2017. WLC has since applied, and been granted operational status of the mine and is currently underway with recommencing production.

## **Coal Resources**

### **1. Geology**

Wongawilli and Avondale Collieries are located in the Southern Coalfield, which is the southern portion of the Permo-Triassic Sydney Basin and contains the Illawarra Coal Measures of Late Permian Age. Overlying the Illawarra Coal Measures are sandstones, shales and mudstones of the Narrabeen Group, which in turn are overlain by the Hawkesbury Sandstone, a massive quartzose sandstone unit. The Wianamatta Group, stratigraphically above the Hawkesbury Sandstone, is the top most unit in the Southern Coalfield.

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Within the Illawarra Coal Measures the Bulli Coal is the uppermost coal member and has been mined to a limited extent at Wongawilli Colliery. The Balgownie Coal, stratigraphically some 8 metres below the Bulli Coal has not been mined due to poor quality and thin coal section. The Bulli to Wongawilli Coal interval averages 27 metres. Although consistent in thickness, averaging about 9 metres, the Wongawilli Seam has significant deterioration in quality in its upper section. An economic basal section of 3.0m to 3.5m is targeted for mining. The Tongarra Seam is not economic in the north of the Wongawilli mining lease. To the south the Tongarra Seam is approximately 26 metres below the Wongawilli Seam and has an economic upper mining section of around 2.3m.

## **2. Sampling and Sampling Techniques**

Target coal seams are identified by a qualified geologist who will do an initial brief log of the drill core (63mm in diameter) and in most instances will have either the full coal seam or representative sections of the coal seam placed in gas canisters for gas desorption testing. Remaining core is placed in core trays for transportation to the field office where the geologist will measure, log, photograph and sample the cored strata and coal seams not placed in gas canisters.

The Bulli, Wongawilli and Tongarra Seams are the target seams during drilling with other intersected coal seams being subject to partial analysis where deemed appropriate. The Bulli Seam is sampled over its full section while a potential basal section of the Wongawilli Seam is selected for analysis. The upper section of the Tongarra Seam is selected for analysis. Core recovery target is >95%. An underground strip sample programme for the Wongawilli Seam is used for short term detailed modelling.

Sampling procedure developed by WLCL is followed by the field geologist. Borecore treatment procedures also developed by WLC are followed by the analysing laboratory.

Historical field procedures and laboratory practices have varied over the some 70 year life of exploration at the Wongawilli colliery.

## **3. Drilling**

All recent drilling has used HQT core drilling with water / mud circulation. Standard practice is to open hole to approximately 30m above the first target coal seam, the Bulli Seam, and usually finishes below the base of the lower most economic coal seam, the Tongarra Seam. A 6.0m core barrel is used for almost all coring, with occasionally a 3.0m barrel is used for specific requirements.

## **4. Resource Criteria**

All recent drill hole collars are surveyed by registered contract surveyors using GPS and agree with DTM (to < 5m). In the past boreholes have been located by odometer on traverses (1960's) or surveyed using theodolite or EDM (1970's-1980).



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Coordinate system used for surveying is Geodetic Datum Australia (GDA94) with collar reduced level to Australian Height Datum (AHD) and grid system using Map Grid Australian Zone 56 (MGA).

Topographic data used was acquired from Airborne Laser Scanning (LiDAR) conducted in 2009 and 2014 with an accuracy of +/- 0.5m (2009) and +/- 0.25m (2014).

Drill hole spacing for the Bulli and Tongarra Seams' Measured Resources is a maximum of 500m apart with Indicated Resources a maximum of 1000m apart. Inferred Resources are estimated from drill hole spacing up to 2000m apart but not more than 1000m past the outermost seam intersection. For the Wongawilli Seam Measured Resources is a maximum of 800m apart with Indicated Resources a maximum of 1250m apart. Inferred Resources are estimated from drill hole spacing up to 2000m apart but not more than 1000m past the outermost seam intersection. Geostatistical analysis supports the use of the above Point of Observation spacing for the Bulli and Wongawilli seams.

Drill hole locations are dependent on natural landform features such as storage water reservoirs and topographic relief across the entire mining lease. Hole spacing is sufficient to establish coal seam continuity across the mining lease to the relevant Resource estimations undertaken.

Sample compositing is not undertaken for the Bulli Seam but is generally done so for the Wongawilli Seam and for the Tongarra Seam.

## **5. Sampling Methodology**

Target coal seam sample pre-treatment involves drop shatter and size adjustment prior to wet tumbling. The coal is then screened at 16.0 mm and 0.5 mm ww and float sunk at relative densities 1.30, 1.35, 1.375, 1.40, 1.425, 1.45, 1.50, 1.60, 1.70, 1.80 and 2.00 with yield and ash determined on each fraction. Tree flotation is carried out on the - 0.5 mm ww fraction. A coking coal composite is prepared and analysed for: - Volatile Matter, Sulphur, Phosphorus, CSN, AA Dilatation, Geisler Plastometer, and Petrographic Analysis. There is also a thermal product which is prepared and analysed. All coal pre-treatment and analysis is processed in NATA approved laboratories.

There is no regular formal Quality Assurance or Quality Control procedure on the exploration data collected. Whilst there is no evidence of there being issues, nor is there any out of compliance issues, it is planned to develop a QA/QC procedure for each piece of exploration data that is collected such that an understanding of the precision and accuracy of the data being collected is developed.

## **6. Estimation Methodology**

Data acquisition undertaken both currently and in the past has involved exploration techniques of surface drilling, 2D surface seismic surveys, aeromagnetic surveys, electromagnetic surveys, geophysical logging of surface drill holes and information available from surrounding collieries, both operating and non-operating. All reliable

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data gathered from these sources has been reviewed as reliable by the Resource Competent Person. Data is entered into a Ventyx Minescape 4 (windows based, running version 4.119) Geological system where borehole lithology data and quality and washability data is stored in table files in the Minescape module. Interpretations of structure from seismic surveys, surface and underground mapping and underground mining survey data also reside in the Minescape module.

Data has been modelled extensively both in Minescape and AutoCad to validate its accuracy and / or consistency with seam variations either by the Resource Competent Person or under his guidance.

## **7. Grade Parameters**

The Bulli Seam has been evaluated for mining involving the plough longwall mining method for thin seam operations. Although not evaluated to a pre-feasibility level the use of thin seam extraction methods in other coal mining operations around the world gives confidence in its application to some of the thinner areas of the Bulli Seam. The estimation of the Bulli seam resource has considered this application of mining techniques and has assessed the Bulli seam as extractable to a thickness of 1.3m. A cut-off of insitu ash content of >35% has also been applied to the Bulli seam. The Wongawilli Seam has been modelled using a cut-off of >35% insitu ash and only the basal portion of the seam has an economic mining section. The Tongarra seam is modelled using both the thickness and insitu ash limits. Generally where the Tongarra Seam thickness decreases to <1.5m the insitu ash content tends to increase to >35%. Some areas of all seams were excluded due to geological structures.

## **8. Mining and Modifying Factors**

The Coal Resource estimation is based on the mined product being sold into the global coal market as an unwashed coking coal. No beneficiation plant exists for the washing of the ROM product on site. Current operations involve inline crushing of the mined product to nominally -50mm material. The majority of the previous production has been sold to WLC's parent company for beneficiation in India where all of the material is utilised either within the coke making industry, power generation or other industrial processes. Long term planning will see the construction of a washing facility off site to produce coking and thermal coals.

## **9. Resource Reconciliation**

For Wongawilli Colliery the Bulli seam resource has increased from 36MT to 59MT (39% increase) while the Wongawilli and Tongarra seams show a very slight increase (0.01% and 0.09% respectively).

**9.1 Bulli Seam** – Full revision of all the borehole data available on the Bulli Seam was undertaken for this 2017 Resource estimation. Some additional data including stratigraphic logs and quality data was uncovered for several boreholes. The results of the revision and inclusion of the additional data has resulted in movement of some Inferred resources into the Indicated category. The Bulli Seam has also been evaluated for mining involving the plough

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longwall mining method for thin seam operations. Although not evaluated to a pre-feasibility level the use of thin seam extraction methods in other coal mining operations around the world gives confidence in its application to some of the thinner areas of the Bulli Seam. The estimation of the Bulli seam resource has considered this application of mining techniques and has assessed the Bulli seam as extractable to a thickness of 1.3m. The results of this revision and inclusion of the additional data has resulted in an increase in the total Resource tonnes of 23.0Mt from the 2010 estimation.

**9.2 Wongawilli Seam** - Full revision of all the borehole data available on the Wongawilli Seam was undertaken for this 2017 Resource estimation. Some additional data including stratigraphic logs and quality data was uncovered for several boreholes. Also the revision of the mining section to be used was undertaken, not on a single common mining section but one that met the criteria for economic mining. This revision resulted in a small increase in the mining height for all of the resource categories, ranging from 0.10m for Measured to 0.012m and 0.246m for Indicated and Inferred respectively. With this increase in mining height there were also slight changes in the insitu density. The results of this revision and inclusion of the additional data has resulted in a small increase in the total Resource tonnes from the 2010 estimation.

**9.3 Tongarra Seam** – Full revision of all the borehole data available on the Tongarra Seam was undertaken for this 2017 Resource estimation. Some additional data including stratigraphic logs and quality data was uncovered for several boreholes. Also the revision of the mining section to be used was undertaken, not on a single common mining section but one that met the criteria for economic mining. This revision resulted in a small increase in the mining height and also slight changes in the insitu density. The results of this revision and inclusion of the additional data has resulted in an increase in the total Resource tonnes of 10.0Mt from the 2010 estimation.

For further information, please feel free to contact the company secretary.

Yours sincerely

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## RUSSELL VALE COLLIERY COAL RESOURCES

as at 31st August 2017

Deposit <sup>(1)(2)</sup>	Mining Method	Coal Type	as at 31st August 2017												As at 31 March 2010							
			Measured Coal Resource				Indicated Coal Resource				Inferred Coal Resource				Total Coal Resource							
			Mt	%Ash	%VM	%S	Mt	%Ash	%VM	%S	Mt	%Ash	%VM	%S	Mt	%Ash	%VM	%S	Mt	%Ash	%VM	%S
Bulli <sup>(3)</sup>	UG	Met	10.7	16.1	20.2	0.40	36.4	19.8	20.6	0.38	7.7	20.5	20.8	0.42	54.6	19.2	20.6	0.39	56.5	21.1	21.0	0.36
Balgownie <sup>(3)</sup>	UG	Met/Th	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75.6 <sup>(4)</sup>	21.2	21.3	0.41
Wongawilli <sup>(3)</sup>	UG	Met/Th	9.8	33.2	18.8	0.54	11.5	33	19.2	0.52	116.5	32.1	19.4	0.55	241.3	33.0	19.2	0.53	182.8	27.8	20.5	0.51

- (1) Cut-off grade  
Coal Resources No seam thickness applied to the Bulli Seam as minimum thickness is economic. Insitu ash limit of 35% applied to the Wongawilli seam preferred mining section  
Coal Reserves No cut-off grade applied
- (2) Resource tonnages are insitu moisture basis. Ash is reported as raw, VM and S are reported as cleaned coal on an air-dried basis
- (3) Bulli Seam decrease in resource tonnes due to mining attrition  
Mine planning and economic evaluation focused on extraction of the Bulli and Wongawilli seams only and there is little likelihood of any future mining of the Balgownie seam  
Wongawilli Seam increase in Resource tonnes due to a review of the preferred mining section
- (4) Balgownie Seam resource was last estimated in 2008

**WONGAWILLI  
COLLIERY  
COAL RESOURCES**

as at 31st August 2017																		As at December 2010				
Deposit <sup>(1)(2)</sup>	Mining Method	Coal Type	Measured Coal Resource				Indicated Coal Resource				Inferred Coal Resource				Total Coal Resource				Total Coal Resource			
			Mt	%Ash	%VM	%S	Mt	%Ash	%VM	%S	Mt	%As h	%VM	%S	Mt	%As h	%V M	%S	Mt	%As h	%V M	%S
Bulli <sup>(3)</sup>	UG	Met	-	-	-	-	19	14.6	20.6	0.38	40	20.8	20.8	8	59	18.8	20.7	0.38	36	15.8	21.0	0.36
Wongawilli <sup>(3)</sup>	UG	Met/Th	41	30.1	21.5	0.4	47	32.2	21.3	0.43	111	36.9	22.1	0.44	199	34.4	21.8	0.43	198	32.7	21.3	0.41
Tongarra <sup>(3)</sup>	UG	Met/Th	-	-	-	-	6	31.2	22.5	0.52	107	33.7	22.7	0.49	113	33.6	22.7	0.49	103	28.5	22.7	0.51

(1) Cut-off grade

Coal Resources Seam thickness >1.3m applied to the Bulli Seam as minimum thickness. Insitu ash limit of 35% applied to the Wongawilli and Tongarra seam preferred mining section

Coal Reserves No cut-off grade applied

(2) Resource tonnages are insitu moisture basis. Ash is reported as raw, VM and S are reported as cleaned coal on an air-dried basis

Bulli Seam increase in resource tonnes due to evaluation of mining thickness and mining

(3) method.

Wongawilli Seam increase in Resource tonnes due to a review of the preferred mining section

Tongarra Seam increase in Resource tonnes due to a review of the preferred mining section

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## Governance and Internal Controls

WLC has implemented a risk management program to effectively manage the quality of all Coal Resource estimations and reconciliations. This risk management program involves an assessment of the risks that are involved when estimating Coal Resources and the relevant controls that are in place to ensure that the Coal Resources collected are accurately reported. As part of this, the program actively measures both the possibility of errors and the controls that are in place to mitigate that outcome.

As has been highlighted in this statement, all of the acquired data for WLC's estimation processes has been modelled extensively in Minescape and AutoCad to validate accuracy and consistency with seam variations. Further, all data gathered from WLC's exploration techniques have been reviewed as reliable by the Resource Competent Person.

There is currently no formal Quality Assurance or Quality Control procedure in place for sampling data. While there is no evidence of there being any issues with this, nor is there any compliance issues, WLC have introduced plans to develop appropriate Quality Assurance/Quality Control procedures for sampling data.

## Statement of Competent Person/s

The estimation of Coal Resources for Wollongong Coal Limited Russell Vale and Wongawilli Collieries, as at 31<sup>st</sup> August 2017, has been carried out by Competent Person Mr. Barry Clark, who is a member of the Australasian Institute of Mining and Metallurgy (30 years) and is the Geological and Marketing Manager with Wollongong Coal Limited. The information in the above statement that relates to Coal Resources is based on, and fairly represents, information and supporting documentation prepared by the Competent Person.

The estimation of Coal Resources reported are as prescribed by the "**Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves**" (2012 edition, The JORC Code, Clauses 42 to 44) and also using the terminology and the guidelines put forth in the 2014 edition of "**Australian Guidelines for the Estimation and Classification of Coal Resources**".