

# 21 September 2021

Ms Jessie Evans Director Resource Assessments (Coal & Quarries) 4 Parramatta Square, 12 Darcy Street Parramatta NSW 2150

**Dear Ms Evans** 

Variation to Extraction Plan LW30-31 – Reduction in length of Longwall 31

#### Introduction

Centennial Mandalong received approval for the Mandalong Mine Extraction Plan for Longwalls 30 and 31 on 20 July 2021. Centennial Mandalong is now seeking approval for a variation to the approved Extraction Plan to reduce the length of Longwall 31 due to the existence of high strength igneous intrusions.

Due to the location of the high-strength intrusions, it is proposed to reduce the length of the longwall panel by approximately 781 m from its approved void length. The proposed reduction in extraction area is within the extents of Longwall 31 assessed and approved as part of the Extraction Plan. This modification will not change the assessed and approved impacts and will not require any variation to the management plans prepared and approved as part of the Extraction Plan for Longwalls 30 and 31.

## Variation Justification

A high strength dyke and igneous sill were encountered during the development of Longwall 30 and Longwall 31 gateroads. The extent of the dyke and sill was confirmed by an extensive in-seam drilling program. Due to longwall operational and safety requirements, including strata and gas related issues, it is necessary to commence Longwall 31 to the north of the igneous intrusions (refer revised A0 Plans 1 to 7).

shows the approved and revised void length and reduction in resource recovery.

Centennial Mandalong Pty Limited ABN 74 101 508 892

PO Box 1000 Toronto NSW 2283 T. +61 02 4973 0900 E: info@centennialcoal.com.au www.centennialcoal.com.au

Table 1 – Revised Longwall 31 Void Length and Resource Recovery

| Approved void length LW31 | Revised void length LW31 | Reduction in resource LW31 |
|---------------------------|--------------------------|----------------------------|
| 1886 m                    | 1105 m                   | 619,000 Tonnes             |

## Variation Impacts

Subsidence impact assessment for the Extraction Plan LW30-31 has been based on the subsidence predictions prepared by Ditton Geotechnical Services for Extraction Plan LW30-31 (2021a) and (2021b). A further assessment of subsidence impacts resulting from the change in longwall length is provided by Ditton Geotechnical Services in the enclosed report (Subsidence Assessment for the Proposed Modifications to LW31, 2021c).

The reduction in longwall void will result in two private properties (MS0021 and MS0138) and a section of Olney State Forest (MS0093) being removed from the zone of subsidence from LW31. There will be a reduction in area of subsidence affecting two private properties (MS0045 and MS0139), one Central Coast Council property (MS0114) and one Crown Land lot (MS0120).

A summary of the expected subsidence impacts to surface features, infrastructure and environmental consequences compared to the approved impact area is provided in **Table 2**.

Table 2 – Assessment of Subsidence Impacts to Built and Natural Features

| Surface Feature                                      | Approved Subsidence<br>Impact Extraction Plan<br>LW30-31 | Assessment of Subsidence<br>Impact<br>Reduction in length LW31                                     | Management Plan<br>LW30-31  |
|--|--|--|---|
| Olney State Forest - Bushland - Gravel access tracks | To remain always safe, serviceable and repairable (SSR). | Removed from zone of subsidence effects.   | Land Management Plan Biodiversity Management Plan Public Safety Management Plan |
| Private property,<br>dwelling and<br>buildings.      | To remain always safe, serviceable and repairable (SSR). | Reduction in subsidence<br>effects and impact –<br>remain SSR                                      | Property Subsidence<br>Management Plans   |
|  |  | Private properties MS0021, MS0138 and MS0093 (Forestry) removed from zone of subsidence influence. | Update PSMP for affected properties and provide to landowners'.                 |
|  |  | Reduction in area of subsidence effect to private properties MS0045                                |   |

| Surface Feature   | Approved Subsidence<br>Impact Extraction Plan<br>LW30-31   | Assessment of Subsidence<br>Impact<br>Reduction in length LW31   | Management Plan<br>LW30-31                                 |
|---|--|--|--|
|   |  | and MS0139, Central Coast<br>Council property (MS0114)<br>and Crown Land lot<br>(MS0120).<br>Private dwelling (55) on                                    |  |
|   |  | property MS0139 removed from subsidence impact.  No change to other dwellings.   |  |
| Morans Creek<br>tributaries   | No connective cracking between surface and base of the alluvium, and the underground workings No subsidence impact or environmental consequence greater than minor | No change  No change to post-mining creek gradients.   | Water Management<br>Plan                                   |
| Public Roads<br>Kiar Ridge Road<br>(gravel)<br>Toepfers Road (gravel) | Minor cracking To remain always safe, serviceable and repairable (SSR).  | No change in subsidence impact Reduction in subsidence effects to Kiar Ridge Road (not undermined). Reduction in subsidence effects along Toepfers Road. | Public Roads Management Plan Public Safety Management Plan |
| TransGrid<br>Transmission Lines<br>TL24 and TL25/26                   | To remain always safe, serviceable and repairable (SSR).  TL24 and TL25/26 towers located beyond 26.5° angle of draw of LW30-31.                                   | No change in subsidence impact.  Reduction in predicted subsidence parameters at each tower.   | Built Features<br>Management Plan                          |
|   | Mitigation cruciform footings installed on TL24 towers affected by LW28-29.  |  |  |

| Surface Feature                                      | Approved Subsidence<br>Impact Extraction Plan<br>LW30-31   | Assessment of Subsidence<br>Impact<br>Reduction in length LW31  | Management Plan<br>LW30-31  |
|--|--|---|---|
| Ausgrid Powerlines                                   | To remain always safe, serviceable and repairable. Mitigation works installed on Ausgrid poles affected by LW30-33.                      | No change in subsidence impact.  No changes due to reduced length LW31.   | Powerline<br>Management Plan  |
| Telstra<br>communication cables<br>(copper)          | To remain always safe, serviceable and repairable.   | No change in subsidence impact No changes due to reduced length LW31.   | Communications<br>Management Plan   |
| Groundwater  | Minimal impact to alluvial groundwater   | No change Reduction in subsidence effect area.  | Water Management<br>Plan  |
| Biodiversity   | Negligible environmental consequences  | No change  Reduction in subsidence effect area.   | Biodiversity<br>Management Plan   |
| Heritage Sites                                       | No subsidence impacts or environmental consequence greater than predicted in documents listed in condition 2(b) of Schedule 2.           | No change Five sites removed from subsidence effects. Predicted subsidence impacts to the remaining 20 sites are unchanged or reduced from the approved LW30-31 EP. | Heritage<br>Management Plan   |
| Remnant Ponding  Morans Creek and  Buttonderry Creek | Potential remnant ponding. Remnant ponding   | No change in subsidence impact Subsidence effect area   | Water Management Plan Continue with six-  |
| tributaries  | observation points identified in Umwelt flood modelling. Watercourse monitoring points 1 to 41 established as per Water Management Plan. | reduced from Buttonderry<br>Creek tributaries.  | monthly flood path inspections and watercourse monitoring as per management plan. |

## **Conclusion**

The proposed variation to the Longwall 31 extraction area will not result in any change to assessed and approved impacts considered as part of the Extraction Plan for Longwalls 30 and 31. Overall, the area of subsidence effect is reduced, with two private properties, one dwelling and five Cultural Heritage sites now not being affected by subsidence from Longwall 31.

Longwall 31 is scheduled to commence extraction during the week commencing 1 November 2021.

If you have any questions or require further information, please contact Phil Enright – Mining Approvals Coordinator on 0249730948 or Jeffrey Dunwoodie – Environment & Community Coordinator on 0249730947.

Yours sincerely

Richard Gelson Mine Manager

#### Enclosed:

- Subsidence Assessment for proposed Modification to LW31 (Ditton Geotechnical Services, 2021c)
- MG14064 Extraction Plan LW30-31 Plan 1 Existing and Proposed Workings, Rev.3
- MG14065 Extraction Plan LW30-31 Plan 2.1 Surface Features and Contours, Rev.3
- MG14066 Extraction Plan LW30-31 Plan 2.2 Surface Features and Infrastructure, Rev.3
- MG14067 Extraction Plan LW30-31 Plan 3 Geological and Seam Data, Rev.3
- MG14068 Extraction Plan LW30-31 Plan 5 Mining Titles and Land Ownership, Rev.3
- MG14069 Extraction Plan LW30-31 Plan 6 Geological Section, Rev.3
- MG14070 Extraction Plan LW30-31 Plan 7 Subsidence Monitoring, Rev.3