

Dendrobium Community Consultative Committee

MEETING MINUTES (Final)



MEETING:	Dendrobium Community Consultative Committee (DCCC)	
LOCATION:	Dendrobium Nebo Room	
DATE:	17:30, Thursday 10 August 2023	
ATTENDEES:	Independent Chairperson Independent Secretary Community Representatives Illawarra Metallurgical Coal Representatives (IMC) Wollongong City Council	Mike Archer (MA) Maxine Wiseman (MW) Jenny Evans (JE) Vivien Twyford (VT) Phil Diamond (PD) – <i>online</i> Phil Grant (PG) Ron Zwicker (RZ) Wollongong City Council – <i>online</i> Simon Thomas (ST) General Manager Dendrobium Gary Brassington (GB) – Approvals Manager - <i>online</i> Chris Schultz (CS) Environment Superintendent Josh Carlin – (JC) IMC Environment officer Rod Mapstone – (RM) Principal Community
APOLOGIES:		Michael Banasik (MB) Wollondilly Shire Council Phil Clunas (PC) Anita Mulrooney (AM) Alex Beccari (AB)

<i>PURPOSE</i>	
	<p>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.</p> <p>Acknowledgement to Country MA provided Acknowledgement to Country – <i>“We acknowledge the Traditional Owners of the land on which we meet this evening, the Dharawal People, and pay our respects to Elders past, present and emerging”.</i></p>

	Reference re : new Dept. P&E CCC Guidelines post 5 year review. New Declaration of Interest Declarations and Code of Conduct forms.
	AGENDA
	<ul style="list-style-type: none"> • Welcome, Apologies & Declaration of Pecuniary Interests • Acceptance of Minutes of last meeting • Previous Actions • Business Arising • IMC Update <ul style="list-style-type: none"> ○ Operations Update ○ Approvals Update ○ Environment Update ○ Community Update • General Business • Member Updates
1	WELCOME / APOLOGIES
	<p>Meeting opened at 5:30 pm.</p> <p>MA welcomed all members and introduced MW as the minute taker. MA issued an apology for Michel Banasik, Anita Mulrooney, Alex Beccari and Phil Clunas.</p>
2	DECLARATION OF PECUNIARY INTERESTS
	<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. MW is paid as minute taker by MA and the cost is recovered from South32 IMC.</p> <p>There were no other declarations made at the meeting.</p>
3	PREVIOUS MINUTES
	<p>Meeting minutes of DCCC from Thursday 8 June 2023 were endorsed as a fair and accurate summary of the meeting.</p> <p>Moved PG Seconded PD</p>
4	BUSINESS ARISING – PREVIOUS ACTIONS
	<p>Actions, Questions on Notice from June minutes</p> <p>PD to provide a map of area of dispute around the motor bikes and mountain cycle area.</p> <p>PD – To present at next meeting.</p> <p>GB to present a map of all South32 owned land.</p> <ul style="list-style-type: none"> • Map screened and discussed.

	<p>RM to arrange future visit to catchment.</p> <ul style="list-style-type: none"> • Date to be confirmed – CS seeking an extension. <p>ST to enquire with maintenance contractor regarding any rail track re-surfacing.</p> <ul style="list-style-type: none"> • Rail re-surfacing – both tamping and grinding is done from time to time based on profile runs completed at scheduled intervals. • Confirmed this was not linked to the noise complaints discussed at the prior meeting. <p>ST – Question on rail track re-surfaces.</p> <p>CS - Rail contractor does both profiles and run required tolerance. They did do some extra profile runs.</p> <p>GB - Monitoring each of the wagons, re-surfacing not linked to the work.</p> <p>GB - The break shoots, the shoes on carriages themselves. Different shoe components maybe changed shoes on the carriages.</p> <p><i>ST - To give feedback at next meeting. (action)</i></p> <p>CS to clarify the fire risk management of the land between the mine and the village.</p> <p>Actions are undertaken in accordance with the Bushfire Management Plan</p> <p>PG - Community meeting was held with the Fire Brigade, a mud map of whole fire zone area shown.</p> <p>PG - Gives residents an idea of areas affected, of hazard zones and how to prepare etc.</p> <p>Slide 5 shows South32 Owned land.</p> <p>CS - Screened map of Dedrobium Mine area and surrounding land holdings.</p> <p>Considerable discussion about various land holdings and apparent confusion amongst residents of Mt Kemba.</p> <p>Uncertainty has arisen in relation to the mountain bike proposal and how it is going to affect Mt Kembla village.</p> <p>Map is not available for inclusion in the minutes.</p>
--	--

DENDROBIUM OPERATIONS UPDATE	
-------------------------------------	--

	<p>Operations Update - ST</p> <p>LW21 commenced extraction on 24 April 2023.</p> <ul style="list-style-type: none"> • LW21 finish date 7th August • Development continuing at TG22, MG22 and Pioneer • Surface slope stability works continuing to remediate from wet weather planned completion late Sep 2023. • Slope movement stabilised in car park appointment of contractor currently being finalised commenced 24th April and finished 7th August.
--	--

	<ul style="list-style-type: none"> • LW19A & LW21A improves longwall continuity by allowing additional gas drainage time for high gas areas. • Assessment completed. Including an assessment of Aboriginal heritage, Wongawilli Creek and Swamp 15A. • LW19A SMP application submitted to DP&E October. • LW22 & LW23 SMP approved. <p>VT - Time frame?</p> <p>ST - Anticipating April/May 2024.</p> <p>VT – After the ones that we can see – what’s next?</p> <p>ST - Yellow area (on slide image) shows Area 3c, it is in our consent area.</p> <p>PD - The mining lease in area runs out in 2030.</p> <p>ST - Would require a lease extension.</p>
<p><i>DENDROBIUM – APPROVALS UPDATE</i></p>	
	<p>Approvals Update</p> <p>LW21A studies are coming together now, gas management plan has been approved.</p> <ul style="list-style-type: none"> • Longwall 19 Subsidence Management Plan approved 11 March 2021 • Longwall 19A SMP Application submitted 10 October 2022 • Longwall 20 Subsidence Management Plan – further approval required • Longwall 21 Subsidence Management Plan approved 19 December 2019 • Longwall 21A Subsidence Management Plan studies underway • Longwall 22 and 23 Subsidence Management Plan approved 20 December 2022 • Dendrobium Area 3 Gas Management Plant – approved by DPE 8 July <p>https://www.planningportal.nsw.gov.au/major-projects/projects/mod-9-gas-management-infrastructure</p>
<p><i>DENDROBIUM – ENVIRONMENT UPDATE</i></p>	
	<p>Environment Update</p> <ul style="list-style-type: none"> • Underground water balance has continued to decrease since the last peak in October/November 2022. • Water storage volumes in Area 3B have remained steady.

- LDP 5 flow in July was an average of 8.12 ML/day (max: 9.37 ML/d and min: 6.74 ML/d).
- Revised rehabilitation objectives submitted to Resources Regulator. Updated plan available on website.
- The Air Quality and Greenhouse Gas Management Plan and Water Management Plan have been reviewed and submitted to the Department for approval.
- Environmental Management Strategy was reviewed and approved in August.
- Independent Environmental Audit planning commencing. Consultation will be undertaken.
- Groundwater wells established at the Pit Top.
- Mulching of Mysore Thorn at Kemira Valley has progressed enabling access to further areas.
- Pre-demolition activities are progressing for the removal of the O'Briens Drift Belt and Powerline Relocation.

ST - Has been a reduction from previous months due to maintaining the pumps. Most of the water is left over residual.

ST - Rehabilitation as per document, it can be accessed via the website, received no feedback.

CS - Incorporating Cordeaux to bring the two sites together.

ST - *Onward consulting, sending an email to MA to seek an input from CCC in next month or so. (Action)*

CS - Site visits in October. Require comments before then, probably mid-September 2023.

CS – Control of Mysore Thorn; doing a lot of weed control. It has been mulched which helps to achieve further for weed control.

VT - Does mulching kill it?

ST – It's already dead.

PD - Mysore starting to pop up along the rail area.

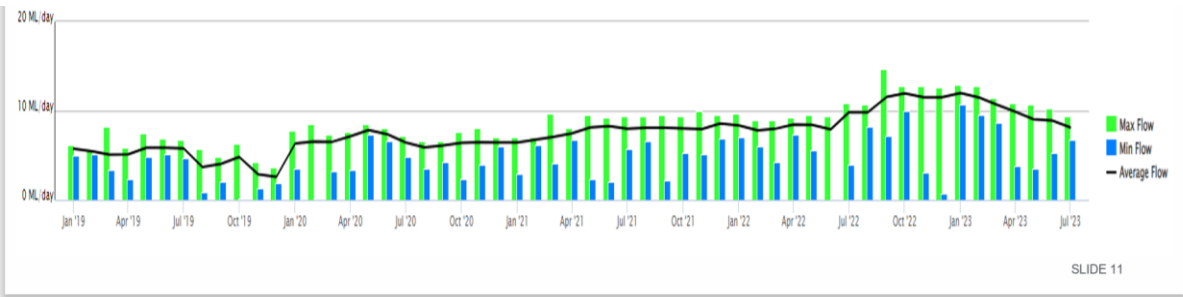
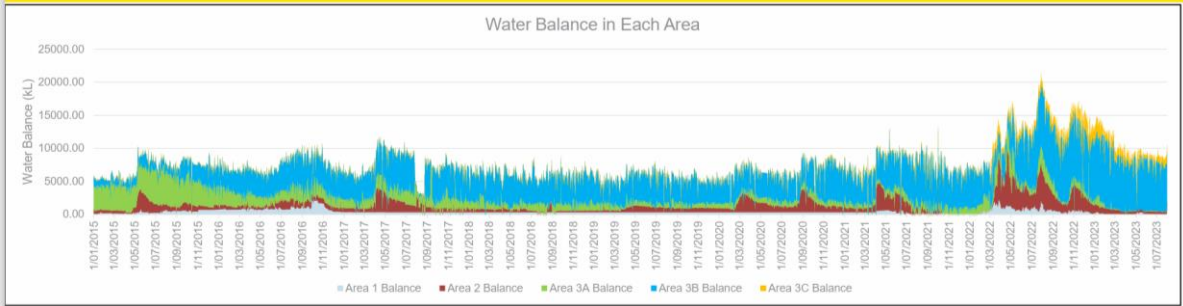
CS - Added to list to be done in coming months.

ST - Legacy site, demolition of coal bins at Kemira valley.

Dendrobium Water Balance and LDP 5 Discharge

ST - LDP5 has been decreasing over time.

Dendrobium Water Balance and LDP 5 Discharge



SLIDE 11

Dendrobium Area 3A/3B Impacts

JC - Presenting the 3A/B Impacts, since last meeting, of rock fracturing, soil cracking over the landscape features.

Site ID	Impact/Trigger Type	Feature		Trigger		Description	Refer to Impact Report/s Dated
		Affected	Identification Date	Level			
DA3C_LW21_001	Rock Fracturing	Outcrop	06/06/2023	1		Rock fracturing to a small rock outcrop west of <i>Fire Road 6F</i> .	9/06/2023
DA3C_LW21_002	Rock Fracturing and Rock Movement	LW21_RO1	06/06/2023	2		Rock fracturing and rock movement to a small rock outcrop at Landscape Monitoring Site LW21_RO1.	9/06/2023
DA3C_LW21_003	Rock Fracturing and Rockfall	Outcrop and Step	06/06/2023	2		Rock fracturing and rockfall to an outcrop and a step west of <i>Fire Road 6F</i> .	9/06/2023
DA3C_LW21_004	Rock Fracturing	Outcrop	06/06/2023	2		Rock fracturing on an outcrop west of <i>Fire Road 6F</i> .	9/06/2023
DA3C_LW21_005	Rock Fracturing	Outcrop	15/06/2023	1		Rock fracture on a rock outcrop northeast of WC20.	19/06/2023
DA3C_LW21_006	Rock Fracturing	Outcrop	15/06/2023	1		Rock fracturing on a rock outcrop northeast of WC20.	19/06/2023
DA3C_LW21_007	Rock Fracturing and Rockfall	Outcrop	15/06/2023	2		Rock fracturing and rock fall on an outcrop northeast of WC20.	19/06/2023
DA3C_LW21_008	Rock Fracturing and Soil Cracking	Rock Step	19/06/2023	1		Rock fracturing/soil cracking to a rock step and bushland northeast of WC20.	20/06/2023
DA3C_LW21_009	Rock Fracturing	Rock Step	19/06/2023	1		Rock fracturing to a rock step west of <i>Fire Road 6F</i> .	20/06/2023
DA3C_LW21_010	Rock Fracturing and Rock Movement/ Displacement	Outcrop	19/06/2023	2		Rock fracturing and associated rock movement/displacement at an outcrop west of <i>Fire Road 6F</i> .	20/06/2023
DA3C_LW21_011	Rock Fracturing, Rock Displacement and Soil Cracking	Outcrop and Bushland	19/06/2023	1		Soil cracking, rock fracturing and associated rock displacement to an outcrop and bushland west of <i>Fire Road 6F</i> .	20/06/2023
144_01	Groundwater	Swamp 144	22/06/2023	3		Groundwater recession rate greater than baseline	28/06/2023
S144_01	Soil Moisture	Swamp 144	27/06/2023	3		Average soil moisture level below the baseline level	28/06/2023



Dendrobium Area 3A/3B Impacts



Site ID	Impact/Trigger Type	Feature Affected	Identification Date	Trigger Level	Description	Refer to Impact Report/s Dated
DA3C_LW21_012	Rock Fracturing	Rock Step	27/06/2023	1	Rock fracturing to rock step west of Fire Road 6F.	28/06/2023
DA3C_LW21_013	Rock Fracturing	Outcrop	03/07/2023	1	Rock fracturing to rock outcrop west of Fire Road 6F.	04/07/2023
DA3C_LW21_014	Rock Fracturing	Watercourse	11/07/2023	2	Rock fracturing to rockbar on tributary WC20.	17/07/2023
DA3C_LW21_015	Rock Fracturing	Watercourse	11/07/2023	2	Rock fracturing to channel on tributary WC20.	17/07/2023
DA3C_LW21_016	Rockfall	Rock Step	11/07/2023	1	Small rockfall to step north of tributary WC20.	17/07/2023
Swamp 15a	Groundwater	Swamp	12/07/2023	1	Groundwater trigger at one site in Swamp 15a.	17/07/2023
Swamp 15a	Soil Moisture	Swamp	12/07/2023	2	Soil moisture triggers at three sites within Swamp 15a.	17/07/2023
DA3C_LW21_016 (Update)	Rockfall	Rock Step	26/07/2023	2	Rockfall to step north of tributary WC20.	31/07/2023
DA3C_LW21_017	Rock Fracturing	Watercourse	26/07/2023	1	Rock fracturing and uplift to WC20_Rockbar 15.	31/07/2023
DA3C_LW21_018	Rock Fracturing	Rock Outcrop/Ledge	26/07/2023	1	Rock fracturing to rock outcrop/ledge.	31/07/2023
DA3C_LW21_019	Rock Fracturing	Rock Step	1/08/2023	1	Rock fracturing to rock step west of Fire Road 6F.	2/08/2023
DA3C_LW21_020	Iron Staining	Watercourse	1/08/2023	1	Iron staining in tributary WC24.	2/08/2023
DA3C_LW21_021	Iron Staining	Rock Step	1/08/2023	1	Iron staining on the Swamp 144 basal step.	2/08/2023

Dendrobium Impacts and Triggers

Surface impacts over LW21-rock fracturing and rockfalls to landscape features and tributary WC20.

Groundwater and soil moisture triggers to Swamp 144 and 15A.

JC - Important to note a lack of base line data and monitoring did begin during high rainfall period.

Area 3A Swamp 15a Groundwater and Soil Moisture

- The site 15a-19 is located 144m south-east from the start of Longwall 19, i.e., within the longwall's 400m buffer zone since the start of mining.
- Water level in borehole recessed below the level of the piezometer on 31 December 2022 and borehole remains dry since then.
- The average soil moisture value recessed below the lowest level recorded before mining and is not recovered since.
- A water level and soil moisture trigger were recorded and reported according to the Longwall 19 Swamp Impact, Monitoring Management and contingency Plan.
- It is important to note virtually no baseline monitoring period, the fact that the monitoring begun during period of unusually high rainfall and that to date, year 2023 is the third driest in 22 years of our records.

Area 3A Swamp 34 Groundwater and Soil Moisture - JC

- The site is located 365m south of LW19.
- Shallow groundwater monitoring began in August 2021.
- The groundwater responds to rainfall events. After a very "wet" par of 2022, when the site was saturated, groundwater behaviour returned to the pre-2022 patterns.
- Soil moisture probe was installed on site in May 2021, the data shows no sign of impact.

Dendrobium – Area 3C LW21 Monitoring

JC - LW21 Area 3C we've covered most of the information on this. IMC are out in that area on a weekly basis as part of monitoring. Graph shows monitoring as of 1 August 2023.

Area 3 Swamp 144 Groundwater and Soil Moisture

- Shallow groundwater and soil moisture of Swamp 144 at the site 144-01 began in August 2020.
- The site is located 120m south of the longwall block within the longwall's 400m buffer zone since the start of extraction.
- The site was passed by LW21 on 22 May 2023
- A groundwater rate of recession and soil moisture triggers were recorded and reported according to the Longwall 19 Swamp Impact, Monitoring, Management and Contingency Plan.

PD - What was the trigger?

JC – It was a level three because it was only one site.

End of Panel report – JC

- Longwall 19 commencement date: 20 June 2022
- Longwall 19 completion date: 29 March 2023
- Longwall 19 is the fourth panel to be extracted in Dendrobium Area 3A
- Dendrobium paid approximately \$56 million in government royalties between July 2022 and February 2023.

LW19 Impacts and triggers overview.

- During LW19 monitoring period there were 63 new surface impacts identified and an update to the older LW8 impact.
- There was one gas release on Wongawilli Creek and five impacts identified on first and second order streams.
- 51 of these impacts occurred on natural features like steep slopes, bushland an outcrops and six impacts were identified on built features such as fire roads and closed vehicle access tracks.
- During LW19 monitoring there were four swamps that recorded either a shallow groundwater or soil moisture trigger.

VT – Is that a lot more triggers than expected?

JC - No all predicted.

Surface Water Quality

- No new water quality TARPs were triggered.
- Water quality TARPs remain triggered at tributary site LA4-S1 for EC, pH and DO as a result of impacts related to Area 3B.

- At Sandy Creek Rockbar 5, electrical conductivity, sulphate, Fe, Mn and Zn remain above baseline levels due to upstream contributions from SC10C which was mined under by Longwalls 7 and 8.
- Increase in iron staining is partly related to increasing groundwater levels due to high rainfall.
- It is expected that the occurrence of iron seeps will decline as drier conditions return.

Swamp groundwater and soil moisture

- During the monitoring period there were four Area 3A swamps with recorded triggers.
- Swamp 35b in Area 3b also recorded a Level 3 shallow groundwater trigger in the reporting period.

Surface flows

- The key findings from the surface flows assessment were that most headwater sites located above longwalls were more likely affected with many sites recording Level 3 triggers and a mix of level 1 or 3 triggers.
- Sites located downstream of offset from longwalls have lower levels of impact with many of these sites showing no triggers.

PD - Regarding level 3 triggers, does it get a response from the department?

JC - Yes, we receive responses.

PD - What sort of response, does it change the method of mining?

JC - Part of the approved mining.

Terrestrial Ecology

- Coastal Upland Swamps were monitored throughout 2022. Swamps ecological values and indicators currently monitored.
- Trends across swamps indicate a declining total species richness post-mining for the majority of impact and control swamps.
- Cumulative impacts considered over longer periods identified.
- Ecological values and indicators of Little John's Tree Frogs currently monitored include population attributes and habitat.
- Monitoring by specialists will continue in 2023

Aquatic Ecology

- No aquatic ecology impacts attributed to the extraction of LW19 in watercourses DA3A.
- No TARPs have been triggered with respect to Wongawilli Creek.

Cultural Heritage

- Two cultural heritage sites were impacted during the extraction of LW19.

PD - Are the local Aboriginal groups advised of the damage?

JC - IMC undertake field work prior to mining with the Registered Aboriginal Parties and archaeological experts to identify and manage risks to Aboriginal heritage sites and have developed the Aboriginal Cultural Heritage Plan.

VT - Presume it has been documented before damage has been done?

JC – Yes, IMC are continuing to work with Registered Aboriginal Parties to identify measures that could contribute to the preservation of these sites.

JC – IMC seeks to avoid and minimise any impact to the environment, any avoidable areas we undertake to rehabilitate after mining has occurred.

- The structural integrity of the sites has not been compromised.

NRAR Enforceable Undertaking – GB

- Reached an agreement with Natural Resources Access Regulator (NRAR).
- Goes back to 2011 from cracking in the streams, surface water licensing was not required.
- IMC have applied for the appropriate license; Water NSW holds all the licenses.
- IMC worked with NRAR and assessed the water that has been taken and the value. It has been a couple of years in negotiating, now going about implementing the Enforceable Undertaking.
- Currently in talks with the local Indigenous groups as part of the undertaking to develop a suitable water-related community project.
- The project will ensure a responsible management of water resources in the catchment area.

GB - The Enforceable Undertaking is in place of a fine and in terms of what we are contributing.

PD - Why settle on five megalitres a day.

GB - Not the figure, what is pumped out is a combination of surface water and groundwater, we agreed on NRAR on this numerical component. We pay for the groundwater licensing – no surface water licenses available to IMC, going forward we will pay for any surface water to Water NSW. Surface water still to be worked out.

NRAR Enforceable Undertaking Project – GB

- Contribute more than \$2.8 million for a community project that will improve the health of waterways and/or restore wetlands.
- Submit proposal to the NRAR by 30 September 2023.
- Deliver project within three months of NRAR endorsement.
- Consult with Aboriginal communities and groups connected to the area.
- Commit to improved surface water management.
- Report results to NRAR annually.

	COMMUNITY UPDATE - COMPLAINTS
	<p>Complaints - RM</p> <p>Complaints since last meeting: -</p> <ul style="list-style-type: none"> • June 2023 – 2 x noise – rail operations • July 2023 – 2 x noise – rail operations • August 2023 – No complaints received to date <p>RM - No complaints for the pit top. Rail noise - some issues we will keep working through. PD – Train went by and was screeching, complained on complaints line. ST - Will enquire if it got dealt with during next maintenance period. (Action)</p>
	DENDROBIUM – COMMUNITY UPDATE
	<p>Community Update – RM</p> <p>Illawarra Metallurgical Coal</p> <ul style="list-style-type: none"> • Ride Wollongong - \$150,000 investment for the next 3 years - Ride Wollongong to encourage to get on bikes. • Hockey Illawarra – School development program \$25,000 <p>DCEP Current balance ~\$152,394 FY23 Payment ~\$162,938 Next meeting Tuesday 15 August</p> <p>Indigenous Grants applications still open</p> <ul style="list-style-type: none"> • FY23 ~\$160,000 worth of grants awarded <p>RM - Still taking applications for indigenous grants.</p>
6	GENERAL BUSINESS
	<p>MA – DPE Community Consultive Committee Guideline.</p> <p>MA – Department finished its five-year review of the CCC guidelines.</p> <p>A few requirements and documents to sign new Code of Conduct Agreements and Declaration of Pecuniary Interests Declarations.</p> <p>The Review has added a requirement that all CCC’s should have and be guided by a Terms of Reference. This CCC has an existing Terms of Reference. That document is reviewed each three years and is due for review again in 2024. At that time should modify to the Departments’ Terms of Reference template.</p> <p>Round Table - All</p> <p>VT – Interested in the future of the mine.</p> <p>ST - Will keep the CCC informed of any developments when they arise.</p> <p>JE - The Enforceable Undertaking, was it based on self-reported data?</p> <p>GB - Yes, it is data from monitoring and reviewed by independent experts.</p> <p>JE - Were there other mining companies affected?</p>

	<p>GB - It wasn't specific to Dendrobium.</p> <p>PG - 96 candle ceremony to acknowledge and remember those lost in the Mt Kembla mining disaster was very moving and well done. Thanks to South32/IMC for their support.</p> <p>PD – Further reference to map of mine and surrounding area discussed earlier in the meeting. Community concerns about build up of debris against bridge at bottom of Mt Kembla Village.</p> <p>MA - will check if we can add map to minutes. – (Action)</p> <p>CS - The mining lease ends in 2029 the mine to close in 2030, but an extension of time can be applied for.</p> <p>End of year function – RM</p> <ul style="list-style-type: none"> • Invites will go out for Thursday, 30 November 2023 @ 6pm • Mt Kembla Village Hotel.
	<p>MEETING CLOSE / NEXT MEETING</p>
	<p>Meeting close: 6.43pm</p> <p>Next Meeting: Thursday 12th October 2023 (Dendrobium Nebo Room)</p> <p>Time: 5.30pm</p>