

Dendrobium Community Consultative Committee

MEETING MINUTES



1	WELCOME/APOLOGIES AND ACKNOWLEDGMENT OF COUNTRY
	MA opened the meeting at 5.30 pm and provided an Acknowledgement of Country. MA issued apologies for AS, MB and noted no feedback from RZ. AL introduced VT as administrative support in taking the minutes for tonight and future meetings.
2	DECLARATION OF PECUNIARY INTERESTS
	MA declared a pecuniary interest, advising that in his role as Independent Chairperson, he is paid for his time by South32 Illawarra Metallurgical Coal. There were no other declarations made at the meeting.
3	PURPOSE
	The purpose of the DCCC is to provide a forum for open discussion between representatives of Dendrobium Mine, the Community, the relevant councils and other stakeholders on issues directly relating to the mine's operations, environmental performance and community relations, and to keep the community informed on these matters. The meeting also includes a discussion on the progress of the Dendrobium Mine Extension Project application.
4	AGENDA
	<p>MA noted change to the Agenda order from the one previously distributed. This is due to cater for some of the guest's availability.</p> <ul style="list-style-type: none"> • Welcome/Apologies & declaration of pecuniary interests – Mike Archer • Acceptance of minutes of last meeting – Mike Archer • Business Arising – Mike Archer • Social Impact Assessment Update (Dendrobium Mine Extension Project) – Daniel Holm • Dendrobium Mine Extension Project Update – Gary Brassington/Antony Leone • Approvals Update – Gary Brassington • Dendrobium Operations Update – Simon Thomas • Environment Update – Chris Schultz • LW17 End of Panel Report Update – Amy Bradbury • Community Update – Antony Leone • General Business – Mike Archer <ul style="list-style-type: none"> ○ Illawarra Escarpment Mountain Bike Trail (Vivien) ○ Community Perception Survey (Vivien) • Member Updates - All
5	PREVIOUS MINUTES
	The minutes from DCCC Meeting (15 December 2021) were accepted as a correct record of the meeting. Moved: PG; Seconded VT
6	BUSINESS ARISING
	<ul style="list-style-type: none"> • ACTION: Tour of the Sydney Water Catchment. <ul style="list-style-type: none"> ○ Propose 19 May 2022 (Thursday) – (5 hr min. tour). Group discussion regarding date. Some will be away, but decision was to keep date for the tour. • ACTION: Tour of the Kemira Valley Coal Loading Facility. <ul style="list-style-type: none"> ○ Propose 14 April 2022 (before next DCCC Meeting) – start time 4pm (1-1/2 hours) – VT & PG noted absence. Decision to keep date for tour.

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	<ul style="list-style-type: none"> • ACTION: South32 to investigate opportunity for security visits to Benjamin Road to deter illegal mountain biking in the area. <ul style="list-style-type: none"> ○ Ongoing issue – currently not in scope. • ACTION: South32 to link the Dendrobium Mine Extension Project Scoping Report in the minutes. <ul style="list-style-type: none"> ○ Completed – inserted in December 2021 Minutes • ACTION: South32 to consult on proposed carpark. <ul style="list-style-type: none"> ○ [Ongoing] – Project aware of importance amongst the community and will continue throughout upcoming engagement. AL happy to keep this as ongoing action to remind us.
7	<i>DENDROBIUM MINE EXTENSION PROJECT (DMEP) – Social Impact Assessment Update</i>
	<p>Presentation from DH (Square Peg Social Performance)</p> <p>DH - The Social Impact Assessment (SIA) for the DMEP places people at the center of the Business. Social impacts are often analysed using a likelihood/consequence matrix.</p> <p>DH - Spent time to revisit the collaborative impact assessment conducted at the previous DCCC-WG Meeting. Assessment of Positive Impacts/Negative Impacts:</p> <p>VT - Mentioned the South32 Indigenous and female Employment practices – all may be an opportunity but is it practically being done?</p> <p>AL– The Company has an inclusion and diversity policy that includes targets for female employment both at the board and flowing down to senior management. We are rolling out a preferential indigenous contractor policy. These are some examples of practical policy implementation at South32.</p> <p>AM – Questions relating to the impact rating, and comparing the likelihood and magnitude between some of these.</p> <p>DH – The matrix is from the government, it is not perfect.</p> <p>The community members of the DCCC were satisfied with their rating of the impact assessment.</p>
8	<i>DENDROBIUM MINE EXTENSION PROJECT – Update</i>
	<p>AL provided updated on the DMEP:</p> <ul style="list-style-type: none"> • Environmental Impact Statement (EIS) - Finalising assessments, including SIA. <ul style="list-style-type: none"> ○ Planned to be lodged early March 2022. ○ Public Exhibition to follow. ○ Community Information Sessions dates and time TBC • Upcoming community engagement <ul style="list-style-type: none"> ○ Engagement planned late March – April. ○ Local letterbox drop ○ Local community information sessions ○ Virtual room information sessions. Feedback from DCCC + Virtual room to be designed ○ Mine site opening under investigation - still being investigated as we come out of the strict COVID controls. If it were to proceed it may be April. ○ Industry briefings • Government approvals process

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AM – Virtual information session is interesting, looking forward to seeing how it looks. Will there be letterbox drops notifying the Community of information sessions? Can DCCC be provided softcopy of newsletter?

AL – Yes newsletters will point to information dates. Yes, we can provide digital copies to DCCC for distribution [ACTION].

VT – Community consultation relating to the Illawarra Escarpment Mountain Bike (IEMB) proposal may occur at the same time. Concern community might be engagement fatigued or confused. Recommends liaising with WCC in organizing dates for community information sessions. Vanessa Phillips is dealing with IEMB engagement.

[ACTION – Contact the stakeholders and liaise with council].

GB – Noted timings pushed out to end of March due to SEARS issued before Christmas with some peer reviews required.

PD – Query regarding the Independent Panel on Mining in Catchment and their role? What will their role be?

GB – Name change to Independent Advisory Panel for Underground Mining. It is a larger group of independent experts that are called on for individual projects rather than the same group of experts which will now be looking at all NSW underground mining projects. We expect this Project will be referred to the Panel.

9 DENDROBIUM MINE – APPROVALS UPDATE

GB provided brief updated on approvals:

- LW 18 – Subsidence Management Plan was approved on 8/12/20
- LW 19 – Subsidence Management Plan was approved on 11/3/21
- LW 20 – Subsidence Management Plan – Further approval required
- LW 21 – Subsidence Management Plan was approved 19/12/19
- LW 22 & 23 Subsidence Management Plan is being assessed
- Dendrobium Area 3 Gas Management Plant – Modification report submitted to DPIE

GB – The business is assessing the potential for a small longwall south of Longwall 19 (called LW19a). The environmental assessments were commissioned in preparation for submission.

PD – requested map of LW19a location [ACTION]

GB – In relation to the modification report regarding the gas management plant we have finalised the report. The Department have accepted the appropriate approvals pathway is to seek a modification to the existing development.

PD – How is gas extracted? Is it fracking the coal seam? Are the tubes/casing left in the coal seam? Is it CO₂?

GB – No fracking involved. Holes are drilled horizontally in the coal seam and put under suction. The coal gas is a combination of CO₂ and methane. The Methane will be flared.

ST – Underground drill rigs drill a hole (no tubes/pipe) and draw gas from the coal seam.

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10	DENDROBIUM – MINING UPDATE
	<p>ST provided update to operations:</p> <ul style="list-style-type: none"> • LW17-18 Relocation completed on 2 December 2021 • LW18 commenced on 2 December 2021. • LW18-19 Relocation scheduled late April through May. With pre-installation of equipment due to commence from Mid-March. • MG19 development completed on 12 February. • TG22 development continuing • TG21 development continuing <p>Chain break (longwall relocation) is expected 27 April. Some movements will start happening in March but it won't be to the same scale as the last one.</p> <p>PD – Will you mine LW19 and then LW19a? ST – Company still investigating the viability of LW19a. Possibly will commence LW21 prior to LW19a (if feasible).</p> <p>PD – The line in middle of LW18 due to intrusion? ST – Correct – this is where the longwall will stop due to complex geological conditions.</p>
11	DENDROBIUM – ENVIRONMENT UPDATE
	<p>CS provided the environmental update:</p> <ul style="list-style-type: none"> • Underground water balance is gradually decreasing. • LDP 5 Flow in January was an average of 8.34 ML/day – relatively consistent over the last six months. • LDP 5 Brine study being revisited based on increased zinc levels from Appin North water Treatment Plant. • Directional noise monitoring system is operational. Calibrations against attended monitoring being undertaken. [ACTION – New software to be demonstrated at next DCCC meeting]. • Results from February quarterly noise monitoring not yet received. • New Hydrocarbon storage container installed on site. • Water management plan still with Department – noted Department behind in reviews. • Offer was made to Specialist Environment Role. • Longwall 17 Impacts and Triggers – some rock fractures and water quality triggers. • LW18 Impacts <ul style="list-style-type: none"> ○ 3 Landscape impacts (one likely from LW16) ○ Water quality triggers for pH, EC and DO with a specialist report also undertaken due to exceeding predictions. • Longwall 18 Impacts – no impacts to Swamps 35a and 35b from LW18 to date. • The site entered the LW18 400m buffer zone on 14/1/22. No sign of influence.
12	Dendrobium Area 3B – Longwall 17 End of Panel Report
	<p>The Longwall 17 end of panel (EOP) report findings was presented by ABr:</p> <ul style="list-style-type: none"> • Dendrobium paid approximately \$32 million in government royalties during FY21 • LW17 commenced on 12/12/20 and was completed on 13/10/21. • LW17 has a total extracted length of 1901m, a width of 305m (including the first workings) and a cutting height up to 3.9m • LW17 mined partially beneath natural features including Swamp 14 and Swamp 149, as well as Tributaries LA2, WC15 and WC12. It also mined beneath built features such as Fire

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Road 6A, Fire Road 6Q and the disused Maldon-Dombarton Railway Corridor

Subsidence Monitoring Overview

- Mine subsidence and closure movements from LW17 were measured using 2D and 3D monitoring techniques
- The display shows the monitoring lines and points monitored LW17
- The total measured subsidence and closure at these monitoring locations are generally similar to or less than the predicted values, or within survey tolerance

PD – What's the distance between Avon Dam E-Line and LW17?

GB – Approximately 515m

Waterfall 54

- LW17 finished approximately 105m inbye of the approved finishing end to reduce the closure at the Waterfall
- Waterfall 54 water levels is consistent with pre-mining records and therefore LW17 was determined to have not had an effect on surface water flows

Longwall 17 Impacts and Triggers

- During LW17, 40 new surface impacts were identified
- There was also an update to a pre-existing LW9 impact
- Water quality triggers reported at L4A_S1

Impacts to Natural Features (Watercourses)

PC – Slide LA2 on Slide 29 was the creek flowing prior to LW17?

ABr – It had intermittent flows prior to mining.

PD – Any cracking this severe in WF54?

ABr/GB – No rock cracks were observed. The TARP was activated due to the survey results. No impacts to the waterfall were recorded.

- Photo examples of impacts to watercourses identified during the extraction of LW17 were presented.
- An increase in Iron Staining at sites LA5, Wongawilli Creek and WC21 was recorded. The WC21 iron staining was originally reported during the extraction of LW9
- The appearance of iron staining along Wongawilli Creek was caused by increasing groundwater levels and reactivation of slope springs in response to high rainfall and groundwater recharge events in March and May 2021.

Impacts to Natural Features (Landscape)

- The slide showed impacts to bushland, rock outcrops and steep slopes/steps within the LW17 active mining area

Impacts to Built Features

- The slide shows impacts to built features, this includes fire roads, the ballast and smaller access tracks
- All impacts to built features are either observed as self-remediating or were manually remediated by means of infilling with local material

Surface Water Quality

- LA4_S1 a tributary to Lake Avon, Water quality triggers were recorded. Surface water quality triggers for LW17 LA4_S1 were pH at Level 3 and EC at Level 3

Groundwater and Soil Moisture Triggers

- LW 17 passed beneath or within 400m of Swamps 14, 23, 35a and 149.

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	<ul style="list-style-type: none"> • A Level 3 Shallow groundwater trigger remains in place at Swamp 14 from previous Longwalls. • Swamp 23 shallow groundwater has increased to a Level 3 TARP • Soil Moisture at Swamp 14 has increased to a Level 3 TARP <p>Mine Water Balance</p> <ul style="list-style-type: none"> • The average daily inflow to Area 3B during LW17 extraction was 5.2 ML/day • The concentration of isotopic tracers (tritium and radiocarbon) in Area 3B mine inflow remains low, indicating very low components of modern water <p>Surface Flows</p> <p>PD – What does Q50 represent?</p> <p>GB – Q50 is the Median measure of the amount of water flowing down a stream – it is a good representation of the amount of water that can be harvested. The different category indicate: A- pools/habitat; B- ecological conditions; C- hydrological flow in catchment</p> <ul style="list-style-type: none"> • Surface Flow hydrology is assessed by, flow lower than expected in relation to baseline and reference, or an increase of no flow days, or a change in Median flows in relation to reference sites <p>PD – Alarming about the number of Level 3 triggers. What would trigger a Level 3 in percentage terms?</p> <p>GB – The TARP percentages are based on the accuracy of the monitoring that can be attained for any particular stream, with Level 1 TARPs based on no change greater than normal fluctuations. Level 3 is typical for streams that have been directly mined beneath. It is important to look at the larger watercourses that these minor ones feed into – there have been no flow triggers on these (Donalds Castle Creek, Wongawilli Creek). It is noted that these triggers do not carry over downstream – the water flows down cracks but does not get lost from the system i.e. at least some or all returns downstream, depending on the fracture network.</p> <p>Groundwater</p> <ul style="list-style-type: none"> • The observed changes in groundwater levels across Dendrobium are in line with numerical model predictions <p>PD – How deep is the clay stone at the area, is it above 15m?</p> <p>GB – The geology of the area varies. Mainly the overlying unit is the Hawkesbury Sandstone but the topography varies where the underlying clay unit (Bald Hill Claystone) outcrops in some areas.</p> <p>Lake Avon Seepage Loss</p> <ul style="list-style-type: none"> • Seepage losses from Lake Avon were estimated at approximately 0.09 to 0.69 ML/day following the extraction of LW17. Therefore, within the tolerable loss limit of 1 ML/day • Dam levels in Avon are currently at around 92% <p>Cultural Heritage Inspection</p> <ul style="list-style-type: none"> • Two out of the five Aboriginal heritage sites were inspected following the extraction of LW17. • Dendrobium 7 and 8 were not visited due to safety with the ongoing extraction of Longwall 18. They will be visited for the Longwall 18 EOP. • Den 6 is an isolated artefact which was not inspected as the artefact is not likely to be re-located and has negligible chance of impact from subsidence. • No impacts caused by the extraction of LW17
13	<i>Dendrobium – Community Complaints</i>
	<p>AL presented on the recent community complaints</p> <ul style="list-style-type: none"> • AL noted the December 2021 complaints was reported at 6 to date but has now been changed to 4. This is because the additional 2 complaints were from the same person about the same issue.

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	<ul style="list-style-type: none"> • Have noted an increase in noise complaints in January 2022 (8/10) • Some were behavioral events (banging whilst loading bins, driving across bumpy roads etc) – looking to improve this • Some correlated to shift change in humid conditions, more people at home during Jan. <p>PD – What is counted as an environmental complaint? AL – Anything related to environment – examples include murky water in creek, rubbish etc. PD – Walking along close to rail and noticed a very noisy rail screech from a train heading up the hill. AL – Will investigate further with the team [ACTION]</p> <p>Dendrobium – Community Investment Update</p> <ul style="list-style-type: none"> • Lindsay Mayne Park (Unanderra) upgrade will receive \$160,000 from the DCEP. This funding will contribute to the construction of a Criterium Track (cycling track), viewing areas and landscaping. • Signage upgrade in Mt Kembla continues to be investigated, however little movement has occurred in the last couple of months. • IMC and ILALC has partnered on a country restoration project. This is known as Ngayagang Yanba Project - \$500,000. This is a 2 year partnership. It is something new, we are hoping a successful partnership will lead to similar future programs • Illawarra Mount Biking Proposal - \$70,000 • i98FM on air initiative – Mar and Apr \$10,000 • Clean Up Australia Day – sometime in March, S32 is partnering with Mount Kembla Public School for a clean up day and bite to eat afterwards.
14	GENERAL BUSINESS
	<p>Illawarra Escarpment Mountain Bike Trail:</p> <ul style="list-style-type: none"> • VT updated the committee on local engagement. Noted slow engagement and updates from council. Would like to know (and seconded by AB) on South32’s position relating to paths on their land. • AL responded that South32 is continuing to engage with council and NPWS. The Social Impact Comment is in draft and will be released in 2022 with the REF. The Comment did highlight the need for a Traffic and Parking Assessment. We are working with Wollongong City Council to deliver this, providing \$70k for the assessment. VT interested in this commitment and asked if this could be shared by her in the community. AL advises there is no issue. South32 will take a position of use of our land when we are comfortable the social and environment impacts of the project are understood. A decision is likely this year. <p>Community Perception Survey</p> <ul style="list-style-type: none"> • VT received a phone call regarding this – would like to know the results. • AL noted that we will look at releasing results at next meeting. VT noted that she will be away so requested if she can receive the results sooner? AL to investigate [ACTION] <ul style="list-style-type: none"> • Next Meeting Thursday 14 April 2022 • DCCC Working Group 24 March 2022
15	MEMBER UPDATES
	<ul style="list-style-type: none"> • VT – Community perception survey on South32 in Nov/Dec 21 (AL response above) • JE – No comment

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	<ul style="list-style-type: none"> • PG – Noticed bus driving up Cordeaux Road with headlight not working. What is the maintenance regime on the bus? AL noted the buses are contracted. ST to follow up [ACTION] • PD – What is the distribution of the newsletter? [ACTION] • AM – No comment • PC – Thanked South32 for the End Of Panel report and would like to know where to find it online. GB - It will be uploaded to webpage once reviewed by Government • AB – Noted that Kemira Valley Coal Loading bins more than 20 years ago said they were to be retired and removed. It has been 20 years, what is the status? GB - still looking to remove the bins but it is a little more complicated with the HV feed for the whole site next to them (would require power off to site to remove). PG noted possibility of bats being a problem last time this came up. PD enquired if the powerline was Endeavour or South32's as the IEMB proposes charging stations for e-bikes and wanted to know where the feed came from. Confirmed it is Endeavour Energy infrastructure. • GB, CS and ST – No comment • MA – Department requires an annual report from the chair, would like to circulate to the group for comment.
16	ACTIONS
	<p>ACTION – Liaise with Wollongong City Council regarding community information session dates to avoid conflict with upcoming engagement on the IEMB Trail.</p> <p>ACTION – Provide DCCC digital copy of DMEP Newsletters advising of Community Information Sessions</p> <p>ACTION – Provide map of proposed longwall location LW19a</p> <p>ACTION – Provide demonstration of new noise monitoring software at next DCCC</p> <p>ACTION – Investigate rail screech as locomotive was climbing hill</p> <p>ACTION – What suburbs receive the Dendrobium Newsletters (distribution list)?</p> <p>ACTION – Investigate missing bus light for the contractor bus</p> <p>ACTION – Present the community perception survey results</p>
17	MEETING CLOSE/NEXT MEETING
	<ul style="list-style-type: none"> • Meeting Close: 7:25pm • Next Meeting: 14 April 2022. Kemira Valley tour followed by DCCC meeting. In person at Dendrobium or ROC with COVID restrictions easing.