

MEETING MINUTES



SOUTH32 ILLAWARRA METALLURGICAL COAL APPIN MINE COMMUNITY CONSULTATIVE COMMITTEE

MEETING: # 58

LOCATION: Douglas Park Community Hall

DATE: 22 March 2022

ATTENDEES:

Mike Archer (MA - Chair)
Sam Davis (SD)
Peter Chaffer (PC)
Shane Simpson (SS)
Danny Stewart (DS)
Michael McGrath (MM) – joined at 5.00pm

ILLAWARRA METALLURGICAL COAL:

Antony Leone (AL – South32 Community)
Amanda Silarski (ASi – South32 Community)
Chris Schultz (CS – South32 Environment)
Valentina Tasevska (VT – Admin)
Josh Rogers (JR – Projects) – Guest

APOLOGIES:

Sharyn Cullis
Barry Durman (BD) – absent
Cr. Banasik – Wollondilly Shire Council
Cr. Deeth – Wollondilly Shire Council
Andy Hyslop (Appin Mine GM)

1	<i>PURPOSE</i>
	The purpose of the Community Consultative Committee is to facilitate and maintain two-way communication between South32 Illawarra Metallurgical Coal (IMC), key stakeholders and local 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.
2	<i>AGENDA</i>
	<ul style="list-style-type: none"> • Welcome, Acknowledgment of Country and apologies • Declaration of Interests • Acceptance of Previous Meeting Minutes / Business Arising from previous Meeting Minutes • Questions on Notice Tracker • Update from South32 Illawarra Metallurgical Coal • General Business • 2022 meeting dates • Meeting close
3	<i>WELCOME / APOLOGIES</i>
	<ul style="list-style-type: none"> • MA opened the meeting at 4:15pm and noted apologies from SC, AH, MD and CB. • MA provided the Acknowledgement to Country – “Illawarra Metallurgical Coal and the Community would like to acknowledge the Traditional Owners of the land on which we meet this evening, the Dharawal People, and pay our respects to Elders past and present and emerging.”
4	<i>DECLARATION OF INTERESTS / CORRESPONDENCE</i>
	MA declared he receives payment from South32 Illawarra Metallurgical Coal to fulfil the role of Independent Chair. It is a requirement of the Government CCC Guidelines that this be noted and stated in the minutes at every meeting. No further declarations were noted by the Committee.
5	<i>PREVIOUS MEETING MINUTES AND BUSINESS ARISING</i>
	<p>Minutes of Meeting (the mini-meeting in January 2022) were moved by SD and seconded by SS.</p> <p><u>Questions on Notice Tracker – Antony Leone</u></p> <ul style="list-style-type: none"> • Provide photos regarding the Old Growth Trees (OGT) on 1029 Menangle Road <p>AL – Presented photographs of the OGT following site visit. Noted a small number without fencing (they maybe not strictly classified OGT due to size). Noted that two trees have fallen down, likely from the very heavy rain that we have had over the past few weeks.</p> <p>AL – South32 will engage an arborist to survey the trees, record those that have fallen and identify the scope for the number of trees without fencing. An update will be provided at the next meeting [ACTION].</p> <p>DS – Questioned if the trees to the east of the property are considered as OGT.</p> <p>AL – South32 will request the arborist inspect the whole property. Previous surveys did not identify them as OGT (too juvenile).</p> <ul style="list-style-type: none"> • AMCCC will be notified on all Menangle Advisory Panel (MAP) updates <p>MAP will be copied on all AMCCC updates. Notifications should be issued in advance, not after lodgement (AL).</p> <ul style="list-style-type: none"> • Community complaints handling process <p>AL – Provided definitions to clarify the process. Definitions provided:</p> <ul style="list-style-type: none"> • Community Complaint: A verbal or written expression of dissatisfaction made directly to a South32 representative by a member of the community relating to an adverse impact on the community from the Company's

actions or operations. A complaint can be received by any South32 representative at any time.

Non-Complaint:

Where investigations have determined South32 not to be the cause of the dissatisfaction

Community Enquiry:

A request for information by, or feedback from, a community member or group.

Community Grievance:

A complaint relating to an adverse impact on a community member/s that has escalated to the point where it requires third party intervention or adjudication to resolve. Grievances may involve more than one community member or family and relate to disputes that have remained unresolved for some time.

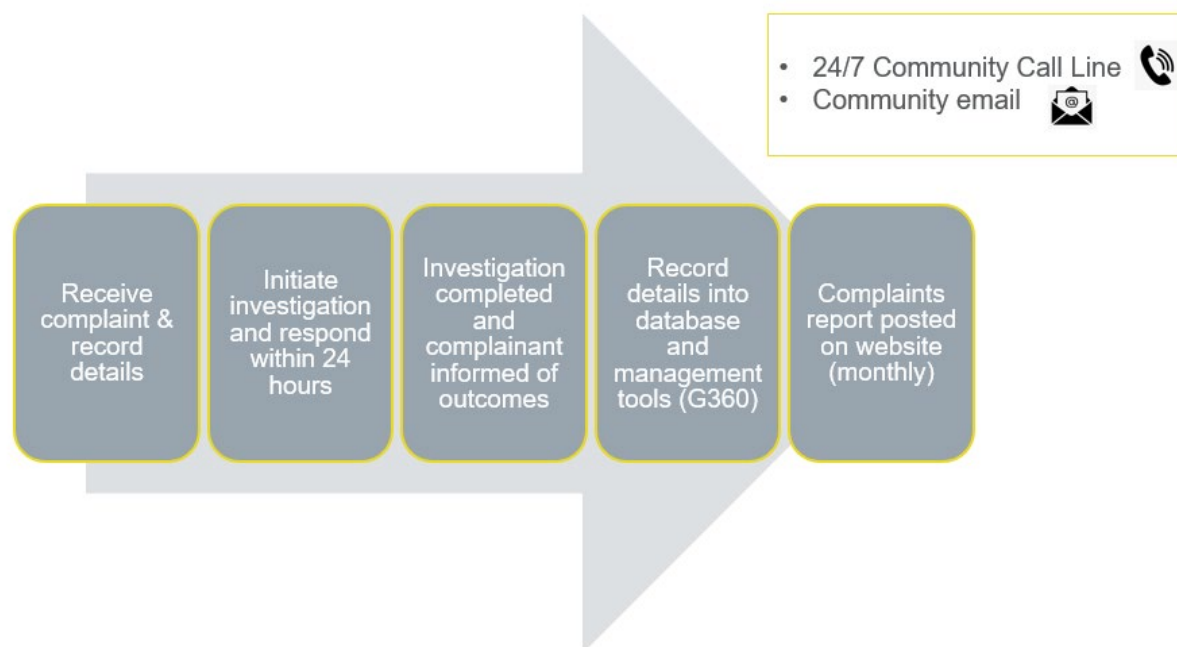
SD – Does South32 determine complaint vs enquiry?

Discussion relating to who determines if it is a complaint. There was a disagreement on the definitions. AS explained the process and the discussion that generally occurs with the complainant in defining if it is an enquiry or complaint. We are guided by the aforementioned definitions in the complaints handling process.

SS – Noted that South32 receives complaints/enquiries and suggested that a graph should be added in regard to how many enquiries are received. This is to-be shared with the Committee going forward.

AS – IMC will present the number of non-complaints to the committee **[ACTION]**.

AL – Noted all complaints are recorded on the website monthly.



6 VENTILATION AIR METHANE (VAM) ABATEMENT

JR provided an update on the Ventilation Air Methane Abatement (VAM) processes at South32 Operations.

AL – Overview on history of methane abatement and re-use at South32:

- South32 has a long history in looking for progressive and innovative ways to reduce Greenhouse Gas Emissions (GHG).
- At Appin Mine the majority of methane is removed prior to, during and post mining as part of our safe operating procedure.
- Development of WestVAMP (located at Westcliff CPP) 2007-2016 of VAM operation – the first demonstration of commercial power generation solely from ventilated air.
- In a world first, EDL and South32 then developed the largest Waste Coal Mine Gas (WCMG) power station – capable of generating ~654 GWh of electricity annually (enough to power 60,000 homes) – gas piped from UG gas drainage (not ventilation air).

JR – Previous work with South32 and CSIRO trialled and confirmed the technology (thermal oxidisers) for methane abatement – now South32 is moving to the next phase by scaling it up to a demonstration plant. If this is successful, then South32 will look to roll out as future solution.

South32 has made a commitment for zero emissions by 2050 and to halve emissions by 2035. VAM abatement is the biggest opportunity for IMC to reduce GHG emissions, with mature technology. Presented information on ventilation Air Methane Mitigator technology (VAMMIT) and study. South32 and CSIRO is trialling and demonstrating a full scale VAMMIT unit at Appin Mine.

PC – Methane and air goes in and carbon-dioxide comes out, what happens to the hydrogen?

JR – Carbon dioxide and water is output.

PC – Does it take power to operate?

JR – Requires gas burners initially before becoming self-sufficient

PC – Is there anything wasted in the process or does anything require replacing? Does the ceramic act as a catalyst?

JR – Ceramic blocks are used to maintain heat and have a shelf-life approximately 5-10 years with routine maintenance and cleaning. Another technology using palladium to act as catalyst is under early investigation.

PC – Questioned the possibility of thermal runaway and if it will eventually replace generators

JR – There is a control system to monitor this process. The gas being drained and piped to the generators will continue. There will always be fugitive emissions from the ventilated air – which is the target for this abatement program.

PC – Does the system collect all emissions?

JR - The demonstration plant will initially be two units. Then we seek to scale up the size. Consideration on the evases and input to the ventilation system so as not to inhibit their function. The long-term goal is to abate as much as possible. We have completed the pilot, now moving into the demonstration plant, with the goal for full scale application.

SD – Why not only build 1 or 2 of these instead of having 17?

JR - CSIRO is building the hardware and technology. A scaling up is not linear (we commenced with a small plant, now scaling up to what will be a commercially viable size, going bigger again will complicate heat transfer characteristics and flow diversion for example).

SD – How is the volume of VAM measured and accounted for?

JR - The fugitive emissions are measured and reported in the sustainability report. We have defined trigger limits we need to meet before a payment required. We can apply for carbon credits through this project.

SD – Was not aware methane was being measured at Ventilation Shaft No. 6 and questioned how this was done.

JR – There is instrumentation at the shafts.

CS – Emissions at South32 are reported in the Annual Sustainability Report which are available on the South32 website. The data is not split per ventilation shaft.

SD – What estimate percentage of methane comes out?

JR – Not all ventilation is consistent and will vary.

SD – How are carbon credits factored in?

JR – This project will generate ACCU's under the clean energy regulations. More info here [LINK](http://www.cleanenergyregulator.gov.au/OSR/ANREU/types-of-emissions-units/australian-carbon-credit-units)
<http://www.cleanenergyregulator.gov.au/OSR/ANREU/types-of-emissions-units/australian-carbon-credit-units>

DS – Will they trial the system at Appin Mine in April 2022?

JR – A location is yet to be selected. This will be determined as part of the pre-feasibility assessment.

DS – Ventilation Shaft No. 6 has 3 fans. If the technology is proven, how many units will there be?

JR – The d but subject to further study and the successful demonstration of a commercial scale unit.demonstration plant will have 2 units. Following the results, a scale up may be considered but subject to further study and the successful demonstration of a commercial scale unit.

DS – Questioned if units would be installed at the Appin Mine Ventilation and Access Project if it were approved.

JR – The location selection will be subject to the study and investigated. No location for the demonstration plant has been selected yet.

SD – There are 3 different VAM systems that CSIRO have. Is South32 looking at those as well?
JR –The pre-feasibility assessment investigates available technology and options from CSIRO. For example, VampCap uses a Carbon Matrix and absorption process to capture the Methane. The scale required to treat that volume of air at that rate isn't viable. The most appropriate technology is selected by CSIRO for application at our operations.
PC – Any missed opportunities in not re-using the heat and can we capture the CO2?
JR – The heat recovery when at 0.3% methane concentration is not cost effective. Opportunities may present for wastewater treatment in the future however.
DS – What is your perfect methane quantity?
JR – The units can operate at 0.3% methane although they have operated above 0.8% in the past. The units will operate successfully over a range of methane concentrations potentially up to 96% efficiency, but this is subject to optimisation and testing of the commercial scale units.

8 OPERATIONS UPDATE

Longwall 709

AL - Provided an operations update. Longwall 708B was completed on 3 January 2022. Commenced Longwall 709 expected in February 2022 and has extracted 71.5m as of 21 March 2022. To be complete Q4 2023.

Longwall 904

AL – Commenced 20 May 2021.
 As at 21 March 2022 – Progressed 1,770m.
 There's approximately 201m remaining with a completion date June 2022.

DS – Has the original take off point been extended? Is the longwall being extended?
AL – There are no plans to extend the longwall. If any changes to the longwall are needed, this will go through the appropriate approvals process with notification to the community.

DS – What cut through was LW904 taken off at? Compared to the original plans?
AL - Let's take this as an action. **[ACTION]**.

10 ENVIRONMENT UPDATE

CS provided an update on the Environment:

Water Projects

- Long-Term Water Treatment Plant - Commissioning expected to commence in April 2022. There has been continued delays with the delivery of electrical equipment, including input/output cards for programmable logic control. Site civils are nearing completion, however wet weather has impacted timeframes. The EPA visited site and inspected the facility on 24 February 2022.
- Temporary Water Treatment Plant – The volume of permeate discharged to Brennans Creek since commissioning is 149ML.

Brennans Creek Dam

CS provided an update on Brennans Creek Dam (BCD) level, which was noted over 12.5 metres (height of spillway). Discharge is approximately 3.5 ML/day. Overflow from BCD commenced on 24 February 2022 and has continued since that date.

Ferric Chloride Incident

CS provided an update on Ferric Chloride Incident. EPA inspected the site on 17 February 2022. The Official Caution was issued on 21 February 2022 and an audit of all bunds has been undertaken across the sites.

Georges River Remediation Plan

CS provided an update on Georges River Remediation Plan with PUR injection commencing at WC21 between 1 and 7 December 2021. 13 holes have been drilled and injected across two pools. The

catchment has been closed since 9 December due to wet weather. The property access is still being sought for the Georges River.

VENM import – Appin North

CS provided an update on virgin excavated natural material (VENM) Import – Appin North – which commenced in December 2021. Approximately 40,000 tonnes will be imported for use as capping material on the coal wash emplacement area. The activity is over 50% complete however has been impacted by wet weather.

Management Plans

CS advised that the Coal Wash Emplacement Area Management Plan requires consultation with Aboriginal stakeholders.

Aquatic Health Monitoring

CS advised that the consultant has been impacted by COVID. An extension has been granted for the provision of the report and it will now be provided by 21 April 2022.

Operational Purpose Deduction

CS provided an update on Operational Purpose Deduction which has been approved by the EPA for the use of Dendrobium Coal Wash for the Construction of new haul roads.

PC – Is Appin North or the washery using the roads?

CS – The roads are in the vicinity of the washery.

DS – Where is the VENM coming from (it is a lot)?

CS – from a development site.

Rehabilitation

CS provided an update on Rehabilitation. Rehabilitation Reforms were passed on 2 July 2021. The Mining Operations Plans expire on 2 July 2022. The requirement to develop a Rehabilitation Management Plan (RMP) prior to 2 July 2022. Consultation is required on the Forward Plan and the Rehabilitation Objectives and criteria under the Mining Act.

The plan itself doesn't require approval but the Forward Plan and the Rehabilitation Objectives need to be done.

RMP for Appin Mine will be done in the next couple of months and CS will circulate documents at least a fortnight before the next meeting for feedback.

SD – What is the timing to submit the rehab plan?

CS – We don't require approval of the plan but certain components within the plan will need approval.

SD – Can we get the plans for review in advance to the next CCC?

CS – The CCC won't need to review the entire Rehabilitation Management Plan but rather the Forward Plan and Rehab Objectives and Criteria (not onerous documents) – We will provide 2-weeks before next CCC **[ACTION]**.

Nepean Gas Zones

CS spoke about the Nepean Gas Zones – 12 gas zones active with 10 at the AA9 end of river and two at the AA7 end. The zones will activate/deactivate on a regular basis

DS – Any updates/movements on boreholes around Harris Creek Cliff line?

CS – A response was provided in the Douglas Park Advisory Panel presentation that was shared with you as a member. These boreholes continue to be monitored and are influenced by rainfall.

DS – Enquiry regarding tree status at the Nepean Biobanking site.

CS – Will provide update at next meeting **[ACTION]**.

11 APPIN MINE VENTILATION & ACCESS PROJECT

AL provided an update on the Appin Mine Ventilation and Access Project, this is still in the Assessment Phase with DPIE. No significant update. We have been advised by DPIE that a determination is nearing.

12 COMMUNITY UPDATE

AS provided an update on Community Investment and upcoming events. We are investigating TLALC partnership and are involved with i98FM Phrase that Pays.

Upcoming events that are supported are:

- Camden Show (postponed due to weather) Illuminate Festival which is scheduled for May 2022; and
- Wollondilly Women in Business Excellence Awards also in May 2022.

AS advised there were no new applications for discussion at the March 2022 Community Partnership Program meeting. Recapped previous donations including the defibrillators at Menangle and Wilton, and support for the Menangle Rural Fire Brigade

PC – Will there be any training provided for the defibrillator that will be at Wilton (outside the Church)?

AS – The community group was provided funding to purchase the defibrillator and it would be up to the community group as to whether it sought training. General discussion amongst the CCC regarding benefits of training and familiarisation of the defib unit.

13 EXPLORATION

Exploration

AL provided an update on Exploration.

Currently operating 4 x drill rigs located within EL8972 and A248. Drilling to continue around Mount Hunter, Cawdor and Razorback.

Aeromagnetic Survey 2022

AL explained the Aeromagnetic Survey 2022 is proposed for June 2022. This is similar to surveys flown in 2002 and 2010. It will target the areas of Cawdor, Razorback and Mount Hunter. Community engagement will commence in the coming months.

PC – If it only surveys the surface/shallow subsurface how is this beneficial to the underground mine?

AL - The aeromagnetic survey may identify outcrop area of intrusion that could be important information for subsurface geology. We would target these areas in future with a drilling program for example.

PC – Will there be letterbox drops?

AL – Yes approximately 500 landholders to be informed and we will also create an interactive webpage for the residents to access.

14 DENDROBIUM EXTENSION PROJECT

Updated the group that the EIS is still to be lodged (late May) which will trigger a public exhibition period. AS indicated that the exhibition period is set by DPIE but anticipates 4-8 week period. There will be a comprehensive community engagement plan (including virtual information session room).

AS – find out how much of Dendrobium Extension in the Wollondilly Shire **[ACTION]**

15 GENERAL BUSINESS

AL noted that Harris Creek Cliff-line monthly surveys will resume when the weir

re-opens. MM confirmed that this has now been opened as of today 22.03.22.

MA raised the prospect of changing the meeting day to another to allow for Wollondilly Shire Councillor attendance (currently meet every Tuesday). MA will contact the council and CCC accordingly to arrange.

MM apologised for lack of attendance at meetings of late.

MA informed the Committee that his mobile number was given out by a Committee member. He has advised that he does not want his number given out only his e-mail address. Other committee members preferred to have mobile numbers not advertised.

SD – Requested copies of the typical confidentiality clauses (as per his e-mail that he has already sent).

16 **ACTIONS**

- Report to CCC the outcomes of arborist survey on the OGT and scope for future fencing (AL).
- Identify number of enquiries as well as complaints going forward (AL)
- Provide CCC appropriate plans for consultation in advance of the next meeting (May 2021) (CS)
- Tree status at Nepean Biobanking site for DS (CS)
- Find out how much of Dendrobium Extension in the Wollondilly Shire (ASi)
- Check with council and CCC for alternative meeting days (MA).

17 **CLOSE OF MEETING**

Close of meeting at 6:05pm

Next meetings 17 May 2022

19 July 2022 (dates and times to be confirmed)