

MEETING MINUTES (Final)



SOUTH32 ILLAWARRA METALLURGICAL COAL (IMC) APPIN MINE COMMUNITY CONSULTATIVE COMMITTEE

MEETING: #63
 DATE: 15 February 2023
 LOCATION: Menangle RFS
 90 Menangle Road, Menangle

ATTENDEES: Danny Stewart (DS) Community Representative
 Barry Durman (BD) Community Representative
 Sam Davis (SD) Community Representative
 Shane Simpson (SS) Community Representative
 Julie Sheppard (JS) Community Representative (1st meeting)
 Barbara Weber (BW) Community Representative (1st meeting)
 Michael McGrath (MM) Community Representative (arrived at 5.15pm)
 Andy Hyslop (AH) Illawarra Metallurgical Coal Mine Manager
 Chris Schultz (CS) Illawarra Metallurgical Coal Superintendent Environment
 Antony Leone (AL) Illawarra Metallurgical Coal Principal Community
 Rod Mapstone (RM) Illawarra Metallurgical Coal (Observer)
 Josh Carlon (JC) Illawarra Metallurgical Coal (Environment Coordinator)
 Mike Archer (MA) Independent Chairperson

APOLOGIES: Matt Deeth (MD) Wollondilly Shire Council

	<p>The purpose of the Community Consultative committee is to facilitate and maintain two-way communication between South32 Illawarra Metallurgical Coal (IMC), key stakeholders and residents. It is to promote open discussion on the activities of South32 Illawarra Metallurgical Coal’s Bulli Seam Operations, including underground mining and surface operations of Appin; environment performance and community relations; and to keep all stakeholders informed on these matters.</p>
	<p><i>AGENDA</i></p>
	<ul style="list-style-type: none"> • Welcome and Apologies • Declaration of Pecuniary Interests • Acceptance of Previous Minutes • Code of Conduct • Questions on Notice Tracker • IMC Update • General Business • Meeting close
	<p><i>WELCOME / APOLOGIES</i></p>
	<p>Meeting opened at 4:30pm.</p>

	<p>MA welcomed all members and introduced JS and BW as new members. As MA is doing minutes, anything specific to be recorded in minutes please advise MA.</p> <p>MA issued an apology for MD later in meeting on receipt of text message from MD.</p> <p>On behalf of IMC and all present MA acknowledged the Traditional Custodians of the land, the Dharawal people and paid respect to Elders past, present and emerging.</p>
	<i>DECLARATION OF PECUNIARY INTERESTS</i>
	<p>MA declared a pecuniary interest, advising that in his role as Independent Chairperson, he is paid for his time by South32 Illawarra Metallurgical Coal.</p> <p>BW advised she works for Wollondilly Shire Council but as she is there as local citizen, she did not expect there would be any conflicts of interest.</p> <p>There were no other declarations made at the meeting.</p>
	<i>PREVIOUS MINUTES</i>
	Minutes of November 23, 2022 meeting endorsed as a fair and accurate record by DS. Seconded by BD
	<i>CODE OF CONDUCT</i>
	Open and constructive participation, shared dialogue, do not interrupt and do not speak publicly on behalf of the committee.
	<i>QUESTIONS ON NOTICE</i>
	<p>Arrange visit to the Coal Wash Emplacement Area AL will circulate dates for committee member consideration. Please advise AL and RM of dates that suit.</p> <p>Arrange site visit to WC21 once works have been completed • TBC (2023)</p> <p>Chair to forward the new CCC guidelines when they are updated MA – checked with DP&E. Review not quite completed. Department will go into recession in lieu of forthcoming state election which will likely delay release of updates guidelines further.</p> <p>MA to provide update Book Douglas Park Community Hall for 2023 meetings where possible (AL) - Douglas Park Community Hall has a permanent booking every Wednesday. Menangle RFS building is available.</p>
	<i>OPERATIONS UPDATE</i>
	<p>LW709</p> <ul style="list-style-type: none"> • Commenced February 2022 • As of 31st January 2023 – LW709 has 1,350m remaining • Progress of LW709 ceased in December for dyke extraction (geological intrusion) and investigation into face frictional ignition event • Production scheduled to recommence 15th February 2023 • Completion of LW planned Q3 2023 <p>Frictional Ignition Event: Event description and cause</p> <ul style="list-style-type: none"> • There was an underground frictional ignition event at Appin Mine Longwall 709 on 22 December 2022. • The event lasted for about 2 seconds. It extinguished itself quickly and no one was injured. • Production immediately ceased and an investigation into the cause commenced. • An ICAM investigation was completed on 18 January 2023.

- The cause of the event was a 1.8m steel rib bolt caught in the LW Armoured Face Conveyor (AFC) where friction heated the steel bolt greater than the ignition temperature of methane (>537 degrees).
- Longwall extraction has recommenced.

LW905

- Commenced 25 September 2022
- As of 31 January 2023 – LW905 has 80m remaining
- To be completed by Q1 2023

Operations Overview

LONGWALL	PLANNED START (subject to change)	PLANNED COMPLETION (subject to change)
905	Started	1 st quarter 2023
709	Started	3 rd quarter 2023
710A	3 rd quarter 2023	4 th quarter 2024
710B	4 th quarter 2024	Late 2025
711	Late 2025	Late 2026

*Actual dates may vary

AH - Transition to single longwall at end February 2023. Same production output expected.

JS – Where to after LW 711?

AH – Our Consent allows for further mining to the northwest

LS – As far as Remembrance Drive?

AH – The Consent boundary is towards Remembrance Drive

Map of Consent boundary available here → <https://community.s32illawarra.com.au/appinmineplan/map#/>

SD – Do you move the longwall around the dyke?

AH – No – we will extract the dyke prior to mining

JS – What is the depth of cover over Razorback?

AH – 750-800m approximately. It will be the deepest longwall operation in the southern hemisphere.

Multiple queries received over the average predicted subsidence on top of Razorback.

ACTION AL – Report on average subsidence predicted in Razorback.

LONGWALL 904 (LW904) END OF PANEL REPORT - JC

LW904 End of Panel Report can be accessed here → <https://www.south32.net/our-business/australia/illawarra-metallurgical-coal/documents>

Background

Longwall 904 commenced on the 20th May 2021 and was completed on 9th August 2022.

It was the fourth panel extracted in Appin Area 9.

The panel has a void length of 2038 m and a width of 325 m including the installation headings and first workings.

Major features surrounding Appin Area 9 are the Nepean River to the south, Harris Creek to the east and built features around Douglas Park community.

Subsidence Monitoring – Overview

Mine subsidence from Longwall 904 was measured using a range of survey techniques, such as global navigation satellite system (GNSS), 2D and 3D monitoring along the displayed lines.

These include the Nepean River Closure lines, main southern railway, as well as various bridges and roads in the area.

During the mining of longwalls 901 to 904 the maximum measured closure of 41mm was less than the maximum predicted closure of 50mm.

During the extraction of Longwall 904, no new gas zones were identified within the Nepean River. However, one new gas zone was identified on the Cataract River approximately 100m upstream of the Nepean-Cataract River confluence. This is likely a reactivation of a historical release associated with previous Tower Colliery workings.

Longwall 904 Impacts

Discussions around intermittent gas zone identified.

SD – Does South32 measure the gas within these zones?

JC – A representative sample is collected.

SD – Can you provide data of the gas volume/content from these zones?

Question on Notice SD – Can South32/IMC please provide data about gas volumes/content released?

SD – Does South32 account for the gas zone release when it reports on methane/GHG emissions?

CS – The amount is very small and would not significantly contribute to current totals reported.

BD – How do you quantify the release?

JC – Using a gas sample bag

Groundwater

The effects of mining on groundwater is monitored at seven multi-level vibrating wire piezometer sites within Appin Area 9.

Data displayed showing groundwater pressure measured and recovery.

Surface Water Quality

Surface water quality is collected on a monthly basis by the IMC Environmental Field Team.

Data presented showing water quality compared to reference sample.

Mine Water Balance

The mine water balance is monitored by IMC and tracks the movement of water. Groundwater inflow to the mine is calculated from the daily mine water balance.

Data presented showing water balance.

Aquatic Ecology

Aquatic Ecology sites are assessed to determine the extent and nature of observed impacts on the aquatic health of the area. This includes impacts such as subsidence-induced rock-fracturing.

From the extraction of Longwall 904, no changes to the aquatic ecology indicators were detected.

Built Features – Man Southern Rail

During the longwall 904 mining period the maximum measured incremental vertical subsidence at the main southern railway was 14mm which was less than the maximum predicted value of less than 20mm.

Track alignment and slope stability was maintained as required by the Management Plan.

DS – is the measured subsidence at one specific spot or averaged?

AH – it is the maximum measured across the railway.

Built Features – Menangle Road

Localised mining-related heaving and compression of the road pavement along Menangle Road was reported during the mining of Longwall 904. These developed gradually and did not affect safety or serviceability of the road however resurfacing was completed in this section.

There were also several existing and non-mining related defects along Menangle Road including potholes, slumping and deterioration due to heavy rainfall and traffic loads. The road pavement was re-sheeted in several locations to maintain ride quality. This work was funded by South32/IMC.

Built Features – Summary

There were no impacts to private water bores for Longwall 904. There was slight cracking in two rural structures and cracking and leaking from one pool. These impacts are in line with predictions and were managed as per the relevant management plan.

There was slight wall cracking to three houses during the mining of LW904. This cracking could be due to mining, natural ground movements, or both. During the longwall 904 mining period there were 4 active claims made.

Cultural Heritage

No Aboriginal Heritage sites within the longwall 904 mining area.

No impacts to Douglas Park Railway Cottage reported by the residents.

ENVIRONMENT UPDATE

Environmental Water Project Update Long-term Plant

Commissioning of the plant with mine water commenced on 3 January 2023. A decision was made to delay this process until after the Christmas break due to availability of personnel and potential for damage to the membranes.

Initial permeate was directed to Brennans Creek Dam until consistent quality was verified.

Production proving commenced 6 February 2023. This will continue for approximately six weeks:

- Two weeks mine water
- Progressive blending with emplacement underdrainage (70:30)
- Two weeks blended water

1.5 ML/day will be discharged to Brennans Creek during production proving.

Temporary Plant

The temporary plant has not been operational since the commencement of commissioning of the LongTerm Plant (3 January 2023).

The volume of permeate discharged to Brennans Creek since commissioning was over 290 ML.

It is planned for the temporary plant to be decommissioned at the end of March 2023. Environment Update

Question on Notice SD – Can the committee be given an update following the review of the Mine Subsidence Act? Perhaps later in the year.

ACTION IMC – Issue invitation to Subsidence Team representative to brief CCC later in the year

Brennans Creek Dam

Discharge continues at approximately 3.5 ML/day. BCD discharge current EC is 1.4 mS/cm, pH 8.7. Dam level is currently approximately 10.1 metres.

Water quality modelling underway to assess potential for blending of water from BCD with permeate.

Georges River Remediation Plan

Remediation works at WC21 have been completed. Monitoring will be undertaken for six months. Property access is still being progressed for the Georges River – nearing resolution. Proposals have been sought from contractors for undertaking the remediation works in the Georges River.

BD – How many pools is South32 repairing?

CS – This detail is in the Georges River Remediation Plan, available on the IMC website at:

**<https://south32.net/our-business/australia/illawarra-metallurgical-coal/documents> > Management Plans
Aquatic Health Monitoring**

Aquatic health monitoring was undertaken in October 2022. Results will be included in the CSIRO Report in March 2023.

Management Plans

Air Quality and Greenhouse Gas MP – Approved.

Waste Management Plan – Approved.

Noise Management Plan – Approved.

Water Management Plan – Approved.

Biodiversity Management Plan – Approved.

Surface Activities Management Plan – Approved.

Traffic Management Plan – consultation with regulatory agencies completed. Submitted to DPE for approval.

Rehabilitation Management Plan – still waiting on approval of rehabilitation objectives by Resources Regulator.

Independent Environmental Audit

The IEA is a triennial requirement under the Project Approval (08_0150) issued by the Department of Planning and Environment and Environment Protection and Biodiversity Conservation (EPBC) Approval 2010/5350.

The IEA assesses compliance against the Project Approval, EPBC Approval, Environment Protection Licence 2504, Consolidated Coal Leases 724 and 767, Coal Leases 381 and 388, Mining Purpose Leases 200 and 201 and Schedule 8A of the Mining Regulation 2016.

The IEA was undertaken by Environmental Resources Management (ERM). The IEA covers the period 25 October 2019 to 11 November 2022.

A site visit was undertaken in the week 8 – 11 November 2022. The final audit report was received on 21 December 2022. Two new non-compliances were identified that had not been previously reported externally.

- Evidence of spillage to ground at Appin West from equipment and materials not stored on sealed areas; and
- Seismic Monitoring Annual Report not attached to Annual Reviews.
 - A summary of an annual report provided by seismologists will be included in the Annual Review. The report will summarise the seismic events located during the period and the relationship to mining, based on the analysis.

CS noted that the spills that were observed were minor, localized and did not present any risk of environmental harm.

The IEA Report and Response to Recommendations are available on the IMC website:

<https://south32.net/our-business/australia/illawarra-metallurgical-coal/documents> > Bulli Seam Operations Project Independent Environment Audit

North Cliff

Studies are ongoing. Plan to engage with regulatory agencies in coming months. Consultation occurring with NPWS regarding powerline removal within National Park.

JS – Will the area be relinquished to National Parks?

CS – We must fulfil our rehabilitation obligations first but will ultimately be relinquished to National Parks.

DS – Are you going to fill the shaft?

CS – Yes, using the shaft spoil already onsite.

BD – Has rehab started yet?

CS – A Review of Environmental Factors will be completed first before power line removal will commence.

Coal Wash

The audit of coal wash management undertaken by the EPA is nearing completion.

Total Nitrogen Exceedance

An exceedance of the Total Nitrogen 50th percentile limit has been recorded from the Appin West WTP as a result of elevated levels in feedwater. This matter is being discussed with the EPA. The background water quality in the creek into which discharge occurs has higher levels of Total Nitrogen than the water discharged. It is planned to progress a license variation.

Ventilation Shaft Emissions in Tonnes CO2 Equivalent

CS spoke to graphics displaying Appin ventilation shafts gas emissions from FY20 to FY22 in CO2 equivalent and methane concentrations.

SD photographed chart with interest in calculating GHG emissions and undertook not to share the photograph with anyone.

CS informed SD that the GHG calculations undertaken involve complex mathematical processes from multiple data sources. The calculations are externally audited and publicly reported.

Nepean Gas Zones

January 2023 - Ten active gas zones on the section of river upstream from Douglas Park Weir, and two active zones on the downstream end.

EXPLORATION UPDATE

Currently five drill rigs are operating.

	All located within EL4470 and AUTH248 Drilling to continues around Razorback and Cawdor
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APPIN MINE VENTILATION AND ACCESS (AMVA) PROJECT	
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	<p>Roadworks</p> <p>Roadworks continuing and progressed with lane swap in late January. Menangle Road is planned to be completed by mid-March.</p> <p>Siteworks</p> <ul style="list-style-type: none"> • Mobilisation of dozers and scrapers to site • Removal of rubbish from site • Temporary sediment dam construction • Excavate internal/external drainage • Geofab lining along drainage • Compaction of safety bunds • Site leveling • Some impacts associated with wet weather <p>A newsletter drop is planned for the community later in February.</p> <p><i>SD – Community experiencing frustration at being delayed by traffic lights late at night when there are no oncoming vehicles. Can South32/IMC investigate “intelligent traffic management system please?”</i></p> <p><i>ACTION AL – Talk to Project team about intelligent traffic management system</i></p>
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VAMMIT	
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	<p>Ventilation Air Methane Mitigation (VAMMIT)</p> <p>Seeking Modification for the construction of the Demonstration Plant Proposed Location.</p> <p>A location has been identified being on South32 land adjacent to Ventilation Shaft 2 / EDL Power Station (Appin).</p> <p>Modification process will involve community engagement and a public exhibition period.</p>
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Mine Lease Application Update	
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	AL updated committee on the staged sequence of mining lease applications following AGL’s withdrawal of their Petroleum Production Lease. Map displayed. Next area for landholder inform will be later this year.
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COMPLAINTS	
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	<p>Summary:</p> <ul style="list-style-type: none"> • December 2022 – 1 (traffic)
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	<ul style="list-style-type: none"> • January 2023 – 2 (traffic) • February 2023 – 4 (3 x traffic, 1 x noise) <p>All complaints related to the roadworks associated with the Appin Mine and Ventilation Project.</p>
<i>COMMUNITY UPDATE</i>	
	<p>IMC Investment</p> <ul style="list-style-type: none"> • Koala Conservation and Education Project - Symbio Wildlife Park - \$470,000 over 3-years. • South West Sydney Academy of Sports - 'Have A Go Day' in April - Douglas Park Oval. <p>Community Partnership Program</p> <ul style="list-style-type: none"> • No new applications approved. • Next meeting on Thursday, 16 February. <p>Indigenous Grant Program</p> <ul style="list-style-type: none"> • Applications remain open for FY23 • Program supports a range of educational and cultural activities. • Applications are encouraged from groups or businesses in the Illawarra and Macarthur areas. <p>Clean Up Australia Day – 28 February (not the official day)</p> <ul style="list-style-type: none"> • Menangle, 9am - 11am. Community members are welcome to join. Details to be circulated on Facebook and to CCC.
<i>GENERAL BUSINESS</i>	
	<p>IMC Facebook Page Please join/encourage community to join the IMC Facebook Page</p> <p>Time of Meeting Discussion Committee voted to change meeting start time to 5:00pm from and including next meeting.</p> <p>Round the table</p> <p>SD – nothing more MM – nothing more BD – Query about Spring Creek Farm coal wash? AL provided update that anticipated truck volumes have not been achieved. Once discussions with truck contractor are finalised an update will be provided. JS – will email through some general questions prior to next meeting BW – nothing more DS – requires copy of previous minutes. Supplied with hard copy. AL – Amanda Silarski will shortly commence maternity leave. Antony will assume Amanda’s responsibilities in an acting capacity. Rod Mapstone will assume Antony’s responsibilities including forthcoming CCC meetings.</p> <p>Meetings for 2023</p> <ul style="list-style-type: none"> • 5 April • 7 June • 9 August • 11 October • 6 December
<i>QUESTIONS ON NOTICE AND ACTIONS</i>	
	<p>Question on Notice SD – Can South32/IMC please provide data about gas volumes/content released?</p>

	<p><i>Can the committee be given an update following the review of the Mine Subsidence Act? Perhaps later in the year.</i></p> <p><i>SD – Community experiencing frustration at being delayed by traffic lights late at night when there are no oncoming vehicles. Can South32/IMC investigate “intelligent traffic management system please?”</i></p> <p><i>ACTION AL – Report on average subsidence predicted in Razorback.</i></p> <p><i>ACTION IMC – Issue invitation to Subsidence Team representative to brief CCC later in the year</i></p> <p><i>ACTION AL – Talk to Project team about intelligent traffic management system</i></p>
	<p><i>MEETING CLOSE</i></p>
	<p>Meeting close: 6:15 pm</p> <p>Next Meeting: Wednesday 5 April 2023 @ 5:00pm at Menangle RFS</p>