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a mining and metals company

Dendrobium Mine and Cordeaux Colliery Annual Review FY25

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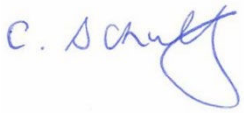
Table 1: Annual Review Title Block	
Name of operations	Dendrobium Mine Cordeaux Colliery
Name of operator	Gear M Illawarra Met Coal Pty Ltd trading as GM^3
Development consent / project approval #	DA 60-03-2001 (Dendrobium) D74/134 (Cordeaux)
Name of holder of development consent / project approval	Illawarra Coal Holdings Pty Ltd
Mining lease #	Consolidated Coal Lease (CCL) 768, Mining Lease (ML) 1510, ML 1566 (Dendrobium) CCL 768 (Cordeaux)
Name of holder of mining lease	Dendrobium Coal Pty Ltd (ML 1510 and ML 1566) Illawarra Coal Holdings Pty Ltd (CCL 768).
Water Supply Works #	10WA118772
Miscellaneous Work#	10MW119342
Name of holder of water approvals	Illawarra Coal Holdings Pty Ltd
Water access licence (WAL) #	37465 36473 42385 42386 45165
Name of holder of WALs	Illawarra Coal Holdings Pty Ltd
RMP start date	20 July 2025
RMP end date	22 July 2028
Annual Review start date	1 July 2024
Annual Review end date	30 June 2025

I, Chris Schultz, certify that this audit report is a true and accurate record of the compliance status of Dendrobium Mine and Cordeaux Colliery for the period 1 July 2024 – 30 June 2025 and that I am authorised to make this statement on behalf of Illawarra Coal Holdings Pty Ltd and Dendrobium Coal Pty Ltd.

Note.

a) *The Annual Review is an 'environmental audit' for the purposes of section 9.39 (2) of the Environmental Planning and Assessment Act 1979. Section 9.42 provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, $1 million and for an individual, $250,000.*

b) *The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or $22,000, or both).*

Name of authorised reporting officer	Chris Schultz
Title of authorised reporting officer	Superintendent Environment and Community
Signature of authorised reporting officer	
Date	24 September 2025

1. STATEMENT OF COMPLIANCE

Table 2: Statement of Compliance		
Development Consent	**Purpose**	**Compliant?**
DA 60-03-2001	Dendrobium Underground Coal Mine and associated surface facilities and infrastructure	No
MOD-11-2-2002	Access of construction traffic to the Bradford Breaker Emplacement Area	
MOD-36-5-2002-I	Application for vehicles to access Benjamin Road.	
60-03-2001 MOD 3	Modification to Development Consent	
60-03-2001 MOD 4	Coal sizer	
60-03-2001 MOD 5	Area 3 and Consent simplification	
60-03-2001 MOD 6	Stage 3 West Cliff Coal Wash Emplacement	
60-03-2001 MOD 7	Strategic Biodiversity Offset	
60-03-2001 MOD 8	Surface Supply Upgrade	
60-03-2001 MOD 9	Gas Management Infrastructure	
60-03-2001 MOD 10	Coal processing	
Mining Lease	**Number**	
Consolidated Coal Lease (CCL)	768	Yes
Mining Lease (ML)	1510	Yes
ML	1566	Yes
Environment Protection Licence (EPL)		
EPL 3241	Dendrobium Mine	Yes
EPL 611	Cordeaux Colliery	Yes
Water Approval		
Water Supply Works	10WA118772	Yes
Miscellaneous Works	10MW119342	Yes
Ground Water Access Licences (WAL)		
37465	10AL119249	Yes

36473	10AL118771	Yes
42385	10AL123125	Yes
42386	10AL123124	Yes
Surface Water Access Licence		
45165	10AL125037	Yes
WaterNSW Access Consent		
F2020/1545[1]	Special and Controlled Areas access	Yes
EPBC Approval		
2001/214	Extraction of Wongawilli Seam Coal	Yes

Table 3: Non-compliances against relevant approvals

Relevant approval	Condition #	Condition description (summary)	Compliance status	Comment	Where addressed in Annual Review
DA 60-03-2001	Condition 1 of Schedule 4	Comply with noise impact assessment criteria	Non-compliant	Exceedances of noise impact assessment criteria recorded.	Section 11.1

Compliance status key for Table 3.

Risk Level	Colour Code	Description
High	Non-compliant	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
Medium	Non-compliant	Non-compliance with: • potential for serious environmental consequences, but is unlikely to occur; or

[1] Annual Statement of Compliance provided in Appendix 9.

		• potential for moderate environmental consequences, but is likely to occur
Low	Non-compliant	Non-compliance with: • potential for moderate environmental consequences, but is unlikely to occur; or • potential for low environmental consequences, but is likely to occur
Administrative non-compliance (ANC)	Non-compliant	Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions)

Refer to Section 11 for more detail regarding the non-compliances listed in Table 3.

The predictions and Statement of Commitments from the Dendrobium Environmental Assessment (EA) are incorporated into the Dendrobium Development Consent DA 60-03-2001 (as modified). An assessment of compliance with the conditions of DA 60-03-2001 is considered to be an assessment of compliance against the predictions in the EA. Compliance against the Development Consent is assessed in Appendix 2.

2. INTRODUCTION

2.1 Sale of Illawarra Coal Holdings

On 29 February 2024 South32 Limited (South32) announced that they had entered into a binding agreement for the sale of Illawarra Coal Holdings Pty Ltd (ICHPL) to Gear M Illawarra Met Coal Pty Ltd, trading as GM^3, an entity owned by Golden Energy and Resources Pte Ltd (GEAR) and M Resources Pty Ltd. The transaction was completed on 29 August 2024. A Transitional Service Agreement was in place until 30 April 2025.

2.2 Background

This Annual Review for Dendrobium Mine and Cordeaux Colliery details the environment and community performance for the 12-month period ending 30 June 2025 and meets the requirements set out in the *Post approval requirements for State significant mining developments - Annual Review Guideline* (NSW DPE, October 2015).

The Annual Review has been prepared to meet the requirements of Condition 5 of Schedule 8 of the Dendrobium Development Consent DA 60-03-2001, as modified (the Consent).

Annual Reviews are publicly available via the GM^3 website at link.

2.3 Overview of Operations

2.3.1 Dendrobium Mine

Dendrobium Mine is an underground mining operation approved in November 2001 by the Minister of the Department of Urban Affairs and Planning. The mine is owned and operated by Dendrobium Coal Pty Ltd, a subsidiary company of ICHPL. It is operated on a continuous basis, 24 hours a day and 7 days a week.

The mining operations are located immediately adjacent to Mount Kembla, approximately 8 kilometres (km) west of Wollongong, NSW. Mount Kembla village is located within 500 metres (m) of the Pit Top site and has close historical links with coal mining.

Dendrobium Mine extracts coal from the Wongawilli Seam of the Southern Coalfield. Three (3) mining areas make up the approved mine plan for Dendrobium and are named Areas 1, 2 and 3 (including 3A, 3B and 3C). Longwall mining during the reporting period was undertaken in Area 3C (LW22) (refer to Plan 1 and Plan 2). The mine primarily produces hard coking coal and is approved to produce up to 5.2 million tonnes per annum until 31 December 2030. Dendrobium Mine is comprised of a number of sites as detailed below.

2.3.1.1 Dendrobium Pit Top

The Pit Top consists of:

- Administration buildings.
- Workshop, machinery and equipment storage areas.
- People and materials access to the underground workings via the Dendrobium Tunnel.
- A sediment pond.
- A grey water treatment plant (GWTP) and oily water separation facility.

The Pit Top layout is shown in Plan 3.

2.3.1.2 Kemira Valley Coal Loading Facility (KVCLF)

Coal is transported from the underground workings to the KVCLF via a conveyor network, reaching the surface via the Kemira Valley Tunnel (KVT). The coal is then fed through a coal sizer, into a rill tower and deposited onto a 140,000-tonne capacity stockpile. Coal is loaded onto trains via an enclosed rail-loading chute. The KVCLF layout is shown in Plan 4.

2.3.1.3 Kemira Valley Rail Line (KVRL)

The privately owned and operated KVRL is used to transport Run of Mine (RoM) coal from the KVCLF to the Dendrobium Coal Preparation Plant (DCPP).

2.3.1.4 Ventilation Shaft 1

The fan housings associated with Ventilation Shaft 1 were decommissioned in October 2008 and relocated to Ventilation Shaft 3. This shaft provides intake air to the underground workings. The Ventilation Shaft 1 site layout is shown in Plan 5.

2.3.1.5 Ventilation Shaft 2/3 Site

Construction of Ventilation Shafts 2 and 3 commenced during 2006 and was completed in 2008. Ventilation Shaft 2 (downcast) and 3 (upcast) provide ventilation to the current and future underground workings in Area 3. Construction of gas management infrastructure was completed in FY24 to assist with extracting gas from the underground workings prior to mining. The Ventilation Shaft 2/3 site layout and gas management infrastructure are outlined in Plan 6.

2.3.1.6 DCPP

The DCPP is located within the Port Kembla Steelworks. The plant provides washing facilities for Dendrobium RoM coal prior to being blended with Bulli Seam coal in the coke making process at the Port Kembla Steelworks or at Port Kembla Coal Terminal (PKCT) for export.

2.3.2 Cordeaux Colliery

Cordeaux Colliery is owned and operated by Endeavour Coal Pty Ltd, a wholly owned subsidiary of ICHPL. Coal production ceased in March 2001 and recovery of longwall mining equipment was completed on 12 April 2001. Following cessation of mining, Cordeaux Colliery was placed on care and maintenance. Throughout this reporting period, Cordeaux Colliery maintained this status.

The Cordeaux Colliery Pit Top functions as office space and a storage facility. The Pit Top is used as a base for the Exploration Team, Survey Team and Environmental Field Team (EFT) activity across the Dendrobium and Appin mining leases and exploration tenements, and is a base for access to, and communications with, the Dendrobium Mining Area within the WaterNSW Special Areas Catchment.

The Cordeaux Colliery Pit Top and the Corrimal No. 3 shaft site are of potential significant strategic value for future operations.

The Cordeaux Colliery Pit Top is wholly contained within an area of approximately 11.9 ha located within WaterNSW Special Areas (Plan 10). Cordeaux Colliery was serviced by four (4) vertical shafts consisting of:

- Personnel and materials access shaft.
- Bulk Coal Winder (BCW) shaft. The shaft was also the second means of egress and contained the mine's two (2) main ventilation fans.
- Corrimal No. 2 Shaft - mine ventilation fan shaft (ex-Corrimal Mine). This fan was used to complement ventilation flow through Cordeaux Colliery.
- Corrimal No. 3 Shaft – mine ventilation fan shaft (ex-Corrimal Mine). This fan was used to complement ventilation flow through Cordeaux Colliery.

Cordeaux Colliery is considered a "zero discharge site", restricting water discharge directly to the surface lands of the WaterNSW Special Areas. Cordeaux Colliery Pit Top has approximately 40% of its area dedicated to surface water management.

As Cordeaux Colliery is currently deemed to be under care and maintenance, there were limited activities associated with the site during the reporting period and as a result, limited potential for environmental impacts.

2.4 Mine Contacts

The site contacts for Dendrobium Mine and Cordeaux Colliery are provided in Table 4.

Table 4: Site Contacts

Position	Name	Number
General Manager Dendrobium Mine	Simon Thomas	(02) 4255 4874
Superintendent Environment and Community	Chris Schultz	0407 888 423
Specialist Environment - Dendrobium	Luca Franceschini	0434 845 652
Coordinator Environment - Cordeaux	Josh Carlon	(02) 4224 6225
Community Call Line		1800 102 210

3. APPROVALS

Relevant consents, leases and licences for Dendrobium Mine and Cordeaux Colliery are included in Table 5, Table 6, Table 7 and Table 8.

3.1 Dendrobium Mine

Table 5: Development Consent and Modifications associated with Dendrobium Mine

Approval	Purpose	Issue Date	Expiry date
DA 60-03-2001	Dendrobium Underground Coal Mine and associated surface facilities and infrastructure	20 Nov 2001	21 Dec 2023
MOD-11-2-2002	Permitting the access of construction traffic to the Bradford Breaker Emplacement Area (Drift Spoil Emplacement Area 1) via Cordeaux Road and Benjamin Road, Mount Kembla.	28 Feb 2002	21 Dec 2023
MOD-36-5-2002-I	Application for commencement of vehicles accessing Benjamin Road.	15 Aug 2002	21 Dec 2023
60-03-2001 MOD 3	Modification to Development Consent	28 Aug 2003	21 Dec 2023
60-03-2001 MOD 4	Coal sizer	4 Apr 2006	21 Dec 2023
60-03-2001 MOD 5	Area 3 and Consent simplification	8 Dec 2008	31 Dec 2030
60-03-2001 MOD 6	Stage 3 West Cliff Coal Wash Emplacement	20 Dec 2007	21 Dec 2023
60-03-2001 MOD 7	Strategic Biodiversity Offset	2 Apr 2015	31 Dec 2030
60-03-2001 MOD 8	Surface Supply Upgrade	13 Jul 2018	31 Dec 2030
60-03-2001 MOD 9	Gas Management Infrastructure	8 Jul 2022	31 Dec 2030
60-03-2001 MOD 10	Coal processing	9 Aug 2024	31 Dec 2030
EPBC 2001/214	Extraction of Wongawilli Seam Coal	20 Dec 2001	1 Jan 2032

Table 6: Mining Leases associated with Dendrobium Mine				
Mining Lease / Sub-Lease	**Number**	**Issue Date**	**Expiry Date**	**Mine Site**
CCL	768	29 Oct 1991	7 Oct 2029	Dendrobium
ML	1510	24 Apr 2002	24 Apr 2044	Dendrobium
ML	1566	7 Sep 2005	6 Sep 2047	Dendrobium

Table 7: Licences associated with Dendrobium Mine			
Licences/Consents	**Number**	**Issue Date**	**Expiry Date**
Licence to Store – Explosives (SafeWork NSW)	XSTR100152	8 Aug 2023	10 Jan 2028
Radiation Licence (EPA)[2]	5096770	26 Feb 2025	26 Feb 2026
EPL	3241	Aug 2000	N/A
Water Approval (Natural Resources Access Regulator – NRAR)	10WA118772	1 Jul 2013	27 Jun 2028
Miscellaneous Works Approval	10MW119342	24 May 2024	24 May 2034
Groundwater Access Licence	37465	9 Feb 2016[3]	N/A
Groundwater Access Licence	36473	9 Feb 2016[3]	N/A
Groundwater Access Licence	42385	4 Jun 2019[3]	N/A
Groundwater Access Licence	42386	4 Jun 2019[3]	N/A
Unregulated River Licence	45165	4 Jun 2024	N/A

[2] For radiation gauges at the DCPP. Issued by Environment Protection Authority (EPA).
[3] Date of issue for WALs is date as per certificate of title.

Exploration Licence	AUTH 143	28 Jul 1979	28 Jul 2026
Exploration Licence	AUTH 374	24 Oct 1986	24 Oct 2026
WaterNSW Access Consent	F2020/1545	19 July 2024	30 Sep 2025

Table 8: Current Mining Approvals for Dendrobium Mine

Approval	Number	Issue Date
Area 3C LW22 and 23 Subsidence Management Plan (SMP)	N/A	20 Dec 2022
Area 3C LW21A SMP	N/A	9 July 2025

3.2 Cordeaux Colliery

Cordeaux Colliery is held under CCL 768. The relevant consents, leases, and licences for Cordeaux Colliery are presented in Table 9.

Table 9: Consents, Leases and Licences for Cordeaux Colliery

Facility/Document	Number	Issue Date	Expiry Date
EPL	611	27 Jul 2000	N/A
Development Consent (Wollongong City Council)	D74/134	20 Dec 1974	N/A
Exploration Licence	AUTH 338	8 Oct 1984	8 Oct 2025
WaterNSW Access Consent	F2020/1545	19 July 2024	30 Sep 2025
CCL	768	29 Oct 1991	7 Oct 2029

4. OPERATIONS SUMMARY

4.1 Mining

4.1.1 Dendrobium Mine

The RoM product for the reporting period was 3.535 million tonnes with a saleable product yield of 72%. A comparison showing the RoM production at Dendrobium Mine for past reporting periods is provided in Figure 1. During this reporting period, Dendrobium commenced longwall mining in Area 3C.

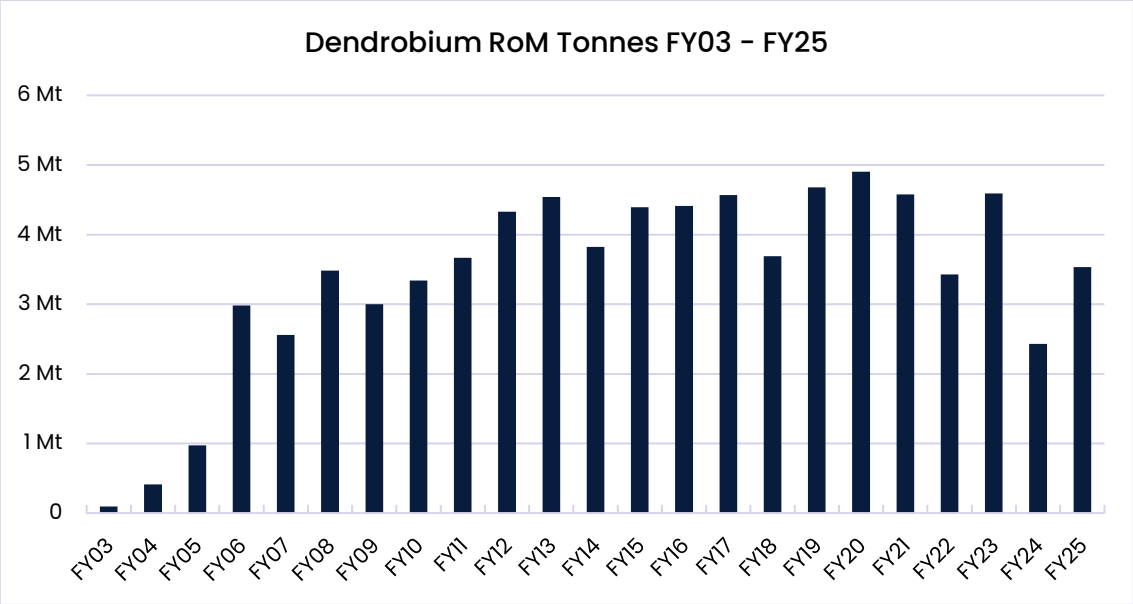


Figure 1: RoM Production for Dendrobium Mine

The start and finish dates for longwalls in the current Dendrobium mining domain are provided in Table 10.

Table 10: Area 3 Longwall Start and Finish Dates		
Longwall Number	**Start Date**	**Finish Date**
7	4 May 2011	23 Jan 2012
8	24 Feb 2012	29 Dec 2012
9	9 Feb 2013	2 Jun 2014
10	20 Jan 2014	20 Jan 2015
11	18 Feb 2015	26 Jan 2016
12	22 Feb 2016	31 Jan 2017
13	4 Mar 2017	19 Apr 2018
14	22 May 2018	26 Feb 2019
15	9 Apr 2019	22 Jan 2020
16	25 Feb 2020	4 Nov 2020
17	12 Dec 2020	13 Oct 2021
18	2 Dec 2021	17 May 2022
19	20 Jun 2022	29 Mar 2023
21	26 Apr 2023	7 Aug 2023
19A	2 Nov 2023	28 Jun 2024
22	11 Aug 2024	Estimated as Dec 2025

4.1.2 Cordeaux Colliery

There was no mining at Cordeaux Colliery in the reporting period. The site is under care and maintenance.

4.2 Mineral Processing

4.2.1 Dendrobium Mine

Processing of the RoM coal produced at Dendrobium Mine is undertaken at the DCPP. Coal wash is emplaced at the Appin Mine Coal Wash Emplacement Area (CWEA), directed to beneficial reuse, sold as a thermal coal or used as engineered fill under Operational Purpose Deductions (OPDs) (see Section 6.16.1.4). The production and waste summary for Dendrobium Mine is outlined in Table 11.

Table 11: Production Summary				
Material	**Approved limit**	**Previous Reporting Period**	**This Reporting Period**	**End of Next Reporting Period**[4]
Waste Rock/ Overburden (Mt)[5]	N/A	0	0	0
RoM Coal/Ore (Mt)	5.2	2.428	3.535	4.100
Coarse reject (Coal Wash Mt)	N/A	0.786	1.005	1.090[6]
Saleable product (Mt)	N/A	1.883	2.530	3.010

4.2.2 Cordeaux Colliery

There was no mineral processing at Cordeaux Colliery in the reporting period. The site is under care and maintenance.

4.3 Ore and Product Stockpiles

4.3.1 Dendrobium Mine

A 140,000-tonne capacity stockpile, located at the KVCLF, is used to store RoM coal prior to it being loaded into trains for transport to the DCPP. Train movements are limited to between 6 am and 11 pm as required by the Consent. During the reporting period, 2,146 trains were loaded at the KVCLF, transporting 3,444,651 tonnes of coal. A summary of train movements for FY25 is included in Table 12.

[4] Estimate.
[5] Not applicable as Dendrobium Mine is an underground coal mine.
[6] Coal wash figure calculated based on actual/forecast movement of product to its final destination (once its purpose is known) rather than as soon as it is generated at the DCPP, to allow alignment to expected use (and any potential rewashing that may impact the numbers).

Table 12: Summary of KVCLF train movements - FY25			
Month	**Tonnes**	**Train Movements[7]**	**Average Train Movements/Day**
Jul-24	4,350 t	2	0.1
Aug-24	150,381 t	98	3.2
Sep-24	160,460 t	101	3.4
Oct-24	333,160 t	214	6.9
Nov-24	238,808 t	147	4.9
Dec-24	343,491 t	216	7.0
Jan-25	401,264 t	243	7.8
Feb-25	324,182 t	200	7.1
Mar-25	421,979 t	256	8.3
Apr-25	321,079 t	203	6.8
May-25	365,366 t	230	7.4
Jun-25	380,131 t	236	7.9
TOTAL			**AVERAGE = 5.9**

4.3.2 Cordeaux Colliery

There was no product storage at Cordeaux Colliery in the reporting period. The site is under care and maintenance.

4.4 Construction

4.4.1 Dendrobium Mine

4.4.1.1 Sediment pond sediment removal

The Pit Top sediment pond at Dendrobium collects surface water from dust suppression activities, yard and vehicle hose down and during rainfall events. During FY25 a specialist

[7] One movement is a return trip from the DCPP. Some trains were only partially loaded.

contractor was engaged to remove sediment from the pond. The method involved breaking up the sediment using a jet hose and pumping the sediment out of the pond into sealed containers using a vacuum truck. Once full, the containers were trucked to the KVCLF and emptied onto the stockpile. The method was successful and will be implemented again in FY26.

4.4.1.2 Slope Stability Project

Since the initial slope stability project was completed in FY24, subsequent rainfall events have led to further minor slope stability issues on the Portal Road. During FY25 one (1) minor slope stability project was completed by a specialist contractor. Remediation involved the removal of slumped sediment, installation of multiple basalt-filled gabion baskets and concrete blocks and improving drainage lines behind and in front of the wall to prevent further slumping (see Plate 1).

Plate 1: Slope Remediation Works - Dendrobium Pit Top Portal Road

4.4.1.3 GWTP overhaul

During FY25 several upgrades were progressed at the GWTP including:

- Installation of a belt skimmer to assist with the removal of oil, that has effectively removed and transferred oil from the GWTP to the waste oil tank.
- Installation of a steel plate to prevent oily water from overflowing into the sediment pond during rainfall.
- Pump upgrades to larger Flygt submersible pumps with equal pumping rates.

The final stage of the project was completed in early FY26 with the installation of a new awning and lighting over the infrastructure.

4.4.1.4 Area 3C Power Upgrade

A power upgrade for Area 3C was completed over the reporting period. The upgrade included augmentation of feeders 7097, 7093/1 and 7094 to increase power capacity by the installation of new power poles, new conductors and the upgrade of the Mount Keira switching station recloser. The final stage of the project is with Endeavour Energy to replace the final recloser which is expected to occur in FY26.

4.4.1.5 Area 3C Gas Management Infrastructure

Construction of the Area 3C gas management infrastructure was completed in FY24. During FY25 the temporary gas drainage plant was removed, the disturbed areas of the site without infrastructure commenced rehabilitation and erosion and sediment improvements were completed. The erosion and sediment control improvements that were completed during FY25 include:

- Asphalting of the site entry road and yard.
- Earthworks to shape the area of the removed temporary gas management infrastructure.
- Installation of sediment controls including coir logs, jute mesh and rock check dams.
- Spraying of a soil binder and hydromulch to encourage soil stabilisation and vegetation growth on rehabilitation areas.
- Drainage improvements.

The completed gas management infrastructure, the existing ventilation infrastructure and erosion and sediment control improvements are shown in Plate 2.

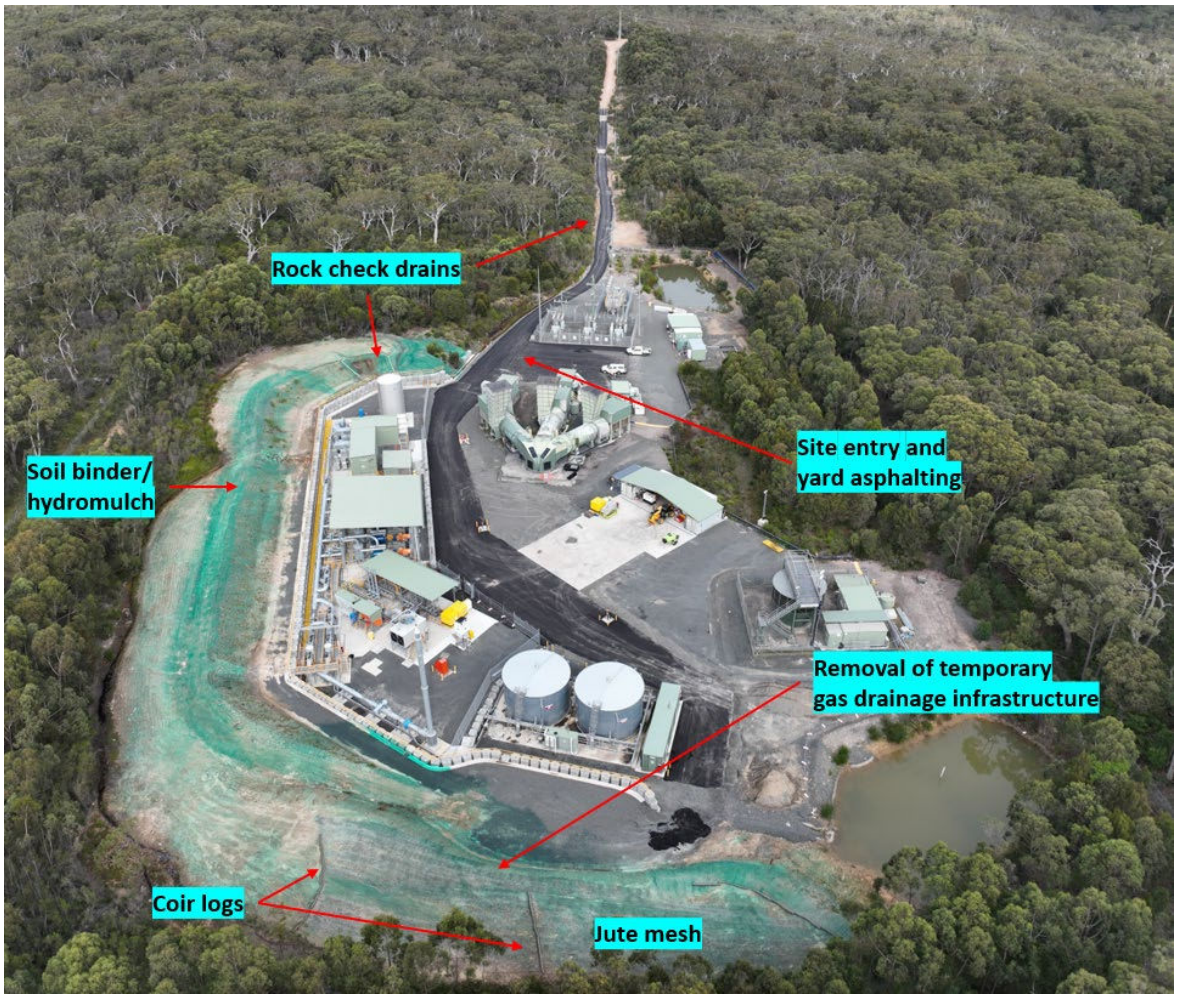


Plate 2: Erosion and sediment control improvements at the Gas Drainage Plant - May 2025

4.4.1.6 Minor Improvement Projects

Other improvement projects progressed throughout FY25 include:

- Minor upgrades to the mine dewatering system to reduce the turbidity of water being discharged at Licence Discharge Point (LDP) 5.
- Ongoing maintenance to the drainage and greywater treatment systems.
- Installation of a concrete hardstand around the self-bunded bulk diesel and solcenic tanks (Plate 3).
- Resurfacing of areas near the workshop, warehouse and along Portal Road.
- Rehabilitation of the Dendrobium Tunnel subsidence site (refer to section 8.1.1.2).
- Installation of an automatic water level sensor on the Pit Top sediment pond.
- Minor upgrades to the bunding of chemicals.

Plate 3: Concrete hard stand around self-bunded diesel and solcenic tanks

The following projects were proposed to be undertaken in FY25:

- Bulk Store equipment relocation - project was not started due to time delays with MOD 11.
- Portal Road culvert remediation - project was deferred to CY27.
- Workshop safety upgrades - project was deferred to CY27.

4.4.1.7 Environmental Monitoring

During FY25, one (1) additional surface flow monitoring site was installed in a catchment watercourse over the Dendrobium Area 3C (DA3C) mining area. This included the installation of a low-profile weir and flume-like halfpipe which directs surface flow through a control of known cross-sectional area. This improves the sensitivity of the control from what would have previously been a wide rockbar control.

Two (2) water quality loggers were also installed in Wongawilli Creek.

4.4.2 KVCLF

Minor improvement projects were completed at KVCLF including:

- Sediment removal from the on-site sumps, drains and sediment ponds.
- Continued weed removal through spraying and mulching of target weed species.

- Drainage improvements beneath the conveyor gantry.
- Installation of storage areas for equipment laydown.
- Remediation of the KVRL slip site.

4.4.3 DCPP

Several improvement works were undertaken at the DCPP over the reporting period. These included a thickener upgrade, electrical equipment upgrades, arc flash containment upgrade, structural repairs, re-sheeting, and conveyor pull cord safety compliance changes.

4.4.4 Cordeaux Colliery

Upgrade of the site's electrical supply continued in FY25

Works also included the replacement of the pole mounted high voltage recloser and relocating the associated control cabinet to be operable from ground level. This removed the hazard of using a ladder to access previously.

Other activities included the upgrade of the fence line on the south-western corner of the site, and relocation of the main vehicle entry gate at Cordeaux, moving it further away from Picton Road. This improvement was implemented following a hazard report around the lack of space for public vehicles to safely turn around in the event they pulled off Picton Road when the site entry gates are closed. Solar powered lighting was also installed to improve lighting at the entry gate.

Work began on the removal of electrically powered equipment from the disused BCW. All power was removed from areas outside of the High Voltage (HV) Switch Room. Equipment with backup batteries was removed from the HV Switch Room, with a proposal to install a standalone kiosk/HV Switch Room external to the existing building in development.

Other minor improvements were progressed as follows:

- Replacement of the Primary Separation Lagoon pump starter motor was completed.
- Installation of gas monitoring and differential pressure monitoring on the three (3) vertical shafts was ongoing at the end of FY25 and is expected to be completed in FY26.
- Upgrade to the mechanical area of the workshop continued, with new power outlets and extra low voltage control systems on grinders and pedestal drill installed. New wall lighting is expected to be installed in FY26.
- Removal of the external beam from the BCW tower was completed.

- Removal of redundant water storage adjacent to the drilling contractor office was completed.
- Planning continued for demolition activities for the Cordeaux Pit Top Coal Bins and Corrimal No. 3 Coal Bins.

The proposed installation of a pole mounted transformer and site low voltage transmission arrangement did not proceed due to budget restrictions.

4.5 Land Preparation

4.5.1 Dendrobium

Land preparation works were undertaken for the gas management infrastructure project with the removal of the temporary gas drainage plant and the reshaping and rehabilitation of the site. These works were completed in compliance with the ICHPL Construction Environmental Management Plans. The area was previously cleared to construct the temporary gas drainage plant. No threatened species of flora or fauna were identified within the work zone.

4.5.2 Cordeaux Colliery

No land preparation works occurred at the Cordeaux Colliery site as mining operations are under care and maintenance.

4.6 Exploration

Exploration during the reporting period consisted of borehole drilling only. Drilling activities completed during the reporting period are summarised in Table 13. All boreholes captured below coincide with CCL 768, although some had exploration approvals sought and granted against the overlying exploration title. Standard exploration holes typically target the Bulli and/or Wongawilli coal seams, extending to the American Creek Coal Member or beyond. All exploration carried out on CCL 768 and overlying exploration tenements is to assist with future mine planning for Dendrobium Mine by testing coal quality, geotechnical properties, gas characteristics and seam continuity as well as to further delineate structures which may impact the mining operation. A selection of holes listed in Table 13 were drilled to support environmental, hydrological monitoring and/or mining approvals purposes.

Plan 7 provides an overview of the locations of the exploration and environmental monitoring boreholes drilled across CCL 768 in the FY25 reporting period.

Table 13: Boreholes completed during the reporting period

Title Type	Title No.	Program	Hole Name	Alternative Name	Easting	Northing	Drill Type	Hole Purpose	Borehole Total Depth (m)	Drilling Start Date	Borehole Comments
Exploration Lease	AUTH 143	Survey 21/ Dendrobium - Area 3C	S2676	DE-A1-04	293473.15	6195199.17	Fully cored - borehole cored from surface to total depth.	Coal quality	312.61	5/08/2024	Coal quality exploration and Cordeaux Dam monitoring ahead of mining (approvals). Borehole was fully packer tested. Piezometers installed.
Exploration Lease	AUTH 143	Survey 21/ Dendrobium - Area 3C	S2676A	DE-A1-04A	293473.2	6195199.57	Polycrystalline diamond (PCD) chip hole.	Hydrological	30	23/09/2024	Cordeaux Dam monitoring ahead of mining (approvals). Piezometer installed.
Exploration Lease	AUTH 143	Survey 21/ Dendrobium - Area 3C	S2676B	DE-A1-04B	293477.56	6195197.15	PCD chip hole.	Hydrological	30	24/09/2024	Cordeaux Dam monitoring ahead of mining (approvals). Piezometer installed.
Exploration Lease	AUTH 143	Survey 21/ Dendrobium - Area 3C	S2676C	DE-A1-04C	293473.54	6195205.46	PCD chip hole.	Hydrological	225.7	25/09/2024	Cordeaux Dam monitoring ahead of mining (approvals). Pump installed.
ML	CCL 768	Survey 17/ Dendrobium - Area 3C	S2681	D-A3C-S17-26	291516.42	6196037.69	Partly cored - borehole chipped to target depths prior to coring.	Coal quality	381.44	6/12/2024	Coal quality exploration. Piezometers were installed in this hole.
ML	CCL 768	Survey 17/ Dendrobium - Area 3C	S2682	D-A3C-S17-28	291307.39	6196265.78	Partly cored - borehole chipped to target depths prior to coring.	Coal quality	405.36	29/01/2025	Coal quality exploration. Borehole was fully packer tested. Piezometers were installed in this hole.
ML	CCL 768	Survey 17/ Dendrobium - Area 3C	S2682A	D-A3C-S17-28A	291307.41	6196260.73	PCD chip hole.	Hydrological	50.5	16/04/2025	A piezometer was installed in this hole.

ML	CCL 768	Survey 17/ Dendrobium - Area 3C	S2685	D-A3C-S17-27	292840[8]	6195622[8]	Partly cored - borehole chipped to target depths prior to coring.	Coal quality	346.86	6/05/2025	Coal quality exploration. Piezometers were installed in this hole.
ML	CCL 768	Survey 17/ Dendrobium - Area 3C	S2654A	D-A3C-S17-33A	292771[8]	6196765[8]	Partly cored - borehole chipped to target depths prior to coring.	Coal quality	384.71	13/06/2025	Coal quality exploration.
ML	CCL 768	Survey 17/ Dendrobium - Area 3C	S2688	D-A3C-S17-30	292555[8]	6196057[8]	Partly cored - borehole chipped to target depths prior to coring.	Coal quality	NA	NA	Not drilled - Site preparation completed for July commencement of drilling.

[8] Final survey pickup has not yet been completed.

5. ACTIONS REQUIRED FROM PREVIOUS ANNUAL REVIEW

The actions arising from the previous Annual Review are detailed in Table 14.

Table 14: Actions arising from previous Annual Review

Action Required	Requested by	Where covered in Annual Review
Construction Activities		
• DA3C power upgrade, including power pole and conductor replacement in various areas around Dendrobium Mine.		Section 4.4.1.4
• GWTP overhaul.		Section 4.4.1.3
• Bulk Store equipment relocation.	ICHPL	Section 4.4.1.6
• Portal Road culvert remediation.		Section 4.4.1.6
• Workshop safety upgrades.		Section 4.4.1.6
• Additional slope stability remediation to address landslip issues along the portal road.		Section 4.4.1.2
• Surface and yard repairs.		Section 4.4.1.6
Water Management		
• Reinstate Kemira Workings and Pump Station system to provide additional protection against potential turbid water sources	ICHPL	Section 12.1.5.1
• Report on adherence with commitments of the GMP and the requirements and objectives set out for each of the water-related conditions and performance measures of relevant project approvals.	DCCEEW	Section 6.13.1.11
• Update the Annual Review to identify the trigger levels for watercourse impacts that meet or exceed the performance measures defined in	DCCEEW	Section 6.13.1.11

the relevant Subsidence Management Plan approval.		
• Update the Annual Review to include volumetric triggers in the Trigger Action Response Plan (TARP) for predicted take from watercourses including Wongawilli Creek and Sandy Creek to allow assessment of impacts and consistency with approved impact.	DCCEEW	Section 6.13.1.11
Weed Management		
• Continued management at KVCLF and KVRL, with a focus on mulching and moving further into the Mysore Thorn undergrowth.	ICHPL	Section 6.6
Surface Flow Monitoring		
• Additional surface flow monitoring sites are proposed in the catchment watercourses around the Dendrobium mining area.	ICHPL	Section 4.4.1.7
• Water quality loggers in Wongawilli Creek	ICHPL	Section 4.4.1.7
Groundwater Monitoring		
• Groundwater monitoring program will be incorporated in the Water Management Plan.	ICHPL	Section 7.3.1.2
Upland Swamps		
• Incorporate upland swamps and consider any impacts against the minimal impact considerations of the NSW Aquifer Interference Policy	DCCEEW	Section 6.13.1.11
Infrastructure Subsidence Mitigation Measures		
• Transmission towers located within the LW22 areas of subsidence influence will be managed in FY25 using a similar approach to the LW19A mitigation works, in consultation with TransGrid.	ICHPL	Section 8.1.1.5

Environmental Management System • Continue to maintain certification against ISO 14001 in FY25. Environmental Management Plans will be updated, and governance reviews undertaken as required.	ICHPL	Section 10.1.2 and 10.1.3
Legacy Sites and Rehabilitation • Continuation of pre-demolition activities for O'Briens Drift including completion of belt removal and power line relocation • Continued planning for demolition of the O'Briend's Drift Winder Building	ICHPL	Section 8.1.1.2
Community: • Continued community engagement and support of community initiatives, including the Kembla Community Visioning Project, general inform on activities from the mine, and supporting community-led events.	ICHPL	Section 9.2
Littlejohns Tree Frog • Construction of LJTF ponds adjacent to six (6) catchment streams	ICHPL	Section 6.5.1
Exploration: • Drilling of S2676 A and B • Four (4) coal quality exploration boreholes	ICHPL	Section 4.6
Cordeaux Colliery: • Continued upgrade of the site's electrical supply. • Installation of a pole-mounted transformer and installation of underground low voltage cabling to the Administration building, Workshop and Communications Huts. Additionally, the removal of electrically powered equipment from a Zone 2 Hazardous Area.	ICHPL	Section 4.4.4 Section 4.4.4

• Replacement of Primary Separation Lagoon pump starter motor.		Section 4.4.4
• Installation of Gas Monitoring and Differential Pressure Monitoring on the three vertical shafts.		Section 4.4.4
• Upgrade to the Mechanical Area of the workshop – new lighting, power outlets and installation of grinders and vertical drill with extra low voltage control systems.		Section 4.4.4
• Removal of the External Beam from the BCW Tower		Section 4.4.4
• Removal of redundant water storage adjacent to the Lucas office.		Section 4.4.4
• Continued planning for demolition activities for the Cordeaux Pit Top Coal Bins and Corrimal No. 3 Coal Bins.		Section 4.4.4
DCPP: • Various works which include structural repairs, guarding compliance, ongoing thickener upgrade, earthing and lighting protection, arc flash containment re-sheeting, handrails and ladder repairs and replacements, thickener upgrade, conveyor fire protection systems maintenance, stop motor isolator replacement and cable tray upgrades.	ICHPL	Section 4.4.3

6. ENVIRONMENTAL PERFORMANCE

6.1 Air Pollution

6.1.1 Dendrobium Mine

Air quality management is an environment aspect within the Environmental Management System for the Dendrobium operation. Dust controls as detailed in the approved Air Quality and Greenhouse Gas Management Plan were implemented during the reporting period.

6.1.1.1 Air Quality Monitoring System

Dendrobium's air quality monitoring program consisted of two (2) real time particulate matter laser photometers during the reporting period as required by the Air Quality and Greenhouse Gas Management Plan and EPL 3241.

The results from the photometers are compared to the short term 24-hour average impact assessment criteria of 50 µg/m^3 and the annual impact assessment criteria of 30 µg/m^3 as outlined in Table 15.

Results from the air quality monitoring program are reported:

- via the GM^3 website in the 14-day Report; and
- annually in the EPL Annual Return and Annual Review.

Table 15: Impact Assessment Criteria for Air Quality

Pollutant	Criterion	Averaging Period
Particulate matter < 10 µm (PM_{10})	50 µg/m^3	24-hour
	30 µg/m^3	Annual
Total Suspended Particulates (TSP)	90 µg/m^3	Annual
Deposited Dust (insoluble solids)	4 g/m^2 /month	Annual

6.1.1.2 Laser Photometer Results

Dust levels measured by the laser photometers at both KVCLF and Dendrobium Pit Top displayed levels well below the required limits during the reporting period, as shown in Figure 2. Mitigation measures implemented on site have assisted in the reduction of dust emissions. During the reporting period, no non-compliances were identified.

Monitoring indicated a slight decrease in particulate matter results compared to the previous year. A similar trend was observed with an increase in levels seen over the warmer months peaking in December, and lower levels over the cooler months, with July being the lowest. Higher daily readings were observed in April and May 2025 due to hazard reduction burns within the region and a dust storm event respectively and were not caused by site activities.

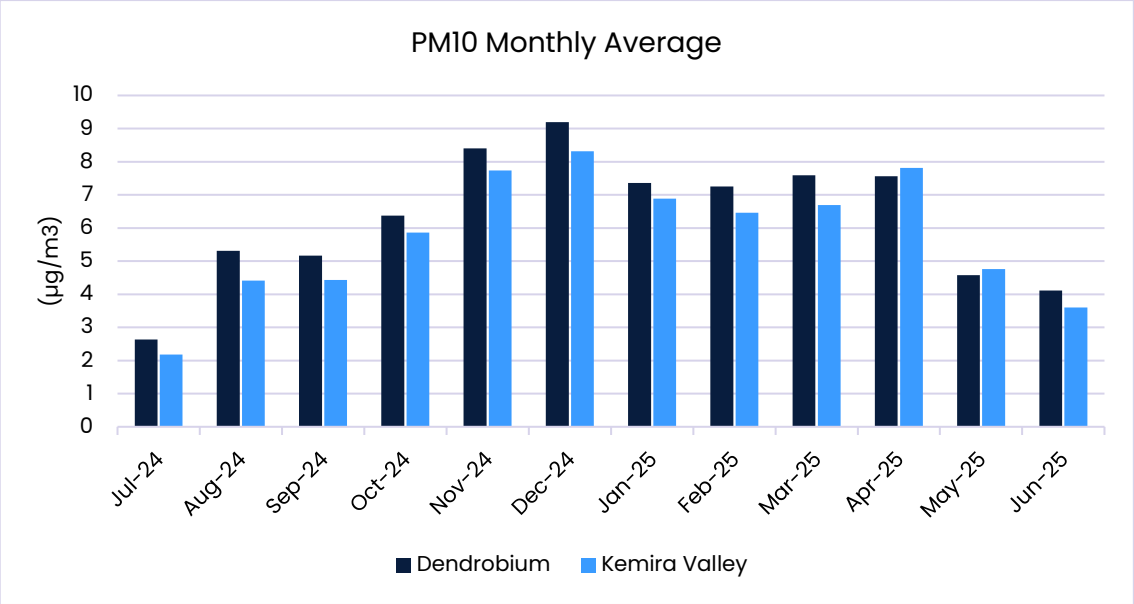


Figure 2: Photometer Results - FY25

The annual average for PM_{10} over the reporting period was 5.76 µg/m³ at Point 20 and 6.29 µg/m³ at Point 21.

Long-term monitoring data is provided in Appendix 4.

6.1.1.3 Deposited Dust and TSP

Dust Deposition Gauges (DDGs) and High-Volume Air Samplers (HVAS) may be used if required to investigate complaints or operational dust related issues, however they are not included in the regular dust monitoring program. These methods are able to be compared to the annual limit of 4 g/m²/month and 90 µg/m³ for deposited dust and TSP respectively as outlined in Table 15.

As detailed in the approved Air Quality and Greenhouse Gas Management Plan, TSP is estimated based on the continuous PM_{10} data, and this result is compared to the annual TSP criteria to assess compliance. The ratio between PM_{10} and TSP has been determined to be approximately 64% based on Dendrobium Mine air quality data between 2012 and 2021.[9] As PM_{10} criteria for the reporting period have been met, compliance with the annual criteria for TSP as outlined in Table 15 has been determined to be achieved.

Compliance against the long-term criteria for deposited dust will be assessed as achieved if compliance with PM_{10} criteria has been met, as noted in the approved Air Quality and Greenhouse Gas Management Plan. As PM_{10} criteria have been met for the

[9] Methodology endorsed by EPA.

reporting period, compliance with long-term criteria for deposited dust as outlined in Table 15 has been determined to be achieved.

No air quality related complaints were received or operational dust issues observed during the reporting period. As a result, DDGs and HVAS were not utilised in the reporting period and no direct TSP or deposited dust data was recorded.

6.1.2 Cordeaux Colliery

Air quality is not actively monitored at Cordeaux Colliery as there is no coal handling at or coal transport from the site. Trafficable and storage areas are sealed.

6.1.3 Ventilation Shaft 1

No air quality issues are considered relevant for Ventilation Shaft 1 as the site has been rehabilitated or is covered with gravel and/or grass. Ventilation Shaft 1 is an intake shaft and therefore there are no dust emissions.

6.1.4 Ventilation Shaft 2/3

Air quality at Ventilation Shaft 2/3 had the potential to be impacted due to the construction of gas management infrastructure. Mitigation measures such as hose down of dust sources, asphalting of the yard and road and adding a soil binder to the rehabilitation area were implemented to reduce dust emissions. As construction of the site has been completed and rehabilitation undertaken, the potential for dust emissions has been further reduced.

Air quality is not actively monitored at the site apart from through site inspections.

Odour levels have been determined to be low, and the site is in a remote location.

No air quality related issues have been identified.

6.1.5 DCPP

Air quality at the DCPP is managed under the BlueScope Steel EPL 6092 with quarterly reporting to BlueScope Steel. No issues associated with ICHPL activities at the site were identified during the reporting period.

6.2 Erosion and Sediment

6.2.1 Dendrobium Mine

Erosion and sediment control at Dendrobium is managed in accordance with the approved Water Management Plan. This plan addresses erosion and sediment controls for the Dendrobium Pit Top, KVCLF, Ventilation Shaft 1 and 2/3 sites and the KVRL.

6.2.1.1 Erosion Control

Both the Dendrobium Mine Pit Top and KVCLF predominantly consist of sealed surfaces and vegetated areas. As limited soil is exposed, the potential for erosion is low. Erosion potential does exist along the portal road where steep slopes may erode and/or fail during periods of high rainfall. Works are undertaken to rapidly stabilise and revegetate these areas where required.

6.2.1.2 Sediment Control

Sediment control structures are inspected and maintained on a regular basis. Sediment is removed from drainage pits along the dirty water drainage system and the GWTP by an industrial vacuum tanker as required. The sediment pond assists in settling out suspended solids before surface water enters the GWTP. Sediment is removed from the pond by an industrial vacuum tanker on an annual basis.

6.2.1.3 Slope Stability

Due to previous and additional rainfall events at the site over FY25, the Dendrobium Pit Top experienced further minor slope stability issues at one (1) location along the portal road. Initial make safe works were completed to stabilise areas of concern. An application to modify the Consent was submitted in FY25 to allow for additional repairs and slope stability works to be undertaken.

6.2.2 Ventilation Shaft 1

Erosion is not a significant issue at the Ventilation Shaft 1 site as disturbed areas have been rehabilitated or stabilised with gravel.

6.2.3 Ventilation Shaft 2/3

Construction of gas management infrastructure was completed in FY24. Several sediment controls and structures were installed during FY25 including stabilisation of the disturbed bank surrounding the gas management infrastructure, improvements to clean water diversions, upgrades to dirty water culverts and asphalting of the site entry road and yard. For more information, refer to section 4.4.1.5. The sediment ponds will continue to be managed until adequate rehabilitation is achieved and the site is stabilised.

6.2.4 Cordeaux Colliery

Erosion is not a significant issue at the Cordeaux Colliery Pit Top site as most of the site surface is sealed, with stormwater run-off directed to appropriate holding dams and filter systems.

Repairs were completed to an eroded section of rock fill behind the Primary Sedimentation Pond early in FY25.

6.2.5 DCPP

Erosion and sediment control at the DCPP is managed under the BlueScope Steel EPL 6092.

The sediment basin at 4-Area was cleaned out regularly during the reporting period. Pumping upgrades and the installation of a silt curtain and hay bales were undertaken to reduce the occurrence of sediment laden water entering the main drain from the 4-Area sediment pond.

6.3 Surface Water

6.3.1 Dendrobium Mine

6.3.1.1 Mine Subsidence

The surface water monitoring program under the SMP enables Dendrobium to maintain a database of regional water quality and to determine any changes to surrounding water quality. Potential water quality impacts as a result of mining are described in Section 6.13.

6.3.1.2 Mine Site Surface Facilities

The surface water monitoring network for surface facilities consists of eight (8) regular sites (refer to Plan 8) which include the Pit Top sediment pond, sites upstream and downstream of the Pit Top and Kemira Valley, sediment ponds LDP 29 and LDP 31 located at the Ventilation Shaft 2/3 site, as well as the mine dewatering point LDP 5, located at Marley Place.

The monitoring program includes:

- recording of field observations; and
- analysis of the water by a NATA accredited laboratory covering pH, electrical conductivity (EC), total suspended solids (TSS), turbidity (specified for LDP 29 and 31), metals (specified for LDP 5) and oil and grease.

6.3.1.3 Monitoring and Results

Monitoring sites are located in the natural watercourses, American Creek and Brandy and Water Creek, that flow adjacent to the Dendrobium Pit Top and KVCLF sites respectively. Upstream and downstream sites are sampled every two (2) months. Variations in water quality in response to local geology and rainfall were within expectations during the reporting period. Results from the downstream sites are compared to the results from

upstream sites at each location. These comparisons are discussed in detail in Sections 6.3.1.4 and 6.3.1.5. Rainfall data for the year is provided in Section 7.5.1.

LDP 5, that discharges into the highly modified and tidal Allans Creek, is sampled monthly. LDP 5 results are discussed in Section 6.3.1.6. LDP 29 and LDP 31 discharge to WaterNSW special area lands and are discussed in Section 6.3.1.7.

6.3.1.4 KVCLF

During the reporting period, there has been no significant difference between the upstream and downstream results for points Dend 7 (upstream of the KVCLF) and Dend 10 (downstream of the KVCLF) identified in bi-monthly monitoring. One (1) two-standard deviation trigger occurred in January 2025 for TSS. The trigger indicated that TSS was two (2) standard deviations lower at Dend 10 (downstream site). This is a positive result, and part of the natural variability of the stream. Results indicate that the water management system in operation at the KVCLF site is effective with minimal influence on Brandy and Water Creek. The results from the sampling program are summarised in Table 16 and Table 17.

There was natural variation in sample results throughout the reporting period. Higher pH and EC concentrations at the downstream site may be caused by the natural flow of groundwater from O'Brien's Drift which enters Brandy And Water Creek between the upstream and downstream sample locations. Trends for Dend 7 and Dend 10 water quality results remained relatively consistent for FY25 except for the higher TSS result observed at Dend 7 and 10 in January 2025 that was attributed to significant rainfall prior to sampling. EC, pH and TSS for the reporting period are shown in Figure 3, Figure 4 and Figure 5 respectively.

Overall trends show water quality has been stable in relation to the KVCLF site. Graphs depicting long-term trends in water quality are provided in Appendix 4.

Table 16: Summary of Water Quality Results – Dend 7 (Upstream of KVCLF)				
Parameter	**Units**	**Min**	**Max**	**FY Average**
pH	pH units	7.51	8.17	7.87
TSS	mg/L	<5	256	71
Oil and Grease	mg/L	<5	<5	<5
EC	µS/cm	287	453	362

Table 17: Summary of Water Quality Results – Dend 10 (Downstream of KVCLF)				
Parameter	**Units**	**Min**	**Max**	**FY Average**
pH	pH units	7.96	8.43	8.17
TSS	mg/L	<5	126	45
Oil and Grease	mg/L	<5	<5	<5
EC	µS/cm	317	513	420

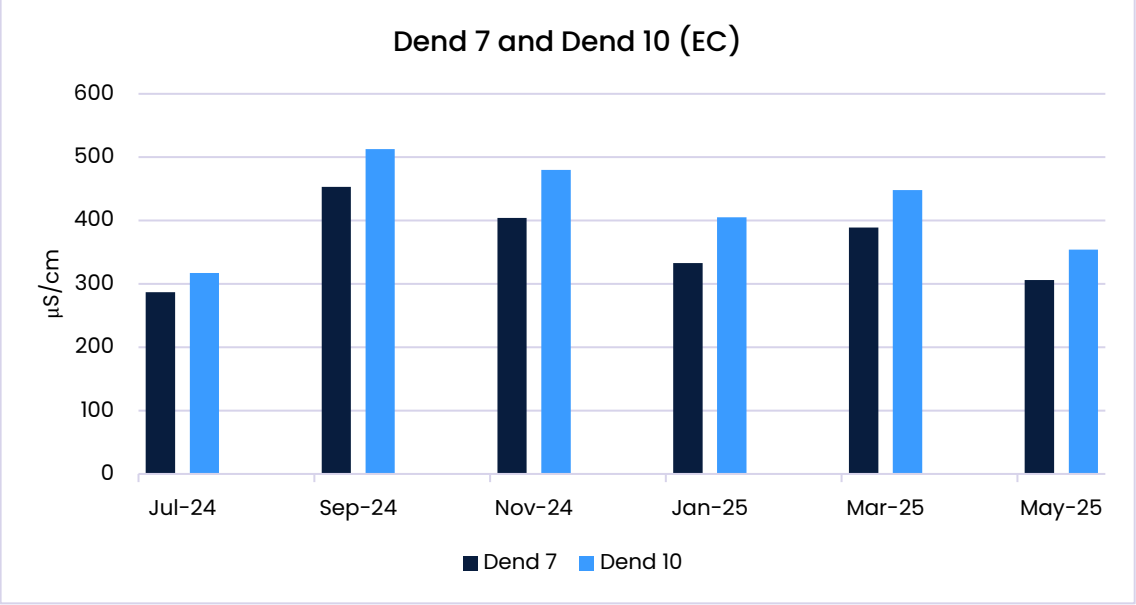


Figure 3: Dend 7 and Dend 10 Results FY25 - EC

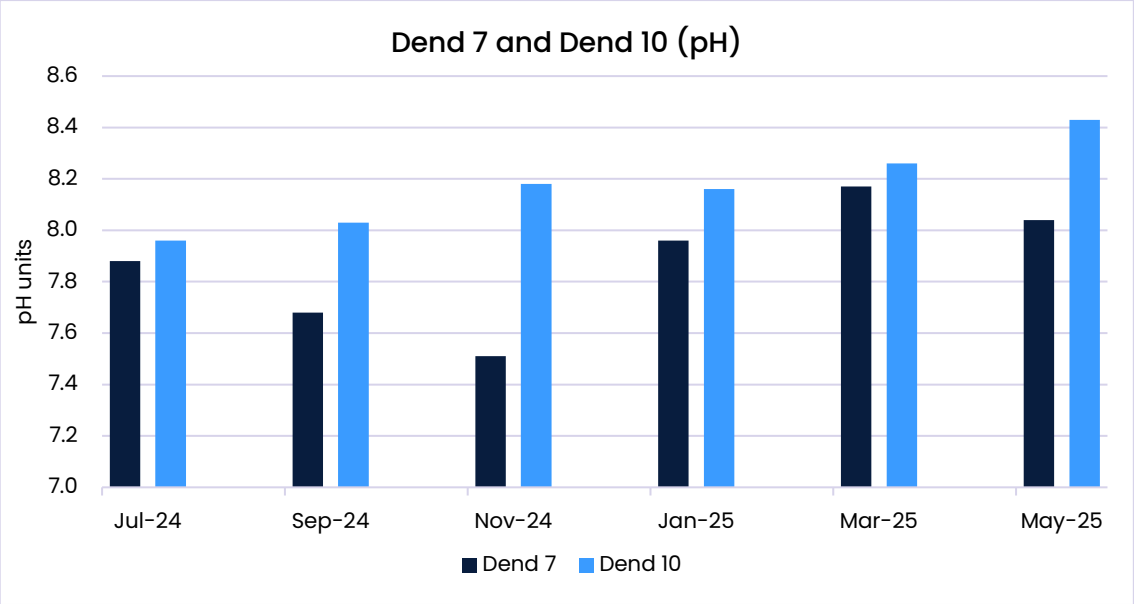


Figure 4: Dend 7 and Dend 10 Results FY25 - pH

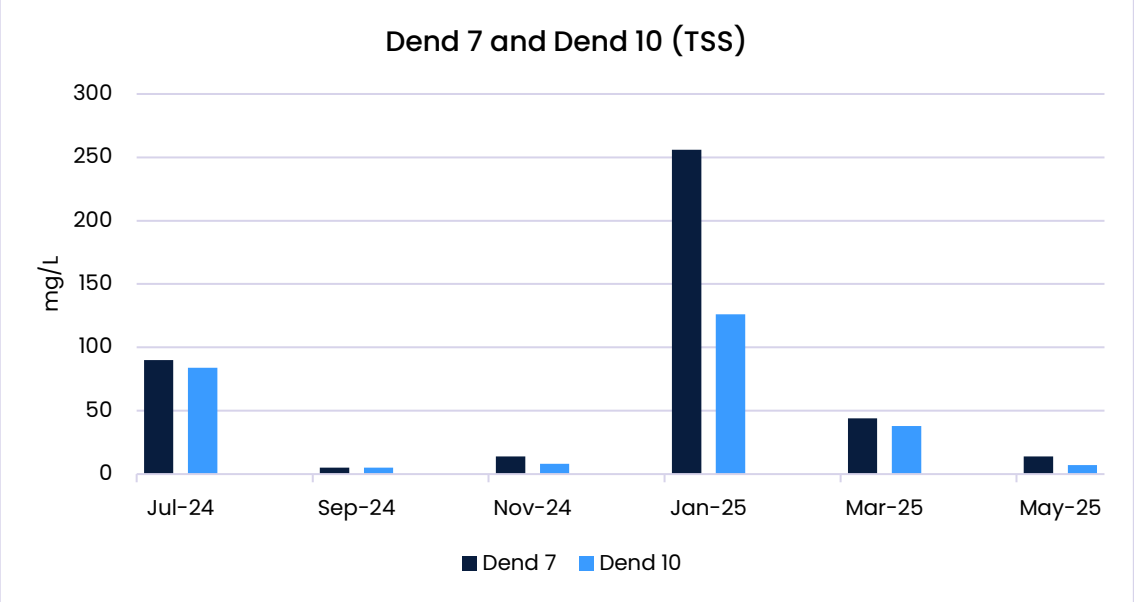


Figure 5: Dend 7 and Dend 10 Results FY25 - TSS

6.3.1.5 Dendrobium Pit Top

A comparison of the water quality results from Dend 12 (upstream of Pit Top) and Dend 13 (downstream of Pit Top) indicates that there is no significant variation in pH, EC, TSS, or oil and grease levels over the reporting period.

The results are summarised in Table 18 and Table 19. Trends for EC, pH and TSS for FY25 are shown in Figure 6, Figure 7 and Figure 8 respectively. Higher pH and EC concentrations at the downstream site may be caused by the flow of natural groundwater from the Nebo Diesel Portal which enters American Creek between the upstream and downstream

sample locations. Trends indicate that the water management system in operation at the Dendrobium Pit Top is effective with minimal influence on American Creek. Graphs depicting long-term trends in water quality are provided in Appendix 4.

Table 18: Summary of Water Quality Results – Dend 12 (Upstream of Pit Top)

Parameter	Units	Min	Max	Average
pH	pH units	7.65	7.93	7.84
TSS	mg/L	<5	<5	<5
Oil and Grease	mg/L	<5	<5	<5
EC	µS /cm	182	269	239

Table 19: Summary of Water Quality Results – Dend 13 (Downstream of Pit Top)

Parameter	Units	Min	Max	Average
pH	pH units	7.81	8.03	7.96
TSS	mg/L	<5	7	5
Oil and Grease	mg/L	<5	<5	<5
EC	µS /cm	238	376	308

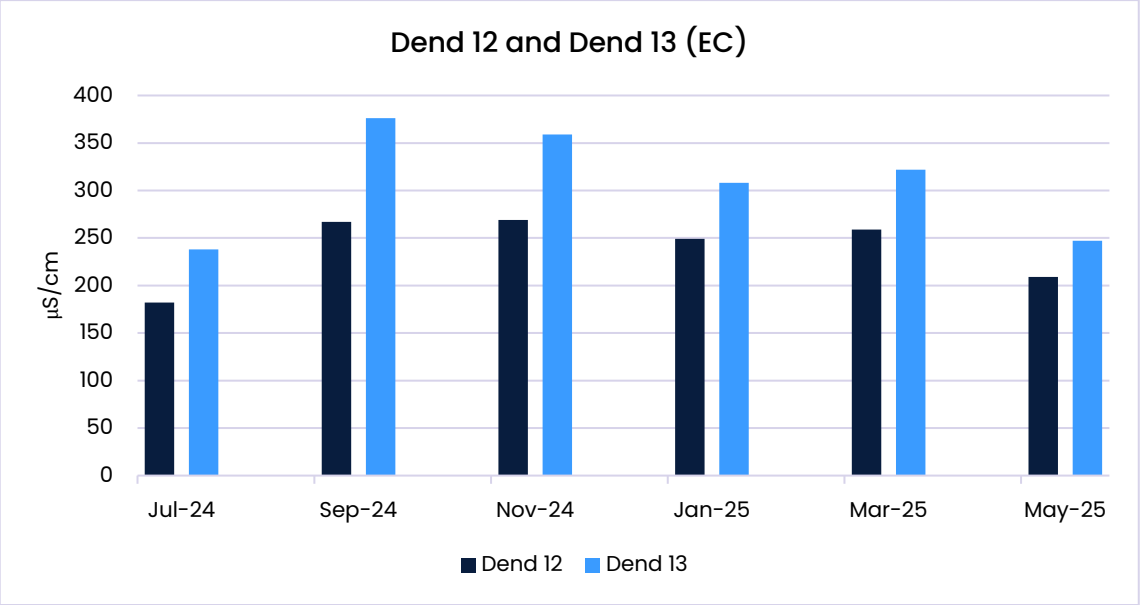


Figure 6: Dend 12 and Dend 13 Results FY25 – EC

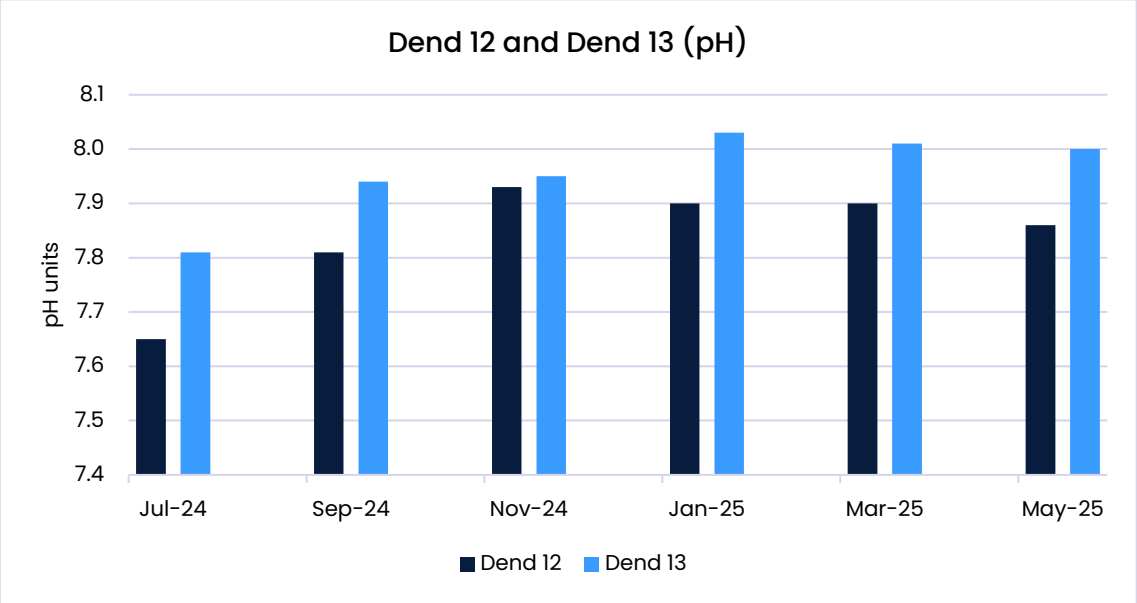


Figure 7: Dend 12 and Dend 13 Results FY25 – pH

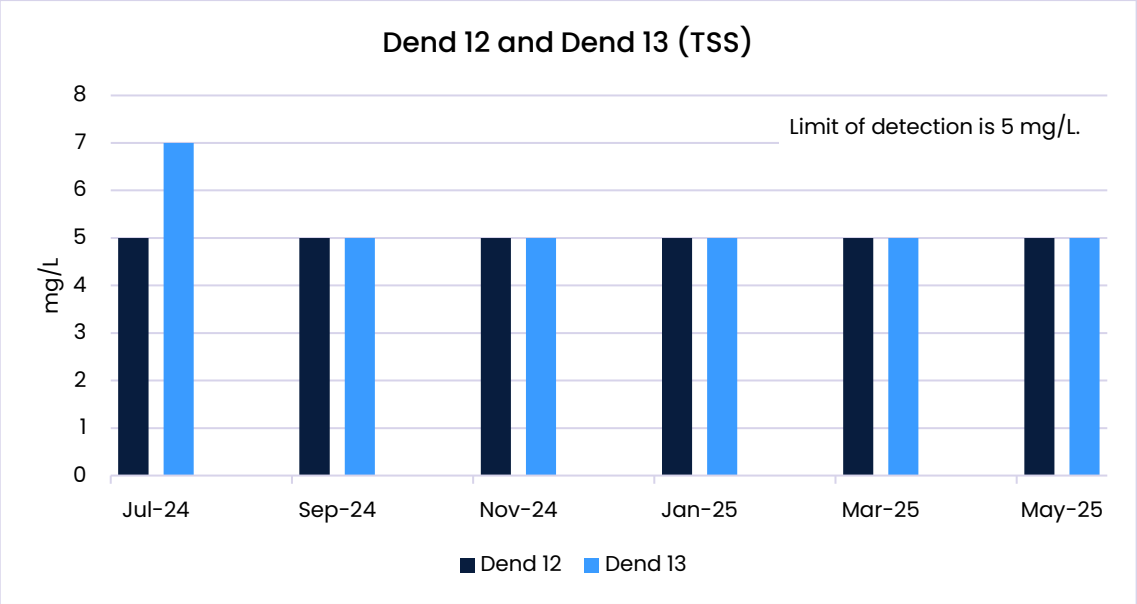


Figure 8: Dend 12 and Dend 13 Results FY25 – TSS

6.3.1.6 Monitoring and Results – LDP 5

Water from the old Nebo and Kemira Mine workings, mine goafs in Areas 1, 2 and 3 and KVCLF sediment ponds is discharged through LDP 5, located at Marley Place (refer to Plan 8). The mine dewatering system was changed in FY23 with the installation of a bypass to allow water from North West Mains D2 pump station to be pumped directly to LDP 5, bypassing the old Kemira Workings. This change was implemented to reduce pressure on an existing pipe range which was found to be leaking. Works have been completed during FY25 to stabilise the roof in Kemira Mains to allow pipe leak repairs to commence. In FY26, it is planned to reinstate the Kemira Workings and Pump Station system to provide additional protection against potential turbid water sources.

In addition to pump out from Dendrobium Mine, brine from the Appin West and Appin North Water Treatment Plants (WTPs) is transported by truck to Marley Place and discharged through LDP 5. A total volume of 2671 ML (including 115.32 ML and 90.22 ML of brine from the Appin West and Appin North WTPs respectively) was discharged in this reporting period. Trends in water discharge over previous years are provided in Appendix 4.

The monitoring requirements for LDP 5 are detailed in the Water Management Plan and monitoring results are reviewed monthly.

A summary of monitoring results for the reporting period against the water quality concentration limits in EPL 3241 is provided in Table 20. Cobalt was added to EPL 3241 and required to be reported on since August 2024. No non-compliances were recorded at LDP 5 against the water quality concentration limits in EPL 3241. The general trends for LDP 5 have remained relatively consistent with FY24. pH has remained stable as shown in

Figure 9. TSS has improved during FY25 due to the installation of a new pipe range to reduce potential water sources with high suspended solids entering the mine dewatering system. TSS has been reduced since the implementation of this project in April 2025, as shown in Figure 10.

Long-term average trends have shown generally stable results within limits. Graphs depicting trends in water quality over previous years is provided in Appendix 4.

Table 20: EPL Annual Monitoring Summary for LDP 5

Parameter	Units	Min	Average	Max	EPL Limit[10]
Arsenic	mg/L	0.002	0.007	0.018	1.3
EC	µS/cm	1560	2123	3530	N/A
Cobalt	mg/L	0.002	0.006	0.01	N/A
Copper	mg/L	<0.001	0.001	0.004	0.08
Nickel	mg/L	0.01	0.03	0.075	5
Oil and Grease	mg/L	<5	<5	<5	10
pH	pH	7.74	8.07	8.27	6.5 - 9.0
TSS	mg/L	<5	9	14	30
Zinc	mg/L	0.09	0.15	0.24	0.4

A copy of the 2024/2025 EPL Annual Return has been provided as Appendix 1.

[10] Water quality concentration limits for metals are 'dissolved'.

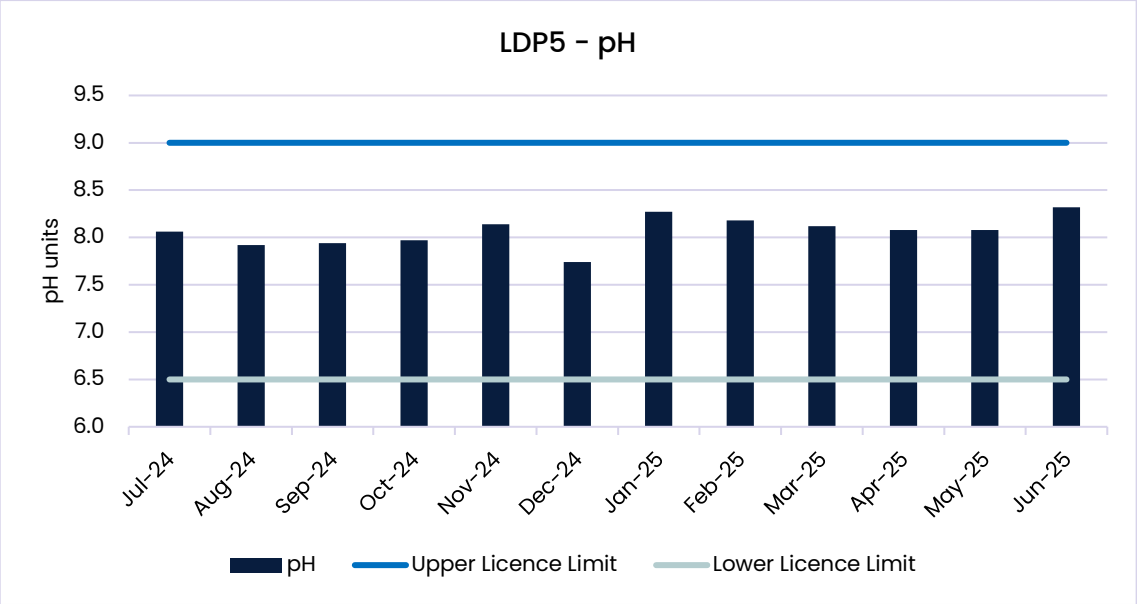


Figure 9: LDP 5 - pH (FY25)

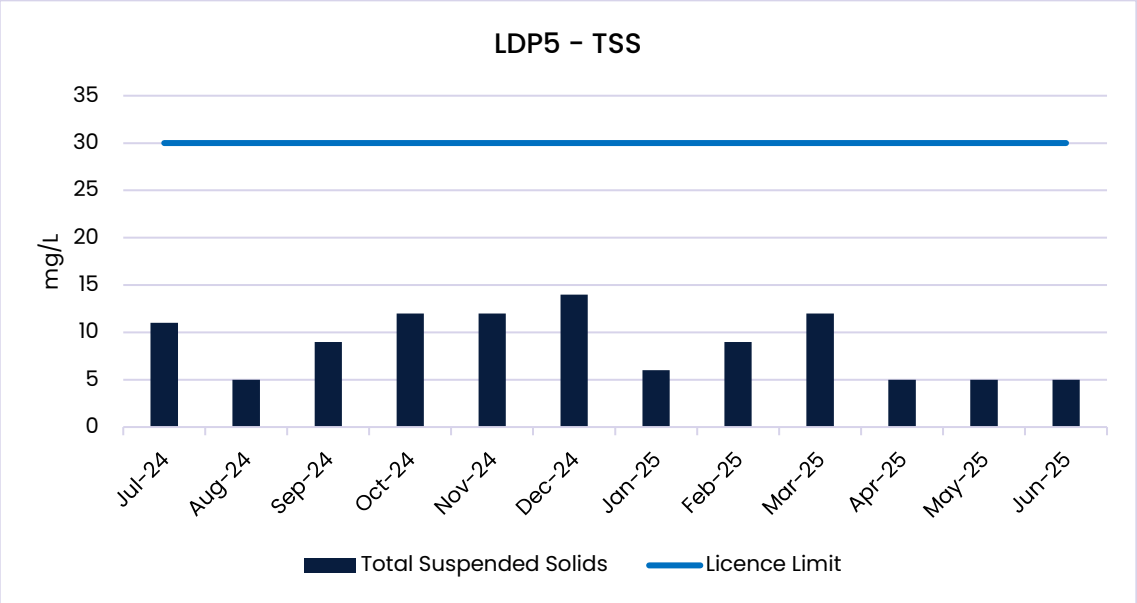


Figure 10: LDP 5 - TSS (FY25)

6.3.1.7 Monitoring and Results - Ventilation Shaft 2/3

Surface water monitoring is undertaken at Ventilation Shaft 2/3 at LDP 29 and LDP 31 monthly while discharging. EPL 3241 specifies that TSS and turbidity are required to be laboratory analysed. Sample results are shown in Figure 11 and Figure 12. Note that if there are no results displayed for a month, no discharge occurred. Trends indicate successful site stabilisation works with declining TSS and turbidity results compared to FY24. These sites will continue to be monitored until adequate rehabilitation of disturbed areas has occurred.

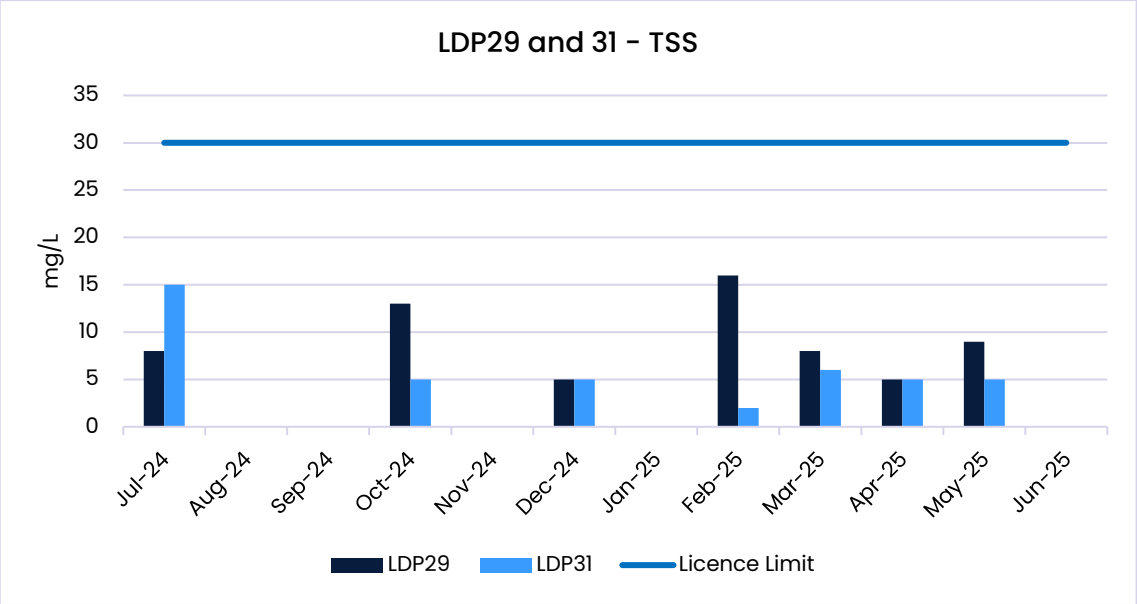


Figure 11: LDP 29 and LDP 31 TSS (FY25)

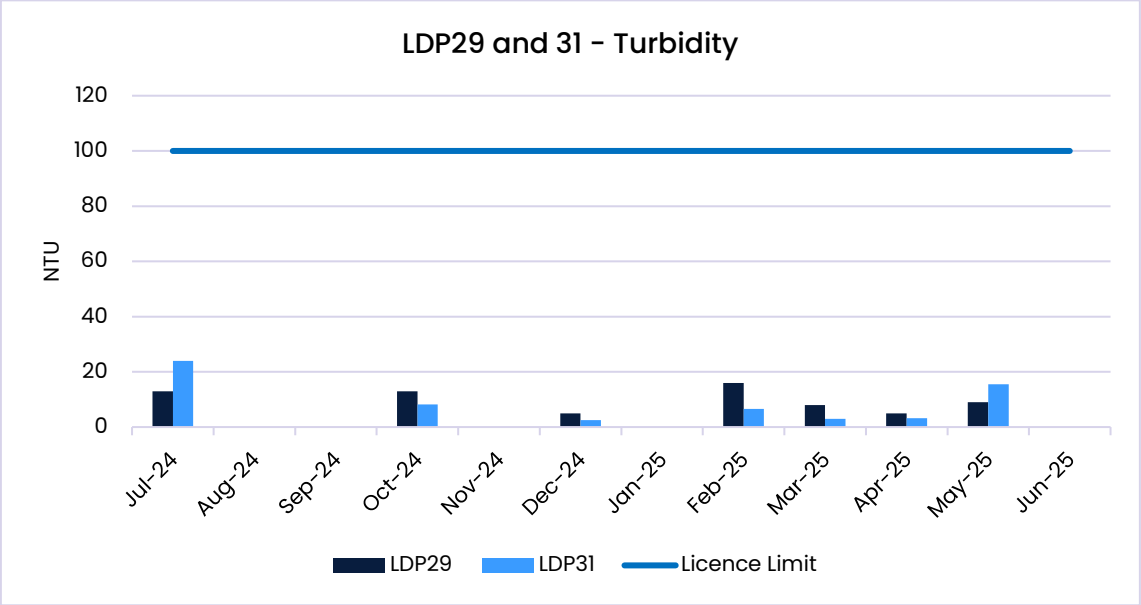


Figure 12: LDP 29 and LDP 31 Turbidity (FY25)

6.3.2 Cordeaux Colliery

Minimal dirty water is generated at Cordeaux Pit Top as the site is in care and maintenance. Water from the surface areas is captured in the Primary Separation Lagoon then transferred via an automated pump to the upper-level Primary Stabilisation Lagoon for settlement. From there it is gravity fed through two (2) more dams, the latter dam being the Mine Water Holding Lagoon. This water is then transferred to underground mine workings via a gravity fed pipeline, negating the need for surface discharge to the environment. The water returned to the mine is of good quality.

During the reporting period approximately 14.31 ML of water was gravity fed from the Mine Water Holding Lagoon to the underground workings. Real-time logging and automated alerts of Mine Water Holding Lagoon water level allowed improved observation of surface water movements during the reporting period.

Figure 13 shows the trends for pH and EC of water within the Mine Water Holding Lagoon from 2000 to 2025. Since cessation of underground pumping operations in 2002, water quality in the Mine Water Holding Lagoon has greatly improved (particularly in relation to EC) and remained generally stable. During the reporting period, monitoring results within the Mine Water Holding Lagoon continue to reflect good water quality. The pH ranged between 7.18 and 8.20 and EC ranged between 144 and 248 µS/cm. Oil and grease results were below the limit of reporting for all samples collected in FY25.

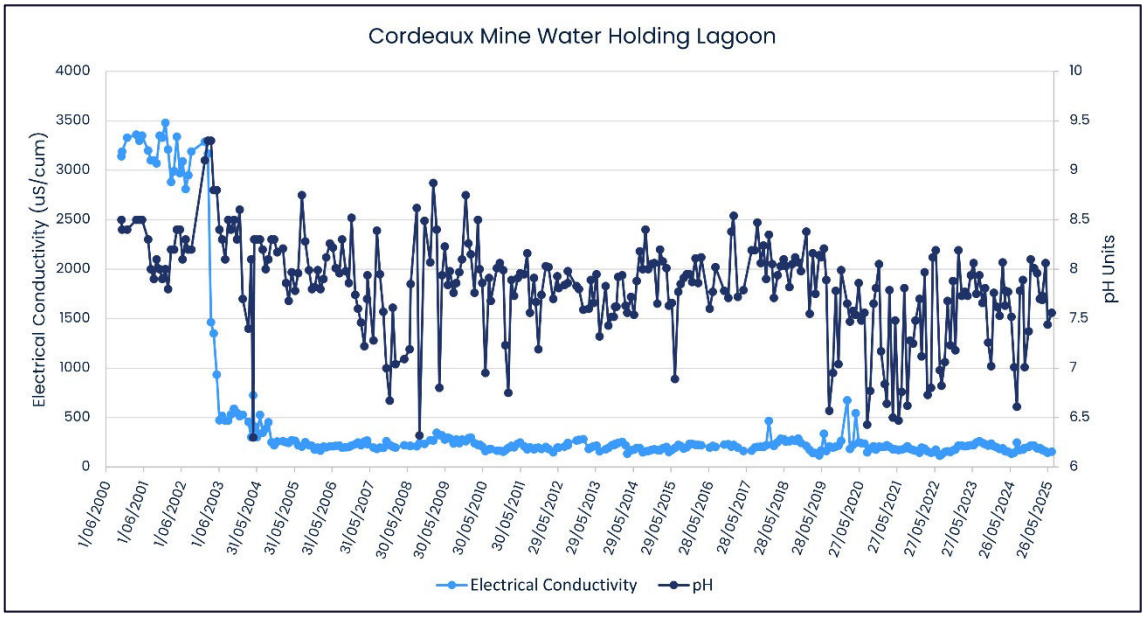


Figure 13: Water Quality Data - Mine Water Holding Lagoon

The clean area catchment run-off from the Cordeaux Pit Top site (including the sealed car parking area) reports to the Sand Filter Lagoon and leaves the site to the local environment via the Cordeaux Filter Lagoon Outflow. Water quality from this point is analysed on a nominal monthly basis. Water quality analysis for this reporting period shows the water quality was between 7.27 and 8.25 pH units, with EC ranging between 256 and 498 µS/cm. Oil and grease results were below the limit of reporting in all FY25 sampling events. Results from the Cordeaux Filter Lagoon Outflow for the period 2000 to 2025 are shown in Figure 14.

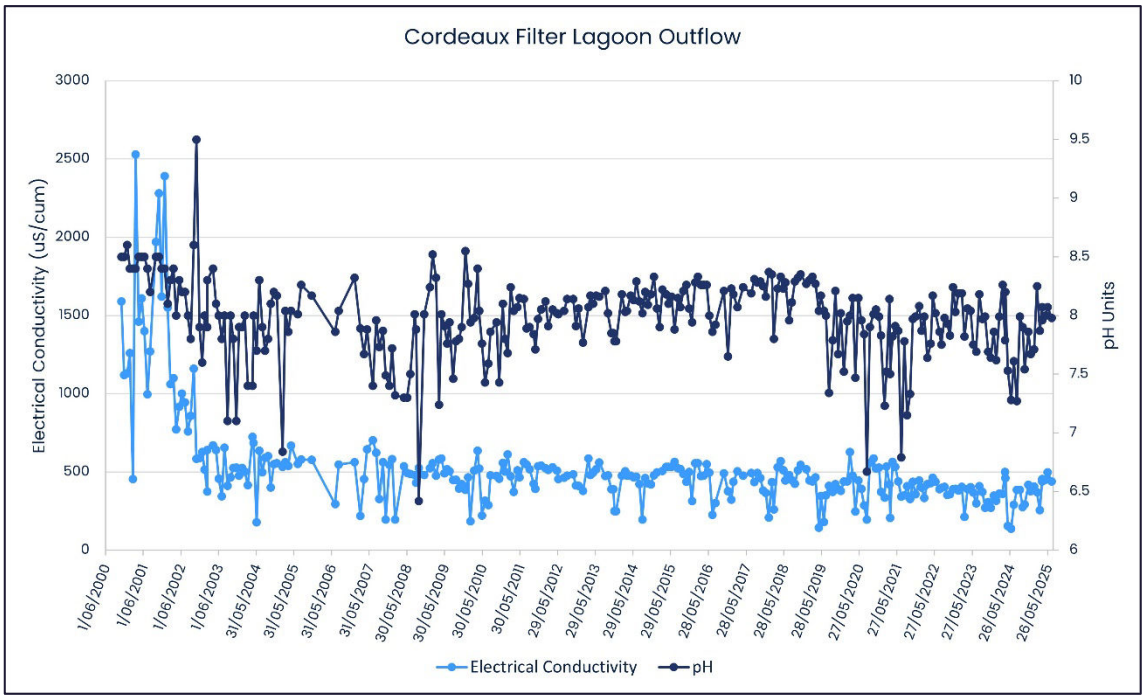


Figure 14: Water Quality Data - Cordeaux Filter Lagoon Outflow

The long-term data suggests that the existing storage capacity and water management is adequate in managing the current activities and rainfall events.

6.3.3 DCPP

Surface water quality at the DCPP and 4-Area is generally managed under the BlueScope Steel EPL 6092. Any runoff from the DCPP enters the BlueScope Coke Ovens Recovery Basin. During FY25 pumping was altered to direct water captured by the 4-Area sediment basin to the BlueScope Coke Ovens Recovery Basin for additional settling time and mixing before being discharged via the main drain which is covered under the BlueScope Steel EPL 6092.

6.4 Contaminated Land

6.4.1 Dendrobium Mine

No significant land pollution events occurred during the reporting period at Dendrobium Mine.

Hydrocarbon bunded areas utilised during the reporting period were located:

- along the Pit Top Portal Road;
- at the rear of the workshop; and
- at the diesel refuelling/solcenic storage area.

Bunds are in place at all hydrocarbon facilities. Bunded areas are checked weekly and are pumped out when required to maintain sufficient capacity. In addition to the permanent bunded areas, portable bunds are used for transient storage or transportation of oils and fuels around the site. Spill kits and/or bins containing absorbent material are located around the site in areas where there is a higher potential for spillage. Surface personnel are made aware of the locations of these spill kits and absorbent material bins in their work area. The contents of the spill kits and the oil absorbent material bins are checked on a regular basis.

Self-bunded bulk diesel and solcenic tanks were installed at the Pit Top in FY24 to replace the existing tanks. Sealing around the diesel and solcenic tanks occurred during FY25 to further reduce the potential for contamination.

6.4.2 Cordeaux Colliery

Cordeaux Colliery has a small, localised area which has been affected by leaching from the slag base at the surface switch yard. This was first noted in 2005 as vegetation in the localised area appeared to have been adversely affected. No further impact has been observed in this reporting period.

No additional areas of land contamination were identified in FY25.

Monthly inspections are completed at Cordeaux Colliery which include checks of hydrocarbon storage areas (permanent and temporary). The main area of hydrocarbon storage at Cordeaux Site is the large permanent bund at the diesel filling area.

Elevated concentrations of petroleum hydrocarbons were detected in a monitoring bore at the Cordeaux Colliery Pit Top during the reporting period. Investigations have been undertaken and the frequency of monitoring the bore has been increased to inform decision making on any additional actions required. The latest results indicate declining concentrations, with the last two (2) rounds of sampling returning non-detects for hydrocarbons. Nonetheless, investigations into the cause of the temporarily elevated levels are still required. Robotic camera inspection of the pipe connecting to the sump is scheduled for FY26. The aim of this investigation is to assess whether there are any cracks in the pipework.

6.4.3 Corrimal No. 3 Shaft

Monthly inspections continue at Corrimal No. 3, focussing on weed management, site security and visual observations of sites previously affected by a spill (refer to previous Annual Reviews for details). No environmental issues were identified during the reporting period.

6.4.4 DCPP

Contaminated land at the DCPP is managed under the BlueScope Steel EPL 6092.

6.5 Threatened Fauna and Flora

6.5.1 Dendrobium Mine

No threatened species were identified on the Dendrobium Pit Top site, KVCLF or Ventilation Shaft 1 or 2/3 sites during this reporting period.

Results from the flora and fauna monitoring undertaken via the SMP process are detailed in Section 6.13 of this report.

Progress has been made with the Littlejohn's Tree Frog (LJTF) pond project. During the reporting period, an activity approval for the project was granted by WaterNSW. Final planning preparations are underway with installation due to begin in early FY26. It is planned that thirty-three (33) ponds will be installed across six (6) catchment streams within or in proximity to the Dendrobium mining area. There will be two (2) types of ponds; twelve (12) steel ponds (Plate 4) and twenty-one (21) bentonite clay ponds.

Plate 4: Steel ponds for LJTF Project

6.5.2 Cordeaux Colliery

During the reporting period minor trimming of branches and shrubs was undertaken to improve drivers' line of sight at some Stop and Give-way signs around site and to improve operation of some solar-powered lighting at the site's entrance. Trimming was also undertaken as part of the relocation of the Cordeaux entry gate. No threatened flora or fauna were identified.

6.6 Weeds

6.6.1 Dendrobium Mine

Within the Dendrobium Pit Top area, some of the more accessible areas were targeted for weed species removal. This included the removal and/or treatment of Lantana, Privet, Ginger Lily, Pampas Grass and Coral Tree. Weed control activities around the Pit Top consist largely of spot spraying with herbicide and hand or mechanical removal. Larger trees such as Coral Tree and Privet were removed by a qualified tree removal company.

Activities at the KVCLF targeted accessible areas for Mysore Thorn removal and/or treatment, and mulching biomass for weed control. At KVCLF, high volume spraying with selective herbicides, cut and paint with herbicides, and mechanical removal were undertaken. Once removal has been undertaken, advancement can then be made further into areas. Herbicide success rate is high, especially during the warmer months when plants are actively growing, however, minor regrowth is often observed following die off due to vegetation thickness and the ability of the spray to penetrate the thickets.

Weed treatment was also undertaken along the KVRL for Mysore Thorn and Bitou Bush.

These control methods will continue to be implemented during FY26. This will provide further access into areas around KVCLF for additional spraying. The use of drones for weed control will be investigated during FY26.

Monitoring against weed management success criteria in the Rehabilitation Management Plan is not currently being undertaken due to the limited number and size of rehabilitated areas.

6.6.2 Cordeaux Colliery and Corrimal No. 3 Shaft

Weeds at Cordeaux Colliery and Corrimal No. 3 Shaft are monitored as part of the Cordeaux Colliery EFT's routine inspections. Weed management is undertaken by the Illawarra Local Aboriginal Land Council through targeted spray activities and removal. Weed growth within the area of the boundary fire break zone is addressed as required.

6.6.3 Ventilation Shafts 1 and 2/3

Weed management is periodically conducted at Ventilation Shaft 1 and Ventilation Shaft 2/3. Weeds are managed using backpack spray kits and spot spraying target areas identified during inspections. Target weed species are periodically removed by hand or with mechanical tools.

Weed species in the Ventilation Shaft 1 and 2/3 areas remain at very low densities and are generally annual weeds located in disturbed areas or highly trafficked areas such as

roadways. Inspections have occurred on a regular basis throughout FY25, with no significant issues identified.

6.7 Blasting

6.7.1 Dendrobium Mine

No surface blasting activities were undertaken during the reporting period. Minor blasting activities underground are undertaken using approved management plans.

6.7.2 Cordeaux Colliery

Cordeaux Colliery is under care and maintenance and no blasting was undertaken.

6.8 Operational Noise

6.8.1 Dendrobium Mine

6.8.1.1 Noise Management Strategies

Noise management is an important aspect of the Dendrobium operations as the Pit Top and KVCLF sites are located adjacent to residences in Mount Kembla and Kembla Heights. Quarterly noise monitoring is conducted to satisfy the requirements of the Consent and the approved Noise Management Plan. Noise management measures were implemented as detailed in the Noise Management Plan.

6.8.1.2 Noise Monitoring Program

The program as detailed in the approved Noise Management Plan includes noise monitoring of the Pit Top, the KVCLF and the KVRL operations.

Attended noise monitoring is carried out quarterly around the Pit Top and KVCLF to determine compliance at the three (3) locations as shown on Plan 8.

Five (5) directional real-time noise monitors are installed at the Pit Top to manage noise and investigate complaints (refer to section 6.8.1.5).

Rail haulage noise measurements along the KVRL are completed annually. Rail noise is also monitored using two (2) fixed noise monitors along the KVRL. The data from the fixed noise monitors is used for investigating complaints.

The representative results from the attended noise monitoring are compared to the noise criteria for Dendrobium Mine and KVCLF for daytime, evening, and night-time periods as set out in the Consent. The $LA_{eq,15\ min}$ and $LA_{1,1\ min}$ noise impact assessment criteria are provided in Table 21.

Table 21: Monitoring Requirements and Prescribed Limits				
Location	Noise Criteria $LA_{eq,15\,min}$ (dBA)			Noise Criteria $LA_{1,1min}$ (dBA)
	Daytime (7 am – 6 pm)	Evening (6 pm - 10 pm)	Night-time (10 pm – 7 am)	
R1	40	40	39	49
R6a	40	40	37	47
R39a	37	35	35	45

6.8.1.3 Quarterly Noise Monitoring

Attended noise monitoring was conducted on a quarterly basis throughout the reporting period, with results indicating that Dendrobium was generally compliant against the $LA_{eq,15min}$ and $LA_{1,1min}$ criteria. Two (2) exceedances and one (1) non-compliance of the noise criteria were recorded. Refer to Section 11.1 for details.

Location R1 (17 High Street)

R1 is located to the north of the Pit Top. Representative $LA_{eq,15min}$ noise results did not exceed the noise criteria during the reporting period. The $LA_{eq,15\text{-}min}$ representative noise results for R1 for FY25 are provided in Figure 15 and annual averages are provided in Figure 16.

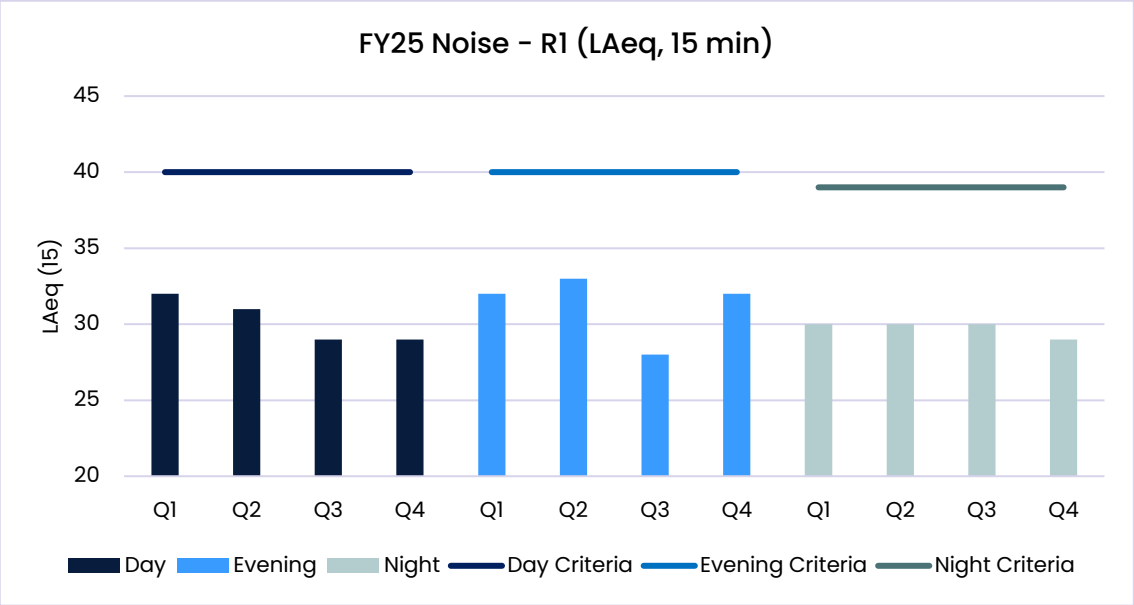


Figure 15: Site R1 Noise Compliance ($LA_{eq,15\,min}$) – FY25

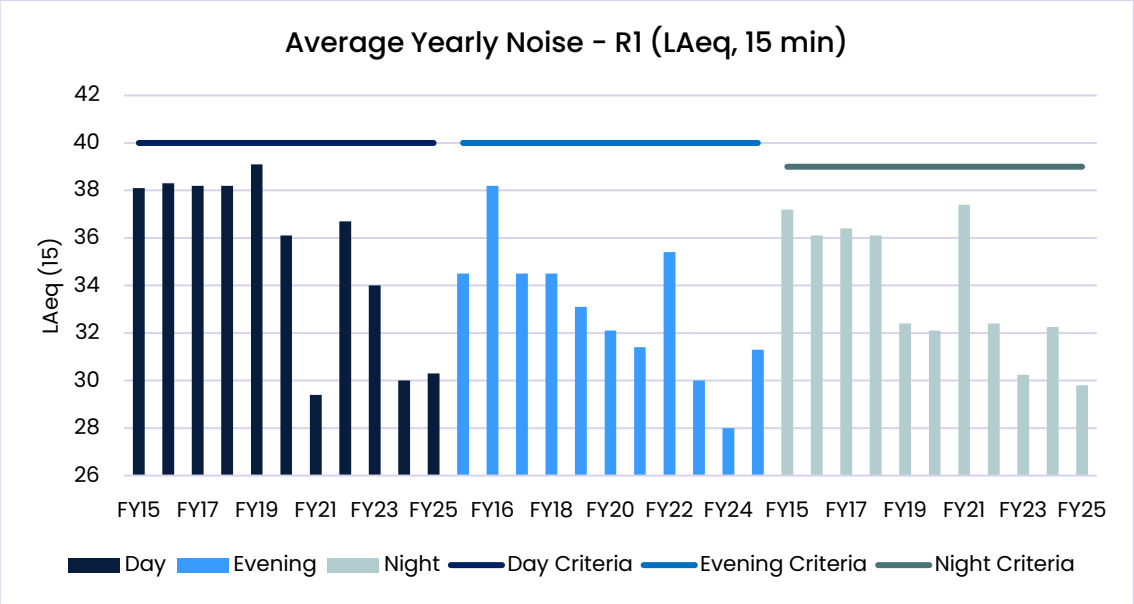


Figure 16: Site R1 Noise Compliance ($LA_{eq,15\ min}$) – FY15 to FY25

Location R6a (374 Cordeaux Road)

R6a is located to the east of the Dendrobium Pit Top. The $LA_{eq,15min}$ representative noise results did not exceed the noise criteria during the reporting period. The $LA_{eq\ 15\text{-}min}$ representative noise results for R6a are provided in Figure 17 and annual averages are provided in Figure 18.

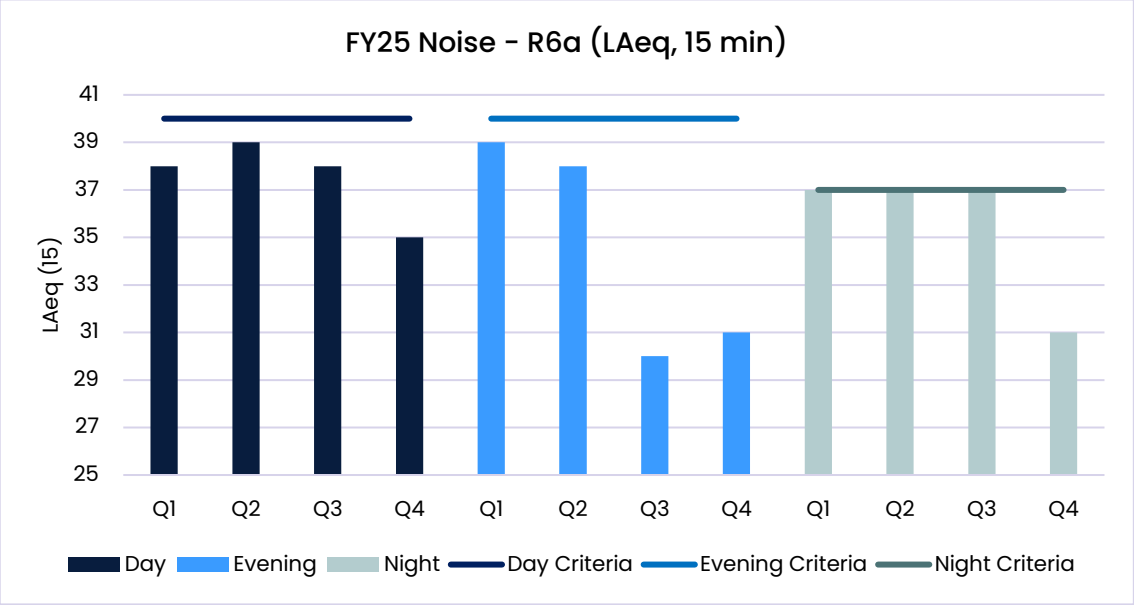


Figure 17: Site R6a Noise Compliance ($LA_{eq,15\ min}$) – FY25

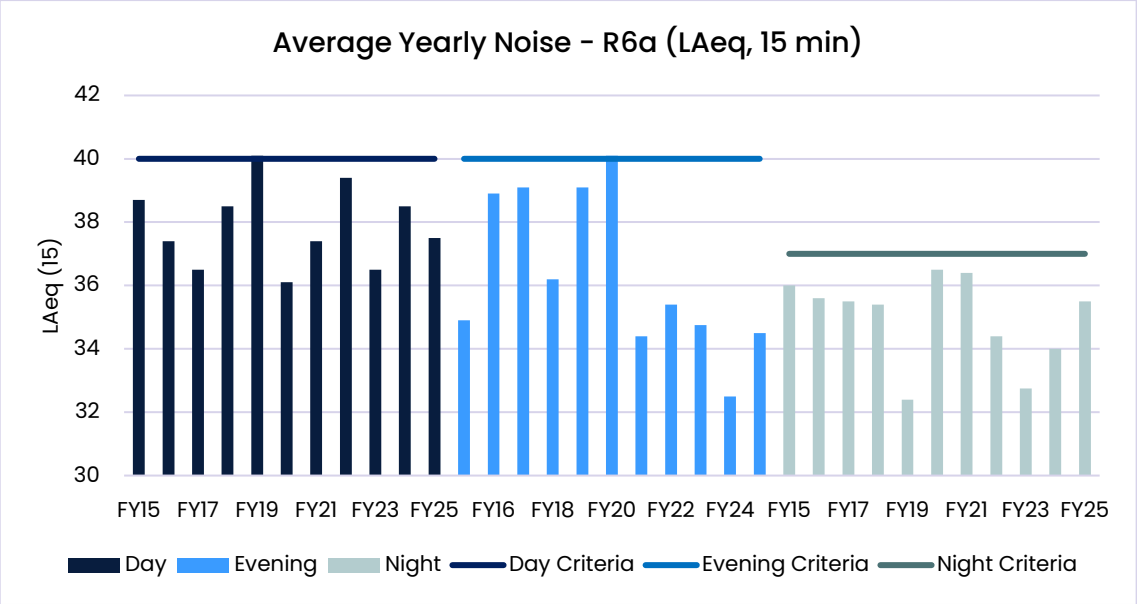


Figure 18: Site R6a Noise Compliance ($LA_{eq,15\ min}$) – FY15 – FY25

Location R39a

R39a is located to the south-east of the KVCLF. The $LA_{eq,15min}$ representative noise results exceeded the noise criteria twice during the reporting period. On 14 August 2024 and 13 November 2024, a $LA_{eq\ 15\text{-}min}$ result of 37 dBA was measured, exceeding the night-time noise criteria by 2 dBA on both occasions. For more information refer to Section 11.1. The $LA_{eq,15\text{-}min}$ representative noise results for R39a are provided in Figure 19 and annual averages are provided in Figure 20.

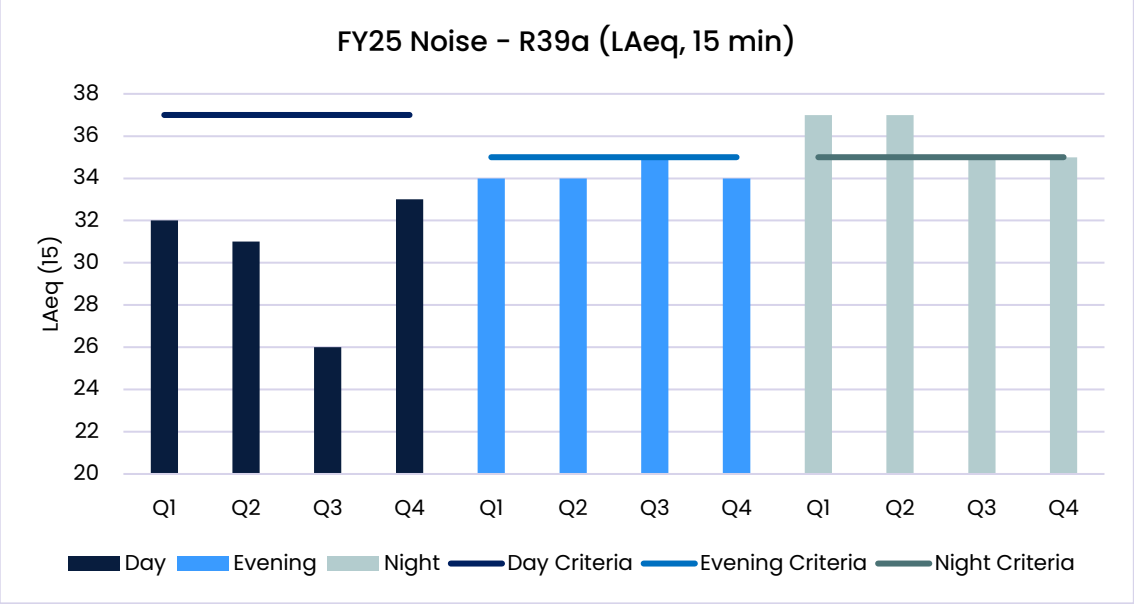


Figure 19: Site R39a Noise Compliance ($LA_{eq,15\ min}$) – FY25

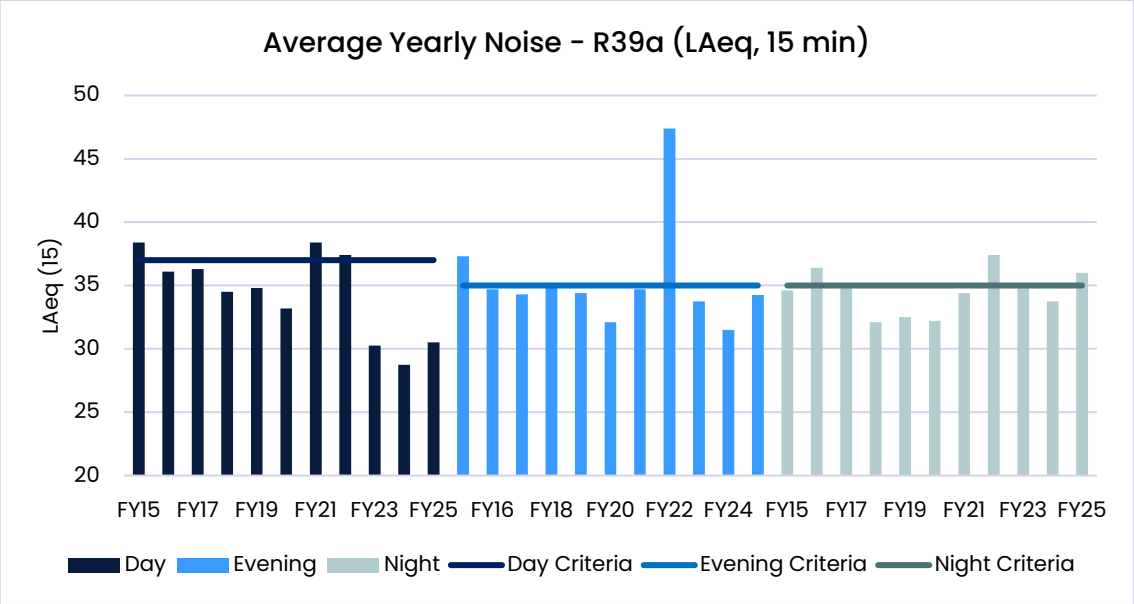


Figure 20: Site R39a Noise Compliance ($LA_{eq,15\ min}$) – FY15 – FY25

$LA_{1,1\ min}$

No exceedances or non-compliances were observed at R1 or R39a against $LA_{1,1\ min}$ criteria during the reporting period. One (1) non-compliance was observed against the $LA_{1,1\ min}$ criterion at R6a. The non-compliance occurred on 27 February 2025 when a result of 60 dBA was measured, exceeding the criterion by 13 dBA. For more information refer to Section 11.1. $LA_{1,1\ min}$ representative noise results for sites R1, R6a and R39a are shown in Figure 21 and annual averages are provided in Figure 22.

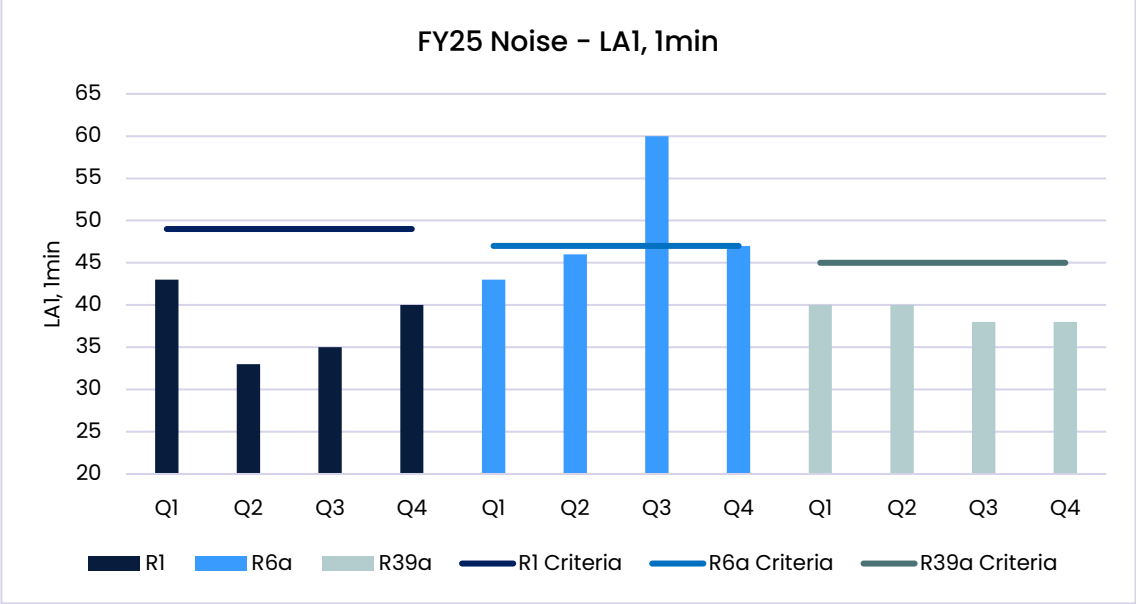


Figure 21: Site Noise Compliance ($LA_{1,1\ min}$) for R1, R6a and R39a - FY25

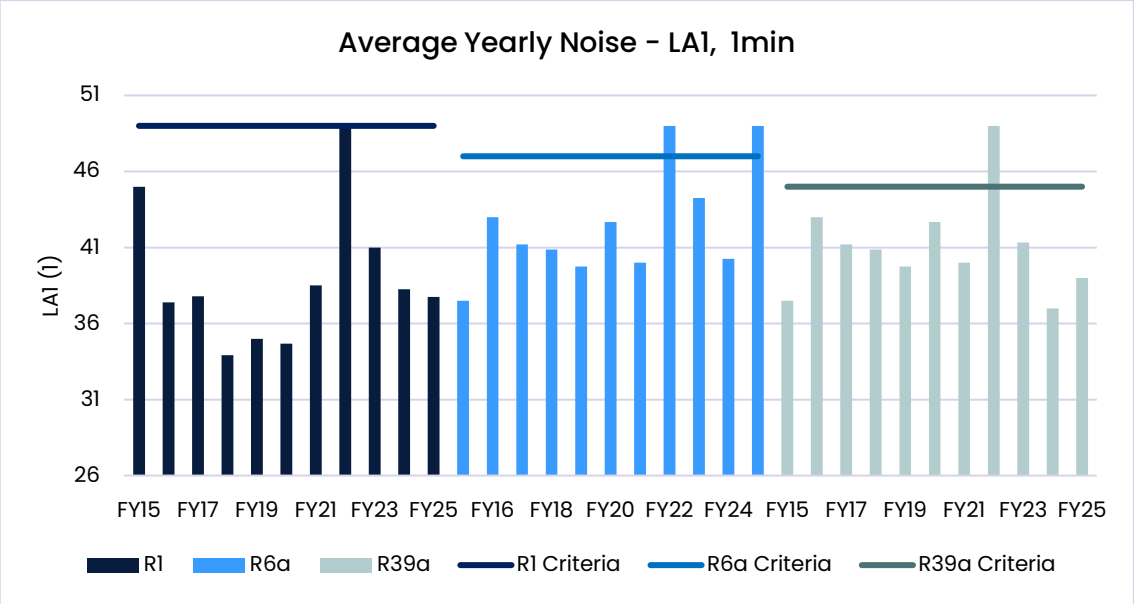


Figure 22: Site Noise Compliance ($LA_{1,1\,min}$) for R1, R6a and R39a FY15 – FY25

When the quarterly compliance monitoring is being conducted, advice is provided if changes to noise sources are identified, and additional mitigation measures will be implemented where feasible. During the reporting period, no changes to noise sources were identified, and no additional mitigation was required.

6.8.1.4 Rail Haulage

The rail line is located within 200 m of more than 800 receivers within the Mount Kembla, Cordeaux Heights and Unanderra communities. The track geometry consists of relatively tight curves which can increase the likelihood of squeal events caused by the wheel/track interface and/or brake related issues. Noise issues have been progressively addressed by the Rail Noise Working Group (RNWG) through the below objectives:

- Review noise results and identify rail noise mitigation options.
- Improve targeted track maintenance.
- Develop strategies for positive proactive community engagement.

During previous reporting periods, the RNWG has undertaken numerous rail trials and noise monitoring campaigns to identify noise sources and minimise the rail noise generated in the local area. The work undertaken has been documented in previous Annual Reviews.

Rail noise investigations and actions were ongoing in FY25. They were discussed at the RNWG and some of the actions undertaken included horn timer investigations, re-railing, track tamping, grinding and general maintenance to the track.

The RNWG will continue to meet in FY26 to discuss track, locomotive and rolling stock performance, complaints, monitoring results and identify improvement opportunities.

A summary of the rail haulage noise criteria is presented in Table 22. The noise levels from all locomotives in use on the KVRL are required to comply with these noise impact assessment criteria.

Table 22: Rail Haulage Noise Criteria

Operating Conditions	Speed and Location of Measurement	Noise Criteria $LA_{1,1min}$ (dBA)
Idle with compressor radiator fans and air conditioning operating at maximum load occurring at idle	Stationary 15 m contour	70 dBA
All other throttle settings under self-load with compressor radiator fans and air conditioning operating	Stationary 15 m contour	87 dBA 95 dBLin
All service conditions	0-50 km/h 15 m from centreline of track	87 dBA 95 dBLin

Annual attended rail haulage noise measurements for the 82-class locomotive (Pacific National 8202) was conducted in July 2024 and May 2025. No exceedances or non-compliances with the noise impact assessment criteria were recorded.

6.8.1.5 Real-Time Noise Monitoring – Pit Top

A directional noise monitoring system (DNMS) was installed at Dendrobium Mine in 2021.

The DNMS is comprised of five (5) loggers that provide coverage of the Pit Top entrance, workshop and warehouse areas and Portal Road. The loggers record data on a continuous basis, and assist ICHPL to identify activities, events and locations that contribute to the site noise level 15-minute average.

Maximum noise level events are displayed for each representative sensitive receiver and are able to be investigated by zooming to a shorter time period. The display at each representative sensitive receiver will include the time of the event.

All five (5) monitors were removed for approximately three (3) months during FY24 for calibration and modem upgrades required due to the closure of the 3G network. Monitors were then reinstalled early in FY25. SIM card issues disrupted the DNMS during the first half of FY25 but the issue has been resolved with no further issues to date.

6.8.2 Cordeaux Colliery

Noise is not monitored at Cordeaux Colliery as the site is in care and maintenance.

6.8.3 DCPP

As the DCPP is within the BlueScope Steel premises, noise monitoring and management actions are not undertaken by ICHPL.

6.8.4 Ventilation Shafts

No noise monitoring is undertaken at the Ventilation Shafts. Ventilation Shafts 1 and 2 are downcast and do not generate any noise, and there are no sensitive receivers in the vicinity of Ventilation Shaft 3.

6.9 Visual Amenity and Lighting

6.9.1 Dendrobium Mine

Lighting at Dendrobium Mine is managed in accordance with the Lighting and Visual Amenity Management Plan. The Pit Top is shielded by established vegetation with minimal stray light leaving the site.

The KVCLF is shielded within the valley with most lighting turned off during the night-time period unless work is being carried out on site. No complaints regarding lighting at the Pit Top were received during the reporting period.

One (1) complaint was received at the KVCLF during the reporting period. The light concern raised by a community member was investigated. It was identified that a light on the rail line had become visible due to a fallen tree. The light was repositioned to reduce stray light and the issue resolved.

6.9.2 Cordeaux Colliery

Cordeaux Colliery is located in bushland off Picton Road with no immediate residential receivers. No complaints regarding lighting were received during the reporting period.

6.9.3 DCPP

As the DCPP is within the BlueScope Steel premises there were no lighting issues identified.

6.9.4 Ventilation Shafts

There is no lighting at Ventilation Shaft 1. There are no sensitive receivers in the vicinity of Ventilation Shaft 2/3.

6.10 Aboriginal Heritage

6.10.1 Dendrobium Mine

The DA3C LW22 and 23 Aboriginal Cultural Heritage Managements Plan (ACHMP) sets out the requirements to satisfy the Consent conditions for Aboriginal heritage management in DA3C i.e. the mining area relevant to the reporting period. No impacts to Aboriginal cultural heritage sites were recorded over Dendrobium Mining Area during FY25. The LW19A End of Panel (EoP) Aboriginal Cultural Heritage Assessment (ACHA) was completed in the reporting period, which detailed heritage site impacts from the previous reporting period, that were summarised in the FY24 Annual Review.

6.10.2 Cordeaux Colliery

Sites of archaeological and natural significance were identified and assessed as part of previous longwall extraction approval processes. The assessments concluded that no significant effects would occur to the identified features as a result of longwall mining at Cordeaux Colliery.

Archaeological assessments and surveys were conducted in 2003 in relation to surface rehabilitation works planned for the Cordeaux sites. The assessments and surveys identified no items of Aboriginal significance that will be disturbed by future rehabilitation activities.

6.11 Natural Heritage

6.11.1 Dendrobium Mine

Items of natural heritage are identified in the SMP process. Details regarding natural heritage and European Heritage are reported in Section 6.13 of this report.

6.11.2 Cordeaux Colliery

Natural heritage is not considered a current issue at Cordeaux Colliery as the site is in care and maintenance.

6.12 Bushfire

6.12.1 Dendrobium Mine

During the reporting period, bushfire mitigation works were undertaken as described in the Bushfire Management Plan.

Asset Protection Zones maintained around surface facilities included:

- 28-38 Harry Graham Drive – Kembla Heights; and

- northern side of Cordeaux Road – Mount Kembla.

Fire trails maintained around the surface facilities included:

- Dendrobium Fire Trail on the southern side of Dendrobium Mine Pit Top;
- Benjamin Road Fire Trail – Kembla Heights; and
- Stones Road Fire Trail – Kembla Heights.

Vegetation management works around the surface facilities included:

- trimming overhanging branches around the GWTP and carpark; and
- removal of weed species at the sediment pond and on the bank adjacent to the yard.

Signage was installed at the entrance to the Benjamin Road and Stones Road Fire Trails during FY25. A hazard reduction burn by the Rural Fire Service is scheduled to occur in FY26 on land owned by ICHPL adjacent to the Pit Top at 65 Cordeaux Road, Kembla Heights. An Asset Protection Zone review was completed in FY25, with the results included in the Bushfire Management Plan, available on the GM³ website.

6.12.2 Cordeaux Colliery

Bushfire management at the Cordeaux Colliery Pit Top includes the maintenance of a fire break around the site boundary and of the firefighting water pipeline (with booster pump facility) around the site. A tanker filling station for charging the fire line has been installed in proximity to the fire pump.

Clearing of excessive vegetation from within the Pit Top boundary fire break zone is completed as required, determined by annual inspections. To reduce the risk of bushfires occurring due to contact with live power lines, line clearing is undertaken to selectively clear vegetation with the potential to encroach on power lines.

Prior to the onset of the summer months each year, ICHPL conducts inspections of the property boundaries to determine appropriate bushfire mitigation and hazard reduction works to be undertaken prior to the hotter and drier summer months of the bushfire season. Monthly inspections of the Cordeaux Colliery Pit Top include a check of the APZ to verify there is minimal fuel load on the ground and sufficient clearance of tree branches over the APZ. No areas of concern were identified in FY25 and therefore no trimming was required.

The Rural Fire Service radio repeater is located in the personnel and materials tower at the Cordeaux Colliery Pit Top site.

6.13 Mine Subsidence

6.13.1 Dendrobium Mine

Mining using the longwall method results in subsidence (lowering) of the land surface. Dendrobium Mine has an approved SMP for each mining area (1, 2, 3A, 3B and 3C) which describes the ongoing program of subsidence monitoring and management. These SMPs were developed in accordance with Condition 7 of Schedule 3 of the Consent.

The management of subsidence is undertaken in consultation with the Department, Dendrobium Community Consultative Committee (DCCC), WaterNSW, Dams Safety NSW, NSW Resources Regulator, Mining, Exploration and Geoscience (MEG) and Biodiversity, Conservation and Science (BCS) Division. The implementation of the plan relates to monitoring and management of natural and built features, including:

- Surface water and groundwater.
- Landscapes, including steep slopes, cliffs, land suitability and areas prone to erosion or flooding.
- Terrestrial and aquatic ecology.
- Aboriginal and European heritage.
- Infrastructure (built features).

LW22 extraction commenced on 11 August 2024 and is forecast to be completed in December 2025. As of 30 June 2025 LW22 had progressed approximately 1670 m. Mine subsidence monitoring and reporting was carried out in accordance with the approved DA3C SMP and supporting management plans.

The monitoring program for LW22 is defined by the DA3C SMP and supporting management plans which include:

- DA3C Asset Protection Plan.
- DA3C Swamp Impact, Monitoring, Management and Contingency Plan (SIMMCP).
- DA3C Watercourse Impact, Monitoring, Management and Contingency Plan (WIMMCP).
- DA3C Aboriginal Cultural Heritage Management Plan.
- Sandy Creek Waterfall Management Plan.

A summary of monitoring commitments for this reporting period are provided in Appendix 5. Additional information is provided in the LW19A EoP Report, DA3A and DA3C SMPs and supporting management plans, which can be accessed from the GM³ website at link.

The LW19A EoP Report was published in October 2024. The LW22 EoP Report will be published in late FY26.

6.13.1.1 Subsidence Movements

Subsidence movements resulting from the extraction of LW19A and LW22 were measured at the following survey points and lines:

- Wongawilli Creek Closure Lines.
- Sandy Creek Waterfall Closure Lines.
- DA3C monitoring points.
- 330kV transmission line monitoring points.
- Endeavour Energy Poles.
- Tributary Cross Lines.
- Airborne Laser Scanning (ALS) of the area.

Subsidence parameters measured during the extraction and at the completion of LW19A were generally similar to or less than what was predicted within the DA3A SMP. For further detail on the subsidence movements measured for LW19A, refer to the LW19A EoP Report. This report can be accessed on the GM[3] website at link. LW22 is currently being extracted. Detailed analysis of survey results will be included in the LW22 EoP Report.

6.13.1.2 Landscape Features

The EFT conducted detailed monitoring and inspections on landscape features including swamps, watercourses, rock outcrops and the general area within DA3C. This monitoring was conducted in accordance with the DA3C SMP (dated November 2019), WIMMCP (dated August 2020) and the SIMMCP (dated August 2020). Post-mining monitoring of previous mining areas was also completed as per respective SMPs.

Monitoring and analysis of water levels, water flow, water quality and key landscape features was also conducted by specialist consultants.

Seventy-nine (79) new surface impacts and nine (9) updates to existing impacts, were identified by the EFT during the FY25 reporting period. Impacts were observed within watercourses and landscape features such as access tracks and steep slopes. A summary of observed impacts over the reporting period is provided in Appendix 6.

For additional information on landscape impacts, refer to the LW19A EoP Report on the GM[3] website at link.

6.13.1.3 Surface Water

HGEO (hydrogeologist consultants) completed an assessment of pre-, during and post-mining data after the completion of LW19A (HGEO, 2024). An additional report will be completed for Longwall 22 in FY26.

No new water quality TARPs were triggered in the review period for LW19A.

One (1) water quality TARP (EC) was triggered prior to the extraction of LW19A at site SCK_Rockbar5. There were no further EC increases and EC decreased below the baseline mean during the reporting period. Therefore, the Level 1 trigger does not represent an adverse trend. Previous water quality TARPs remain triggered at Lake Avon tributary site LA4_S1 for EC, pH and dissolved oxygen (DO) as a result of impacts related to Area 3B. In general, stream salinity (measured by EC) has decreased since 2020 due to higher-than-average rainfall and runoff compared with the preceding drought period (2017-2019). A brief period of increasing EC occurred due to dry conditions in 2023 leading to the trigger at SCK_Rockbar5. DO was relatively stable in most watercourses during the reporting period, although a sharp decrease in DO was noted at WC24_Pool22 during the previously extracted LW21 that has since recovered to levels similar to baseline.

Analysis of flow-corrected trends in water quality indicate trends with EC, dissolved sulfate, iron, manganese and zinc are slightly elevated above baseline conditions at monitoring sites DCC_FR6 and SCK_Rockbar5. EC, dissolved sulfate and manganese are elevated compared with baseline at site WC_FR6.

Level 1, 2 and 3 TARP triggers were identified during the surface flow assessment for watercourses over the mining area, with some watercourses, including Wongawilli Creek, recording no trigger for the reporting period. As per the SMP, Level 1, 2 and 3 triggers met the performance measure, with an exceeding Prediction trigger level in place to identify an exceedance of the performance measure. The Exceeding Prediction TARP level was not triggered therefore surface flow results met the performance measure.

For more information on surface water, refer to the LW19A EoP Report on the GM^3 website at link.

6.13.1.4 Upland Swamps – Shallow Groundwater and Soil Moisture

LW19A mined beneath and/or passed within 400 m of three (3) swamps: Swamp 15a, Swamp 34 and Swamp 148.

A review of shallow groundwater hydrographs and soil moisture at swamp sites within the area of influence of LW19A indicate potential but inconclusive mining subsidence effects at site 148_01 (groundwater level), 148_01 (soil moisture) and 34_01 (soil moisture). Piezometer 148_01 in Swamp 148 which was previously assessed as impacted after the passage of LW19, remains impacted as at the end of LW19A. Assessment against the performance measure requires one (1) year of average (or above) rainfall.

Shallow groundwater and soil moisture TARPs were triggered at several piezometer sites within Swamp 15a between November 2023 and January 2024. Subsequent assessments concluded that the TARP triggers which occurred from as early as the first day of LW19A could be attributed to very dry conditions in the months prior to the start of LW19A,

combined with the short and unrepresentative baseline records for the sites. In the second quarter of 2024, most swamp piezometers recorded a recovery in groundwater levels and a return to previous saturation levels as a result of higher-than-average rainfall. None of the shallow piezometers in Swamp 15a show signs of impact, with most showing the highest levels of saturation for several years, or since the start of monitoring. In relation to the performance measure set out in the LW19A SIMMCP, the recession rate and percentage dry day criteria are assessed to have been met. Based on the assessment and supporting data presented here, there is no evidence of mining impact or a change in the hydrological function of Swamp 15a. Piezometer 148_01 in Swamp 148 which was previously assessed as impacted after the passage of LW19 remains impacted as at the end of LW19A. Assessment against the performance measure requires one (1) year of average (or above) rainfall. The assessment will be carried out as part of the LW22 EoP Report.

Where impacts are greater than predicted or not within approved levels, offset measures will be considered. Any offset will consider the level of impact requiring offsetting, the measures available and the practicality and cost of implementing the measure.

Subject to Condition 14 of Schedule 3 of the Development Consent:

> *The Applicant must provide suitable offsets for loss of water quality or loss of water flows to WaterNSW storages, clearing and other ground disturbance (including cliff falls) caused by its mining operations and/or surface activities within the mining area, unless otherwise addressed by the conditions of this consent, to the satisfaction of the Secretary. These offsets must:*
>
> *(a) be submitted to the Secretary for approval by 30 April 2009;*
>
> *(b) be prepared in consultation with WaterNSW;*
>
> *(c) provide measures that result in a beneficial effect on water quality, water quantity, aquatic ecosystems and/or ecological integrity of WaterNSW's Special Areas or water catchments.*

ICHPL transferred 33 ha of land adjacent to the Cataract River to WaterNSW to meet the above condition. A Strategic Biodiversity Offset (SBO) has been developed in consultation with Conservation Programs, Heritage & Regulation Division (CPHR) of DCCEEW and WaterNSW for the approval of the Secretary of the Department. The Secretary approved the SBO in accordance with Condition 15 of Schedule 2 of the Development Consent for the Dendrobium Coal Mine on 16 December 2016. Following ongoing consultation with the Department, a revised SBO (October 2023) has been approved. The revised SBO confirms the Maddens Plains land satisfies offset requirements for upland swamps located in:

- Dendrobium Areas 3B and 3C, identified in Table 3-1; and

- Dendrobium Areas 3A, 3B and 3C, mapped on Figure 1, that covers swamps mapped at the time the SBO was prepared in 2016 and impacts on Swamp 15a which do not exceed performance measures under Condition 3 of Schedule 3 of the Consent.

The Independent Panel (2024) noted that *"the latest SBO (2023) captures all swamps except Swamp 154 and therefore negates the need for any management or remedial actions in the relevant Area 3C SIMMCP and associated TARPs"* and further stated that *"in the Swamp Rehabilitation Research Program (SRRP) Status Report deals with, inter alia, research into Littlejohn's Tree Frog restoration within Dendrobium lease area and occupancy within the Maddens Plains offset site, as well as Giant Dragonfly research. Ongoing routine monitoring of threatened species, as required under SMP approvals, has a significant role in understanding the impacts on threatened species and thus on the role of offsets and the possibility of any rehabilitation program successes."*

There is a provision under Section 6 of the SBO for suitable residual environmental offsets to be provided where mine-related impacts of the development on upland swamps are identified to be beyond those approved and not satisfied by the SBO. This would apply to Swamp 154.

For more information on shallow groundwater and soil moisture, refer to the LW19A EoP Report on the GM³ website at link.

6.13.1.5 Swamp 15a – Independent Specialist Review

The 2023 Dendrobium Independent Environmental Audit (IEA) recommended an independent review of the study into the coincidence/causality of vegetation change (ecosystem functionality) and groundwater change at Swamp 15a. The details and findings of the review are presented below.

Stage 1 included a scoping study to review relevant documents, meetings and communications focussing on the discussion of the temporal extent and types of monitoring.

Stage 2 included a review of the available data and exploratory data analysis to establish an understanding of any indicators of ecological change in Swamp 15a and their relationship to hydrological change. The key findings of stage 2 were that the vegetation changes observed in Swamp 15a appear to be driven by catchment scale factors with similarities observed across control swamps.

Stage 3 of the study reviewed the structure and hydrogeology of Swamp 15a and assessed the monitoring data for surface water and shallow groundwater at Swamp 15a as of one (1) month after the completion of LW19A. The review found no evidence for widespread hydrogeological change at Swamp 15a as a result of mining, consistent with the consent performance measure of "negligible change in ecosystem functionality".

Reassessment of latest data will be undertaken as part of the next EoP report.

6.13.1.6 Aquatic Ecology

The aquatic ecology monitoring program is based on a Before, After, Control, Impact (BACI) design that provides a measure of variability at Impact and Control sites before, during and after extraction. This enables changes in the key indicators associated with mining-related impacts to be distinguished from natural variability.

Minor triggers were observed in watercourses during the LW19A review period. These were an elevation in EC in Sandy Creek, a reduction in water level in SC10_Pool 23 and increases in water level recession rates in Pool 26a and 29 on SC10. The elevation in EC at site SCk_Rockbar 5 occurred just prior to the commencement of LW19A, and during catchment-wide elevation of EC associated with low rainfall levels during 2023. The pool water level reductions and increased water level recession rates were attributed to dry conditions during 2023 and short, unrepresentative baseline periods (HGEO, 2024a).

During extraction of LW19A, iron straining previously observed in SC10C and SC10 following extraction of LW8 in 2013 has continued. Iron staining first observed in Wongawilli Creek in August 2021 has also continued during the extraction of LW19A. However, iron staining in Wongawilli Creek has not extended within 600 m of LW19A and there is no indication that extraction of LW19A has contributed to iron staining in Wongawilli Creek. Monitoring and assessment of iron straining and any associated impacts to aquatic ecology will continue as part of the ongoing DA3 monitoring program, with further aquatic ecology surveys to be undertaken.

Physical mining impacts, reduction in availability of aquatic habitat and assumed loss of some associated aquatic biota in tributaries overlying and within 400 m of LW19A may also have occurred but have not yet been observed. Such impacts could result in a greater potential for and severity of any future similar reductions in pool water levels and flow in tributaries and Wongawilli Creek. It is noted that previous reductions in flow observed in Wongawilli Creek have been within predictions. No aquatic ecology TARPs have been triggered with respect to Wongawilli Creek or Sandy Creek.

For more information on aquatic ecology, refer to the LW19A EoP Report on the GM^3 website at link.

6.13.1.7 Terrestrial Ecology and Swamps

Niche Environmental and Heritage (Niche) was commissioned by ICHPL to undertake terrestrial ecology monitoring (Niche, 2024b). The report includes assessment of features within the LW19A mining area.

Terrestrial ecological values and indicators which are currently being monitored include: Coastal Upland Swamps (swamp extent, species composition and total species richness

(TSR)); LJTF (population attributes and habitat characteristics); and Giant Dragonfly surveys. Trends across swamps indicate declining TSR post-mining for the majority of impact and control swamps, while an increase in or maintenance of swamp extent was observed, potentially indicating a lagged response to above average rainfall in 2020-2022. Several impact monitoring transects showed reduced habitat conditions, or reduced LJTF detection in the post-mining period. Detections of the adult life stage of Giant Dragonfly were recorded at four (4) of the five (5) control swamps. Ongoing detection of the species has been recorded at Swamp 15a in 2023. No detections were recorded at the four (4) impact swamps, indicating that mining impacts may have resulted in the loss or reduction of the population at these swamps. However, there is uncertainty in these results due to poor survey conditions during 2023 and further surveys are recommended. No detections were recorded at one (1) control swamp and one (1) pre-mining swamp.

For the latest update on terrestrial ecology over the Dendrobium mining area, refer to the LW19A EoP Report on the GM³ website at link.

6.13.1.8 Cultural Heritage

Following the extraction of LW19A, an inspection of Aboriginal heritage sites within the LW19A study area (as defined in Niche 2024a) was conducted on 29 August to 24 September 2024.

Two (2) of the seven (7) Aboriginal Cultural Heritage sites (Sandy Creek Road 21 AHIMS ID# 52-5-0273, DM 15 AHIMS ID# 52-2-3639) had observable impacts from subsidence related movements due to the previous extraction of LW19. One (1) of the impacted sites demonstrated further subsidence impact from LW19A.

Sandy Creek Road 21 (AHIMS ID#52-5-0273) has horizontal cracking along the inner lower lip and lower back wall from LW19. A small rockfall from the rear wall towards the northern end of the shelter was observed during LW19A, however no direct impacts to the art were observed. At the time of recording (29 August 2024) the structural integrity of the shelter overhang remains intact.

For more information on Aboriginal heritage, refer to the LW19A EoP Report on the GM³ website at link.

6.13.1.9 Summary of Impacts

The observed impacts were generally less than, similar to or consistent with those predicted in the assessments undertaken prior to mining. A summary of the observed impacts and triggers during the reporting period is provided in Appendix 6. For further detail on impacts associated with LW19A, refer to the LW19A EoP Report. Details of

subsidence impacts from LW22 will be included in the LW22 EoP Report. The locations of the surface impacts identified in the FY25 reporting period are shown in Plan 15.

6.13.1.10 DA3C Monitoring Network Independent Review

Condition 2 of the LW19A SIMMCP Approval required ICHPL to submit an independent review of all current and proposed pool water level, shallow groundwater and deep groundwater monitoring sites within DA3C. The DA3C Monitoring Network Independent Review (AGE, 2024) was submitted to the Department on 22 March 2024. Recommendations made within the review include:

- install proposed groundwater monitoring locations (DE-A1-04 and DE-A1-03) prior to July 2024;
- include additional suitable unimpacted groundwater control sites in the lower Hawkesbury Sandstone (HBSS) and upper Bulgo Sandstone (BGSS) for BACI analysis;
- undertake quarterly quality sampling (rather than annual sampling) at all DA3C deep groundwater monitoring points for the first year (where access permits) and then review sampling frequency for future years;
- investigate the feasibility of including an additional upper BGSS sampling point at S2659;
- continue monitoring frequencies in relation to surface water level and water quality monitoring; and
- install proposed flow monitoring points LC7S1 and LC9S1 prior to July 2024 and August 2025 respectively.

The Department requested in a letter dated 16 May 2024 that ICHPL report on the progress of implementing recommendations made in the DA3C Monitoring Network Independent Review in future Annual Reviews for Dendrobium Mine.

The progress of recommendations made in the review as at September 2025 is presented in Appendix 10. All recommendations have now been implemented.

6.13.1.11 DCCEEW Feedback to the FY24 Annual Review

DCCEEW provided feedback to the FY24 Annual Review. Table 23 includes these recommendations and the ICHPL responses.

Table 23: ICHPL responses to DCCEEW feedback to the FY24 Annual Review	
DCCEEW Recommendation	**ICHPL Response**
1.1 The proponent publishes the Groundwater Monitoring Program	The Groundwater Monitoring Program is included in Appendix B of the LW22/23 WIMMCP – Dendrobium Long Term Groundwater Monitoring Program (Page 93 - link).
1.2 The proponent in future incorporates upland swamps which are high priority GDEs as gazetted in the Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources 2023 and to consider any impacts against the minimal impact considerations of the NSW Aquifer Interference Policy.	Approvals are based on the assessment in the SMP which uses the agreed swamp mapping. This mapping is verified infield by ecology specialists.
1.3 The proponent ensure future Annual Reviews report on adherence with commitments of the GMP and the requirements and objectives set out for each of the water related conditions and performance measures of relevant project approvals. Statements made should be supported with contemporary data and assessed against historical data and compared to the impact statements made that supported the decision for mining approval.	The GMP does not set thresholds. Groundwater TARPs are those listed under the Secondary TARP for Area 3A groundwater monitoring in the *Avon and Cordeaux Reservoirs Dams Safety NSW Notification Area Management, Closure and Contingency Plan* (GM³, 2022). TARP trigger levels 2 and 3 are defined for bores S1867, S1970, S1992 and S1994.
2.1 The proponent updates the Annual Review and Watercourse Impact, Monitoring, Management and Contingency Plan: a. to identify the trigger levels for watercourse impacts that meet or exceed the performance measures defined in the relevant	a. Watercourse Impact, Monitoring, Management and Contingency Plans for SMPs include trigger levels for watercourse impacts that meet or exceed the performance measures defined in the relevant Subsidence Management Plan approval e.g. *Table 1.3 – LW 19 and 19A Study Area Watercourse Impacts, Triggers and Response in link*.

Subsidence Management Plan approval. b. to include volumetric triggers in the Trigger Action Response Plan (TARP) for predicted take from watercourses including Wongawilli Creek and Sandy Creek to allow assessment of impacts and consistency with approved impact.	These tables are reproduced in EoP reports e.g. *Table 21: LW 19 and 19A Watercourse TARP in link*. A summary of the watercourse surface flow assessment is included in Table 5 of the LW19A EoP Summary Report (*link*), with a more comprehensive analysis included in Section 5 of the Surface Water and Shallow Groundwater Assessment: Longwall 19A (HGEO, 2024): link Also refer to Section 6.13.1.3 in this report. b. Volumetric triggers for surface flow assessment are not appropriate due to the large natural fluctuations in these watercourses. For example, on Sandy Creek and Wongawilli Creek flows naturally decline to 0 ML/day (Sandy Creek and Wongawilli Creek) up to 800 and 3000 ML/day, for respective creeks. This significant natural variation means a simple volumetric flow rate trigger is not appropriate as it will result in many false triggers. The current assessment method includes the below analysis: • % reduction in median flow rate (compared to 'natural' variability). • ML/d reduction in median flow rate. The existing TARP assessment undertaken for each EoP Report compares flows in these watercourses against Reference sites which is required to understand whether a flow is truly anomalous. The current TARPs have been developed over multiple iterations and involved consultation between specialists and agencies including WaterNSW.

6.13.2 Cordeaux

Due to the time elapsed since the last longwall panels were extracted at Cordeaux Colliery, the continued effects of subsidence will be negligible to nil and pose no threat to the safety of infrastructure or the public and therefore continued monitoring is not undertaken.

6.14 Hazardous Material Management

6.14.1 Dendrobium Mine

6.14.1.1 Explosives

A Licence to Store Explosives is in place for the Dendrobium premises. Limited quantities of explosives were stored at Dendrobium Mine over the reporting period.

6.14.1.2 Dangerous Goods

The dangerous goods kept at Dendrobium Mine include compressed gases, flammable and combustible liquids and corrosive substances. Volumes stored are below the manifest quantities to require a Dangerous Goods Licence to be issued by SafeWork NSW.

A Site Emergency Information Container is installed adjacent to the front gate in accordance with legislative requirements. This information box includes the site manifest along with Safety Data Sheets (SDSs) for each of the dangerous goods kept on site.

6.14.1.3 Combustible Liquids

Dendrobium Pit Top has bulk combustible liquid storage tanks (~30,000 L each) for diesel and solcenic oil (used in the underground roof supports). Both diesel and solcenic are delivered to site by tanker. These are stored generally in accordance with the requirements of *AS 1940-2017: The storage and handling of flammable and combustible liquids*.

6.14.1.4 Other Substances

ICHPL assesses new substances before their use on site by completing a Substance Evaluation Form and a risk assessment (based on the hazardous nature of the substance). SDSs and substance evaluations are available electronically from ChemAlert. Regular inspections of the storage sites are undertaken to review compliance with relevant standards.

6.14.2 Cordeaux Colliery

Cordeaux Colliery has an underground diesel tank (42,000 L holding capacity) and minor volumes of gas cylinders, and transient stores of oils/lubricants.

The diesel fuel is brought to site by fuel tankers. A bulk diesel fuel system has been installed utilising underground tank storage with locked bowser delivery. The majority of fuel used is for exploration equipment and field vehicles. Cordeaux Colliery has a Fuel System Operations Plan for the underground diesel tank. Tank integrity testing and an analysis of the surrounding groundwater have been completed as required. This includes

6-monthly sampling of five (5) groundwater monitoring wells, as detailed in the Water Management Plan. Monitoring wells are also shown on Plan 11. The results confirm the absence of any leaks/contamination. A digital reconciliation monitoring system is installed on the diesel tank to better account for fuel-in and fuel-out of the system to assist in monitoring any fuel loss that could be attributed to tank leakage. This system was upgraded early in FY25.

6.14.3 DCPP

6.14.3.1 Hazardous Materials

Hazardous materials management at the DCPP is consistent with the standards practiced at Dendrobium Mine. SDSs and substance evaluations are available electronically from ChemAlert. Waste oil is collected on site and transported to a recovery waste management service.

6.14.3.2 Radiation Gauges

There are nine (9) fixed radiation gauges located in the DCPP that contain radiation regulated materials. The radiation regulated materials are licenced and maintained as per the legal requirements. All radiation regulated materials are housed in appropriate containers and are inspected and tested in accordance with legislative requirements.

6.15 Methane Ventilation

6.15.1 Dendrobium Mine

The underground mine workings are ventilated by drawing fresh air into the mine (intake air) via the Dendrobium Mine Portal Tunnel, KVT, and Ventilation Shafts 1 and 2. The ventilation air drawn through the mine is extracted via the Ventilation Shaft No. 3 fans.

All three (3) fans installed at Ventilation Shaft 3 are required to operate unless routine maintenance is occurring. Mine ventilation air was drawn through the mine during the reporting period at an average rate of 468 m^3/s with the discharge air (mine ventilation air) having an average concentration of methane (CH_4) of 0.08% and an average concentration of carbon dioxide (CO_2) of 0.51%.

A summary of Scope 1 and Scope 2 greenhouse gas (GHG) emissions during the reporting period for Dendrobium Mine and Cordeaux Colliery is provided in Table 24 and Figure 23. GHG emissions between FY15 and FY25 are shown in Figure 24. Cordeaux Colliery emissions are approximately 0.39% of the total emissions in FY25. Dendrobium Mine commenced mining activities in Area 3C and began operating the gas drainage plant in FY25. As Area 3C contains higher methane concentrations than previously mined areas, there was a noticeable increase in GHG emissions during FY25.

Table 24: GHG Emissions – Dendrobium Mine and Cordeaux Colliery – FY25			
Emission	**Units**	**FY24 Total**	**FY25 Total[11]**
Scope 1 emissions	kt CO_2-e	382.57	479.47[12]
Scope 2 emissions	kt CO_2-e	60.47	63.64
Total	kt CO_2-e	443.03	543.11

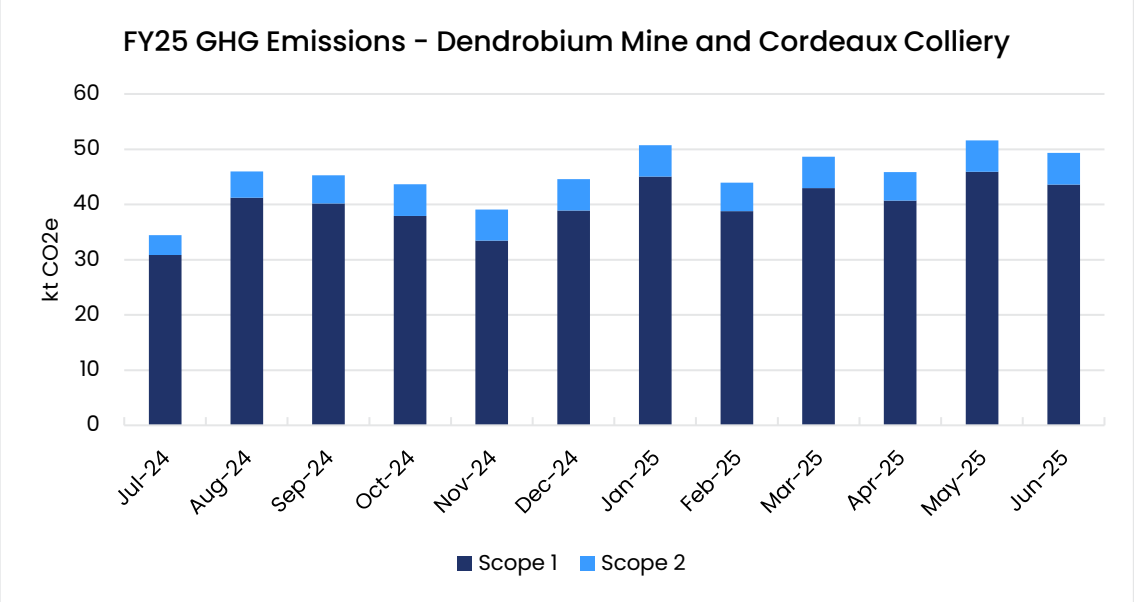


Figure 23: Dendrobium Mine and Cordeaux Colliery GHG emissions for FY25

[11] These figures are subject to third party assurance for NGERs reporting.
[12] Post-mining fugitive emissions have been excluded as Dendrobium Mine did not classify as a gassy mine in FY25 under Section 1.8 in the NGER Measurement Determination (>0.1%) and therefore fugitive emissions from post-mining activities under Section 3.17 are not an emission source.

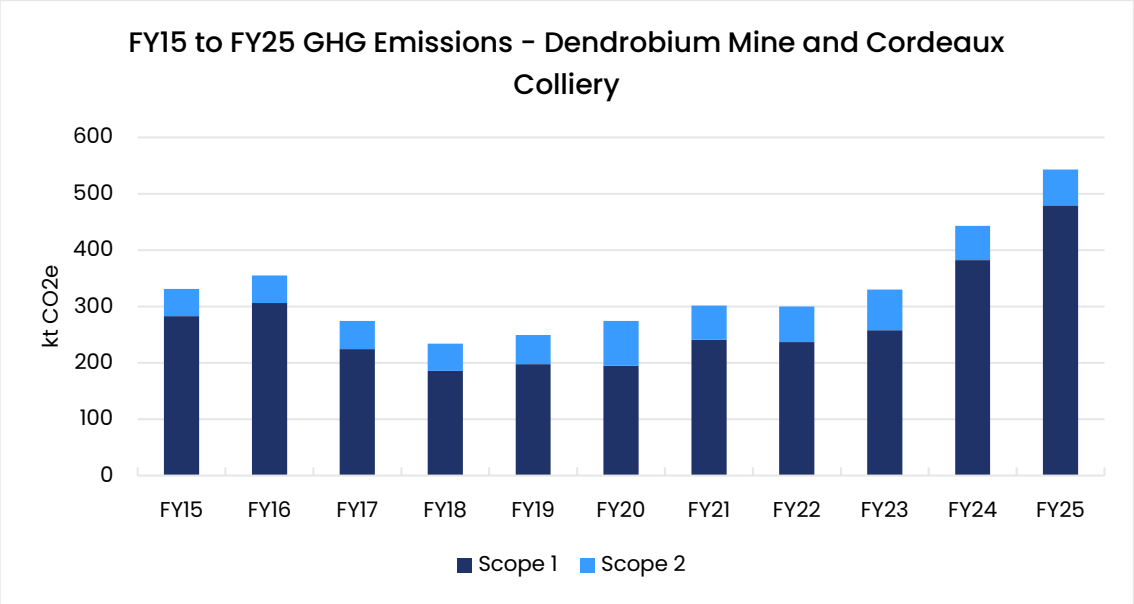


Figure 24: Dendrobium Mine and Cordeaux Colliery GHG emissions for FY15 to FY25

6.15.2 Decarbonisation Strategies

ICHPL was actively working through the reporting period to progressively reduce emissions.

In FY25 the focus continued on increasing the proportion of fugitive emissions generated by longwall production at Appin Mine that are captured by the gas drainage system and reticulated to abatement facilities (either power generation or flaring). This is measured by the post drainage capture efficiency (PDCE) metric. Increases in longwall gas capture have been achieved with additional underground drilling programmes that began in FY20 and were continued into FY25. This includes directionally drilled holes targeting gas bearing strata below the longwall and into zones where it is thought gas can be extracted from the longwall goaf (the void formed by longwall extraction). In the period FY20 - FY24, PDCE has been steadily increasing at Appin Mine, and it is now reliably at approximately 65%. This represents an improvement relative to ICHPL's base year (FY15), where PDCE was approximately 51%.

In FY25 ICHPL continued studies for the development of a regenerative thermal oxidiser (RTO) at Appin Mine's Ventilation Shaft No. 6 site. MOD 4 for the Ventilation Air Methane Abatement Project was submitted (after addressing comments from the Department) on 6 June 2025. The average achievable methane emissions reduction from the RTO is estimated at approximately 36 kt CO_2-e per year, based on Appin Mine's current exhaust average methane concentration. The MOD application is available on the Major Projects website here.

Dendrobium Mine has relatively low methane emissions in comparison to Appin Mine, which is why methane abatement at ICHPL is currently focussed on Appin Mine emissions.

A Decarbonisation Strategy has also been progressed with a consultant in FY25. This project includes an analysis of GHG data and emissions modelling, identification and assessment of abatement opportunities, and provision of recommendations. The project is planned to be completed in FY26.

6.15.3 Australian Sustainability Reporting Standards

In preparation for reporting under the Australian Sustainability Reporting Standards (ASRS), ICHPL engaged a consultant In FY25 to undertake a package of work to prepare for climate-related financial disclosures, with the first mandatory report required by 31 March 2026. This package of work included:

- A Diagnostic Session to review current data on climate related processes and disclosures, including internal engagement to identify current integration of climate change considerations into long term operations and decision making.
- A Climate Resilience Assessment that involved selecting inputs for the climate scenario analysis, including two (2) publicly referenced scenarios and three (3) time horizons aligned with reporting requirements and business context. The screening process identified and consolidated eight (8) relevant climate-related risks and opportunities - three (3) physical risks, three (3) transition risks and two (2) opportunities, for qualitative assessment.
- The development of a Transition Plan, in which progress against emerging expectations for climate-related disclosures were evaluated. The review looked to identify areas of alignment and opportunities for further development. A gap analysis was then conducted against the Transition Plan Taskforce (TPT) Metal and Mining Sector Guidance to assess readiness across foundations, implementation and engagement strategy, metrics and targets, and governance. This analysis highlighted key areas requiring further development, particularly the need to set emissions reduction targets, embed climate risks into financial and capital planning, and operationalise transition measures. These findings informed a set of recommendations to guide the next phase of transition planning, ensuring ICHPL's approach is credible, actionable, and aligned with ASRS requirements.

In addition, an assessment of ICHPL's Scope 3 emissions was undertaken across all 15 categories. The assessment identified that the categories that contributed most significantly to Scope 3 emissions were use of sold products (93.5%), waste generated in operations (4.9%) and purchased goods and services (0.7%). Recommendations were provided for improving data capture in preparation for mandatory disclosure for CY26.

6.15.4 Cordeaux Colliery

Cordeaux Colliery had no methane drainage extraction plant to support its underground gas management activities when operational. Following cessation of mining (the site is in care and maintenance), the emissions to the atmosphere via the main mine ventilation fans significantly decreased. The mine ventilation fans were shut down and the shafts temporarily sealed in December 2003. Underground fugitive emissions through Cordeaux Colliery are based on estimation as per the National Greenhouse and Energy Reporting (Measurement) Determination 2008 Section 3 Method 1.

6.16 Waste Management

6.16.1 *Dendrobium Mine*

6.16.1.1 General Waste

General waste bins are transported from Dendrobium Pit Top to Cleanaway's depot at Unanderra. The waste is then tipped onto a sorting pad and is directed into its correct waste stream for recycling or disposal. Waste specific skips are in place for scrap steel, timber, oil drums and particulate filters. Dendrobium Mine's main solid waste streams, the volume of waste recycled and disposed of, and the recycling efficiency for Dendrobium Pit Top is provided in Table 25 and Table 26 respectively.

Table 25: Waste Streams and Total Volumes							
Waste Stream	**Treatment / Disposal**	**Volume (tonnes)**					
		FY20	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**
Timber	Recycled off site	141.2	60.7	22.0	81.5	152.9	133.8
Cardboard and paper	Recycled off site	5.3	5.7	5.8	9.8	9.2	9.0
Steel and scrap metal	Recycled off site	243.3	195.4	235.9	198.7	231.8	236.6
Commingle	Recycled off site	5.0	3.8	2.9	2.5	3.6	3.9
General waste (ResourceCo)	Recycled off site	689.4	594.3	781.0	666.5	673.7	580.0
Particulate (diesel) filters	Off-site treatment/ disposal in landfill	191	358.6	374.1	186.8	98.2	77.5
General waste	Landfill	73.59	101.5	99.9	98.6	114.9	96.2
Electronic waste	Recycled off site	0.026[13]	0.2[14]	1.9[15]	2.3[15]	5.1[15]	0.6[15]

Table 26: Recycling Efficiency for FY25[16]		
Total Recycled (tonnes)	**Total Removed from Site (tonnes)**	**% Recycled**
963.3	1137.0	85%

6.16.1.2 Waste Reduction and Recycling

In FY19, ICHPL and its main waste contractor began redirecting wastes from landfill to reduce the waste footprint of ICHPL. A Cleanaway and ResourceCo joint venture Resource Recovery Facility, located in Wetherill Park, processes dry non-recyclable waste. Combustible materials are turned into Processed Engineered Fuel (PEF), diverting approximately 94% of waste material from landfill. The PEFs, Low Calorific Value (CV) and

[13] Recorded e-waste disposed at the Regional Operations Centre (ROC) via the University of Wollongong e-waste bin. E-waste is recycled by an external recycling vendor.
[14] 68 kg was disposed at the ROC via the University of Wollongong e-waste bin. 136 kg was disposed via Certified Environmental Disposal services provided by DXC.
[15] Volume across ICHPL. All electronic waste is processed (recycled or disposed of) by ACT Logistics. Excluded from waste volume calculations.
[16] Solid waste excluding electronic waste.

High CV, comply with the requirement of the Clean Energy Regulator under the Emissions Reduction Fund.

Waste generated on site in FY25 was 1137.0 tonnes. 676.2 tonnes of the total waste were classified as general waste, of which 580.0 tonnes were diverted for recycling at ResourceCo and the remaining 96.2 tonnes was disposed as landfill. These figures exclude silent seal (0.34 tonnes) and effluent (14.2 tonnes) which are handled separately. Redirecting this general waste to the recycling facility is an alternative end-of-life treatment and final disposal of products opportunity. Approximately 85% of total waste was recycled off-site during the reporting period. Waste to landfill has reduced largely due to the increased recycling efficiency (refer to Figure 25).

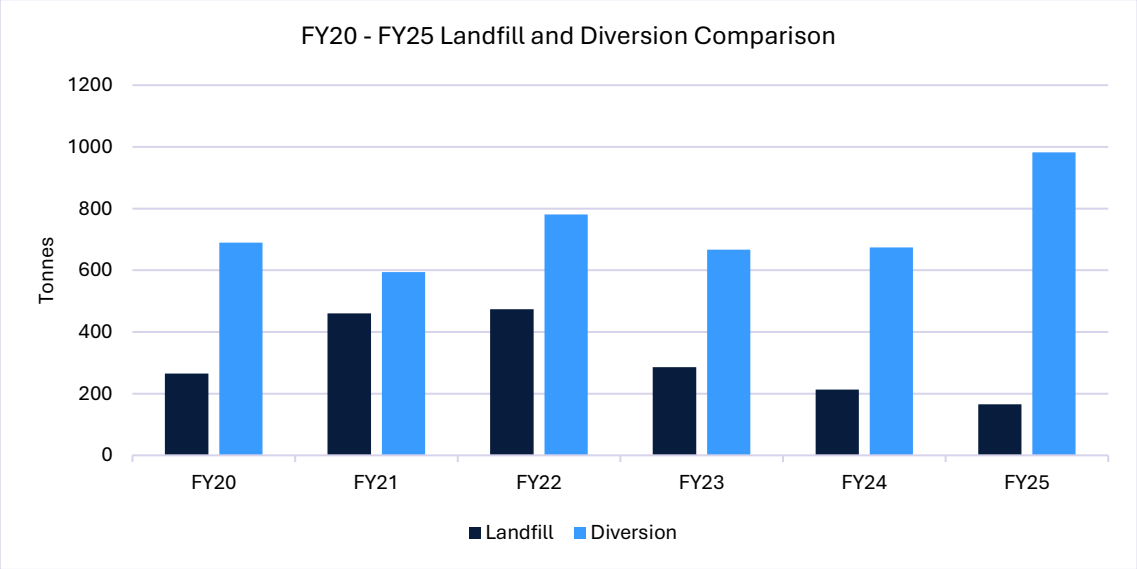


Figure 25: Recycled and landfill waste streams for FY20 - FY25

6.16.1.3 Oil and Grease Containment and Disposal

Oil and grease produced on-site is transported from the Pit Top for processing by a licenced contractor off-site. Oil sumps and traps are in place and are periodically inspected by site personnel and emptied as required by a licenced contractor. Solcenic oil is separated from oily water volumes via a licenced contractor. Oil and grease volumes removed from the site during the reporting period are included in Table 27. Less solcenic oil was removed in FY25 due to the installation of a self-bunded solcenic tank and the removal of the old solcenic bund that would collect rainfall and become contaminated. Oily water volumes decreased due to improved waste management practices and the removal of the old diesel tank and bund in FY24. Waste oil increased due to an increase in underground machinery as a result of gas drainage works.

Table 27: Oil and Grease Volumes – Dendrobium Mine				
Waste Stream	Volume (tonnes)			
	FY22	FY23	FY24	FY25
Oil	41	40	40	70
Oily water/Sludge	1.6	8.2	40.2	25
Solcenic oil	72.1	70.8	10.6	7

6.16.1.4 Coal Wash Management

Coal wash is a by-product of processing RoM coal. During FY25, a total of 1.70 Mt of coal wash was emplaced at the CWEA. This was comprised of 0.97 Mt of coal wash from the West Cliff Coal Preparation Plant (WCCPP) and 0.63 Mt from the DCPP, and 0.10 Mt of other materials.

The redesign of Stage 3 of the CWEA to avoid direct impacts to the Aboriginal heritage sites located within the approved footprint has limited coal wash emplacement availability to 4 Mt. It is expected that Stage 3 will reach capacity in FY29. This timeframe will be dependent on production volumes, ash content and volumes directed to beneficial reuse.

The design of Stage 4 of the CWEA is currently being reviewed. As part of this review, the opportunities to maximise coal wash emplacement capacity are being evaluated, including the option of increasing the height. An application to modify the Project Approval may be required pending the outcomes of the review. Construction of infrastructure associated with Stage 4 is expected to commence in FY26.

Table 28 outlines the nominal current capacity and status of each stage of the CWEA.

Table 28: CWEA – Capacity and Status		
Emplacement Stage	Estimated Capacity (Mt)	Emplacement Status
1	4.6	Complete
2	20.8	Complete
3	29.3	Current
4	26	Not Yet Commenced

During the reporting period, ICHPL diverted approximately 0.20 Mt of coal wash from the DCPP for beneficial uses (i.e. as an engineered fill in housing developments and for the development of arterial and agricultural roads). Approximately 0.12 Mt has been stockpiled at Appin North for use under OPDs for engineering works, with approximately 8.1 Mt diverted from the CWEA since 2009. ICHPL has agreements with property developers that should continue to see large volumes of coal wash diverted for beneficial uses. Coal wash was utilised at Whytes Gully Waste And Resource Recovery Centre at

Kembla Grange and Jervis Bay Road Intersection Upgrade in FY25, as well as the next stage of the Calderwood Development. ICHPL continues to develop a pipeline of major projects that will require engineered fill for the next five (5) years.

Coal wash from the DCPP had been stored at Appin North in various stockpiles since 2019 pending approval for use in OPDs or for beneficial reuse. In FY23, an audit of coal wash management was completed by the EPA. Emplacement of the stockpiled material continued in FY25. Considerable work continues to be carried out on the alternative uses of coal wash, including ongoing monitoring of potential contaminants when coal wash is used for landfill or emplacement. This work has been reported in previous Annual Reviews. GM³ will continue to be involved in research, the development of, and implementation of alternative uses for coal wash in order to minimise the volume of coal wash emplaced at the CWEA in the future.

Approximately 30 kt of reprocessed coal wash was transported to PKCT for export during FY25 as thermal coal. The product is used for power generation and the production of cement after blending with high CV thermal coal. Anticipated sales in FY26 are estimated at 100 kt.

An OPD was approved by the EPA in FY25 for the use of 73 kt of coal wash in the construction of the Stockpile 3 Tipping Pad. This was an improvement that was undertaken to improve safety in the area following a truck roll over incident.

6.16.2 Ventilation Shaft 1

No activities are undertaken at Ventilation Shaft 1 and therefore there was no waste generated.

6.16.3 Ventilation Shafts 2/3

During the reporting period, only effluent was removed from the Ventilation Shaft 2/3 site by a licensed waste contractor that is captured in the Dendrobium Mine waste figures. All other waste generated at this site is removed by the maintenance team and is captured in the Dendrobium Mine waste figures.

6.16.4 DCPP

Waste at the DCPP is managed under the BlueScope Steel contract with Veolia Waste Management.

6.16.5 Cordeaux Colliery

6.16.5.1 General Waste

General waste produced at Cordeaux Colliery was negligible throughout the reporting period as the site is on care and maintenance and the waste generated is predominantly

from personnel utilising offices on site. Waste recycling through ResourceCo resulted in a continued reduction of waste to landfill. Cleanaway Waste Management Services attend site to remove waste. The amount of waste generated at Cordeaux Colliery in FY25 and a comparison to previous reporting periods is shown in Table 29. Waste such as cardboard, paper and batteries are set aside for recycling or reuse.

Table 29: General Waste Volumes for Reporting Period – Cordeaux Colliery

Waste Stream	Treatment/ Disposal	Volumes					
		FY20	FY21	FY22	FY23	FY24	FY25
Commingle	Recycled off site	2.3	8.8	2.5	2.1	2.4	2.8
General/Store Waste	Landfill	22.7	24.6	23.1	5.2	10.0	5.5
General Waste (ResourceCo)	Recycled off site	0	0	14.3	34.3	26.9	22.3
Cardboard	Recycled off site	0	0	0.3	2.8	3.1	1.3
Oily Water/Sludge	Treated off site	0	8.5	0	93.5	46.7	0
Timber	Recycled off site	3.7	0	0	0	0	0
Steel	Recycled off site	0	0	14.2	8.5	58.9	3.2

6.16.5.2 Sewage Treatment / Disposal

All sewage effluent is transported off site by a licenced contractor for treatment and disposal. During the reporting period 265 kL was removed from Cordeaux Colliery.

6.16.5.3 Oil and Grease Containment and Disposal

No bulk oils or greases are stored on site. Oil sumps and traps remain in place and are periodically inspected by site personnel and emptied as required by a licenced contractor. During the reporting period there was no oil and grease removed from site.

6.16.5.4 Drilling Muds

Drilling muds produced as part of exploration and drilling activities are disposed of in accordance with the Drilling Cuttings, Muds and Water Disposal for Exploration Activities

Procedure (IMCP0318). Drilling muds with certain analytes below the guideline limits[17] stipulated in this procedure are disposed of at Appin North/WCCPP. During the reporting period 2.12 ML of drilling muds was disposed of at the WCCPP. This was a reduction from FY24 totals, in line with a reduction in exploration activities. Drilling muds that exceed guideline limits are disposed of at Bulk Recovery Solutions, Ingleburn, with 262.12 tonnes disposed of at the facility during FY25.

7. WATER MANAGEMENT

7.1 Water Licences

7.1.1 Groundwater

Dendrobium Mine has a Water Supply Works Approval (10WA118772) and four (4) groundwater WALs. Water take at Dendrobium Mine for FY25 is shown in Table 30.

Note: 1 unit = 1 ML.

Table 30: Water Take – Dendrobium Mine

WAL No.	Water Sharing Plan, Source and Management Zone	Entitlement (units)	Total (ML)
36473	Greater Metropolitan Region Groundwater Sources Sydney Basin South Groundwater Source Nepean Management Zone 3	75	0
37465	Greater Metropolitan Region Groundwater Sources Sydney Basin Nepean Groundwater Source Nepean Management Zone 2	3962	2542
42386	Greater Metropolitan Region Groundwater Sources Sydney Basin Nepean Groundwater Source Nepean Management Zone 2	3153[18]	0
42385	Greater Metropolitan Region Groundwater Sources Sydney Basin Nepean Groundwater Source Nepean Management Zone 2	1840	0

[17] Classified as non-trackable liquid waste.
[18] 500 units were transferred from Dendrobium 10AL123124 (WAL No. 42386) to Appin West 10AL119248 and 1000 units to Tahmoor Coal Pty Ltd in FY25.

7.1.2 Unregulated River

In May 2024, a zero share WAL (WAL 45165) for incidental water take at Dendrobium Mine was issued by the Department of Climate Change, Energy, the Environment and Water (DCCEEW). The dealing was registered with Land Registry Services and linked to Miscellaneous Work 10MW119342. Water trade allocation applications have been submitted for FY24 and FY25 for 890 and 850 ML respectively.

7.2 Compensatory Water

No compensatory water was supplied to other users during the reporting period.

7.3 Groundwater

7.3.1 Dendrobium Mine

7.3.1.1 Mining Area

The Dendrobium Mine groundwater monitoring program was undertaken during the reporting period as defined in the approved WIMMCP under the SMP, and Monitoring and Management Plan under Avon and Cordeaux Reservoirs Notification Area Management, Closure and Contingency Plan. The purpose of the program is to analyse the water quality and quantity within the mine and mining area to satisfy health, safety and environmental aspects of the Consent and relevant policies and standards. The plans were developed in consultation with Dams Safety NSW, the Department, WaterNSW, and the Resources Regulator.

Water sampling is performed underground with samples analysed on-site and at NATA accredited laboratories. Mine water usage, water flows and volumes within the mine are analysed and reported regularly (i.e. on a monthly basis). Surface and underground vibrating wire piezometers are utilised to monitor groundwater response to mining. Monthly reports are prepared and submitted to Dams Safety NSW, WaterNSW and the Department summarising water quality and the water balance at Dendrobium. During the reporting period, Dendrobium operated under a Principal TARP as outlined in the Avon and Cordeaux Reservoirs DS Notification Area Management, Closure and Contingency Plan. In FY25, the Secondary TARP 4 triggered Level 3 after the piezometric head in all three (3) Bulgo piezometers at borehole S1867 fell below the Cordeaux Dam Standing Water Level (SWL), which concurrently activated the Principal TARP Level 1 (Figure 26).

Total Underground Water Balance Coupled with Sampling and Analysis

Flow rates averaged over 7 day period	CHARACTERISTICS OF LEVEL	POSSIBLE REASONS	ACTIONS	ACTION BY	NOTIFICATION
NORMAL	≤ 0.5 ML/day stored water and ≤9ML/day total water imbalance	N/A	▪ No remedial action necessary ▪ Monthly review meeting	No Special Action Required	None necessary
Level 1	> 0.5 to ≤1.0 ML/day stored water or >9 to ≤11ML total water imbalance and/or Unacceptable secondary monitoring alarm	▪ Intersection of 'conduit' to stored water source ▪ Increased groundwater make ▪ Normal Wongawilli seam water 'make'	▪ Advise DS and WaterNSW. ▪ Review all other monitoring inputs for anomalies, likely sources and 'conduit' path. ▪ Assess the need for increased sampling frequency and/or pumping capacity. ▪ *Assess the need to seek expert advice re appropriate remedial solution or other water reduction strategy*	General Manager Sustainability and Approvals	▪ Water Balance Review Team ▪ DS and WaterNSW (notification within 24 hours of confirmation)
Level 2	>1.0 to ≤1.9ML stored water or >11 to ≤13 ML/day total water imbalance	▪ Intersection of 'conduit' to stored water source ▪ Increased groundwater make	▪ Advise DS and WaterNSW. ▪ Review requirement for increased sampling and reporting frequency. ▪ Consider Incident Management Team activation. ▪ Review pumping and production strategy as necessary. ▪ *Formulate and implement a water reduction strategy.* ▪ *Seek expert advice re appropriate remedial solution or other water reduction strategy.*	General Manager Sustainability and Approvals	▪ Water Balance Review Team ▪ DS and WaterNSW (immediately on confirmation)
Level 3	>13ML/day total water imbalance	▪ Increased groundwater make	▪ Advise DS and WaterNSW. ▪ Review Level 2 sampling and reporting frequency. ▪ Activate Incident Management Team ▪ Modify production and pumping strategy to suit.	General Manager	▪ Water Balance Review Team ▪ IMT ▪ DS and WaterNSW (immediately on confirmation)
Unacceptable Stored Water	>1.9ML/day stored water	▪ Intersection of 'conduit' to stored water source	▪ *Advise DS and WaterNSW.* ▪ *Activate IMT* ▪ *Stop Longwall and Development production* ▪ *Adopt contingency measures from Level 2* ▪ *Mobilise mitigation and sealing strategies* ▪ *IMT and review team meetings daily – seek DS input*	General Manager	▪ Water Balance Review Team ▪ IMT ▪ DS and WaterNSW (immediately on confirmation)

▪ Note: Water Balance Volumes exclude Area 2 Rainfall related events

▪ *Actions in Blue Italic are only for Stored Water*

Figure 26: Principal TARP

A summary of the mine water balance for the reporting period is provided in Figure 27.

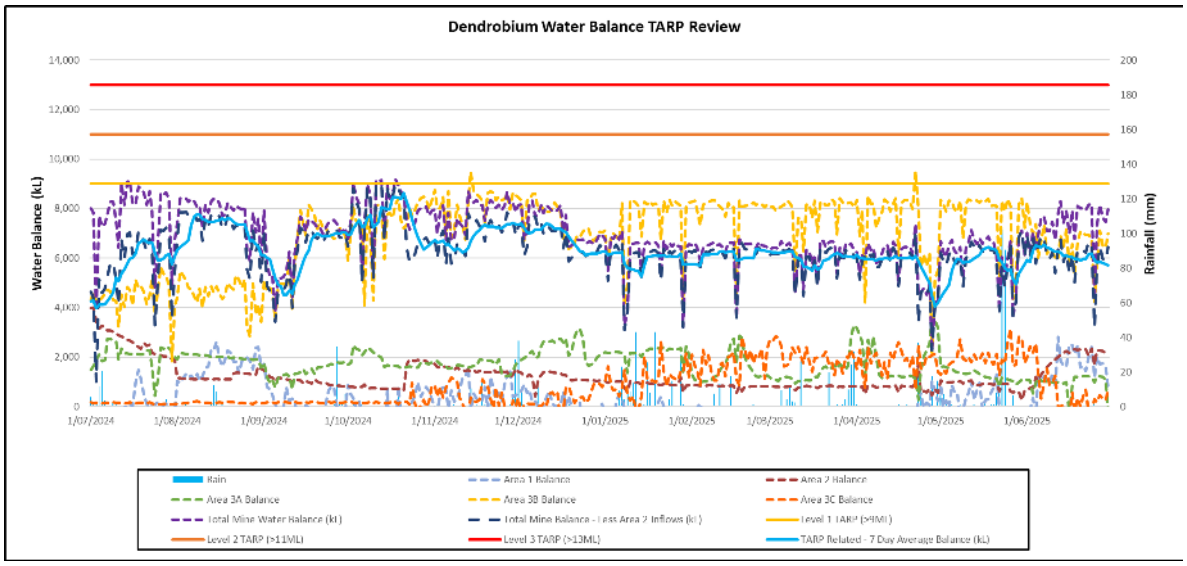


Figure 27: Dendrobium Mine Water Balance – FY25

The TARP-related water balance has increased since March 2022 due to the increased pumpout rate in Area 3B. The increased water balance was expected since Area 3B pumps have been running at a high capacity to dewater Area 3B goaf water. There is a correlation between increased water in Area 3B goaf and excessive rainfall events based on the recorded monitoring data. Area 3B has a delayed response to rainfall approximately two (2) months following significant rainfall events.

At the end of this reporting period, the water level in DA3B goaf is still relatively high since the significant rainfall events in 2022, therefore, the water balance from DA3B remains at a high level compared to other areas. The DA3B goaf water level has been maintained at

approximately 46% full. The mine improved the pumping capacity by upgrading equipment, aiming to reduce the water level in the DA3B goaf area to 20%, which is the water level prior to the heavy rainfall events in 2022. After actively dewatering, the water level in the goaf areas has been decreasing steadily over the reporting period, and the total water balance shows a decreasing trend. No abnormal inflows were observed during the reporting period. FY25 total water balance decreased approximately 10% compared to FY24.

The groundwater reporting to the mine workings during normal conditions is largely characteristic of coal measure and associated strata water. This water is higher in salinity and age based on water chemistry and isotope analysis. Water samples from inflow events have been typical of near seam coal and shale water. Geochemistry and isotope analysis is conducted monthly to determine probabilistic proportions of any modern rain or dam water entering the workings. Fluctuations in the water balance were largely a result of significant rainfall events. The water balance for the reporting period is shown in Table 31.

Table 31: Water Balance Statistics for the reporting period

Statistic	Total Water Balance	7 Day average Water Balance Less Area 2 Inflows (TARP related)	Units
Mean	6,965	6,314	kL/day
Maximum	9,164	9,017	kL/day
Minimum	2,257	1,006	kL/day
Total	2,542,161	2,304,690	kL

The mean total mine inflow during LW19A extraction was 7.32 ML/day which represents a 9% decrease compared with the LW21 and a 34% decrease since LW19 during which mine inflows peaked after heavy rain in 2022. The net mine water balance is dominated by pumping from DA3B (77 % of total), with DA3A (where LW19A is located) representing only 3.4% of inflows. No anomalous inflow due to intersecting water-bearing structures such as faults or dykes was reported during the extraction of LW19A.[19].

Extraction of longwalls results in ground subsidence, fracturing of overlying strata and a zone of groundwater depressurisation around the mine workings that can affect connected shallow groundwater and surface water systems. Mining of LW19A resulted in continued depressurisation of the target coal seam and overlying strata in line with

[19] LW19A in DA3A was completed on 28 June 2024. LW22 in DA3C commenced on 11 August 2024 and is estimated to be completed in FY26. Groundwater assessment for LW22 will be included in the FY26 Annual Review.

numerical model predictions. Many piezometers showed slight recovery during LW19A due to higher-than-average rainfall which resulted in increased recharge over the period. Importantly, for piezometers adjacent to Lake Avon, observed head is similar to, or higher than, the numerical model prediction. Therefore, the model predictions remain generally accurate as of LW19A.

Numerical model estimates indicate that the total seepage loss from Cordeaux Reservoir is currently ~0.1 ML/day and will increase to 0.27 ML/day by the end of mining in DA3C. Seepage losses from Avon Reservoir are estimated to be 0.12 ML/day at the end of LW19A. More conservative gradient-based estimates of seepage loss are in the order of 0.82 and 0.87 ML/day for Cordeaux and Avon Reservoirs respectively.

7.3.1.2 Pit Top

Groundwater monitoring is carried out around the Dendrobium Pit Top and KVCLF sites to identify any potential impacts associated with the surface facilities on groundwater quality and potential contamination affecting end of mine life rehabilitation. The wells, as shown on Plan 8, were developed in June/July 2023 by SLR Consulting, with initial water quality sampling conducted concurrently. Samples are collected on a six-monthly basis at the Pit Top and annually at KVCLF. During FY25 monitoring was conducted in July 2024 and February 2025 with a follow up sample for three (3) sites in May 2025 with no adverse results identified. Results for pH and EC are provided in Figure 28 and Figure 29 respectively.

The groundwater monitoring program was incorporated into the Water Management Plan in FY25. The Water Management Plan is currently being assessed by the Department.

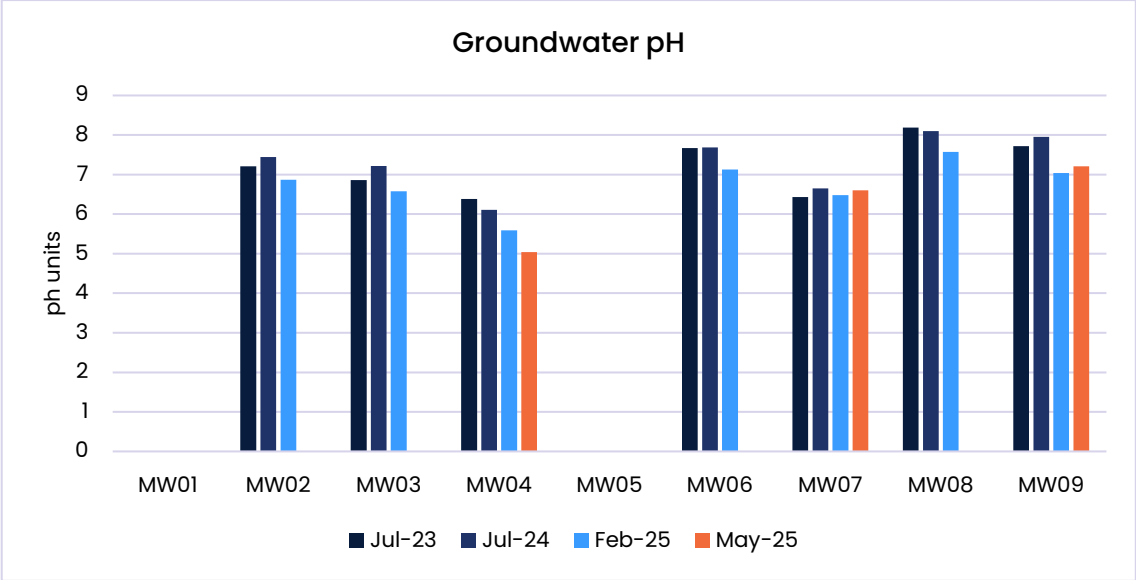


Figure 28: Groundwater monitoring results (pH)[20]

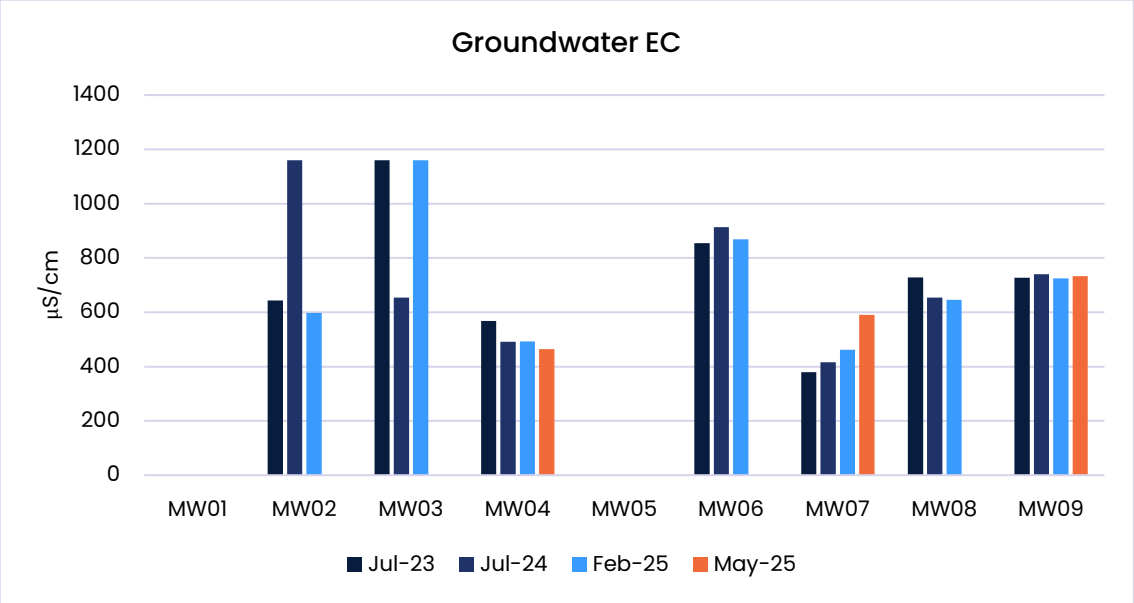


Figure 29: Groundwater monitoring results (EC)[20]

Groundwater quality monitoring results are captured in EQuIS. Any variations will be investigated, and corrective measures implemented where required.

7.3.2 Cordeaux Colliery

A total of 14.31 ML was transferred from the surface to Cordeaux underground workings during the reporting period. This is similar to previous reporting period (15.97 ML). FY25

[20] Sites with no results shown in the graph were unable to be sampled.

and FY24 figures are significantly higher than FY23 (3.9 ML), which reflects the cessation of water collected on site being used for exploration activities.

7.4 Surface Water

7.4.1 Dendrobium Mine

Underground and surface operations at Dendrobium utilise a combination of potable and recycled mine water.

7.4.1.1 Potable Water Use

Potable mains water, supplied by Sydney Water, is currently used for the longwall hydraulic roof supports (emulsions used underground require high quality water for batching), the surface gas drainage plant and surface amenities such as the kitchen and bathhouse facilities. Potable water is also used for fire suppression sprays which are connected to the fire water tank. During the reporting period potable water usage underground was 7.99 ML, which is an 10% decrease compared to the previous reporting period. The total potable water used for both underground and surface operations was 79.55 ML for the reporting period.

7.4.1.2 Recycled Water Use

Recycled water is sourced from the Nebo Workings and used for various purposes on the surface and for underground operations. In this reporting period, a total of 578.03 ML of recycled water was used. These purposes included:

- Surface Operations:
    - Dust suppression along the Portal Road and stockpile.
    - Cleaning of vehicles and equipment in the wash down bay.
    - General hose down.
    - Firefighting supply.
- Underground Operations:
    - Secondary support activities.
    - Development and production units.
    - Dust suppression and firefighting supply.
    - General hose down.
    - Gas drainage drill rigs.

7.4.1.3 Surface Water Management

Surface water runoff is separated into three (3) streams at the Pit Top site: clean water, oily water and site runoff. At the KVCLF, surface water is separated into two (2) streams, which include clean water and site runoff. Detail on these streams is available in the Water Management Plan, available on the GM³ website at link.

The Pit Top sediment pond and KVCLF sediment ponds are managed in accordance with the Water Management Plan.

Runoff from O'Brien's drift is classified as clean water therefore runoff is diverted into the natural drainage systems.

7.4.2 Cordeaux Colliery

7.4.2.1 Water Supply and Use

Potable water use at Cordeaux Colliery is generally for personal consumption and toilet facilities. Potable water is brought to the site by road tanker as required. During the reporting period the potable water used by the site was 0.18 ML.

7.4.2.2 Surface Water Management

The surface facilities at Cordeaux Colliery have been designed to prevent water run-off from the site entering WaterNSW land. The design provides effective treatment of run-off from potentially dirty areas such as the coal bins, workshop area and machinery hard-stand areas. Drainage from these areas is directed to the Primary Separation Lagoon. The clean and dirty water surface drainage circuits of the site remain in place.

As the site is on care and maintenance, the amount of dirty water generated from the surface areas has significantly reduced since when the site was an operational mine. Water from hardstand areas is captured in the Primary Separation Lagoon then transferred by pump to the upper-level Primary Stabilisation Lagoon for settlement. The water is then transferred to underground mine workings from the Mine Water Holding Lagoon via a gravity fed pipeline. This arrangement negates the requirement for any surface discharge. The water returned to the mine is essentially of good quality, containing no contaminants. Details of the monitoring and transfer volumes are provided in Section 7.3.2.

Runoff from the Corrimal Shaft sites is classified as clean water therefore runoff is diverted into the natural drainage systems.

7.4.3 Ventilation Shafts 1, 2 and 3

No water usage or capture occurs on the Ventilation Shaft 1 site. Rehabilitation of disturbed areas has been undertaken at Ventilation Shaft 1.

The Ventilation Shaft 2/3 site uses potable water transported from underground via the potable water supply pipeline from West Mains 4 cut-through to supply the gas drainage plant, amenities and ablution block facilities. Potable water usage at this site is captured in Section 7.4.1.1.

Due to their location within the WaterNSW Metropolitan Special Area, the surface facilities at the Ventilation Shaft 2/3 site have been designed to control sediment entering the surrounding WaterNSW land by capturing stormwater from disturbed areas and directing this water to sediment ponds.

7.4.4 DCPP

Industrial water is supplied by Sydney Water mains via the BlueScope Steel water network. Industrial water consumption in FY25 was 302,590 kL, compared to 200,689 kL in FY24.

The stockpile operations reuse water from the sediment dams (4-Area). Industrial water is used to 'top up' the systems as required due to water loss on vehicles and to the environment.

Potable water is supplied to the DCPP by Sydney Water mains via the BlueScope Steel water network. Potable water consumption in FY25 was approximately 4,975 kL, which is based on the assumption of 466 litres per person per day.

Water produced from the DCPP is managed through the BlueScope Steel EPL. ICHPL advises BlueScope Steel if discharges of water from the DCPP occur.

7.5 Rainfall

7.5.1 Dendrobium Mine

Rainfall recorded in the Dendrobium Mine area at the DA3B weather station during the reporting period was 1062 mm, a decrease when compared to the previous reporting period in which 1317 mm rainfall was recorded. Rainfall was generally below average with the exception of January, March and May which experienced consistent rainfall events. Daily rainfall for the weather station at DA3B is displayed in Figure 30. Annual rainfall data for FY11 to FY25 are displayed in Figure 31.

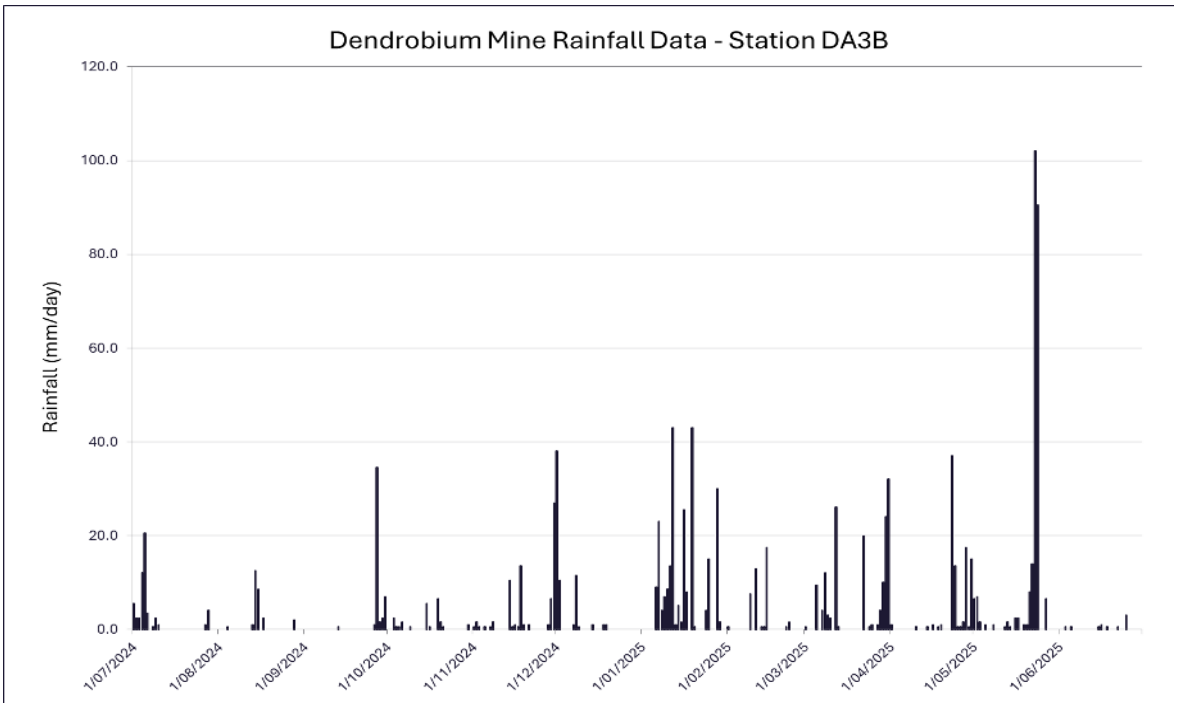


Figure 30: Dendrobium daily rainfall data for FY25

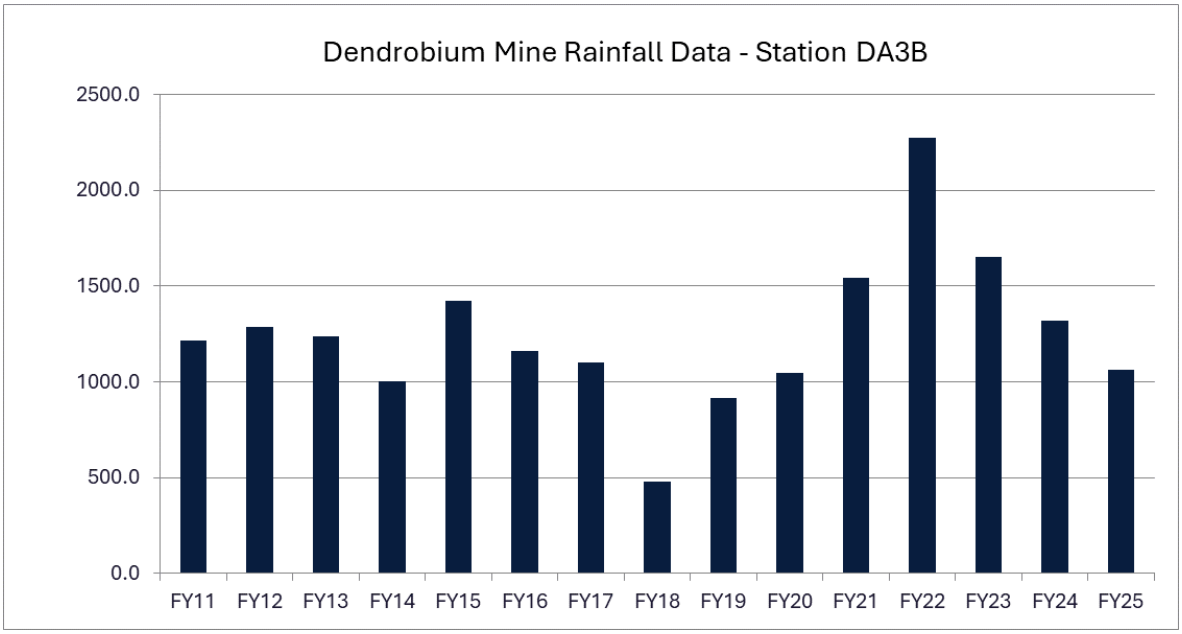


Figure 31: Annual rainfall data for Dendrobium - FY11 to FY25

7.5.2 Cordeaux Colliery

Rainfall for the Cordeaux Colliery surface facilities is recorded on a daily basis from a rainfall gauge located at the Pit Top. A total of 1070.5 mm of rainfall was recorded during the reporting period, which was a decrease from the previous reporting period (1290 mm). 24-hour rainfall totals were generally below 40 mm with the exception of a few events in the last quarter of FY25. Annual rainfall recorded at the Cordeaux Colliery rain gauge is displayed in Figure 32. Figure 33 shows the annual total rainfall recorded for FY11 to FY25.

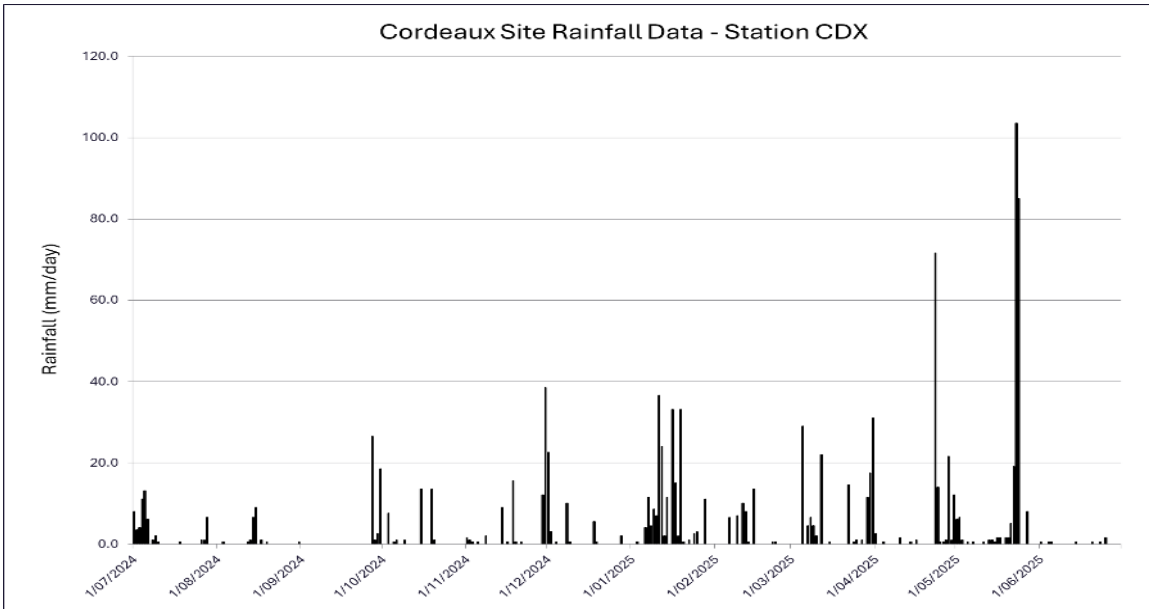


Figure 32: Cordeaux site FY25 daily rainfall - site rain gauge

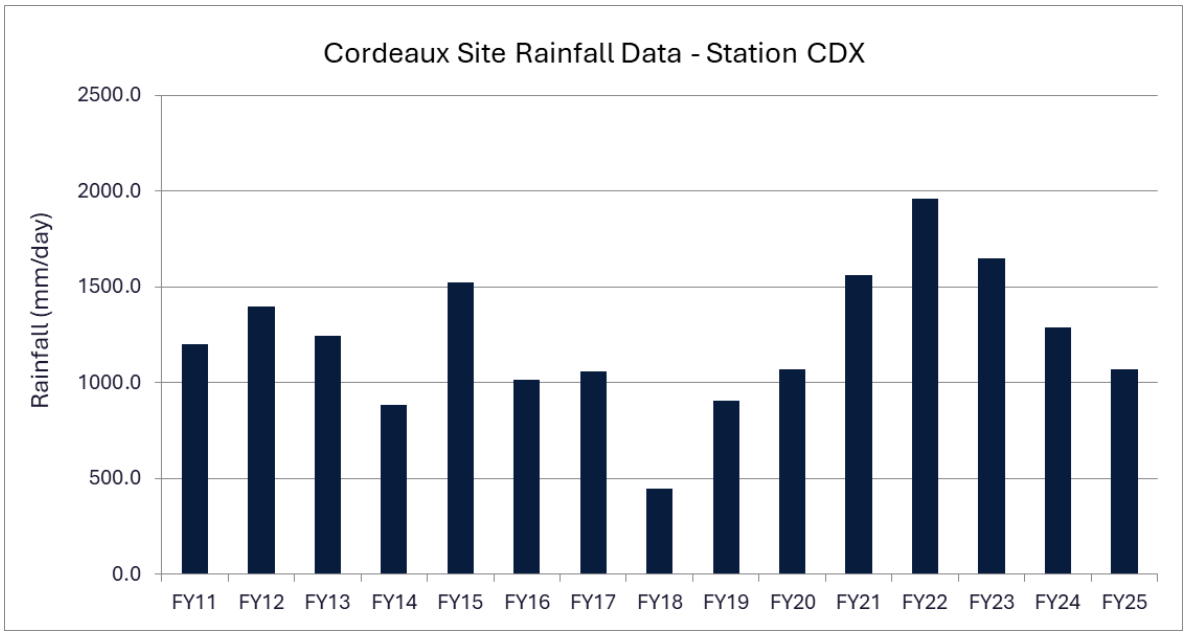


Figure 33: Cordeaux site annual rainfall - FY11 to FY25

7.6 Enforceable Undertaking

On 30 June 2023, an Enforceable Undertaking was agreed between ICHPL and NRAR in relation to alleged unlicensed surface water take from Dendrobium Mine during the 2018 to 2023 water years. Details of the Enforceable Undertaking are provided in previous Annual Reviews.

In FY24, ICHPL worked with NRAR, the Illawarra Local Aboriginal Land Council (ILALC), and WaterNSW to identify and develop the Wingecarribee Swamp Rehabilitation Project. This project was prioritised due to its potential to deliver long-term ecological and waterway benefits within the Wingecarribee Swamp. Key initiatives include upgrading boundary stock fencing, expanding weed control, surveying threatened species and habitat modification, and conducting vegetation surveys to track ecological change and health over time.

The project proposal was formally approved by NRAR on 24 August 2024. Since approval, progress has focused on securing the necessary government and statutory approvals. This includes engagement with heritage agencies, WaterNSW, and preparation for the Review of Environmental Factors (REF) process. The ILALC has commenced the recruitment process for project roles, and GM³ is working closely with local landholders and WaterNSW to finalise access approvals needed to begin on-ground works later in CY25.

8. REHABILITATION

8.1 Rehabilitation for the Reporting Period

8.1.1 Dendrobium Mine

8.1.1.1 Rehabilitation Management Plan (RMP)

A RMP has been developed to meet the requirements of the Form and Way documents published by the Resources Regulator. The RMP was revised in January 2025 and July 2025. A revision of the rehabilitation risk assessment was undertaken in May 2025. Rehabilitation objectives, a final landform and rehabilitation plan and a Forward Program were submitted to the Resources Regulator Portal. The rehabilitation objectives were re-approved by the Resources Regulator in July 2025. Rehabilitation completion criteria were uploaded to the Resources Regulator portal in FY26 for assessment.

The Forward Program and RMP are available on the GM³ website at link.

Executing the rehabilitation work remains subject to the outcomes of investigations and studies as detailed in the Forward Program, as well as external and internal approval processes.

8.1.1.2 Rehabilitation Activities – FY25

Remediation of the O'Briens Gap switchyard was completed in FY20. An ESF2 form was submitted to the Resources Regulator in FY23 and the site was inspected by the Resources Regulator in May 2024. A Notice of Satisfactory Rehabilitation was received from the Resources Regulator on 4 October 2024.

The relocation of the power line to facilitate the removal of the redundant O'Briens Drift infrastructure was completed in June 2025.

The rehabilitation cost estimate (RCE) for the Dendrobium operations was reviewed during the reporting period. No major changes to the existing security estimate were identified. The new template for the RCE, released by the Resources Regulator, will be used for the RCE review in FY26.

Following a site inspection with the Resources Regulator, an ESF2 form was submitted in May 2024 for an area of rehabilitation in Kembla Heights that was subject to subsidence in 2013. The ESF2 application was rejected in October 2024 as rehabilitation works were not to the satisfaction of the Secretary. Additional rehabilitation works were completed in FY25, including:

- removal of weed species;
- installation of new fencing to reduce the impact of feral deer;
- planting of 36 local natives' tube stock; and
- removal of dumped rubbish.

The weed removal and tree planting undertaken are shown in Plate 5.

Plate 5: Dendrobium tunnel subsidence site following weed removal and tree planting

A Rehabilitation Completion on a Mining Lease Form will be submitted once rehabilitation has been assessed to meet the rehabilitation completion criteria.

An Annual Rehabilitation Report is required to be submitted to the Resources Regulator in accordance with Clauses 9 and 13 of Schedule 8A of the *Mining Regulation 2016*. A copy of this report is provided as Appendix 8 and is available on the GM³ website.

8.1.1.3 Targeted Assessment Program (TAP) – Surface and Groundwater

A Groundwater and Surface Water TAP was conducted at Dendrobium Mine on 12 November 2024. The recommendations of the TAP and actions taken are outlined in Table 32.

Table 32: Recommendations from Groundwater and Surface Water TAP

Recommendation	Action
Review and update the Rehabilitation Risk Assessment to ensure it covers risks and uncertainty (or knowledge gaps) outlined in this letter. The range of controls nominated for risk should be expanded beyond high level references to	Rehabilitation Risk Assessment was updated in FY25 and included in revised RMP.

management plans or assessments undertaken. As part of this review, all risk controls that require follow-up assessments or actions should be clearly outlined and assigned to a person (or position) and timeframes nominated within the Rehabilitation Risk Assessment to ensure follow up is monitored.	
Provide information on monitoring programs (type, frequency) that are currently undertaken for determining if geochemical issues develop with groundwater/surface water quality. It is understood these are associated with ground water monitoring. The groundwater monitoring program should be nominated as a control in the Rehabilitation Risk Assessment.	Water Management Plan was updated in FY25.
Undertake an assessment of the final landform proposed for the Dendrobium pit-top, Kemira Valley and Cordeaux pit-top areas to determine conceptual surface water management at closure. The location of surface water management structures needs to be identified and their conceptual design determined by a suitable hydrology model. The resulting conceptual final landform and location of the surface water management structures need to be submitted to the Regulator as an updated Final Landform and Rehabilitation Plan. It is the Regulator's expectation that this assessment be programmed to occur over the next 12 months.	Review undertaken by SLR Consulting. Findings of review incorporated into RMP.
Update the RMP to include information on the programs specified above.	RMP has been updated.
Ensure that proposed further studies identified in the Rehabilitation Risk Assessment and RMP are captured in the "Rehabilitation research and trials" table within future submissions of the Dendrobium Forward Program.	Information will be provided in Forward Work Program when submitted.

8.1.1.4 Exploration

The return of drill sites to useable land following drilling is a highly visible part of GM³'s commitment to sound environmental exploration practices and sustainable

development of coal resources. It is essential that rehabilitation is undertaken so that areas disturbed by exploration activities are returned to a condition that is safe and stable. The final condition should be as good or better than as it existed prior to exploration activities.

To achieve this outcome, rehabilitation planning and practices are integrated throughout all phases of an exploration program. It is a mandatory requirement for rehabilitation of the site to occur as soon as reasonably practicable following the completion of exploration activities. At the cessation of drilling, exploration site rehabilitation takes place progressively. Across Dendrobium mining and exploration leases, rehabilitation of exploration drilling sites typically involves activities such as:

- confirming the borehole has been sealed;
- removing all equipment, rubbish and fencing off-site;
- cutting the casing collar to below surface where monitoring equipment is not installed;
- the removal of any added crushed sandstone used to build up the drilling pad;
- site and access track profiling where required;
- brush-matting to encourage vegetative restoration along the drilling pad and access tracks; and
- documenting evidence of rehabilitation activities.

Disturbed areas requiring rehabilitation on a standard exploration borehole are typically approved as 40 x 40 m drilling pads. This may have slight variations to account for drill pad constructions (typically less than 40 x 40 m) and to account for access tracks if required.

Rehabilitation activities are guided by the Review of Environmental Factors (REF) documentation prepared for each exploration approval, mandatory requirements in the Exploration Codes of Practice, conditions stipulated in exploration/activity approvals and rehabilitation objectives and completion criteria that are developed for each exploration activity approval.

Rehabilitation of bushland is monitored for success over several years. Some exploration approvals granted by WaterNSW are conditional on Ecological Restoration Plans (ERPs) being developed, that follow the guidelines of the National Standards for the Practice of Ecological Restoration in Australia. Over a proposed five (5) year monitoring term, sites are visited annually to check the progress of ecological recovery towards long term stability. Exploration sites approved under Survey 17 (listed in Table 13) are part of this ERP monitoring program.

Some sites have groundwater monitoring instrumentation installed, with infrastructure (usually a standpipe) remaining at the surface. These sites are largely rehabilitated, excluding areas required to maintain access to the instrumentation. These sites will be fully remediated at the completion of the monitoring program when instrumentation is no longer required.

Exploration rehabilitation across CCL 768 in FY25 was primarily focused on the rehabilitation of sites drilled in late FY24 and throughout FY25. Additionally, there were some instrumentation terminations and final surface remediations of sites no longer requiring monitoring. The rehabilitation status of applicable boreholes is captured in Table 33.

Table 33: Rehabilitation Status of completed FY25 Boreholes

Hole Name	Alternative Name	Approval Title	Drill End Date	Rehabilitation Status
S2545A	GW21-02A	CCL 768	19/02/2024	Site rehabilitation completed, instrumentation remains on site. Track partially open for survey access.
S2655	DE-A1-05	AUTH 143	04/07/2023	Site rehabilitation completed, instrumentation remains on site. Track open for access.
S2655A	DE-A1-05A1	AUTH 143	08/08/2023	Site rehabilitation completed, instrumentation remains on site. Track open for access.
S2656	DE-A1-05A	AUTH 143	24/08/2023	Inspected March 2025. Site rehabilitation completed, instrumentation remains on site.
S2656A	DE-A1-05A2	AUTH 143	28/09/2023	Inspected March 2025. Site rehabilitation completed, instrumentation remains on site.
S2658	DE-A1-02	AUTH 143	03/08/2023	Instrumented borehole on site – rehabilitation on hold as site will be re-visited for post-mining drilling. Access track to remain open for ongoing monitoring.
S2658A	DE-A1-02A	AUTH 143	21/08/2023	Instrumented borehole on site – rehabilitation on hold as site will be re-visited for post-mining drilling. Access track to remain open for ongoing monitoring.
S2658B	DE-A1-02B	AUTH 143	31/08/2023	Instrumented borehole on site – rehabilitation on hold as site will be re-visited for post-mining drilling. Access track to remain open for ongoing monitoring.
S2659	DE-A1-01	AUTH 143	20/10/2023	Inspected March 2025. Site rehabilitation completed, instrumentation remains on site.
S2659A	DE-A1-01A	AUTH 143	26/03/2024	Inspected March 2025. Site rehabilitation completed, instrumentation remains on site.
S2659B	DE-A1-01B	AUTH 143	26/03/2024	Inspected March 2025. Site rehabilitation completed, instrumentation remains on site.

S2670	DE-A1-03	AUTH 143	24/06/2024	Site rehabilitated November 2024. Instrumentation remains on site, with access tracks remaining open for ongoing monitoring and sampling.
S2670A	DE-A1-03A	AUTH 143	24/07/2024	Site rehabilitated November 2024. Instrumentation remains on site, with access tracks remaining open for ongoing monitoring and sampling.
S2670B	DE-A1-03B	AUTH 143	17/10/2024	Site rehabilitated November 2024. Instrumentation remains on site, with access tracks left open for ongoing monitoring and sampling.
S2676	DE-A1-04	AUTH 143	29/08/2024	Instrumentation remains on site, with access tracks left open for ongoing monitoring and sampling. Site has been left open presently with intentions to return for future drilling.
S2676A	DE-A1-04A	AUTH 143	23/09/2024	Instrumentation remains on site, with access tracks left open for ongoing monitoring and sampling. Site has been left open presently with intentions to return for future drilling.
S2676B	DE-A1-04B	AUTH 143	24/09/2024	Instrumentation remains on site, with access tracks left open for ongoing monitoring and sampling. Site has been left open presently with intentions to return for future drilling.
S2676C	DE-A1-04C	AUTH 143	03/10/2024	Instrumentation remains on site, with access tracks left open for ongoing monitoring and sampling. Site has been left open presently with intentions to return for future drilling.
S2681	D-A3C-S17-26	CCL 768	17/12/2024	Site cleared of all equipment. All surface sandstone applied on the drilling pad has been removed. Instrumentation has been installed. Site rehabilitation is scheduled. Access track will be left open for ongoing monitoring and sampling.

S2682	D-A3C-S17-28	CCL 768	07/03/2025	Site cleared of all equipment. Site rehabilitation scheduled. Access track will be left open for ongoing monitoring and sampling.
S2682A	D-A3C-S17-28A	CCL 768	16/04/2025	Site cleared of all equipment. Site rehabilitation scheduled. Access track will be left open for ongoing monitoring and sampling.
S2685	D-A3C-S17-27	CCL 768	20/05/2025	Site rehabilitation in progress, instrumentation installation in progress.
S2654A	D-A3C-S17-33A	CCL 768	26/06/2025	Grouting of borehole in progress, site rehabilitation to follow.
S2688	D-A3C-S17-30	CCL 768	Drilling in progress	Rehabilitation to follow when drill rig demobilises from site.
S1844	DC Dendrobium DDH 76	AUTH 143	14/08/2006	Piezometer was terminated June 2025, and all surface infrastructure removed. Site is now fully remediated.
S2514 and S2514A	D-A3C-S17-20	CCL 768	13/12/2001	Piezometers were terminated and casing removed on February 2025. A post-mining borehole is planned to be drilled on this site in FY26, so final surface remediation is outstanding on this site.
S2211	D-A3c-14-3	AUTH 143	15/08/2013	Piezometer was terminated December 2024, and all surface infrastructure removed. Site is now fully remediated.

8.1.1.5 Subsidence

Surface Infrastructure

ICHPL continues to engage with TransGrid to safely manage the 330 kV Transmission Tower assets which are located in DA3. These towers are influenced by mining induced subsidence movements. In consultation with ICHPL, TransGrid undertook a comprehensive assessment of mitigation measures required for LW22, LW21A and LW23, which was completed in FY23.

During the reporting period the required mitigation works were implemented at Towers 19, 20 and 21. Vertical subsidence has developed at Tower 20 now that LW22 has mined beneath the tower. For the remaining towers, only low level incremental vertical movements have been measured, similar to the order of survey accuracy. All towers within the active mining area are routinely monitored by ICHPL throughout the active subsidence period in accordance with the management plan.

Natural Features

Subsidence impacts associated with underground mining operations, predominantly soil cracking and rock fracturing, were monitored and reported as they were identified. During the reporting period three (3) soil cracks identified on vehicle access tracks (Fire Road 6C and smaller unnamed trails) required active remediation following rainfall events. These cracks were filled and compacted. Monitoring at the sites is ongoing. Cracks identified in bushland were monitored to verify they remediated naturally to avoid additional ground and vegetation disturbance. Where there is a potential safety risk near these sites, signage and caution tape is put in place. A postmining inspection of all surface cracks will be undertaken at completion of LW22, with details including any corrective actions included in the EoP Report.

The WC21 and Donalds Castle Creek Rehabilitation Plan was approved by the Department following extensive consultation with various agencies. The trial rehabilitation program was undertaken in FY23 with drilling and grouting at Pool 24 and 25 in WC21. Post-grouting monitoring of pool water levels and recession was undertaken in FY23 and continued in FY24 due to low rainfall totals. A specialist report looking at the results of the rehabilitation trial was prepared, with data available at the end of FY24, and report finalised in July 2024. The report determined there was no substantive improvement in the water-holding capacity of WC21 Pools 24 and 25 as a result of grouting.

ICHPL is currently in consultation with WaterNSW regarding alternate contingency measures to account for impacts at WC21.

8.1.1.6 Rehabilitation monitoring

Monitoring was undertaken at the rehabilitation site in Kembla Heights that was subject to subsidence in 2013 (refer to Section 8.1.1.2). The monitoring commenced following the planting of local natives in April 2025 and includes regular checks of plant health, weeds and the protective barriers against grazing from fauna.

Monitoring was undertaken at the Ventilation Shaft 2/3 site where an area was cleared for the construction of gas drainage infrastructure. Improved erosion and sediment controls were implemented, including hydromulching of the disturbed area with native grasses and the use of a soil binder to stabilise the disturbance to allow for vegetation growth. Regular checks were undertaken during the monthly site inspections.

Subsidence remediation monitoring is undertaken when travelling along tracks where remediation activities have occurred. A post-mining inspection of all sites is completed as part of the EoP Report.

8.1.2 Cordeaux Colliery

No rehabilitation was undertaken at the Cordeaux Colliery Pit Top site during the reporting period.

Cordeaux is to remain on care and maintenance in the immediate future, until longer-term options can be fully developed and approved.

8.2 Biodiversity Offsets

No new biodiversity offsets were sourced over the reporting period. Details of offset properties previously purchased and offset strategies developed are provided in previous Annual Reviews.

No offset credits were retired over the reporting period. Details of Biodiversity Credits previously purchased are provided in previous Annual Reviews.

9. COMMUNITY

ICHPL is committed to meaningful engagement with the communities surrounding Dendrobium Mine, recognising that strong relationships are essential to maintaining trust and supporting our operations. Engagement activities during the reporting period were guided by the Community and Stakeholder Engagement Management Plan (CSEMP), which establishes a structured, transparent and proactive approach to ICHPL's engagement. The CSEMP supports our operational objectives by helping to maintain our social licence to operate and outlines how we will:

- Proactively engage with relevant community and stakeholders.
- Provide clear, timely and relevant information.
- Provide community and stakeholders with a clear line of sight to ICHPL should they wish to discuss or raise any concerns.
- Record and manage community and stakeholder feedback, including enquiries, complaints, and grievances.
- Facilitate consultation with community and stakeholders.

Communities located closest to ICHPL surface infrastructure at Mount Kembla and Kembla Heights are prioritised, as well as those within the broader operational footprint including rail transportation routes. These areas experience the most direct interaction with ICHPL activities, and were the focus of ongoing communication and engagement efforts during the reporting period. The importance of engaging with the broader community across the region, who may have an interest in our operations or be indirectly affected by our activities is also recognised.

As at 30 June 2025, Dendrobium Mine directly employed approximately 650 people (ICHPL employs approximately 2,000 people across both Appin and Dendrobium Mines).

This section outlines our engagement activities, management of community complaints, and contributions through partnerships and the Community Enhancement Program.

9.1 Community Complaints

9.1.1 Dendrobium Mine

ICHPL operates a 24-hour Community Call Line (free call 1800 102 210) and a dedicated community email address (community@gm3.au) to enable community members to provide feedback or lodge complaints regarding any aspect of Dendrobium Mine's operations. These contact details are promoted through all community correspondence, the GM^3 website, and the online Community Portal (www.community.gm3.au).

All complaints received, regardless of the format, are acknowledged within 24 hours and are investigated by the Community Team in collaboration with relevant operational personnel. Complainants are kept informed throughout the process, including notification of investigation outcomes and any actions taken. Some complaints may require extended investigation and implementation of remedial measures, depending on their nature. All complaints are handled in accordance with ICHPL's Community Complaints Procedure.

A monthly complaint summary is published on the GM^3 website and provided to the Dendrobium Community Consultative Committee (DCCC), ICHPL management, and relevant government agencies as required.

During the FY25 reporting period, Dendrobium Mine received 18 complaints (as shown in Figure 34):

- Twelve (12) were related to noise (seven (7) associated with the Pit Top operations, and five (5) were related to rail noise along the KVRL).
- Four (4) were related to the environment/dust (e.g. excessive exhaust from trains, dust, spills on roads).
- Two (2) were related to traffic (e.g. curfew breaches, driver behaviour).

The total number of complaints received during FY25 decreased compared to FY24, in which 24 complaints were recorded. To support effective complaints management and reduce community impacts, the Community Team implemented the following strategies:

- Increased proactive communication with near neighbours, including expanding the distribution list to properties along Cordeaux Road and Stones Road.
- Utilised broader engagement tools, such as Facebook, to provide timely updates on operational activities including longwall moves and surface works. Community updates are now published on Facebook directly by GM[3] and the DCCC.
- Provided regular input into site operational meetings to support improved planning and implementation of mitigation measures.
- Continued participation in the Pit Top and Rail Noise Working Groups and attended weekly operations meetings to address and manage noise concerns.
- Enhanced internal awareness and training for operational teams on potential community impacts and key engagement priorities.
- Conducted targeted communications (i.e. letterbox drops and door-knocks) in areas likely to be affected by upcoming works or unplanned activities, providing early notice and contact information.

During FY25, three (3) complaints were received directly by external agencies (the Department and the EPA). One (1) complaint was in relation to horn noise at the Central Road rail crossing[21], and two (2) complaints were in relation to machinery noise at the Dendrobium Mine Pit Top[22]. Responses were provided to the regulatory agencies to provide to the resident. As these were not lodged through ICHPL internal channels, they were not managed under the ICHPL Community Complaints Procedure.

[21] This complaint was a continuation of a complaint from FY24.
[22] These complaints were from the same resident.

In response to the noise complaints relating to Pit Top machinery movements, the Department requested that ICHPL undertake a Noise Impact Assessment.[23]

One grievance continued to be managed throughout FY25.[24]

Details of complaints are provided in Appendix 3 and are available on the GM[3] website at link.

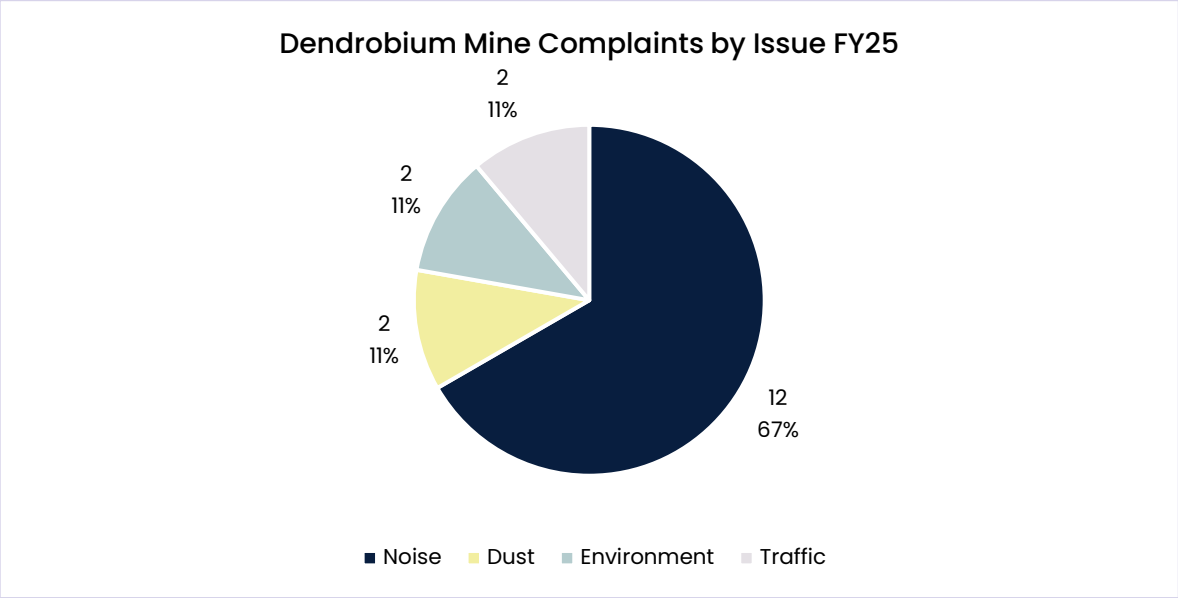


Figure 34: Dendrobium Community Complaints by Issue - FY25

Figure 35 shows the complaints received in FY25 by issue and month. The highest number of complaints was recorded in January 2025, primarily related to noise from the KVRL, including horn noise and squealing brakes.

[23] The assessment commenced in FY26 following discussions with the Department regarding methodology.
[24] Complaints received under the grievance are not counted against the number of complaints.

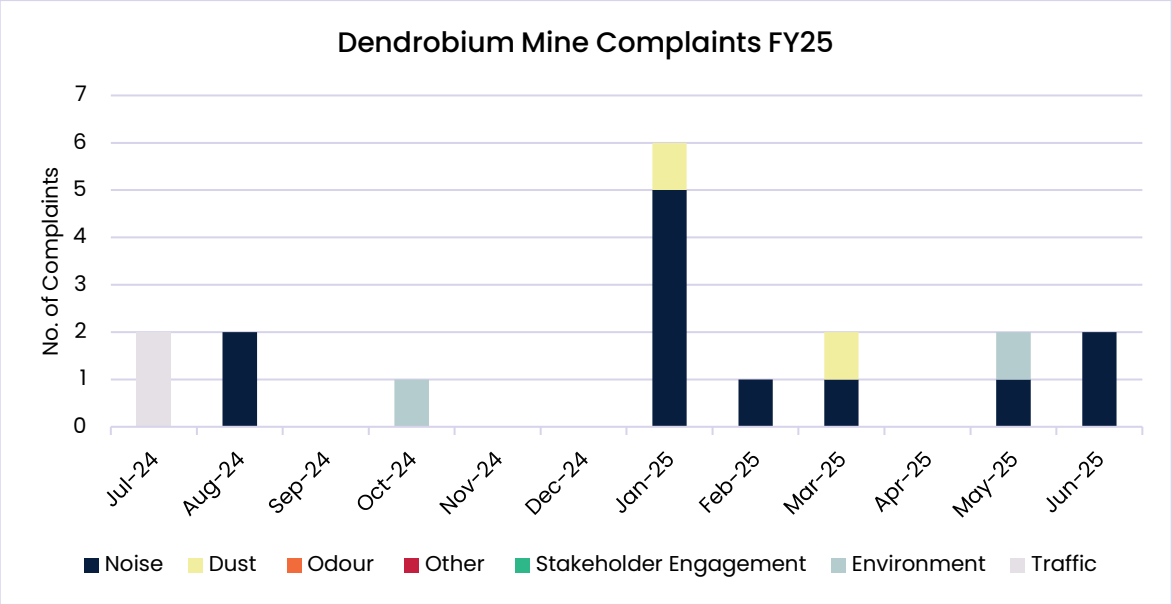


Figure 35: Dendrobium Community Complaints - FY25

The complaints received in the period FY18 to FY25 are shown in Figure 36. The effectiveness of the aforementioned strategies is reflected in the downward trend in community complaints over the past eight (8) years.

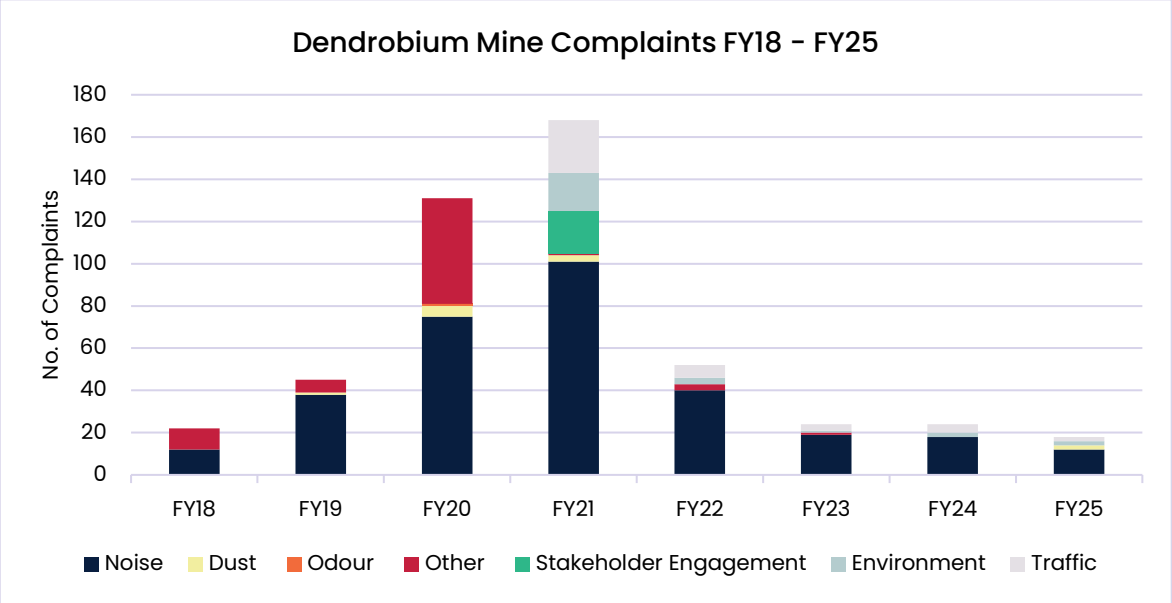


Figure 36: Dendrobium Community Complaints FY18 – FY25

9.1.2 Cordeaux Colliery

There were no community complaints for Cordeaux Colliery received during the reporting period.

9.2 Community Engagement

9.2.1 Dendrobium Mine

The Community Team leads regular community engagement activities in accordance with the CSEMP, with the support of operational and functional teams as appropriate. The CSEMP identifies key stakeholders and defines appropriate engagement and communication methods.

Key stakeholders include:

- local communities surrounding Dendrobium Mine activities and associated infrastructure;
- local government;
- state government agencies and authorities;
- employees and contractors;
- local Aboriginal Land Councils, Registered Aboriginal Parties, and the wider Aboriginal community;
- local businesses and industry;
- community partners and organisations (e.g. Mount Kembla Memorial Pathway Group); and
- broader regional community.

Due to the location of the Dendrobium Pit Top facilities and KVCLF, it is essential that frequent and effective communication occurs between ICHPL and residents of Mount Kembla and surrounding areas. Community engagement is provided in accordance with the CSEMP. Communication and engagement methods may include:

- direct landholder engagement (e.g. door knocks, one-on-one meetings, phone calls, email);
- community newsletters (via letter box drop and online);
- community perception surveys;
- in-person and virtual meetings;
- social and human rights impact assessments;
- media releases and other media engagement;
- GM³ website (www.gm3.au) and social media platforms (including Facebook);
- DCCC;
- community information sessions;

- online GM³ Community Portal (www.community.gm3.au) – including individual private landholder portals; and
- surveys and feedback forms.

ICHPL directly manages the following Dendrobium Mine stakeholder committees and working groups:

- DCCC; and
- Dendrobium Community Enhancement Committee (DCEC).

9.2.1.1 DCCC

The DCCC was established in January 2002 in accordance with Condition 9 of Schedule 8 of the Consent. The DCCC provides a mechanism to bring the community, environmental groups, local councils and ICHPL together to:

- Establish effective working relationships between the company, the community and other stakeholders in relation to Dendrobium Mine.
- Facilitate ongoing communication of information and discussion of mining operations and the environmental performance of the mine.
- Discuss community concerns and review the resolution of community complaints.
- Discuss communication of relevant information on the mine and its environmental performance to the wider community, including results of environmental monitoring, environmental management reports and the results of audits.
- Work together towards outcomes of benefit to the mine, immediate neighbours and the local and regional community.

The DCCC is nominally comprised of 12 members, including local community representatives, ICHPL personnel, and representatives from Wollongong City Council and Wollondilly Shire Council. It is chaired by an Independent Chairperson appointed by the Planning Secretary of the Department. Formal meetings are held every two (2) months. A new Chairperson was appointed by the Department in June 2024 following the retirement of the previous Chairperson.

In late FY24, two (2) members of the DCCC resigned, prompting the Chairperson to initiate a recruitment process. This involved public advertising, independent application review, and interviews with shortlisted candidates. Two (2) new members were appointed and joined the DCCC in August 2024.

A summary of information presented to the DCCC during the reporting period included, but is not limited to:

- longwall operations and development activities;
- management plan updates;
- approval processes and updates;
- environmental compliance and management;
- EoP Reports;
- community complaints and community programs; and
- general community issues.

Copies of minutes from the DCCC meetings are available on the GM³ website (link).

9.2.1.2 Dendrobium Community Enhancement Program (DCEP)

The DCEP was established in 2002 to facilitate funding for community projects with a vision to create a strong community and positive environment for the residents in the zone of influence of Dendrobium Mine. Since inception, ICHPL has contributed over $2 million to the fund and continues to contribute three (3) cents per saleable tonne of coal from the Dendrobium operations (adjusted for CPI).

The program is administered by the DCEC which is comprised of an independent Chairperson, community representatives and ICHPL representatives. The DCEC met regularly during the reporting period, with extraordinary meetings also convened to conduct business planning and review of operations.

Local projects and activities supported by the DCEP in FY25 included:

- Figtree Australian Football Club.
- Mount Kembla Pathway group.
- Figtree Anglican Church – Carols.
- Life Education.
- Mount Kembla Public School.
- Unanderra Hearts.
- Wests Illawarra Junior Hockey.
- Wollongong City Council – Step upgrade.
- Unanderra Swim Club.

Organisations in the local community are encouraged to apply for funding. Applications for funding under the DCEP are assessed against a range of selection criteria. The application form and selection criteria can be accessed by contacting community@gm3.au.

9.2.1.3 Kembla Visioning Project

The Kembla Visioning Project, commenced in 2023 by Wollongong City Council on behalf of GM[3] (previously South32), engaged residents of Mount Kembla and Kembla Heights to help shape a shared vision for the future of the area, with a focus on mine closure and rehabilitation. Over the course of 2024, residents, community groups and local businesses took part in workshops, surveys, and conversations to share what matters most to them as we plan for mine closure and rehabilitation. The feedback highlighted a strong commitment to protecting the local environment and ensuring quality rehabilitation, along with preserving the area's cultural and historical heritage. While there was some support for eco-friendly tourism, many also raised concerns about maintaining the community's unique character. Above all, people expressed the need for open communication and ongoing opportunities to be involved. These insights will play an important role in guiding future planning and ensuring decisions reflect the community's long-term vision. Further information and a copy of the final report is available here.

9.2.1.4 Other Partnerships

ICHPL has supported a range of community initiatives and undertaken community engagement in FY25. This includes, but is not limited to, the below partnerships:

- Clontarf Academy (in school, boys mentoring program).
- Ride Wollongong (local cycling event).
- Illawarra Women's Trauma Recovery Centre (victim advocacy program).
- Symbio Wildlife Park (Koala conservation and education app development).
- Deadly Science in school STEM program.
- Illawarra Community Foundation – Convoy.

9.2.2 Cordeaux

No specific community liaison was undertaken for Cordeaux Colliery during the reporting period, as the site is remotely located and surrounded by WaterNSW land.

10. INDEPENDENT AUDITS

10.1 Environmental Audits

During this reporting period the performance of Dendrobium Mine's Environmental Management System was assessed in a comprehensive series of audits as detailed in

Table 34. If non-conformances or non-compliances are identified during audits, corrective actions are raised and tracked via the action tracking system utilised by GM[3].

Table 34: Environmental Audits undertaken during the reporting period

Date	Type	Internal	External	Comments
Nov 2024	TAP – Surface and Groundwater		X	Refer to Section 8.1.1.3
Apr/May 2025	Annual ISO 14001 Audit		X	Surveillance audit. Undertaken by Bureau Veritas.
Oct 2024 – Jun 2025	2nd Line Assurance/ Quarterly Review		X	Review of internally reported GHG data.
Apr – Sep 2024[25]	Reasonable Assurance Audit		X	GHG data audit prior to NGER submission.
Ongoing	Management Plan Governance Reviews	X		Conducted internally as a part of ISO 14001 certification

10.1.1 Independent Environmental Audit

An IEA is undertaken every three (3) years for Dendrobium Mine in accordance with Condition 6 of Schedule 8 of the Consent. The most recent IEA was conducted in 2023. Progress with actions identified to address recommendations in the IEA Report is provided in Appendix 9.

The next triennial IEA is scheduled to be undertaken in 2026.

10.1.2 ISO 14001

The ICHPL Environmental Management System has been certified to ISO 14001 since May 2003. ISO 14001:2015 Certification for Dendrobium Mine and Cordeaux Colliery operations was maintained following a surveillance audit during April/May 2025 by Bureau Veritas. The auditing process requires demonstration of adequacy of systems to manage environmental aspects and impacts related to site activities. The systems audited include legal compliance, document control, records, corrective action, monitoring and control, communication and management of risks. No non-conformances were identified. The one (1) non-conformance identified in FY24 was closed.

[25] Assurance of FY25 data commenced in July 2025.

10.1.3 Governance Reviews

A Governance Review process is in place as part of the ISO 14001 certification. This process involves reviewing relevant environmental management plans in accordance with the schedule and incorporates both a desktop review and in-field verification. The following internal Governance Reviews were conducted for Dendrobium Mine and Cordeaux Colliery during the reporting period:

- Cordeaux Colliery Pollution Incident Response Management Plan (EPL 611).
- Dendrobium Coal Preparation Plant Environmental Management Plan.
- Dendrobium Mine Air Quality and Greenhouse Gas Management Plan.
- Dendrobium Mine Bushfire Management Plan.
- Dendrobium Mine Environmental Management Strategy.
- Dendrobium Mine Noise Management Plan.
- Dendrobium Mine Pollution Incident Response Management Plan (EPL 3241).
- Dendrobium Mine Waste Management Plan.
- Dendrobium Mine Water Management Plan.
- Environment Management Manual.
- Internal Audit against the ISO 14001 Standard.

The majority of corrective actions raised from these reviews were administrative. Corrective actions and opportunities for improvement were raised in the action tracking system utilised by ICHPL and closed out as required. Changes required to the respective management plan as a result of the Governance Review are recorded in the Management Plan Review Log, for incorporation into the relevant management plan during the next scheduled review.

10.1.4 2nd Line Assurance - GHG

Anthesis undertook 2nd line assurance for internally reported GHG data during FY25. The review covered the GHG master workbook, ventilation shaft fugitive emissions, and emission factors checks.

10.1.5 Limited/Reasonable Assurance Audit - GHG

KPMG undertook a reasonable assurance audit for National Greenhouse and Energy Reporting (NGER) data in FY25.[26] The audit of the FY25 data commenced in July 2025 and is expected to be completed in October 2025.

10.1.6 Cumulative Impact Assessment

In July 2024, ICHPL received a letter from the Department requiring the submission of an independently prepared cumulative impact assessment of mining activities undertaken to date under the development consent. The purpose of the assessment is to provide clarification as to whether mining-related impacts at Dendrobium Mine remain generally in accordance with those approved by the consent referencing concerns regarding:

- Extent of mining related impacts observed within Area 3.
- Significance and extent of impacts on watercourses, swamps and threatened species.
- Adequacy of monitoring and lack of evidence of effective remediation.

A preferred consultant was nominated and endorsed by the Department and EMM Consulting has been engaged to undertake the assessment. EMM Consulting has been reviewing the available information, completed a field trip to review subsidence impacts and consulted with regulatory agencies. The report is due to be completed in FY26.

10.2 Environmental Risk Register

Environmental risks associated with the site operations are recorded in the Environmental Aspects and Impacts Register. The Environmental Aspects and Impacts Register is reviewed regularly and is an input into the Environmental Improvement Plan.

[26] EY will be conducting limited/reasonable assurance in FY26.

11. INCIDENTS, NON-COMPLIANCES AND EXCEEDANCES DURING THE REPORTING PERIOD

11.1 Site Compliance – Dendrobium

During the reporting period, Dendrobium Mine was generally compliant with legislation and approvals as listed in Section 3. Non-compliances and exceedances of criteria recorded during the reporting period are listed in Table 35 and Table 36 respectively. It is noted that an exceedance of criteria is not necessarily classified as a non-compliance. Non-compliance with legislation has also been included in this section.

There were no regulatory actions in the reporting period (refer to Table 37).

The Dendrobium Mine Compliance Report, which reports compliance against the conditions in the Consent, is attached as Appendix 2.

Table 35: Non-compliances during the reporting period

NC1	
Non-compliance	The $L_{A1,1\ min}$ noise impact assessment criterion was exceeded at R6a.
Date	27 February 2025.
Details of non-compliance	An exceedance of the $L_{A1,1\ min}$ noise impact assessment criterion was recorded during quarterly noise monitoring in the night-time period at R6a on 27 February 2025. A result of 60 dBA was recorded, which is a 13 dBA exceedance against the criteria of 47 dBA. This is a non-compliance with Condition 1 of Schedule 4 of the Consent. The EPA and Department were notified.
Location	Receiver R6a, located adjacent to 374 Cordeaux Road.
Cause of non-compliance	The cause of the exceedance was engine noise from a supply loader in the period 12:29 to 12:30 am.
Actions taken to mitigate adverse effects of non-compliance	Mitigation at the time of monitoring is limited where the site is operating normally and in accordance with noise predictions in the environmental assessments.

Actions taken to prevent reoccurrence	The requirements for minimising noise in the period 10 pm to 6 am was reiterated with site personnel.

The recording of a non-compliance against Condition 1 of Schedule 4 of the Consent has also resulted in non-compliance with Condition 2A of Schedule 2 of the Consent.

Table 36: Exceedances of criteria during the reporting period

EX1	
Exceedance	Exceedances of the noise impact assessment criteria were recorded at R39a.
Date	14 August 2024 and 13 November 2024.
Details of exceedance	The representative noise data indicated exceedances of the $L_{Aeq,\ 15\ min}$ noise impact assessment criteria in Condition 1 of Schedule 4 of the Consent at R39a: • a result of 37 dBA was recorded in the night-time period (11.00 – 11.15 pm) on 14 August 2024, which is 2 dBA above the 35 dBA impact assessment criteria; and • a result of 37 dBA was recorded in the night-time period (11.15 – 11.30 pm) on 13 November 2024, which is 2 dBA above the 35 dBA impact assessment criteria. Note that for the determination of compliance, the NSW Industrial Noise Policy states in Section 11.1.3: *A development will be deemed to be in non-compliance with the noise consent or licence condition if the monitored noise level is more than 2dB above the statutory noise limit specified in the consent or licence condition.*
Location	Receiver R39a, located in the vicinity of the KVCLF.
Cause of exceedance	Adverse weather conditions influenced the results on both occasions. On 14 August 2024, there was a change in wind direction and a temperature inversion in comparison to daytime and evening measurements.

	On 13 November 2024, a wind was present from a south-west direction at elevation. This wind enhanced noise propagation from the source to the receiver during the night-time period.
Actions taken to mitigate adverse effects of non-compliance	Mitigation at the time of monitoring is limited where the site is operating normally and in accordance with noise predictions in the environmental assessments.
Actions taken to prevent reoccurrence	There were no specific actions identified as a result of the exceedances.

Table 37: Regulatory action during the reporting period

Regulatory Action	Detail
Official Caution	None issued.
Warning Letters	None issued.
Penalty Notices	None issued.
Enforceable Undertakings	None issued.
Prosecution Proceedings	None commenced.

An Advisory Letter was received from the EPA on 6 August 2024 as a result of the identification of a foam substance in American Creek as well as below stormwater discharge pipes leading from the site to American Creek. The foam was identified during a site inspection on 3 July 2024. A sample was collected by the EPA that, following analysis, identified the presence of surfactants.

The EPA noted that Dendrobium Coal could potentially be in contravention of Section 120 of the *Protection of the Environment Operations Act 1997* and issued the Advisory Letter in response to the discharge.

11.2 Site Compliance – Cordeaux

During the reporting period, Cordeaux Colliery was compliant with legislation and approvals as listed in Section 3.

12. ACTIVITIES PROPOSED IN THE NEXT REPORTING PERIOD

12.1 Dendrobium Mine

12.1.1 Mine Operations

On 20 December 2022, the Department approved the SMP for LW22 and LW23. During the next reporting period, longwall mining will continue in DA3C with LW22, which commenced on 11 August 2024 and is expected to be completed in December 2025. Development will continue in DA3C Gates, Corrimal Mains and Pioneer/Figtree Mains.

On 9 July 2025, the Department approved the SMP for LW21A, which is scheduled to start extraction in January 2026, with completion forecasted for early FY27.

In November 2024 ICHPL received SMP approval for a variation to LW23 which includes a reduction in width and a small increase in length to provide further setback from an Aboriginal heritage site of high archaeological significance.

ICHPL is currently preparing technical assessments to support an SMP application for LW24 to LW29 in DA3C. The application is expected to be submitted to the Department in FY26.

An application to modify the Development Consent (Mod 11) was submitted to the Department in June 2025. The application seeks approval for the extension of the Pit Top footprint for land management activities, demolition of the bulk warehouse and installation of a general purpose building, helicopter operations for mining support activities, transport of materials other than RoM coal on the KVRL and incorporation of Cordeaux Colliery operations into the Consent. Once deemed adequate by the Department, the application will be on public display for at least four (4) weeks.

12.1.2 DCPP

Various works will continue over the next reporting period, including further structural repairs, sump replacements, replacement of magnetic separators and static screens, further electrical equipment upgrades, installation of CO_2 ventilation and monitoring, guarding compliance, ongoing thickener upgrade, arc flash containment, re-sheeting, ladder repairs and replacements, conveyor pull cord safety compliance and upgrades to clean coal centrifuges.

12.1.3 Exploration

All prospecting activities for FY26 are approved under, or are in the process of being approved under, the CCL 768 mining title.

Planned drilling activities for FY26 include:

- Three (3) standard coal quality exploration boreholes. These holes (S2688, D-A3C-S17-29 and D-A3C-S17-32) fall within Survey 17 (approved under CCL 768).
- Five (5) coal quality exploration boreholes, with the additional purpose of defining geological sill boundaries. These holes (D-A6-21 through to -24, and D-A3C-5) fall within Survey 23 (approval application submitted under CCL 768).
- One (1) coal quality exploration borehole, with the additional purpose of geotechnical investigations for a potential shaft site. This hole (D-A6-26) falls within Survey 23 (approval application submitted under CCL 768).
- One (1) coal quality exploration borehole, with the additional purpose of hydrological investigation for the Dams Safety Committee (DSC) ahead of LW29. This hole (LW29DSC) falls within Survey 23 (approval application submitted under CCL 768).
- Two (2) non-coal hydrological investigation boreholes. D-GW24 is a pre-mining investigation hole that falls within Survey 23 (approval application submitted under CCL 768). S2514B is a fully cored post-mining investigation borehole that falls within Survey 17 (approved under CCL 768).
- One (1) surface to in-seam borehole (D-A6-27) that falls within Survey 23 (approval application submitted under CCL 768).

All proposed FY26 drilling is subject to change based on mine planning and business priorities.

Additionally, there is 2D seismic proposed for Dendrobium Mine which may be acquired in late FY26. There are currently twelve (12) 2D lines proposed, covering a total of >25 km. This seismic exploration remains subject to planning review and exploration approvals at this time.

The proposed location of exploration (and additional mining/approvals related) boreholes and seismic planned for FY26 are shown in Plan 12.

12.1.4 Construction Activities

The following projects will be progressed in the next reporting period:

- DA3C power upgrade - Endeavour Energy to replace the final circuit breaker to complete the project.
- Installation of new air compressors.
- Surface transformer and switchyard upgrades.
- Bulk Store equipment relocation.

- Portal road repairs.
- Construction of a laydown area at the KVCLF.
- Slope stability works on KVRL.

12.1.5 Environmental Management

12.1.5.1 Water Management

In FY26, it is planned to reinstate the Kemira Workings and Pump Station system to provide additional protection against potential turbid water sources. Considerable work was conducted along Kemira Mains during FY25 to support the roof with progress made to 10 cut-through. It is planned that during FY26 the final 400 m of roof support activities will be implemented to the injection point at 14 cut-through. Once this has occurred repair or replacement of the standpipe can be progressed so that mine water can be pumped into the historic Kemira workings.

12.1.5.2 Weed Management

On-going weed management will continue at KVCLF and KVRL. The focus in FY26 (pending suitable weather) will be on using an agricultural drone to spray Mysore Thorn and advance further into the thickets. This will supplement the ground-based progress that was made during FY25 with spraying and mulching occurring.

12.1.5.3 Catchment Surface Water Monitoring

Additional surface flow monitoring sites are proposed in catchment watercourses around the Dendrobium mining area.

12.1.5.4 Groundwater Monitoring

Additional swamp groundwater and soil moisture sites will be installed in the DA3C mining area.

12.1.5.5 Infrastructure Subsidence Mitigation Measures

Transmission towers located within the LW22 and LW21A area of subsidence influence will continue to be managed in FY26 using a similar approach to that employed for previous tower mitigation works, in consultation with TransGrid.

12.1.5.6 LJTF Habitat

Construction of LJTF ponds adjacent to six (6) catchment streams is planned to occur in FY26, with a WaterNSW activity approval granted in FY25. A contractor has been engaged for the project and steel tanks were delivered in June 2025.

12.1.5.7 Environmental Management System

Dendrobium Mine will continue to maintain certification against ISO 14001 in FY26. Environmental Management Plans will be updated and governance reviews undertaken as required.

12.1.6 Rehabilitation

An investigation will be undertaken into the rehabilitation of the Bradford Breaker flat in FY26 to inform future works in this area.

12.1.7 Community

ICHPL will continue engaging with the community in line with the CSEMP and will support local initiatives through the Community Investment Plan throughout FY26.

12.2 Cordeaux Colliery

During the next reporting period, Cordeaux Colliery operations will remain on care and maintenance.

The following activities are planned for FY26:

- Continued upgrade of the site's electrical supply. The upgrade aims to replace ageing infrastructure that is no longer fit for purpose and align the infrastructure with ongoing high voltage maintenance requirements.
- Installation of a standalone kiosk/HV switch room external to existing building.
- Installation of Gas Monitoring and Differential Pressure Monitoring on the three (3) vertical shafts being Personnel and Materials Shaft, BCW Shaft and Corrimal 3 Shaft.
- Replacement of the aging high voltage circuit breaker supplying Incomer No. 2 Transformer in the HV Switch Yard with a recloser.
- Repairs to damaged boundary fencing at Corrimal No. 3 Shaft site.

13. REFERENCES AND ASSOCIATED DOCUMENTS

13.1 References

- AGE (2024) Dendrobium Area 3C Monitoring Network Independent Review.
- Dendrobium Mine Development Consent DA 60-03-2001 (as modified).
- Environment Protection Licence 3241.
- Environment Protection Licence 611.
- HGEO, 2024. End of Panel Surface and Shallow Groundwater Assessment: Longwall 19A (No. D24262).
- ICHPL. Avon and Cordeaux Reservoirs Dams Safety NSW Notification Area Management, Closure and Contingency Plan.
- ICHPL, Air Quality Monitoring Procedure (IMCP0209).
- ICHPL. Cordeaux Colliery Environmental Management Plan (ICAMP0156).
- ICHPL. Dendrobium Mine Pit Top Yard Dust TARP (DENTARP0041).
- ICHPL. Drilling Cuttings, Muds and Water Disposal for Exploration Activities Procedure (IMCP0318).
- ICHPL. Swamp Impact, Monitoring, Management and Contingency Plan (Dendrobium Area 3A; and Dendrobium Area 3C).
- ICHPL. Watercourse Impact Monitoring, Management and Contingency Plan (Dendrobium Area 3A; and Dendrobium Area 3C).
- ICHPL, 2024. Dendrobium Area 3C Longwall 19A End of Panel Report.
- MSEC, 2024. End of Panel Subsidence Monitoring Review Report for Dendrobium Longwall 19A. MSEC1436.
- National Greenhouse and Energy Reporting (Measurement) Determination 2008 Section 3 Method 1 (as amended).
- Niche Environment and Heritage, 2024a. Dendrobium Area 3A Longwall 19A End of Panel Report. Aboriginal Cultural Heritage Assessment.
- Niche Environment and Heritage, 2024b. Dendrobium Terrestrial Ecology Monitoring Program Annual Report 2023.
- Niche Environment and Heritage, Dendrobium Area 3C Aboriginal Cultural Heritage Management Plan (Longwalls 22 and 23).
- NSW Department of Planning and Environment (2015). Annual Review Guideline, Post approval requirements for State Significant Developments, October 2015.
- Stantec (2024). Longwall 19A End of Panel Report Aquatic Flora and Fauna Review.

13.2 Acronyms used in Annual Review

Acronyms used in the Annual Review are provided in Table 38.

Table 38: Acronyms used in Annual Review

Acronym	Definition	Acronym	Definition
ACHA	Aboriginal Cultural Heritage Assessment	ILALC	Illawarra Local Aboriginal Land Council
ALS	Airborne Laser Scanning	ISO	International Standards Organisation
ANC	Administrative non-compliance	km	kilometre
ASRS	Australian Sustainability Reporting Standards	kt	kilotonnes
BACI	Before, After, Control, Impact	KVCLF	Kemira Valley Coal Loading Facility
BCS	Biodiversity, Conservation and Science Division	KVRL	Kemira Valley Rail Line
BCW	Bulk Coal Winder	KVT	Kemira Valley Tunnel
BGSS	Bulgo Sandstone	LDP	Licence Discharge Point
CCL	Consolidated Coal Lease	LJTF	Littlejohn's Tree Frog
CH_4	Methane	LW	Longwall
CO_2	Carbon dioxide	m	metre
CO_2-e	Carbon dioxide equivalent	MEG	Mining and Exploration Group
CPHR	Conservation Programs, Heritage and Regulation Division of DCCEEW	µg	microgram
CPI	Consumer Price Index	µS	microSiemen

CSEMP	Community and Stakeholder Engagement Management Plan	mg	milligram
CV	Calorific Value	ML	Mining Lease or megalitre
CWEA	Coal Wash Emplacement Area	Mt	Million tonnes
CY	Calendar Year – January to December	NATA	National Association of Testing Authorities in Australia
DA3A/B/C	Dendrobium Area 3A, 3B or 3C.	NGER	National Greenhouse and Energy Reporting
DCCC	Dendrobium Community Consultative Committee	NRAR	Natural Resources Access Regulator
DCCEEW	Department of Climate Change, Energy, the Environment and Water NSW	NSW	New South Wales
DCEC	Dendrobium Community Enhancement Committee	OPD	Operational Purpose Deduction
DCEP	Dendrobium Community Enhancement Program	PDCE	Post Drainage Capture Efficiency
DCPP	Dendrobium Coal Preparation Plant	PEF	Processed engineered fuel
DDG	Dust Deposition Gauge	PKCT	Port Kembla Coal Terminal
Department	Department of Housing, Planning and Infrastructure (DPHI) formerly: • Department of Planning and	PM_{10}	Particulate matter 10 microns

	Environment (DPE) formerly • Department of Planning, Industry and Environment (DPIE)		
DO	Dissolved Oxygen	RCE	Rehabilitation Cost Estimate
DNMS	Directional Noise Monitoring System	REF	Review of Environmental Factors
EA	Environmental Assessment	RNWG	Rail Noise Working Group
EC	Electrical Conductivity	ROC	Regional Operations Centre
EFT	ICHPL Environmental Field Team	RoM	Run of Mine
EIS	Environmental Impact Study	RTO	Regenerative Thermal Oxidiser
EoP	End of Panel	SBO	Strategic Biodiversity Offset
EPL	Environment Protection Licence	SDS	Safety Data Sheet
EP	Extraction Plan	SIM	Subscriber identity module
EPA	Environment Protection Authority	SIMMCP	Swamp Impact, Monitoring, Management and Contingency Plan
EQuIS	Environmental Monitoring Database	SMP	Subsidence Management Plan
ERP	Ecological Restoration Plan	SRRP	Swamp Rehabilitation Research Program
FY	Financial Year – July to June	STEM	Science, Technology, Engineering, and Mathematics
g	gram	SWL	Standing Water Level

GDP	Gas Drainage Plant	TARP	Trigger Action Response Plan
GEAR	Golden Energy and Resources	TAP	Targeted Assessment Program
GHG	Greenhouse Gas	TSP	Total Suspended Particulate
GM^3	Entity owned by GEAR and M Resources	TSR	Total Species Richness
GWTP	Grey Water Treatment Plant	TSS	Total Suspended Solids
HBSS	Hawkesbury Sandstone	WAL	Water Access Licence
HV	High Voltage	WCCPP	West Cliff Coal Preparation Plant
HVAS	High Volume Air Sampler	WTP	Water Treatment Plant
ICHPL	Illawarra Coal Holdings Pty Ltd	WIMMCP	Watercourse Impact, Monitoring, Management and Contingency Plan
IEA	Independent Environmental Audit		

13.3 Management Plans

The Management Plans required by the Dendrobium Mine Consent, EPL 3241 and EPL 611 and their status are provided in Table 39.

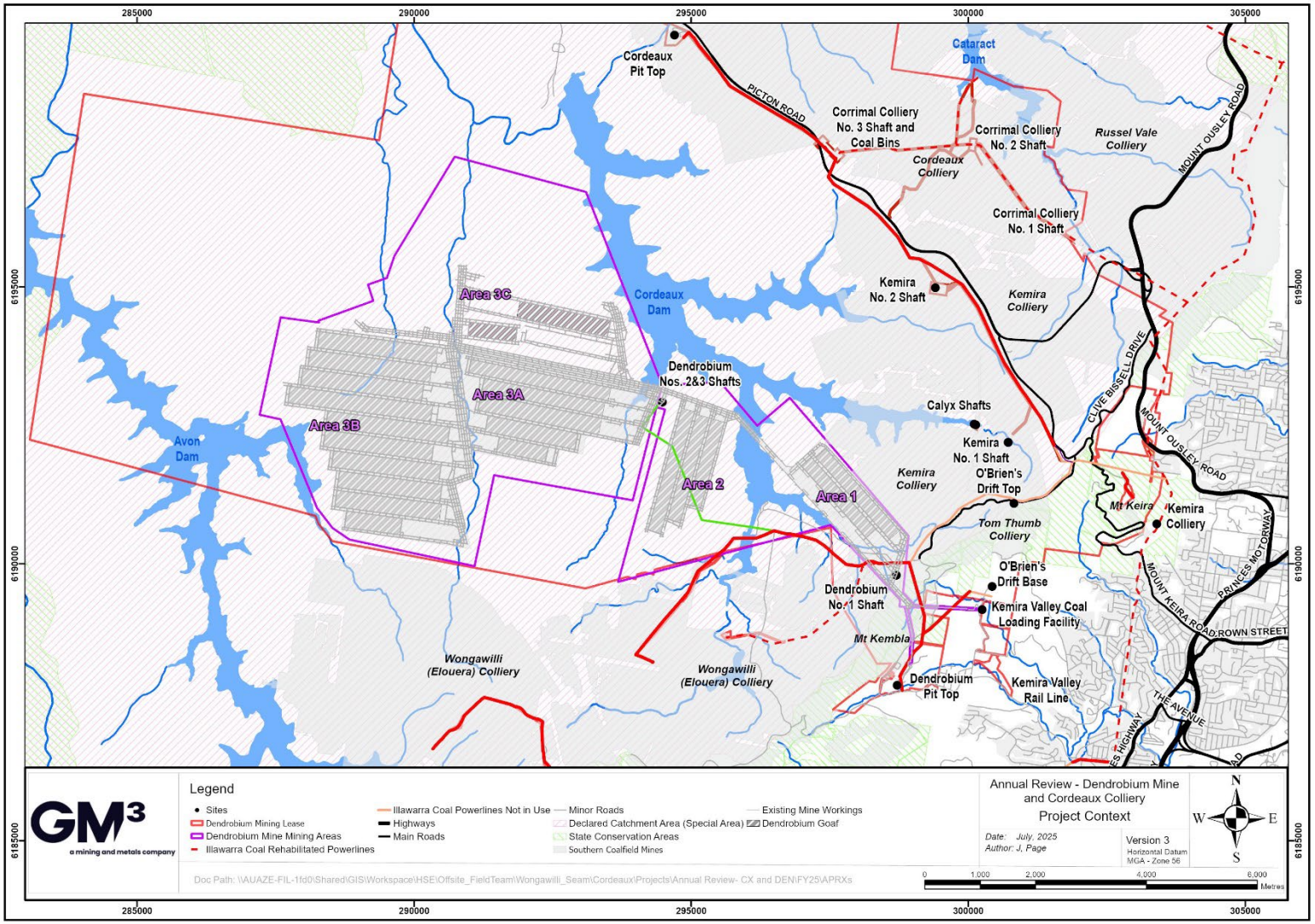
Table 39: Management Plans

Management Plan	Approved Date [27]	Next Review
Air Quality and Greenhouse Gas Management Plan	15/01/2025	20/12/2027
Bushfire Management Plan	12/06/2025	8/04/2028
Environmental Management Strategy	7/02/2025	11/12/2027
Lighting and Visual Amenity Management Plan	2/12/2024	2/12/2027
Noise Management Plan	5/06/2025	31/03/2028
Pollution Incident Response Management Plan EPL 3241	27/11/2024	27/11/2027
Pollution Incident Response Management Plan EPL 611	6/12/2024	6/12/2027
Rehabilitation Management Plan: Dendrobium Mine and Cordeaux Colliery	22/07/2025	22/07/2028
Traffic Management Plan	15/02/2025	14/01/2028
Waste Management Plan	5/12/2024	5/12/2027
Water Management Plan[28]	9/08/2023	4/08/2026

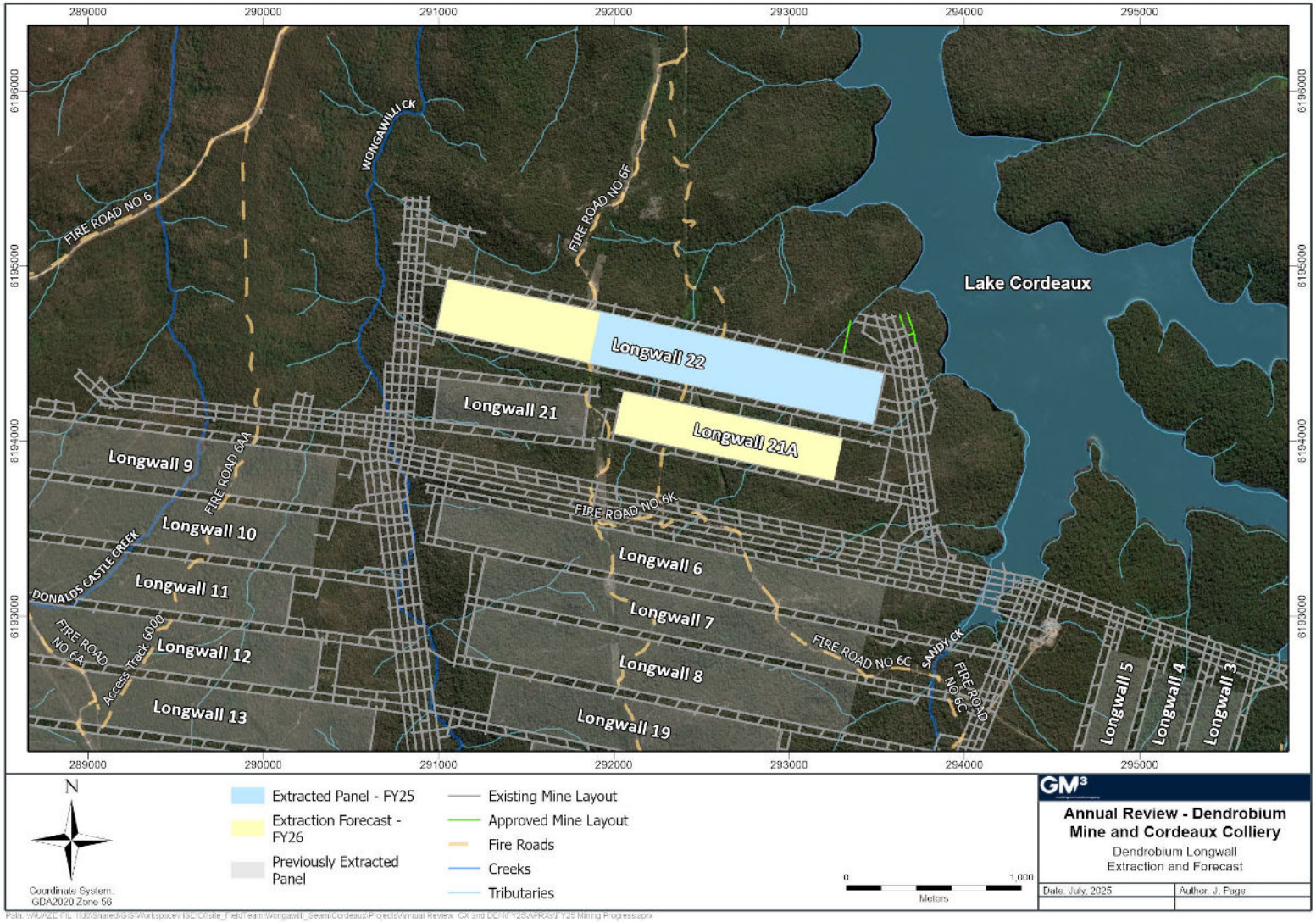
[27] Approval date is either the date approved by the Department (as applicable) or internally (where Department approval not required).
[28] A revised plan was submitted to the Department for approval on 16 June 2025.

14. PLANS

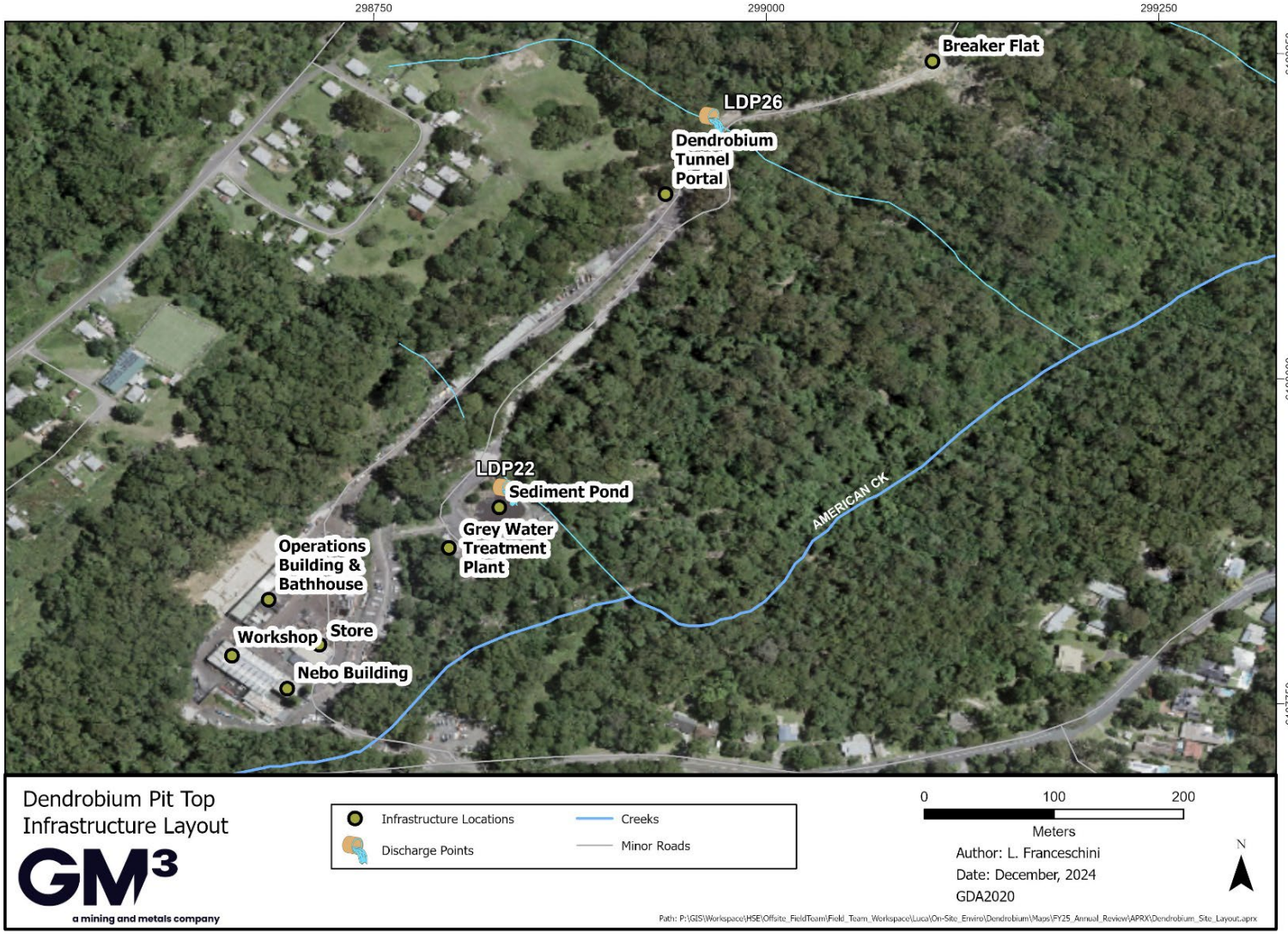
Plan 1: Location of Mining Domain



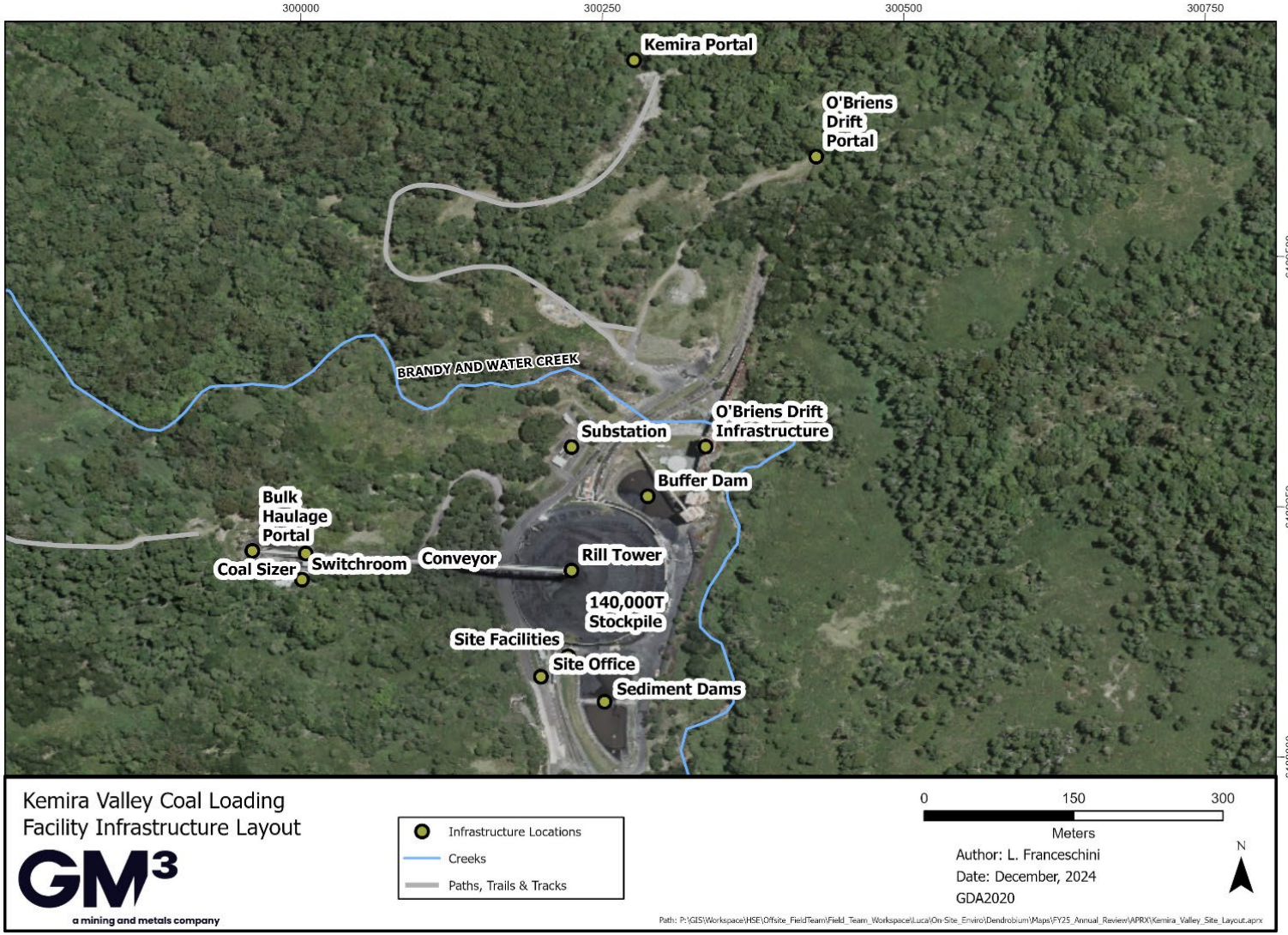
Plan 2: Longwall Status at end of FY25



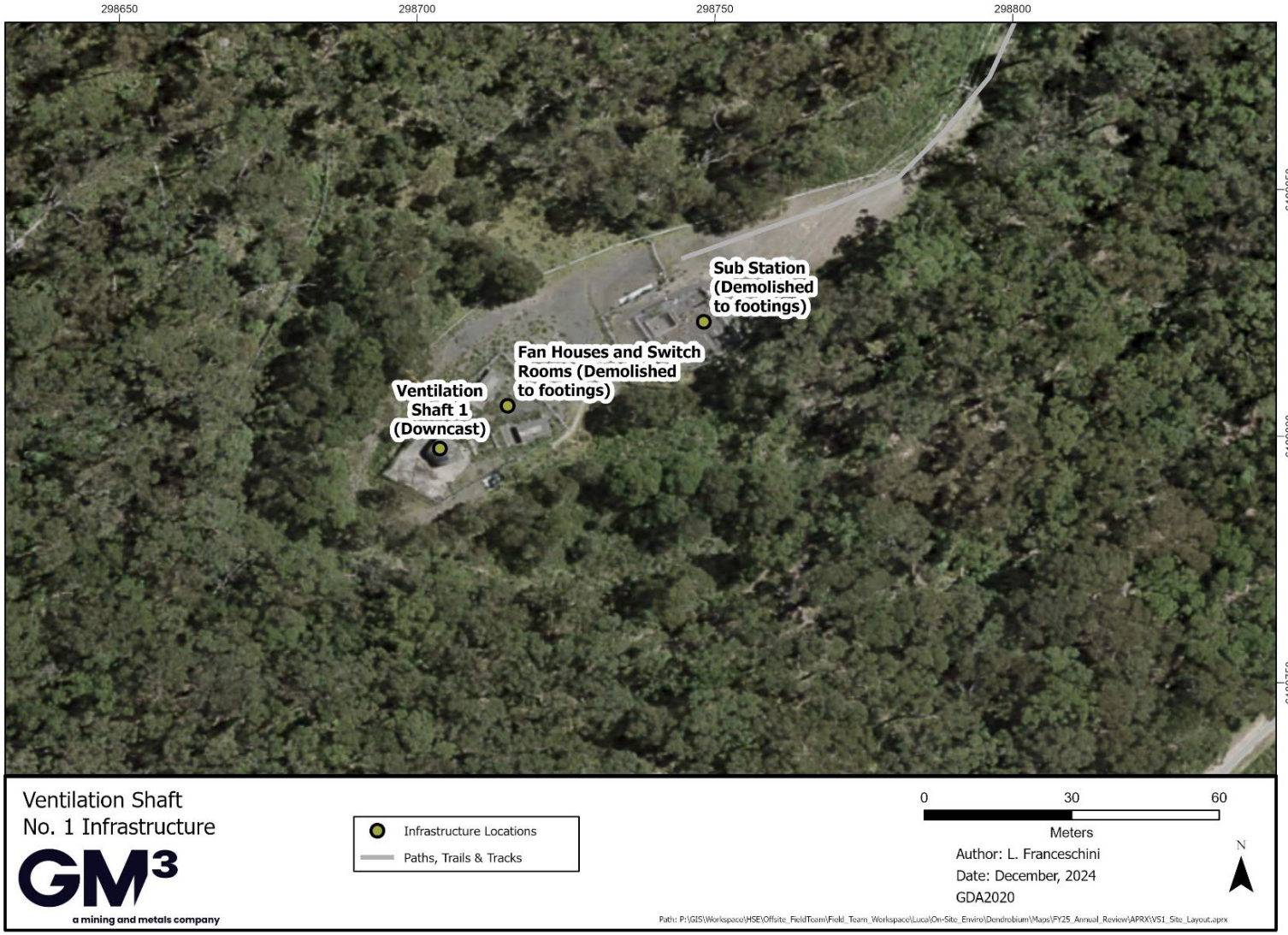
Plan 3: Site Layout - Dendrobium Mine Pit Top



Plan 4: Site Layout - Kemira Valley Coal Loading Facility

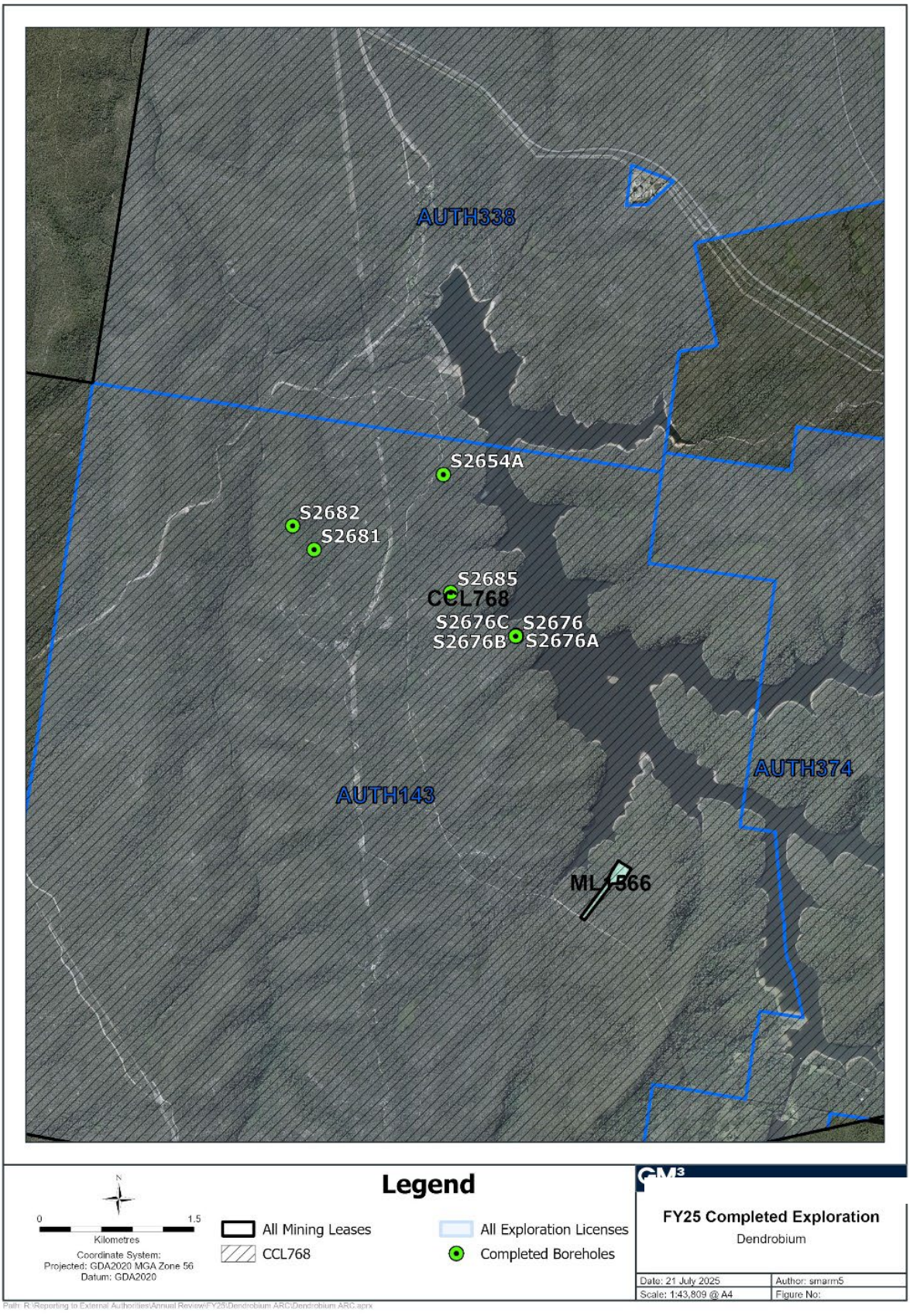


Plan 5: Site Layout - Ventilation Shaft 1

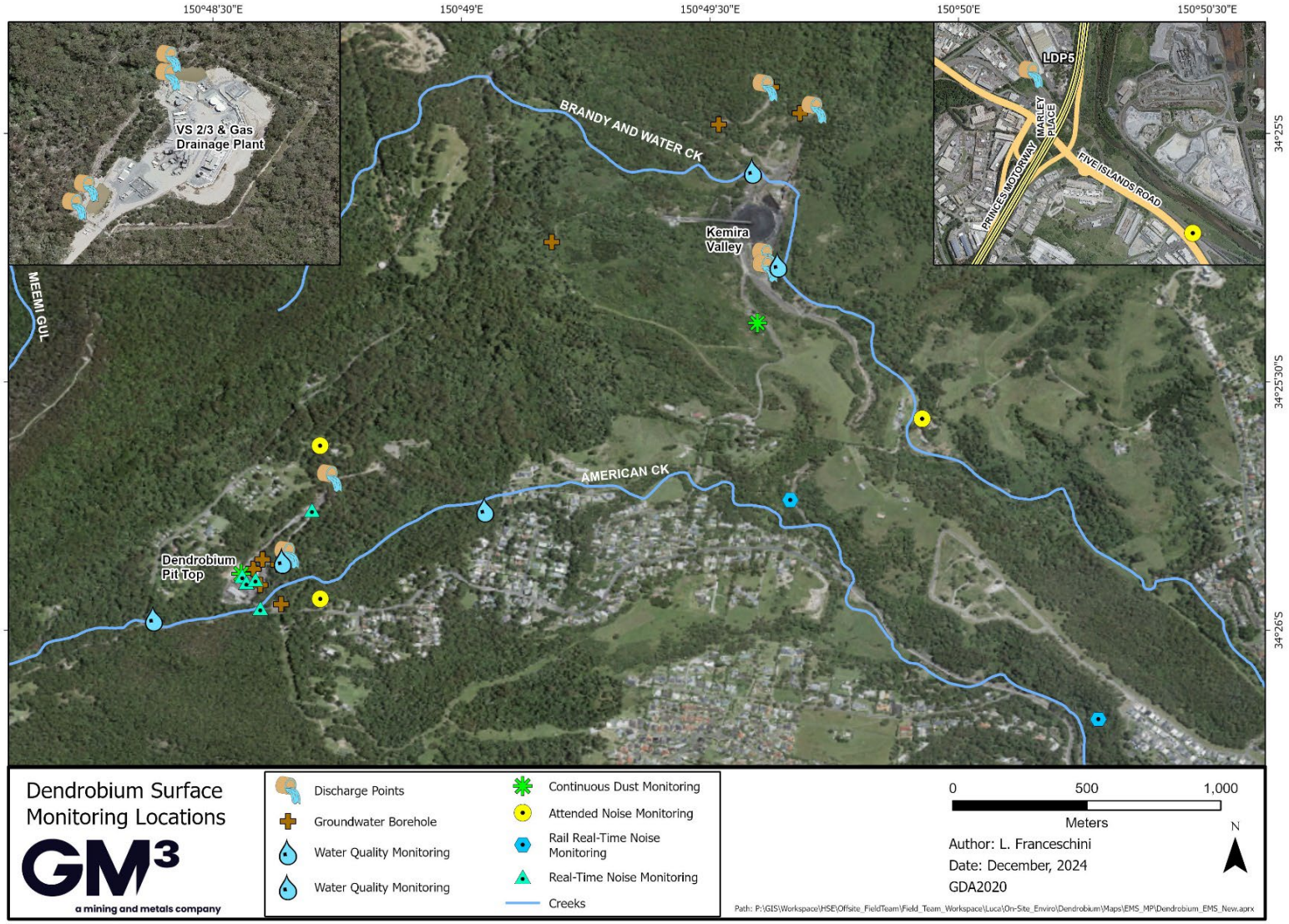


Plan 6: Site Layout - Ventilation Shafts 2 and 3 and Gas Management Infrastructure

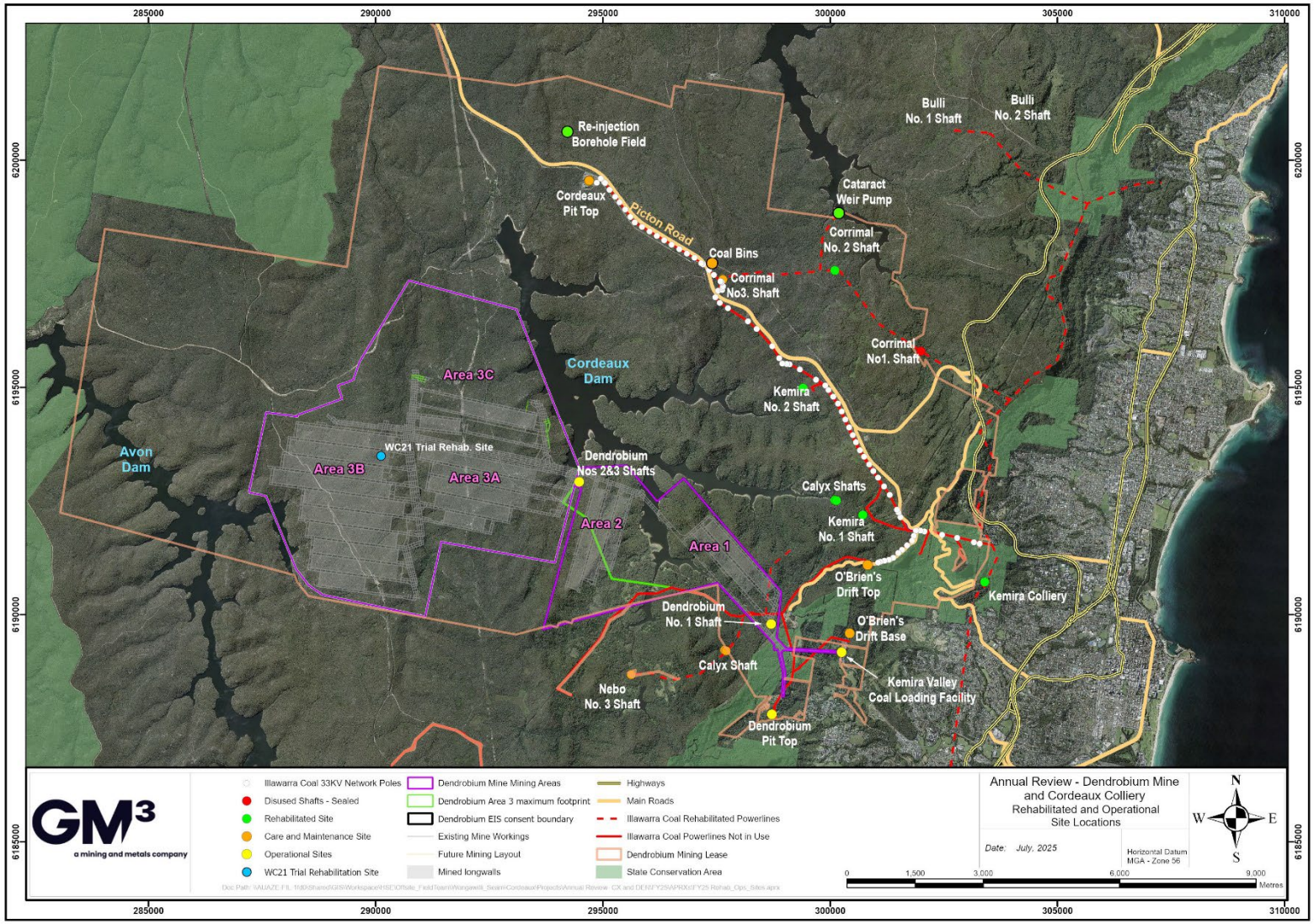
Plan 7: Exploration Activities - Dendrobium Mine - FY25



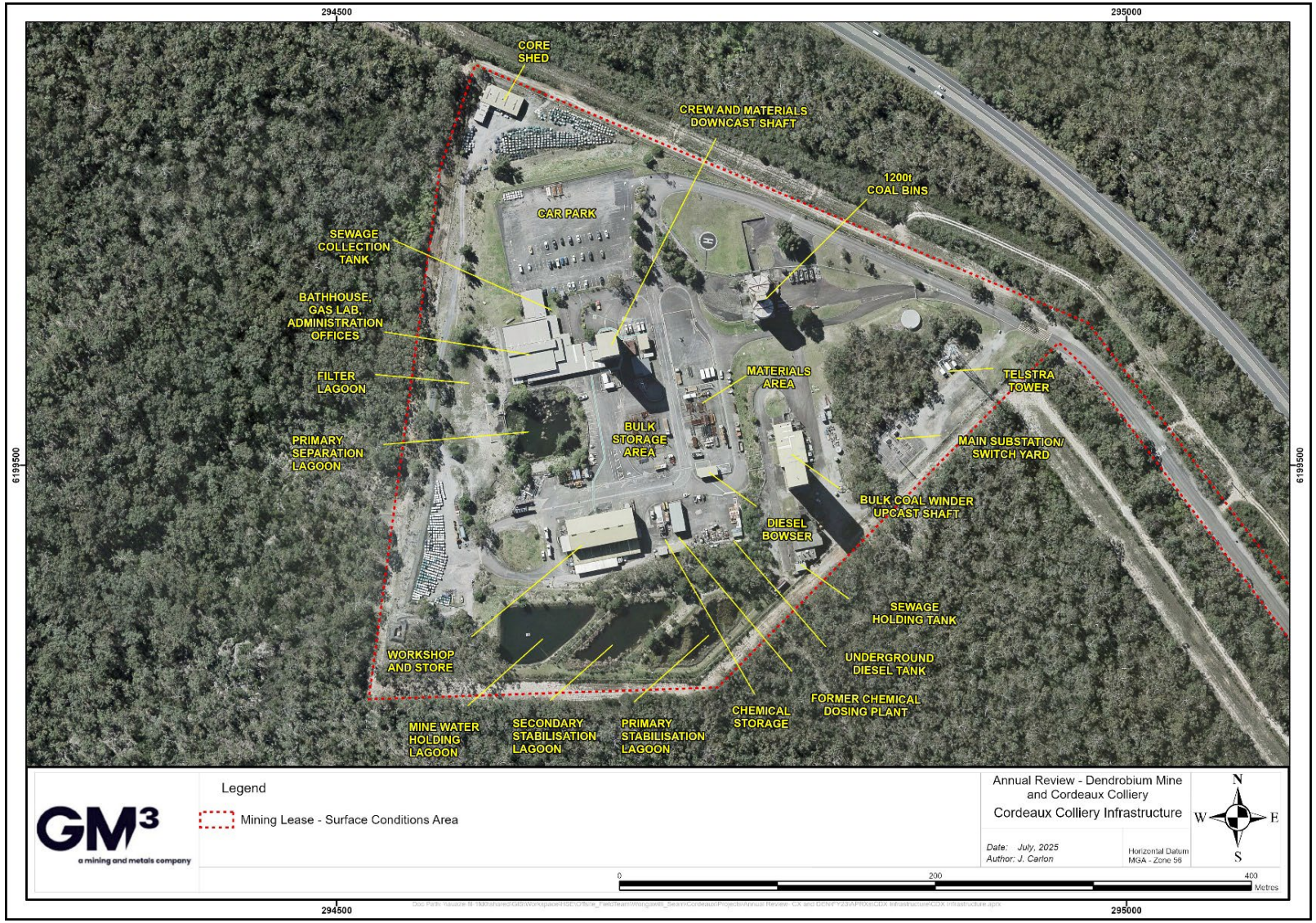
Plan 8: Monitoring Locations - Dendrobium Mine Pit Top



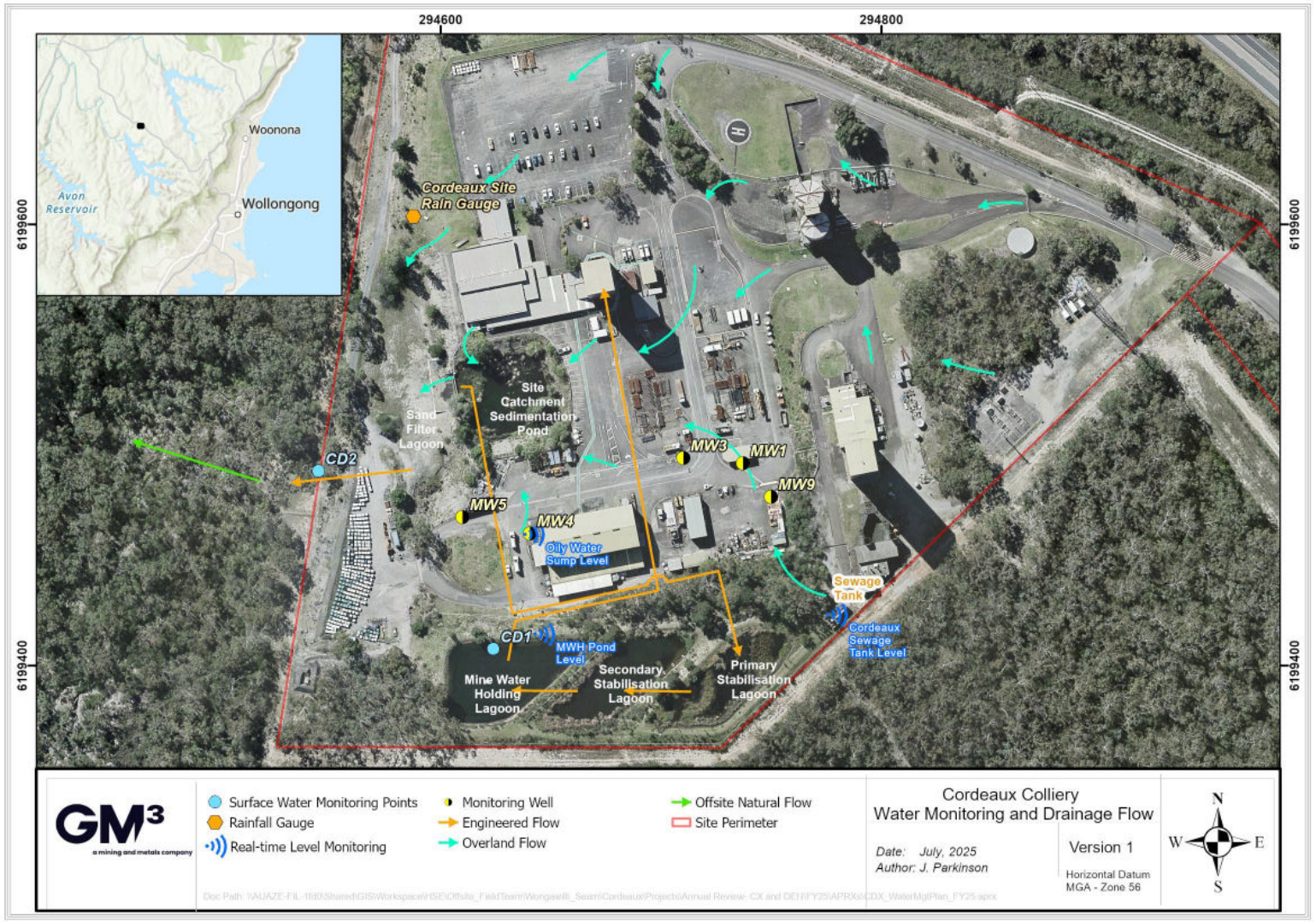
Plan 9: Operational and Rehabilitation Areas



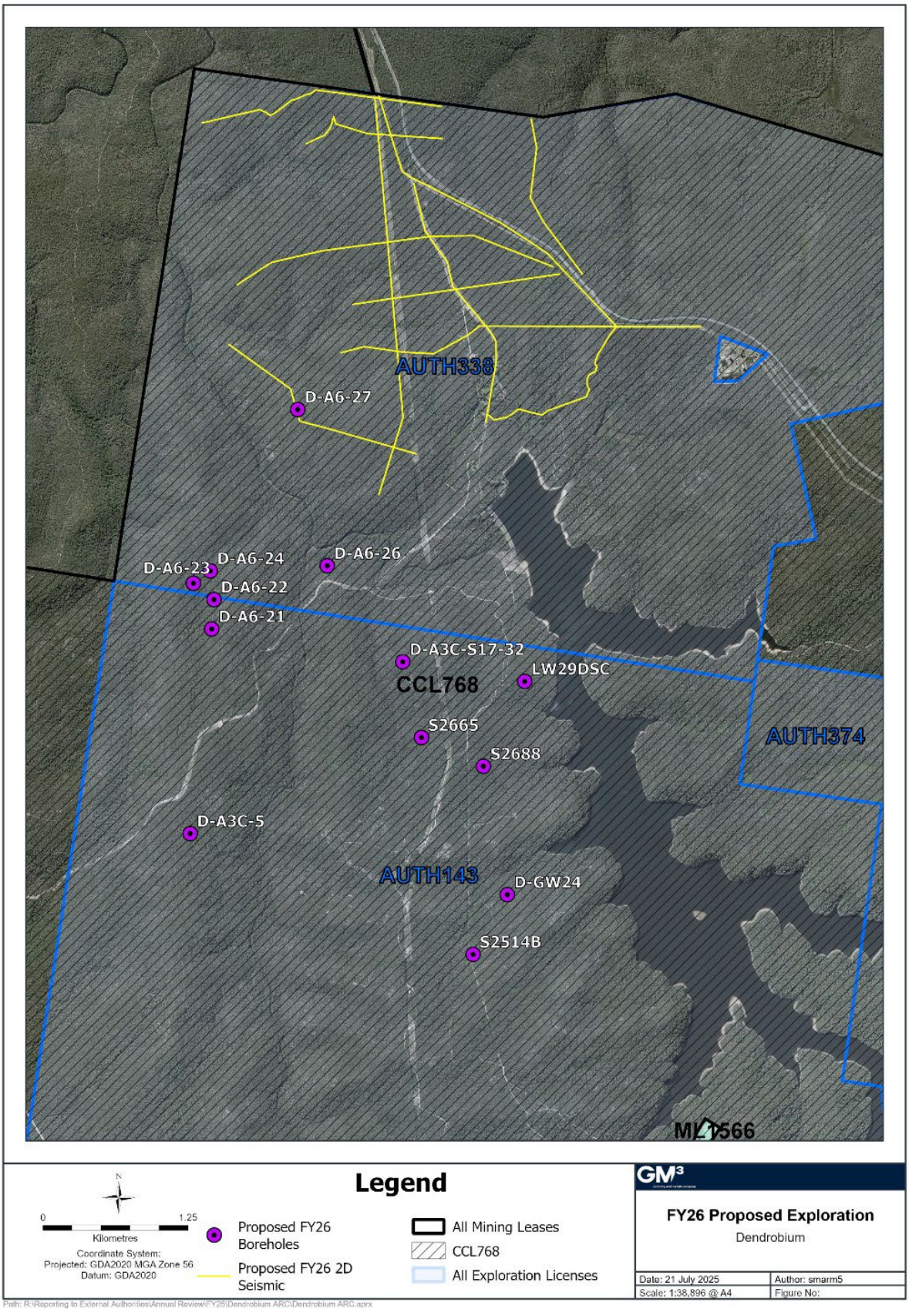
Plan 10: Site Layout - Cordeaux Colliery



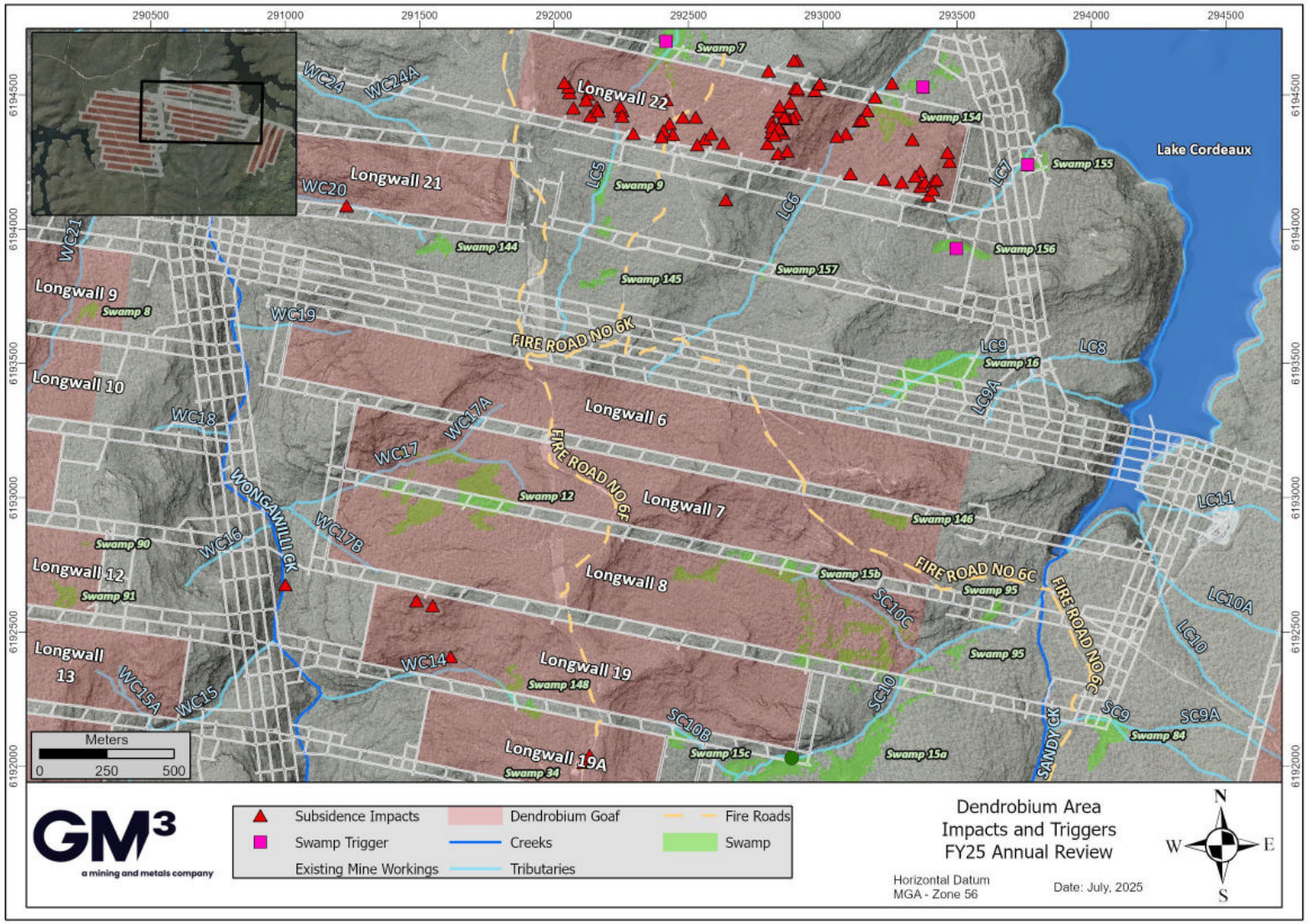
Plan 11: Monitoring Locations - Cordeaux Colliery



Plan 12: Planned Exploration Activities - CCL 768 - FY26



Plan 13: Subsidence impacts and triggers observed during FY25



15. APPENDICES

Appendix 1: EPL 3241 Annual Return - FY25

Annual Return

DENDROBIUM COAL PTY LTD

Licence 3241

A. Statement of Compliance - Licence Details

ALL Licence holders must check that the Licence details in Section A are correct.

If there are changes to any of these details, **you must advise Environment Protection Authority (EPA) and apply as soon as possible for a variation to your Licence or for a Licence transfer.**

Licence variation and transfer application forms are available on the EPA website at: http://www.epa.nsw.gov.au/licensing-and-regulation/licensing or from regional offices of the EPA, or by contacting by telephone 02 9995 5700.

If you are applying to vary or transfer your Licence, you must still complete and submit this Annual Return.

A1. Licence holder

Licence number : 3241

Licence holder : DENDROBIUM COAL PTY LTD

Trading name *(if applicable)* :

ABN : 85 098 744 088

ACN :

Reporting period : From: 1-7-2024 To: 30-6-2025

A2. Premises to which Licence Applies (if applicable)

Common name (if any) : DENDROBIUM MINE

Premises : CORDEAUX ROAD MOUNT KEMBLA 2526 NSW

A3. Activities to which Licence Applies

Mining for coal

Coal works

A4. Other Activities (if applicable)

A5. Fee-Based Activity Classifications

Note that the fee based activity classification is used to calculate the administrative fee.

Fee-based activity	Activity scale	Unit of measure
Coal works	> 2,000,000.00 - 5,000,000.00	T annual handing capacity
Mining for coal	> 3,500,000.00 - 5,000,000.00	T annual production capacity

A6. Assessable Pollutants (if applicable)

Note that the identification of assessable pollutants is used to calculate the **load-based fee.**
The following assessable pollutants are identified for the fee-based activity classifications in the licence:

B. Monitoring and Complaints Summary

B1. Number of Pollution Complaints

Pollution Complaint Category	Complaints
Air	2
Water	0
Noise	12
Waste	0
Other	4
Total complaints recorded by the licensee during the reporting period	**18**

B2. Concentration Monitoring Summary

For each concentration monitoring point identified in your licence, details are displayed below. If concentration monitoring is not required by your licence, **no data** will appear below.
If data was provided from an uploaded file, the file name will be displayed below instead of any data.
Note that this does not exclude the need to conduct appropriate concentration monitoring of assessable pollutants as required by load-based licensing (if applicable).

Discharge Point 5

Treated stormwater and minewater discharge from Dendrobium mine. Brine discharge from Appin West mine.
Discharge quality monitoring, Pipeline discharging to Allan's Creek at Marley Place. lat. long. -34.450367 150.855419

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Arsenic	milligrams per litre	12	12	0.002	0.007	0.018
Cobalt	milligrams per litre	11	11	0.002	0.006	0.010
Conductivity	microsiemens per centimetre	12	12	1560	2123	3530
Copper	milligrams per litre	12	12	< 0.001	0.001	0.004

Nickel	milligrams per litre	12	12	0.010	0.030	0.075
Oil and Grease	milligrams per litre	12	12	< 5	< 5	< 5
pH	pH	12	12	7.74	8.06	8.27
Total suspended solids	milligrams per litre	12	12	< 5	8.75	14.00
Zinc	milligrams per litre	12	12	0.09	0.15	0.24

Monitoring Point 20

PM10 monitoring, Photometer located at the Kemira Valley coal loading facility. lat. long. -34.423107 150.826605

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
PM10	micrograms per cubic metre	Continuous	Continuous	0.23	5.79	43.71

Monitoring Point 21

PM10 monitoring, Photometer located at the Dendrobium mine pit top. lat. long. -34.431440 150.809213

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
PM10	micrograms per cubic metre	Continuous	Continuous	0.21	6.29	37.17

Discharge & Monitoring Point 29

Discharge to waters

Discharge quality monitoring, Piped discharge outlet from north sedimentation pond at Vent Shaft 2 & 3. Lat. Long. -34.384071 150.764316

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Total suspended solids	milligrams per litre	7	7	< 5	10	16

Turbidity	nephelometric turbidity units	7	7	4.7	19.2	37.4

Discharge & Monitoring Point 31

Discharge to waters

Discharge quality monitoring, Piped discharge outlet from south sedimentation pond at Vent Shaft 2 & 3. Lat. Long. -34.385361 150.763436

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Total suspended solids	milligrams per litre	8	8	< 5	5	6
Turbidity	nephelometric turbidity units	8	8	2.5	9.2	24.0

B3. Volume or Mass Monitoring Summary

For each volume or mass monitoring point identified in your licence, details are displayed below. If volume or mass monitoring is not required by your licence, **no data** will appear below.
If data was provided from an uploaded file, the file name will be displayed below instead of any data.
Note that this does not exclude the need to conduct appropriate volume or mass monitoring of assessable pollutants are required by load-based licensing (if applicable).

Monitoring Point 24

Volume Monitoring, Pipeline dewatering underground water storage area. lat. long. -34.415564 150.809602

Unit of measure	Frequency	No. of measurements made	Lowest result	Mean result	Highest result
megalitres per day	Continuous	Continuous	1.02	7.22	9.29

Monitoring Point 25

Volume Monitoring, Pipeline discharge for Kemira Valley sedimentation ponds. lat. long. -34.421191 150.826841

Unit of measure	Frequency	No. of measurements made	Lowest result	Mean result	Highest result
megalitres per day	Continuous	Continuous	0	0.14	1.06

C. Statement of Compliance - Licence Conditions

C1. Compliance with Licence Conditions

Were all conditions of the licence complied with (including monitoring and reporting requirements)?	**Yes**

D. Statement of Compliance - Load Based Fee Calculation

If you are not required to monitor assessable pollutants by your licence, **no data** will appear below.

If assessable pollutants have been identified on your licence, the following worksheets for each assessable pollutant will determine your load based fee for the licence fee period to which this Annual Return relates.

Loads of assessable pollutants must be calculated using any of the methods provided in EPA's Load Calculation Protocol for the relevant activity. A Load Calculation Protocol would have been already sent to you with your licence. If you require additional copies, you can download the Protocol from the EPA's website or you can contact us on telephone 02 9995 5700.

You are required to keep all records used to calculate licence fees for four years after the licence fee was paid or became payable, whichever is the later date.

E. Statement of Compliance - Requirement to Prepare PIRMP

Have you prepared a Pollution Incident Response Management Plan (PIRMP) as required under section 153A of the Protection of the Environment Operations (POEO) Act 1997?	**Yes**

Is the PIRMP available at the premises?	**Yes**
Is the PIRMP available in a prominent position on a publicly accessible website?	**Yes**
Address of the web page where the PIRMP can be accessed ▼	
https://gm3.au/dendrobium-mine/	
Has the PIRMP been tested?	**Yes**
The PIRMP was last tested on	**14-8-2024**
Has the PIRMP been updated?	**Yes**
The PIRMP was last updated on	**27-11-2024**
Number of times the PIRMP was activated in this reporting period?	**0**
The PIRMP was activated on	

F. Statement of Compliance - Requirement to Publish Pollution Monitoring Data

Are there any conditions attached to your licence that require pollution monitoring to be undertaken as required under section 66(6) of the Protection of the Environment Operations (POEO) Act 1997?	**Yes**

Do you operate a website?	**Yes**
Is the pollution monitoring data published on your website in accordance with the EPA's written requirements for publishing pollution monitoring data?	**Yes**
Address of the web page where the pollution monitoring data can be accessed ▼	
https://gm3.au/dendrobium-mine/	

G. Statement of Compliance - Environment Management System and Practices

Do you have an ISO 14001 certified Environmental Management System (EMS) OR any other system that EPA considers is equivalent to the accountability, procedures, documentation and record keeping requirements of an ISO 14001 certified EMS?	**Yes**

When was the last check (As per ISO 14001) of the EMS completed?	**28-4-2025**
Were there any non-conformances related to environmental issues identified in the last check of the EMS?	**No**
If there were non-conformances identified, were these non-conformances rectified?	

H. Signature and Certification

This Annual Return may only be signed by person(s) with legal authority to sign it as set out in following categories: an Individual, a Company, a Public authority or a Local council.

It is an offence under section 66 of the Protection of the Environment Operations Act 1997 to supply any information in this form that is false or misleading in a material respect, or to certify a statement that is false or misleading in a material respect. There is a maximum penalty of $250,000 for a corporation and $120,000 for an individual.

I/We

- declare that the information in the Monitoring and Complaints Summary in Section B of this Annual Return application is correct and not false or misleading in a material respect, and
- certify that the information in the Statement and Compliance in sections A, C, D, E, F, G and H and any other pages attached to Section C is correct and not false or misleading in a material respect.

Appendix 2: Dendrobium Mine Development Consent Condition Compliance Report -FY25

Condition of Consent	Status	Comments
SCHEDULE 2: ADMINISTRATIVE CONDITIONS		
Obligation to Minimise Harm to the Environment		
1. The Applicant must implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development.	Compliant	Reasonable and feasible measures were implemented over the reporting period to prevent/minimise harm to the environment.
Terms of Approval		
2. The Applicant must carry out the development generally in accordance with the: (a) Development Application (DA 60-03-2001), EIS and associated submissions to the Dendrobium Underground Coal Mine Project Commission of Inquiry, and in particular its: • Primary Submission (the Dendrobium Project, dated 30 July 2001); • Submission in Reply (the Dendrobium Project, undated); and • Environmental Effects of Subsidence Associated with the Dendrobium Project, prepared by National Environmental Consulting Services and dated August 2001; (b) Modification Application dated 12 February 2002 and supporting information dated 27 January 2002; (c) Modification Application and supporting information dated 24 May 2002 and additional supporting information dated 14 June 2002; (d) Modification Application and Statement of Environmental Effects for the Dendrobium Coal Sizer, prepared by Olsen Environmental Consulting and dated March 2005; (e) Application for Further Approval of West Cliff Emplacement Area Stage 3, Vol 2 (including Appendices), prepared by Cardno Forbes Rigby and dated July 2007, associated Response to Submissions dated 1 November 2007 and associated Statement of Commitments dated 28 November 2007 (see Appendix 3);	Compliant	The listed documentation reflects changes to the development as a result of consultation with Authorities and the community. Management Plans and associated documentation reflect these changes and requirements.

Condition of Consent	Status	Comments
(f) Modification Application – Modification of Area 3 Footprint and Review of Conditions of Consent dated 27 November 2007, EA and associated Statement of Commitments (see Appendix 4); and (g) Modification 7, Modification 8, Modification 9 and Modification 10.		
2A. The Applicant must carry out the development in accordance with the conditions of this consent.	Non-compliant	Refer to Table 35 and Table 36.
2B. The Applicant must carry out the development generally in accordance with the development layout shown in Appendix 2.	Compliant	Gas management infrastructure site activities have been undertaken generally in accordance with the site layout.
3. If there is any inconsistency between the above documents, the most recent document must prevail to the extent of the inconsistency. However, the conditions of this consent must prevail to the extent of any inconsistency.	Compliant	Document precedence is applied where required.
4. The Applicant must comply with any reasonable and feasible requirement/s of the Secretary arising from the Department's assessment of: (a) any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with the conditions of this consent; (b) any reviews, reports or audits undertaken or commissioned by the Department regarding compliance with the conditions of this consent; and (c) the implementation of any actions or measures contained in these documents.	Compliant	Requirements have been complied with where reasonable and feasible. An assessment of cumulative impacts of mining activities undertaken to date under DA60-03-2001 was requested in the reporting period. A request was also received to undertake a Noise Impact Assessment.

Condition of Consent	Status	Comments
Limits on Consent		
5. Mining operations may take place in the mining area until 31 December 2030. *Note: Under this consent, the Applicant is required to rehabilitate the site in accordance with the conditions of this consent and those imposed on the mining lease(s) associated with the development under the Mining Act 1992. Consequently this consent will continue to apply in all other respects other than the right to conduct mining operations until the site has been rehabilitated to a satisfactory standard.*	Compliant	This date is in the future.
6. The Applicant must not extract more than 5.2 million tonnes of RoM coal a year from the mining area.	Compliant	Less than 5.2 million tonnes was extracted during the reporting period. Mining plans and production forecasts are developed on this basis.
7. The Applicant must only transport coal from the surface facilities by rail.	Compliant	Coal extracted from Dendrobium Mine was only transported via the Kemira Valley Rail Line during the reporting period.
Staged Submission of Management Plans/Monitoring Programs		
8. With the approval of the Secretary, the Applicant may submit any management plan or monitoring program required by this consent on a progressive basis.	Compliant	Plans required under the consent are submitted as required. No staged management plans were submitted.

Condition of Consent	Status	Comments
9. The Applicant must ensure that monitoring programs, management plans and the Environmental Management Strategy, as in existence at the date of modification of consent in November 2008, continue to be implemented (to the satisfaction of the Secretary) until replaced by monitoring programs and management plans approved in accordance with the conditions of this consent.	Compliant	All required management plans have been implemented and are updated as required and approved by the Department as per internal processes.
Structural Adequacy		
10. The Applicant must ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA. *Notes*: *Under Part 6 of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.* *Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 sets out the requirements for the certification of the development.*	Compliant	All construction activities have been undertaken in accordance with the requirements of the BCA (now National Construction Code) where applicable.
Demolition		
11. The Applicant must ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures*, or its latest version.	Compliant	There was no demolition during the reporting period.
Operation of Plant and Equipment		
12. The Applicant must ensure that all plant and equipment used on site is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	Compliant	A maintenance management system is used to verify that all plant and equipment used on site is maintained in a proper and efficient condition. Operators are trained and assessed as competent. The site introduction

Condition of Consent	Status	Comments
		process captures and records all relevant information for plant and equipment that is to be used either on the surface or underground.
Community Enhancement		
13. The Applicant must contribute $0.03 per tonne of saleable coal production each financial year to fund the provision of significant present and future benefits to local communities directly affected by the development. These funds must be: (a) administered and expended in accordance with procedures which are to the satisfaction of WCC and the Secretary; (b) provided by 30 September each year over the life of the consent; (c) based on saleable coal production in the previous financial year; and (d) indexed in accordance with the CPI, with April 2005 used as the commencement date for indexation calculations. Any dispute over the operation of this fund must be referred to the Secretary for resolution.	Compliant	Payment was made for FY25 in accordance with requirements.
Costs of Management Measures		
14. The Applicant must be responsible for the costs of all management measures (including measures to minimise, mitigate, offset or remediate impacts of the development which are not recoverable by a third party through the Coal Mine Subsidence Compensation Act 2017 or the Mining Act 1992) including but not limited to remediation of natural features, rehabilitation of ecological systems, the provision of supplementary waters and monitoring of the effectiveness of the works, as determined by the Secretary.	Compliant	Management measures were undertaken as required and at the cost of ICHPL where not recoverable by a third party.
Strategic Biodiversity Offsets		
15. If the Applicant is required to provide a biodiversity offset pursuant to this consent (including any biodiversity	Compliant	A biodiversity offset area has

Condition of Consent	Status	Comments
offset that is required under the conditions of a subordinate approval issued in accordance with this consent), the Secretary, in consultation with BCS, may accept in satisfaction of the requirement for the biodiversity offset, the provision of land that has conservation values which exceed the conservation values required to meet the relevant offsetting requirement. If the Secretary accepts such an offset under this condition, the Secretary must issue a written statement to the Applicant advising: (a) the details of the proposed offset land; (b) the offset requirements that are being met; (c) the conservation values that have been relied upon to meet the offsetting requirements; and (d) that in the opinion of the Secretary: (i) the land has offsetting values in addition to those that have been relied upon to meet the offsetting requirement in condition 15(b); or (ii) if the land has been subject to a previous statement from the Secretary under this condition, confirmation that the land continues to have conservation values in addition to those that have been relied upon to meet the previous offsetting requirement, or that there are no further conservation values available in respect of the land. If the Secretary has issued a statement under this condition, the Applicant can rely on that statement and the residual conservation values that the land subject to the statement may hold, to meet further offsetting requirement(s) that may be required under this consent or the project approval for the Bulli Seam Operations Project (08_0150). The Secretary's statement under this condition can be relied on a number of times in respect of the same land until all of the conservation values of the land the subject of the Secretary's statement have been relied upon to meet offsetting requirements under this consent or the approval for the Bulli Seam Operations Project (08_0150). The Applicant must make suitable arrangements to provide appropriate long-term security for the biodiversity offset area(s) accepted under this condition, within 2		been established and approved by the Planning Secretary.

Condition of Consent	Status	Comments
years of the date of the Secretary's statement in respect of that land, unless otherwise agreed with the Secretary		
SCHEDULE 3: SPECIFIC ENVIRONMENTAL CONDITIONS – MINING AREA		
SUBSIDENCE *Note: These conditions should be read in conjunction with the Statement of Commitments.*		
Watercourse Impact Management		
1. The Applicant must ensure that, as a result of the development: (a) no rock fall occurs at Sandy Creek Waterfall or from its overhang; (b) the structural integrity of the waterfall, its overhang and its pool are not impacted; (c) cracking in Sandy Creek within 30 m of the waterfall is of negligible environmental and hydrological consequence; and (d) negligible diversion of water occurs from the lip of the waterfall to the satisfaction of the Secretary.	Compliant	A SMP for Area 3A was approved that meets these requirements. Mining has now been completed in Area 3A.
2. The Applicant must ensure that underground mining operations do not cause subsidence impacts at Sandy Creek and Wongawilli Creek other than "minor impacts" (such as minor fracturing, gas release, iron staining and minor impacts on water flows, water levels and water quality) to the satisfaction of the Secretary. *Note: In this condition, "minor impacts" are those defined as minor triggers in Table 23.2 of the draft SMP submitted by the Applicant for Dendrobium Area 3A.*	Compliant	A SMP for Area 3A was approved that meets these requirements. The approved SMP for Area 3B also addresses potential impacts on Wongawilli Creek. Longwall panels are aligned, where possible, to minimise impacts to watercourses. Mining has now been completed in Areas 3A and 3B.
3. The Applicant must ensure the development does not result in reduction (other than negligible reduction) in the quality or quantity of surface water or groundwater inflows to Lake Cordeaux or Lake Avon or surface water inflow to the Cordeaux River at its confluence with Wongawilli Creek, to the satisfaction of the Secretary.	Compliant	Potential subsidence impacts are covered in the relevant SMP.
4. Prior to carrying out any underground mining operations that could cause subsidence in either Area 3A, Area 3B or	Compliant	The Watercourse Impact Monitoring,

Condition of Consent	Status	Comments
Area 3C, the Applicant must prepare a Watercourse Impact Monitoring, Management and Contingency Plan to the satisfaction of the Secretary. Each such Plan must: (a) demonstrate how the subsidence impact limits in conditions 1 - 3 are to be met; (b) include a monitoring program and reporting mechanisms to enable close and ongoing review by the Department and Resources Regulator of the subsidence effects and impacts (individual and cumulative) on Wongawilli Creek, Sandy Creek and Sandy Creek Waterfall; (c) include a general monitoring and reporting program addressing surface water levels, water flows, water quality, surface slope and gradient, erodibility, aquatic flora and fauna (including Macquarie Perch, any other threatened aquatic species and their habitats) and ecosystem function; (d) include a management plan for avoiding, minimising, mitigating and remediating impacts on watercourses, which includes a tabular contingency plan (based on the Trigger Action Response Plan structure) focusing on measu es for remediating both predicted and unpredicted impacts; (e) address third and higher order streams individually but address first and second order streams collectively; (f) be prepared in consultation with BCS, WaterNSW and Resources Regulator; (g) incorporate means of updating the plan based on experience gained as mining progresses; (h) be approved prior to the carrying out of any underground mining operations that could cause subsidence impacts on watercourses in the relevant Area; and (i) be implemented to the satisfaction of the Secretary. *Notes*: *Should review by the Department of reports by the Applicant under paragraph (b) indicate that subsidence impacts have exceeded or threaten to limits imposed in conditions 1-3, then under condition 4 of Schedule 2 the Secretary may instruct the Applicant to implement reasonable and feasible requirements, which may include to cease mining within the operative longwall, shorten the length of that longwall or shorten the length and/or width of future longwalls.* *Requirements under paragraphs (a) and (b) in resp*		Management and Contingency Plan was incorporated into the Area 3A, 3B and 3C SMPs and is available on the GM[3] website.

Condition of Consent	Status	Comments
ct of Sandy Creek and Sandy Creek Waterfall relate only to the Watercourse Impact Monitoring, Management and Contingency Plan for Area 3A.		
Swamp Impact Management		
5. The Applicant must ensure that subsidence does not cause erosion of the surface or changes in ecosystem functionality of Swamp 15a and that the structural integrity of its controlling rockbar is maintained or restored, to the satisfaction of the Secretary.	Compliant	Subsidence management measures for Swamp 15a are included in the SMP for Area 3A. Note: Reported as non-compliant in FY24 Annual Review. Refer to the FY24 Annual Review for details.
6. Prior to carrying out any underground mining operations that could cause subsidence in either Area 3A, Area 3B or Area 3C, the Applicant must prepare a Swamp Impact Monitoring, Management and Contingency Plan to the satisfaction of the Secretary. Each such Plan must: (a) demonstrate how the subsidence impact limits in condition 5 are to be met; (b) include a monitoring program and reporting mechanisms to enable close and ongoing review by the Department and Resources Regulator of the subsidence effects and impacts (individual and cumulative) of each Area 3A longwall on Swamp 15a; (c) include a general monitoring and reporting program addressing surface water levels, near surface groundwater levels, water quality, surface slope and gradient, erodibility, flora and ecosystem function; (d) include a management plan for avoiding, minimising, mitigating and remediating impacts on swamps, which includes a tabular contingency plan (based on the Trigger Action Response Plan structure) focusing on measures for remediating both predicted and unpredicted impacts; (e) address headwater and valley infill swamps separately and address each swamp individually; (f) be prepared in consultation with BCS, WaterNSW and Resources Regulator;	Compliant	The Swamp Impact Monitoring, Management and Contingency Plan has been incorporated into the Areas 3A, 3B and 3C SMPs. The Swamp Impact Monitoring, Management and Contingency Plan and the Watercourse Impact Monitoring, Management and Contingency Plan documents were revised to take into account the SMP Approval Conditions and submissions from regulatory agencies.

Condition of Consent	Status	Comments
(g) incorporate means of updating the plan based on experience gained as mining progresses; (h) be approved prior to the carrying out of any underground mining operations that could cause subsidence impacts on swamps in the relevant Area; and (i) be implemented to the satisfaction of the Secretary. *Notes:* *Should review by the Department of reports by the Applicant under paragraph (b) indicate that subsidence impacts have exceeded or threaten to exceed limits imposed in condition 5, then under condition 4 of Schedule 2 the Secretary may instruct the Applicant to implement reasonable and feasible requirements, which may include to cease mining within the operative longwall, shorten the length of that longwall or shorten the length and/or width of future longwalls.* *Requirements under paragraphs (a) and (b) rel te only to the Swamp Impact Monitoring, Management and Contingency Plan for Area 3A.*		Note: Reported as non-compliant in FY24 Annual Review. Refer to the FY24 Annual Review for details.
Subsidence Management Plans		
7. Prior to carrying out any underground mining operations that could cause subsidence in either Area 3A, 3B or 3C, the Applicant must prepare a Subsidence Management Plan (SMP) to the satisfaction of the Secretary and the Resources Regulator. Each such SMP must: (a) integrate ongoing management of Areas 1 and 2; (b) integrate the Watercourse and Swamp Impact Monitoring, Management and Contingency Plans required under conditions 4 and 6; (c) include monitoring of subsidence effects; (d) include a WaterNSW Assets Protection Plan; (e) include monitoring, management, and contingency plans for all other significant natural features and all significant man made features which may be impacted by subsidence, including: landscape (including cliffs and steep slopes); groundwater (see condition 13); terrestrial flora and fauna and ecology (including all threatened species assessed as being likely to be significantly affected by the development and their habitats); Aboriginal and other cultural heritage (see condition 12); and electrical, communications and other infrastructure;	Compliant	SMPs that meet these requirements have been and will be submitted as required. These SMPs are available on the GM[3] website.

Condition of Consent	Status	Comments
(f) be prepared in consultation with BCS, WaterNSW and Resources Regulator; (g) be approved prior to the carrying out of any underground mining operations that could cause subsidence in the relevant Area; and (h) be implemented to the satisfaction of the Secretary and the Resources Regulator. *Notes*: *The WaterNSW Assets Protection Plan required under this condition must also be prepared and implemented to the satisfaction of the WaterNSW.* *The contingency plans required under paragraph (e) must address remediation (as appropriate) and be based on a TARP structure.*		
8. The SMPs prepared under condition 7 for Areas 3B and 3C must: (a) include a mine plan for the relevant Area; (b) include a detailed subsidence impact assessment, clearly setting out all predicted subsidence effects, subsidence impacts and environmental consequences; (c) include a minimum of 2 years of baseline data, collected at appropriate frequency and scale, for all significant natural features; (d) identify and assess the significance of all natural features located within 600 m of the edge of secondary extraction; (e) distinguish between, clearly describe and adequately quantify all subsidence effects, subsidence impacts and environmental consequences; (f) propose limits on subsidence impacts and environmental consequences to be applied within the relevant Area; (g) be otherwise prepared in accordance with any guidelines for SMPs developed by the Department and/or Resources Regulator; (h) be approved prior to the carrying out of any underground mining operations that could cause subsidence in the relevant Area; and (i) be implemented to the satisfaction of the Secretary and the Resources Regulator. *Note: In approving an SMP, the Secretary may impose conditions containing subsidence impact limits (similar to conditions 1- 3 &*	Compliant	SMPs are prepared in line with this condition.

Condition of Consent	Status	Comments
5), subsidence management mechanisms (similar to conditions 4 & 6) or other conditions.		
End of Panel Reporting		
9. Within 4 months of the completion of each longwall panel, or as otherwise permitted by the Secretary, the Applicant must: (a) prepare an end-of-panel report: reporting all subsidence effects (both individual and cumulative) for the panel and comparing subsidence effects with predictions; describing in detail all subsidence impacts (both individual and cumulative) for the panel; discussing the environmental consequences for watercourses, swamps, water yield, water quality, aquatic ecology, terrestrial ecology, groundwater, cliffs and steep slopes; and comparing subsidence impacts and environmental consequences with predictions; and (b) submit the report to the Department, Resources Regulator, WaterNSW, BCS, DPE Water and any other relevant agency to the satisfaction of the Secretary.	Compliant	End of Panel Reports for Longwalls 6, 7, 8, 9, 10, 11,12, 13, 14, 15, 16, 17, 18, 19, 21 and 19A have been submitted in accordance with the timing of this condition.
10. The Applicant must include a comprehensive summary, analysis and discussion of the results of monitoring of subsidence effects, subsidence impacts and environmental consequences in each Annual Review. *Note: Conditions 9 and 10 apply to Area 2, as well as to Areas 3A, 3B and 3C.*	Compliant	A summary of subsidence effects, impacts and environmental consequences is included in the Annual Review.
Subsidence Expert Assessments		
11. The Applicant must pay the reasonable costs of the Department in engaging independent experts to advise it when it assesses SMPs prepared under condition 7 for Areas 3B and 3C.	Compliant	ICHPL has paid the reasonable costs for engagement of independent experts by the Department as required.
ABORIGINAL HERITAGE		
12. The SMPs prepared under condition 7 must include an Aboriginal Heritage Plan, which must include a: (a) description of known Aboriginal heritage sites;	Compliant	The Aboriginal Heritage Plan has been incorporated

Condition of Consent	Status	Comments
(b) protocol for the ongoing consultation and involvement of the Aboriginal community in the conservation and management of Aboriginal heritage; (c) description of the measures that would be implemented to protect Aboriginal sites generally, including measures that would be implemented to secure, analyse and record sites at risk of subsidence; (d) description of the measures that would be implemented to protect Aboriginal site 52-2-1646, including: a full recording and assessment of the site's rock art; a more detailed subsidence assessment for the site; measures which seek to avoid any significant impact on the site and any necessary contingency plans to protect the site against collapse or substantial impact on its rock art; and (e) description of the measures that would be implemented if any new Aboriginal objects or skeletal remains are discovered during the development.		into SMPs as required.
GROUNDWATER MONITORING PROGRAM		
13. The SMPs prepared under condition 7 must include a Groundwater Monitoring Program, which must include: (a) proposals to develop a detailed regional and local groundwater model, with special reference to flows to and from nearby water storages; (b) detailed baseline data to benchmark the natural variation in groundwater levels, yield and quality; (c) groundwater impact assessment criteria; (d) a program to monitor the impact of the development on: groundwater levels, yield and quality (particularly any potential loss of flow to, or flow from, WaterNSW water storages); coal seam aquifers and overlying aquifers; and groundwater springs and seeps; and (e) consideration of the requirements of the latest version (or subsequent replacement) of WaterNSW's *The Design of a Hydrological and Hydrogeological Monitoring Program to Access the Impacts of Longwall Mining in SCA Catchment*.	Compliant	The Groundwater Monitoring Program has been incorporated into SMPs as required. A Groundwater Monitoring and Modelling Plan is also in place.
ENVIRONMENTAL OFFSETS		

<table>
<tr><th>Condition of Consent</th><th>Status</th><th>Comments</th></tr>
<tr><td>14. The Applicant must provide suitable offsets for loss of water quality or loss of water flows to WaterNSW storages, clearing and other ground disturbance (including cliff falls) caused by its mining operations and/or surface activities within the mining area, unless otherwise addressed by the conditions of this consent, to the satisfaction of the Secretary. These offsets must:
(a) be submitted to the Secretary for approval by 30 April 2009;
(b) be prepared in consultation with WaterNSW;
(c) provide measures that result in a beneficial effect on water quality, water quantity, aquatic ecosystems and/or ecological integrity of WaterNSW's special areas or water catchments.</td><td>Compliant</td><td>This offset was accepted by WaterNSW on 10 February 2009.</td></tr>
<tr><td colspan="3">SCHEDULE 4: SPECIFIC ENVIRONMENTAL CONDITIONS – SURFACE FACILITIES</td></tr>
<tr><td colspan="3">NOISE</td></tr>
<tr><td colspan="3">Noise Impact Assessment Criteria</td></tr>
<tr><td>1. The Applicant must ensure that the noise generated at the surface facilities does not exceed the noise impact assessment criteria in Table 1 at any residence on privately-owned land, or on more than 25% of any privately-owned land. The applicable criteria for any residence not listed in Table 1 must be the criteria applying at the nearest listed residence.

Table 1: Noise impact assessment criteria dB(A)
<table>
<tr><th colspan="2">Day</th><th>Evening</th><th colspan="2">Night</th><th>Residence</th></tr>
<tr><th>$L_{Aeq(15\ min)}$</th><th></th><th>$L_{Aeq(15\ min)}$</th><th>$L_{Aeq(15\ min)}$</th><th>$L_{A1(1\ min)}$</th><th>(as shown in the Noise Monitoring Program)</th></tr>
<tr><td colspan="2">42</td><td>42</td><td>38</td><td>48</td><td>R2</td></tr>
<tr><td colspan="2">41</td><td>41</td><td>40</td><td>50</td><td>R22</td></tr>
<tr><td colspan="2">40</td><td>40</td><td>39</td><td>49</td><td>R1
R9
R15a</td></tr>
<tr><td colspan="2">40</td><td>40</td><td>37</td><td>47</td><td>R3a
R5a
R6a&b</td></tr>
<tr><td colspan="2">37</td><td>35</td><td>35</td><td>45</td><td>R39a</td></tr>
</table>
Notes:
• To determine compliance with the $L_{Aeq(15\ minute)}$ limit, noise from the development is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary. Where it can be demonstrated that direct measurement of noise from the development is impractical, EPA may accept alternative means of determining compliance.
• To determine compliance with the $L_{A1(1\ minute)}$ limit, noise from the development is to be measured at 1 metre from the dwelling façade. Where it can be demonstrated that direct measurement of noise from the development is impractical, EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy).
• The noise emission limits identified in the above table apply under meteorological conditions of:
○ wind speeds of up to 3 m/s at 10 metres above ground level; or
○ up to 3°C/100 m temperature inversion strength for all receivers, plus a 2 m/s source-to-receiver component drainage flow wind at 10 metres above ground level for those receivers where applicable.
• These limits do not apply if the Applicant has an agreement with the relevant owner/s of these residences to generate higher noise levels, and the Applicant has advised the Department and EPA in writing of the terms of this agreement.</td><td>Non-compliant</td><td>Noise monitoring is undertaken in accordance with the approved Noise Management Plan. A summary of results is provided via the Dendrobium Mine Annual Review and in the 14-day report published on the GM³ website.

A non-compliance and exceedance of noise impact assessment criteria were recorded during the reporting period. Refer to Table 35 and Table 36 for details.</td></tr>
</table>

<table>
<tr><th>Condition of Consent</th><th>Status</th><th>Comments</th></tr>
<tr><td colspan="3">Land Acquisition Criteria</td></tr>
<tr><td>2. If the noise generated at the surface facilities exceeds the relevant criteria in Table 2 at any residence on privately-owned land or on more than 25% of any privately-owned land, the Applicant must, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 8 - 10 of schedule 4. The applicable criteria for any residence not listed in Table 2 must be the criteria applying at the nearest listed residence.

Table 2: Noise acquisition criteria dB(A)
<table>
<tr><th>Day
$L_{Aeq(15\ min)}$</th><th>Evening
$L_{Aeq(15\ min)}$</th><th>Night
$L_{Aeq(15\ min)}$</th><th>Residence
(as shown in the Noise Monitoring Program)</th></tr>
<tr><td>47</td><td>47</td><td>43</td><td>R2</td></tr>
<tr><td>46</td><td>46</td><td>45</td><td>R22</td></tr>
<tr><td>45</td><td>45</td><td>44</td><td>R1
R9</td></tr>
<tr><td></td><td></td><td></td><td>R15a</td></tr>
<tr><td>45</td><td>45</td><td>42</td><td>R3a
R5a
R6a&b</td></tr>
<tr><td>42</td><td>40</td><td>40</td><td>R39a</td></tr>
</table>
Note: Noise generated by the development is to be measured in accordance with the notes to Table 1.</td><td>N/A</td><td>Noise levels recorded from operational activities have not exceeded the criteria in Table 2.</td></tr>
<tr><td colspan="3">Rail Haulage Impact Assessment Criteria</td></tr>
<tr><td>3. The Applicant must ensure that noise generated by locomotives using the Kemira Valley rail line does not exceed the rail noise impact assessment criteria in Table 3.
Table 3: Rail noise impact assessment criteria
<table>
<tr><th>Operating Condition</th><th>Measurement Conditions</th><th>Criteria
$L_{A1(1\ min)}$</th></tr>
<tr><td>Locomotive at idle, with compressor radiator fans and air conditioning operating at maximum load</td><td>Stationary 15 metre contour</td><td>70 dB(A)</td></tr>
<tr><td>All other throttle settings under self-load, with compressor radiator fans and air conditioning operating at maximum load</td><td>Stationary 15 metre contour</td><td>87 dB(A)
95 dB(Lin)</td></tr>
<tr><td>All service conditions</td><td>Up to 50 kilometres per hour,
15 metres from centreline of rail track</td><td>87 dB(A)
95 dB(Lin)
Must be non-tonal
Linear noise levels must not exceed A-weighted noise levels by more than 15 dB</td></tr>
</table>
Note: All measured noise levels must be assessed for tonality in accordance with the NSW Industrial Noise Policy, unless otherwise specified.</td><td>Compliant</td><td>Rail noise monitoring was undertaken during the reporting period.
Overall noise levels (LA_{eq} and L_{eq}) were compliant.</td></tr>
<tr><td colspan="3">Continuous Improvement</td></tr>
<tr><td>4. The Applicant must:
(a) continue to investigate ways to reduce the noise generated by the development (including off-site road noise, noise and vibration impacts from the operation of</td><td>Compliant</td><td>Details of noise investigations undertaken and mitigation improvements</td></tr>
</table>

Condition of Consent	Status	Comments
the Kemira Valley rail line and maximum noise levels which may result in sleep disturbance); (b) continue to implement all reasonable and feasible best practice noise mitigation measures; and (c) report on these investigations and the implementation and effectiveness of these measures in the Annual Review, to the satisfaction of the Secretary.		implemented are discussed in the Annual Review.
5. The Applicant must use its best endeavours to minimise wheel squeal, brake squeal and locomotive wheel slippage arising from rail haulage on the Kemira Valley rail line.	Compliant	Details regarding noise investigations undertaken and mitigation improvements implemented are detailed in the Annual Review (refer to Section 6.8.1).
Additional Noise Mitigation Measures		
6. Upon receiving a written request from the owner of any residence where subsequent noise monitoring shows the noise generated by the development is 3 dB(A) greater than the noise impact assessment criteria in Table 1 (except where a negotiated noise agreement is in place) the Applicant must implement reasonable and feasible noise mitigation measures (such as double glazing, insulation and/or air conditioning) at any residence on the land in consultation with the landowner. If within 3 months of receiving this request from the landowner, the Applicant and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.	N/A	No monitoring was undertaken at residences that indicated that the noise generated by the development exceeded 3 dB(A).
Monitoring		
7. The Applicant must prepare a Noise Monitoring Program for the development to the satisfaction of the Secretary. This program must: (a) be submitted to the Secretary for approval by 30 April 2009; (b) be prepared in consultation with EPA;	Compliant	An approved Noise Management Plan (Monitoring Program) is in place. The NMP was last approved on 5 June 2025.

<table>
<tr><th>Condition of Consent</th><th>Status</th><th>Comments</th></tr>
<tr><td>(c) provide for quarterly attended noise monitoring and real-time noise monitoring (where appropriate) to monitor the performance of the development, especially in residential areas close to the surface facilities; and
(d) include a noise monitoring protocol for evaluating compliance with the noise impact and land acquisition criteria in this consent.

The Applicant must implement the Noise Monitoring Program as approved by the Secretary.

Note: This program must expressly monitor the modifying factors referred to in the NSW Industrial Noise Policy (such as intermittency, tonality and low frequency)</td><td></td><td>The NMP has been implemented.</td></tr>
<tr><td colspan="3">BLASTING AND VIBRATION</td></tr>
<tr><td>8. The Applicant is not permitted to undertake blasting operations at the surface facilities except with the prior written approval of EPA and subject to any conditions which EPA may impose.</td><td>N/A</td><td>No blasting activities were undertaken.</td></tr>
<tr><td colspan="3">AIR QUALITY</td></tr>
<tr><td colspan="3">Impact Assessment Criteria</td></tr>
<tr><td>9. The Applicant must ensure that dust generated by the development does not cause additional exceedances of the criteria listed in Tables 4 to 6 at any residence on privately-owned land, or on more than 25 percent of any privately-owned land.

Table 4: Long term impact assessment criteria for particulate matter
<table>
<tr><th>Pollutant</th><th>Averaging period</th><th>Criterion</th></tr>
<tr><td>Total suspended particulate (TSP) matter</td><td>Annual</td><td>90 µg/m^3</td></tr>
<tr><td>Particulate matter < 10 µm (PM_{10})</td><td>Annual</td><td>30 µg/m^3</td></tr>
</table>
Table 5: Short term impact assessment criteria for particulate matter
<table>
<tr><th>Pollutant</th><th>Averaging period</th><th>Criterion</th></tr>
<tr><td>Particulate matter < 10 µm (PM_{10})</td><td>24 hour</td><td>50 µg/m^3</td></tr>
</table>
Table 6: Long term impact assessment criteria for deposited dust
<table>
<tr><th>Pollutant</th><th>Averaging period</th><th>Maximum increase in deposited dust level</th><th>Maximum total deposited dust level</th></tr>
<tr><td>Deposited dust</td><td>Annual</td><td>2 g/m^2/month</td><td>4 g/m^2/month</td></tr>
</table>
Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS/NZS 3580.10.1-2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.</td><td>Compliant</td><td>Air quality monitoring is undertaken in accordance with the Air Quality and Greenhouse Gas Management Plan. Results are provided in the Annual Review and published in the 14-day report on the GM^3 website. No exceedances of criteria recorded for this reporting period.</td></tr>
<tr><td colspan="3">Monitoring</td></tr>
</table>

Condition of Consent	Status	Comments
10. The Applicant must prepare and implement an Air Quality Monitoring Program for the surface facilities (excepting those surface facilities within the mining area) to the satisfaction of the Secretary. This program must: (a) be submitted to the Secretary for approval by 30 April 2009; (b) be prepared in consultation with EPA; (c) use a combination of high volume samplers and dust deposition gauges to monitor the performance of the development; and (d) include an air quality monitoring protocol for evaluating compliance with the air quality impact assessment criteria in this consent. The Applicant must implement the Air Quality Monitoring Program as approved by the Secretary.	Compliant	The Air Quality and Greenhouse Gas Management Plan is in place. The AQMP was reviewed during the reporting period and approved on 15 January 2025. The AQMP has been implemented.
METEOROLOGICAL MONITORING		
11. During the development, the Applicant must ensure that it has a suitable meteorological station in the vicinity of the site that is generally in accordance with the requirements in the guideline *Approved Methods for Sampling of Air Pollutants in New South Wales*.	Compliant	Weather stations are located at the KVCLF, Dendrobium Pit Top and Ventilation Shaft 2/3 site that generally meet these requirements.
WATER MANAGEMENT		
Discharges		
12. The Applicant must ensure all surface water discharges from the surface facilities: (a) meet the relevant ANZECC water quality objectives for the protection of aquatic ecosystems and water quality of existing receiving waters; and (b) comply with the discharge limits (both volume and quality) set for the development in any EPL.	Compliant	Water quality monitoring is undertaken as per the Water Management Plan.
Water Management Plan		

Condition of Consent	Status	Comments
13. The Applicant must prepare a Water Management Plan for the surface facilities to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for approval by 30 April 2009; (b) be prepared in consultation with EPA, WaterNSW and DPE Water by suitably qualified expert/s whose appointment/s have been approved by the Secretary; and (c) include a: • Site Water Balance; • Erosion and Sediment Control Plan; • Surface Water Monitoring Program; and • Surface and Ground Water Response Plan. The Applicant must implement the Water Management Plan as approved by the Secretary.	Compliant	An approved Water Management Plan is in place and has been implemented. The WMP was last approved on 9 August 2023.
Site Water Balance		
14. The Site Water Balance must: (a) include details of: sources and security of water supply; water use on site; water intercepted by mining operations; water management on site; off-site water transfers and water stored or disposed of underground; reporting procedures; and (b) describe measures to minimise water use by the development.	Compliant	The Site Water Balance has been included in the Water Management Plan to meet these requirements.
Erosion and Sediment Control		
15. The Erosion and Sediment Control Plan must: (a) be consistent with the requirements of the *Managing Urban Stormwater: Soils and Construction Manual* (Landcom 2004, or its latest version); (b) identify activities that could cause soil erosion and generate sediment; (c) describe measures to minimise soil erosion and the potential for transport of sediment to downstream waters; (d) describe the location, function, and capacity of erosion and sediment control structures; and (e) describe what measures would be implemented to monitor and maintain the structures over time.	Compliant	The Erosion and Sediment Control Plan has been included in the Water Management Plan to meet these requirements.

Condition of Consent	Status	Comments
Surface Water Monitoring Program		
16. The Surface Water Monitoring Plan must include: (a) baseline data on surface water flows and quality in streams and other waterbodies that have been or could be affected by the surface facilities; (b) surface water quality and stream health assessment criteria, including trigger levels for investigating any potentially adverse surface water impacts; (c) a program to monitor the impact of the surface facilities on surface water flows and quality, stream health and channel stability; and (d) procedures for reporting the results of this monitoring.	Compliant	The Surface Water Monitoring Plan has been included in the Water Management Plan to meet these requirements. The results are published in the 14-day report on the GM³ website and a summary of the results from the monitoring program is provided in the Annual Review.
Surface and Ground Water Response Plan		
17. The Surface and Ground Water Response Plan must describe what measures and/or procedures would be implemented to: (a) respond to any exceedances of the surface water, stream health, and groundwater assessment criteria; and (b) mitigate and/or offset any adverse impacts on groundwater dependent ecosystems, aquatic ecosystems or riparian vegetation.	Compliant	The Surface and Ground Water Response Plan has been included in the Water Management Plan to meet these requirements.
LANDSCAPE MANAGEMENT		
Rehabilitation		
18. For rehabilitation works within the Metropolitan Special Area, the Applicant must also ensure that these works are carried out to the satisfaction of WaterNSW.	Compliant	A Rehabilitation Management Plan and Conceptual Site Closure Plan have been developed. Closure and/or rehabilitation activities, when undertaken, will meet the requirements of the relevant

<table>
<tr><th>Condition of Consent</th><th>Status</th><th>Comments</th></tr>
<tr><td></td><td></td><td>regulatory agencies. Rehabilitation undertaken during each financial year is reported in the Annual Review and in the Annual Rehabilitation Report.</td></tr>
<tr><td>Rehabilitation Objectives</td><td></td><td></td></tr>
<tr><td>18A. The Applicant must rehabilitate the site in accordance with the conditions imposed on the mining lease(s) associated with the development under the Mining Act 1992. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the documents listed in condition 2 of Schedule 2, and comply with the objectives in Table 7.
Table 7: Rehabilitation Objectives
<table>
<tr><th>Feature</th><th>Objective</th></tr>
<tr><td>All areas of the site affected by the development</td><td>• Safe, stable and non-polluting
• Fit for the intended post-mining land use/s
• Establish the final landform and post-mining land use/s as soon as practicable after cessation of mining operations
• Minimise post-mining environmental impacts</td></tr>
<tr><td>Areas proposed for native ecosystem re-establishment</td><td>• Establish/restore self-sustaining native woodland ecosystems
• Establish local plant community types
• Establish:
– riparian habitat within any diverted and/or re-established creek lines and retained water features;
– habitat, feed and foraging resources for threatened fauna species; and
– vegetation connectivity and wildlife corridors, as far as is reasonable and feasible</td></tr>
<tr><td>Final Landform</td><td>• Stable and sustainable for the intended post-mining land use/s
• Integrated with surrounding natural landforms and other mine rehabilitated landforms, to the greatest extent practicable
• Incorporate micro-relief and drainage features that mimic natural topography and mitigate erosion, to the greatest extent practicable</td></tr>
<tr><td>Rehabilitation materials</td><td>• Soil and vegetative materials from areas disturbed under this consent (including topsoils, substrates and seeds) are recovered, managed and used as rehabilitation resources</td></tr>
<tr><td>Surface facilities sites</td><td>• To be decommissioned and removed, unless the Resources Regulator agrees otherwise</td></tr>
<tr><td></td><td>• All surface facilities sites are to be revegetated with suitable local native plant species to a landform consistent with the surrounding environment or the intended post mining land use(s)</td></tr>
<tr><td>Portals and vent shafts of the development</td><td>• To be decommissioned and made safe and stable
• Retain habitat for threatened species (e.g. bats), where practicable</td></tr>
<tr><td>Watercourses subject to approved mine water discharges</td><td>• Hydraulically and geomorphologically stable
• Aquatic ecology and riparian vegetation that is the same or better than prior to grant of this consent</td></tr>
<tr><td>Mine water discharges following mine closure (from any location)</td><td>• Negligible environmental consequence</td></tr>
<tr><td>Watercourses subject to subsidence impacts</td><td>• Remediate physical damage as soon as reasonably practicable, unless the environmental impacts of remediation exceed the environmental benefits</td></tr>
<tr><td>Water quality</td><td>• Water retained on the site is fit for the intended post-mining land use/s
• Water management is consistent with the regional catchment management strategy</td></tr>
<tr><td>Built features damaged by mining operations</td><td>• Repair to pre-mining condition or equivalent unless the:
– owner agrees otherwise; or
– damage is fully restored, repaired or compensated for under the Coal Mine Subsidence Compensation Act 2017</td></tr>
<tr><td>Cliffs, minor cliffs, rock face features and steep slopes</td><td>• No additional risk to public safety compared to prior to mining</td></tr>
<tr><td>Community</td><td>• Ensure public safety
• Minimise adverse socio-economic effects associated with mine closure</td></tr>
</table>
</td><td>Compliant</td><td>The Rehabilitation Management Plan has been developed to meet these objectives.

The objectives were re-approved by the Resources Regulator on 10 July 2025.</td></tr>
</table>

Condition of Consent	Status	Comments
18B. The Applicant must carry out the rehabilitation of the site progressively, that is, as soon as reasonably practicable following disturbance.	Compliant	Areas of disturbance outside of operational areas have been progressively rehabilitated. Refer to Section 8.1.1.
Rehabilitation Management Plan		
20. The Applicant must prepare a Rehabilitation Management Plan for the development, in accordance with the conditions imposed on the mining lease(s) associated with the development under the Mining Act 1992.	Compliant	A Rehabilitation Management Plan to meet the requirements of the mining lease standard conditions has been prepared and submitted. The RMP was reviewed in the reporting period.
Mine Closure Plan		
21. The Applicant must prepare a Mine Closure Plan to the satisfaction of the Secretary. The plan must: (a) be prepared: (i) by a suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary; (ii) in consultation with the Department, WaterNSW, DPE Water, Resources Regulator, WCC and (if requested by the Secretary) the Mining Panel; (iii) in accordance with any relevant Resources Regulator Guideline; and (b) be subject to peer review and submitted for approval at a date agreed by the Secretary, provided that this date is at least 2 years prior to the planned cessation of mining at the site; (c) include detailed consideration of best practice measures and emerging technologies to mitigate post mining greenhouse gas emissions from the mine, including consideration of how such measures will be integrated into the mine closure strategy; (d) include a stakeholder engagement plan to guide mine closure planning processes and outcomes;	N/A	A Conceptual Site Closure Plan has been developed that generally meets these requirements and all requirements will be met closer to mine closure. Site Closure is not planned within the next two (2) years.

Condition of Consent	Status	Comments
(e) investigate ways to minimise adverse socio-economic effects associated with mine closure; (f) contain a detailed mine closure strategy, which includes: (i) detailed consideration of all issues associated with sealing or not sealing mine entrances, with particular reference to groundwater re-pressurisation, developing hydraulic pressure heads within main headings and long-term emergence of mine waters within the Metropolitan Special Area and/or the Illawarra Escarpment; (ii) consideration of other underground mines hydraulically connected to Dendrobium Mine (including options regarding isolating those other mines); (iii) include details of any measures necessary to ensure that mine workings do not impact on stored waters or dams; (iv) consideration of the most up-to-date groundwater and surface water inflow modelling for Dendrobium Mine, including improved modelling of points of anticipated groundwater outflow; (v) a robust risk assessment that fully and objectively identifies the potential hazards associated with mine closure, the likelihood and consequences associated with these hazards materialising, the extent to which consequences can be controlled should the hazards materialise, and the residual risks after control measures have been put in place; and (vi) options for managing residual risks, such as ongoing mine water discharges and surface leakages of contaminated mine water, should the Dendrobium Mine not be able to be effectively sealed, and any requirement for water treatment prior to discharge; and (g) be fully reviewed and revised every three years following approval, unless the Secretary agrees otherwise. The Applicant must implement the Mine Closure Plan as approved by the Secretary. *Notes*: *The Mine Closure Plan should address all land impacted by the development.* *The Rehabilitation Plan and Mine Closure Plan require substantial integration to achieve all objectives for the rehabilitated site.*		
Bushfire Management Plan		

Condition of Consent	Status	Comments
22. The Applicant must prepare and implement a Bushfire Management Plan for the site, with particular reference to the mining area, in consultation with WaterNSW and to the satisfaction of the Rural Fire Service.	Compliant	An approved Bushfire Management Plan that meets these requirements is in place. The Bushfire Management Plan review was completed in FY25 to address comments from the RFS and WaterNSW.
Photographic Archival Recording		
22A. The Applicant must undertake photographic archival recording of significant built and landscape elements affected by Modification 8 prior to the commencement, during the works and after the completion of works, in accordance with the NSW Heritage Division publications 'How to prepare archival records of heritage items and Photographic Recording of Heritage Items using Film or Digital Capture'. A copy of these archival recordings must be provided to the Heritage Council of NSW and WCC.	Compliant	Archival recording was undertaken prior to, during and after the completion of works. The report dated 30 March 2020 was submitted to the WCC and Heritage Council of NSW.
Unexpected Historical Archaeological Relics		
22B. In the event that unexpected archaeological artefacts are uncovered during ground disturbing works, the Applicant must ensure work ceases in the subject area and a suitably trained archaeologist should attend the site to inspect the find. Should archaeological material be identified as having heritage significance, the Applicant must obtain any necessary further approvals before works can proceed.	Compliant	No unexpected archaeological artefacts were identified during ground disturbing works at the surface facilities.
TRANSPORT		
Rail Transport of Coal		
23. The Applicant must ensure that trains do not travel on the Kemira Valley rail line: (a) between 12 midnight and 6 am, until 29 April 2010; and	Compliant	The rail curfew has been adhered to during the reporting period.

Condition of Consent	Status	Comments
(b) between 11 pm and 6 am, from 30 April 2010 unless written approval is obtained from EPA for emergency use of the rail line.		No emergency use was required.
24. The Applicant must record the: (a) date and time of each train movement on the Kemira Valley rail line; and (b) amount of coal transported from the KVCLF each year and include a comprehensive summary and discussion of the results of this monitoring in each Annual Review.	Compliant	This data is recorded via the Logistics KPI Report and also on Pacific National Run Sheets. The data is summarised and reported in the Annual Review.
Road Transport		
25. The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for approval by 30 April 2009; (b) be prepared in consultation with the WCC, Mt Kembla Primary School and the CCC; (c) include traffic control measures for truck movements through residential areas, including Stones Road and its intersection with Cordeaux Road; (d) provide that mine shift changeover times and deliveries by heavy vehicle to the pit top facilities and KVCLF do not conflict with pick-up and drop-off times for Mt Kembla Primary School students; (e) provide heavy vehicle speed limits; (f) include a Driver's Code of Conduct to be applied to the applicant's employees and contractors working at the development and measures for the enforcement of this code; and (g) include procedures for regular monitoring of compliance with this plan. The Applicant must implement the Traffic Management Plan as approved by the Secretary.	Compliant	The Traffic Management Plan was reviewed over FY25 and was approved on 15 February 2025. The TMP has been implemented.
Road Maintenance		
26. The Applicant must enter into an agreement with WaterNSW, to the satisfaction of the Secretary, to share the reasonable costs of maintenance of all access roads,	Compliant	An agreement has been developed with WaterNSW.

Condition of Consent	Status	Comments
bridges and creek crossings located on land controlled by WaterNSW and used by the Applicant.		
27. The Applicant must establish an agreement with WCC to share the reasonable costs of maintenance of Stones Road for the life of the development. Prior to decommissioning of the mine, Stones Road must be inspected, to the satisfaction of WCC, and the road restored by the Applicant to a standard not less than its condition prior to the development's approval. If roadworks are not carried out by the Applicant within one month of being informed by WCC that these works are required under the maintenance agreement, WCC must be entitled to carry out such maintenance work at the Applicant's cost. Any dispute over implementation of this condition is to be referred to the Secretary for resolution.	Compliant	A Maintenance Agreement for Stones Road is in place, dated 28 August 2019.
VISUAL		
Visual Amenity		
28. The Applicant must minimise the visual impacts of the surface facilities to the satisfaction of the Secretary.	Compliant	A vegetative screen is maintained around the operation.
Lighting Emissions		
29. The Applicant must: (a) ensure that all external lighting associated with the surface facilities complies with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*; (b) take all practicable measures to mitigate off-site lighting impacts from the surface facilities; (c) ensure that light emitted from headlights of locomotives operating on the Kemira Valley rail line are screened from residences; and (d) report on the effectiveness of lighting emission controls in the Annual Review to the satisfaction of the Secretary.	Compliant	A Lighting and Visual Amenity Management Plan is in place. One (1) complaint regarding lighting was received in the reporting period. Corrective actions were taken to rectify the issue.
WASTE		
30. The Applicant must: (a) monitor the amount of waste generated by the development;	Compliant	Waste volumes are monitored. A summary of waste management

<table>
<tr><th>Condition of Consent</th><th>Status</th><th>Comments</th></tr>
<tr><td>(b) investigate ways to reuse, recycle, or minimise this waste;
(c) implement reasonable and feasible measures to minimise this waste; and
(d) report on waste management and minimisation in the Annual Review to the satisfaction of the Secretary.</td><td></td><td>activities associated with Dendrobium Mine is reported via the Annual Review.</td></tr>
<tr><td colspan="3">BIODIVERSITY</td></tr>
<tr><td colspan="3">Biodiversity Credit Requirements</td></tr>
<tr><td>31. Unless otherwise agreed by the Secretary, the Applicant must retire the biodiversity credits specified in Table 8, prior to commencing vegetation clearing associated with Modification 9. The retirement of credits must be carried out in consultation with BCS and in accordance with the Biodiversity Offsets Scheme of the BC Act.
Table 8: Biodiversity Credit Requirements
<table><tr><th>Credit Type</th><th>Credits Require</th></tr><tr><td colspan="2">Ecosystem Credits</td></tr><tr><td>PCT 1083 - Red Bloodwood -scribbly gum heathy woodland on sandstone plateaux of the Sydney Basin Bioregion</td><td>17</td></tr><tr><td colspan="2">Species Credits</td></tr><tr><td>Caladenia tessellata</td><td>33</td></tr><tr><td>Genoplesium baueri</td><td>33</td></tr></table></td><td>Compliant</td><td>A payment to the Biodiversity Conservation Fund was made on 15 September 2022 and approved on 20 September 2022 (BCT Reference BCF424).</td></tr>
<tr><td colspan="3">SCHEDULE 5: SPECIFIC ENVIRONMENTAL CONDITIONS – OTHER SITE COMPONENTS</td></tr>
<tr><td colspan="3">COAL WASHERY</td></tr>
<tr><td colspan="3">Hot Gas Exhaust Stack Discharges</td></tr>
<tr><td>1. The Applicant must:
(a) ensure that the concentration of pollutants discharged from the coal dryer hot gas exhaust complies with discharge limits set for the development in any EPL;
(b) regularly monitor the concentration of pollutants discharged from the coal dryer hot gas exhaust; and
(c) report on waste management and minimisation in the Annual Review to the satisfaction of the Secretary.</td><td>N/A</td><td>The Coal Dryer is not in operation.</td></tr>
<tr><td colspan="3">Fuel Source</td></tr>
<tr><td>2. The Applicant must ensure the coal drying plant only uses blast furnace offgas or natural gas as fuel for the drier.</td><td>N/A</td><td>The Coal Dryer is not in operation.</td></tr>
<tr><td colspan="3">WEST CLIFF COAL WASH EMPLACEMENT</td></tr>
<tr><td colspan="3">Coal Washery Reject</td></tr>
<tr><td>3. The Applicant must:</td><td>Compliant</td><td>Project Approval 08_0150 for the</td></tr>
</table>

Condition of Consent	Status	Comments
(a) monitor the amount of coal washery reject emplaced in the West Cliff Coal Wash Emplacement; (b) investigate ways to reduce emplacement of coal washery reject at West Cliff, including beneficial use or improved disposal options; and (c) report on these matters in the West Cliff AEMR to the satisfaction of the Secretary.		Bulli Seam Operations Project has been granted and as such takes precedence. Refer to Condition 8 of Schedule 5 of the Consent. *These requirements are reported in the Appin Mine Annual Review.*
Pollution Reduction Program		
4. The Applicant must develop with EPA a new Pollution Reduction Program (PRP) to be incorporated into the West Cliff Colliery's EPL. Subject to the satisfaction of EPA, the PRP must: (a) include investigation, trial and implementation of appropriate strategies, technologies or works to achieve agreed water quality discharge criteria for licensed discharges from the West Cliff Colliery site with particular reference to salinity; and (b) cover a period of not less than five years.	Compliant	Project Approval 08_0150 has been granted and as such takes precedence. Refer to Condition 8 of Schedule 5 of the Consent. *Projects to improve water quality discharged from Appin Mine and the outcomes of monitoring programs are reported in the Appin Mine Annual Review.*
Water Quality Monitoring Program		
5. The Applicant must review its water quality monitoring program for the West Cliff Mine in consultation with EPA and DPE Water and to the satisfaction of the Secretary.	Compliant	Project Approval 08_0150 has been granted and as such takes precedence. Refer to Condition 8 of Schedule 5 of the Consent.

Condition of Consent	Status	Comments
		A Water Management Plan is in place for Appin Mine. Consultation is undertaken as required.
Brennans Creek Diversion Bypass Rehabilitation Plan		
6. The Applicant must, by 30 June 2009, develop a Brennans Creek Diversion Bypass Rehabilitation Plan in consultation with BCS, DPE Water and Resources Regulator and to the satisfaction of the Secretary.	Compliant	Project Approval 08_0150 has been granted and as such takes precedence. Refer to Condition 8 of Schedule 5 of the Consent. *Brennans Creek Diversion Bypass Rehabilitation Plan was submitted to DoP in December 2008. The plan was approved on 9 September 2009.*
General Management of the Emplacement		
7. Subject to condition 2 of schedule 2 and conditions 3- 6 above, the Applicant must monitor and manage the West Cliff Coal Wash Emplacement as part of the Environmental Management Plan for the West Cliff Mine. Monitoring and management of the Emplacement must be reported within the West Cliff AEMR, rather than the Annual Review for this development.	Compliant	Project Approval 08_0150 has been granted and as such takes precedence. Refer to Condition 8 of Schedule 5 of the Consent. *Emplacement operations are managed in accordance with the Appin Mine Coal Wash Emplacement Area Management Plan. Details of the*

Condition of Consent	Status	Comments
		emplacement operations, including the rehabilitation aspects, are included in the Appin Mine Annual Review.
8. All references in this consent (including conditions 3 – 7 of this schedule and Appendix 3) that have direct application to the West Cliff Coal Wash Emplacement must cease to have force and effect subsequent to the grant of any project approval under Part 3A of the Environmental Planning & Assessment Act 1979 which includes the West Cliff Colliery and the West Cliff Coal Wash Emplacement Area.	Compliant	Project Approval 08_0150 has been granted.
SCHEDULE 6: SPECIFIC ENVIRONMENTAL CONDITIONS – EXTENDED SITE		
GREENHOUSE GASES & ENERGY EFFICIENCY		
1. The Applicant must prepare a Greenhouse and Energy Efficiency Plan for the development. This plan must: (a) be prepared in consultation with EPA and generally in accordance with the Guidelines for Energy Savings Action Plans (DEUS 2005, or its latest version); (b) be submitted to the Secretary by 30 April 2009 for approval; (c) include a program to monitor greenhouse gas emissions and energy use generated by the development; (d) include a framework for investigating and implementing measures to reduce greenhouse gas emissions and energy use at the development; (e) include a research program to inform the continuous improvement of the greenhouse gas minimisation measures at the development; (f) describe how the performance of these measures would be monitored over time; and (g) report on the development's greenhouse gas emissions and minimisation measures in the AEMR to the satisfaction of the Secretary. *Note: The Applicant may consider the Dendrobium Mine's greenhouse gas minimisation measures within its overall greenhouse gas minimisation measures across its Southern Coalfield mines and related operations.*	Compliant	Documents to meet these requirements were originally submitted to the DoP by 30 April 2009 to meet these requirements and approved in December 2009. These requirements are included in the approved Air Quality and Greenhouse Gas Management Plan and are being implemented. The AQMP was reviewed during the reporting period and

Condition of Consent	Status	Comments
The Applicant must implement the Greenhouse and Energy Efficiency Plan as approved by the Secretary.		approved on 15 January 2025. A Decarbonisation Strategy for ICHPL is being progressively implemented and reviewed.
2. The Applicant must implement all reasonable and feasible measures to minimise the greenhouse gas emissions from the development to the satisfaction of the Secretary.	Compliant	Measures being undertaken are reported in the Annual Review.
SCHEDULE 7: ADDITIONAL PROCEDURES FOR AIR QUALITY AND NOISE MANAGEMENT		
NOTIFICATION OF LANDOWNERS		
1. If the results of monitoring required in Schedule 4 identify that the impacts generated by the development are greater than the relevant impact assessment criteria in Schedule 4, except where this is predicted in the documents listed in condition 2 of schedule 2 or where a negotiated agreement has been entered into in relation to that impact, then the Applicant must notify the Secretary and the affected landowners and/or existing or future tenants (including tenants of mine-owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the development is complying with the criteria in Schedule 4.	Compliant	Results are reported in the Annual Review which is publicly available on the GM³ website. Monitoring results are provided in the 14-day report that is available on the GM³ website. Notifications of exceedances of noise impact assessment criteria were made to the Department and relevant landowners as required in FY25.
INDEPENDENT REVIEW		
2. If a landowner considers the development to be exceeding the impact assessment criteria in schedule 4, except where this is predicted in the EA, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land. If the	N/A	ICHPL is not aware of any requests for an Independent Review in this reporting period.

Condition of Consent	Status	Comments
Secretary is satisfied that an independent review is warranted, the Applicant must within 2 months of the Secretary's decision: (a) consult with the landowner to determine his/her concerns; (b) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to conduct monitoring on the land, to: determine whether the development is complying with the relevant impact assessment criteria in schedule 4; and identify the source(s) and scale of any impact on the land, and the development's contribution to this impact; and (c) give the Secretary and landowner a copy of the independent review.		A Noise Impact Assessment was requested to be undertaken by the Department in response to landowner complaints.
3. If the independent review determines that the development is complying with the relevant impact assessment criteria in schedule 4, then the Applicant may discontinue the independent review with the approval of the Secretary. If the landowner disputes the results of the independent review then either the Applicant or the landowner may refer the matter to the Secretary for resolution. Where matters referred to the Secretary under this condition cannot be resolved by the Director- General within 28 days, the Secretary must refer the matter to an Independent Dispute Resolution Process.	N/A	No independent review has been undertaken.
4. If the independent review determines that the development is not complying with the relevant impact assessment criteria in Schedule 4, and that the development is primarily responsible for this non compliance, then the Applicant must: (a) take all reasonable and feasible measures, in consultation with the landowner, to ensure that the development complies with the relevant criteria and conduct further monitoring to determine whether these measures ensure compliance; or (b) secure a written agreement with the landowner to allow exceedances of the relevant criteria; or (c) offer to acquire all or part of the landowner's land in accordance with the procedures in conditions 6-8 below to the satisfaction of the Secretary.	N/A	No independent review has been undertaken.

Condition of Consent	Status	Comments
5. If further monitoring under condition 4(a) determines that the development is complying with the relevant impact assessment criteria, then the Applicant may discontinue the independent review with the approval of the Secretary. If further monitoring under condition 4(a) determines that measures implemented under that condition have not achieved compliance with the impact assessment criteria in schedule 4, and the Applicant cannot secure a written agreement with the landowner under condition 4(b) to allow these exceedances, then the Applicant must, upon receiving a written request from the landowner, acquire all or part of the landowner's land in accordance with the procedures in conditions 6-8 below.	N/A	No independent review has been undertaken.
LAND ACQUISITION		
6. Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant must make a binding written offer to the landowner based on: (a) the current market value of the landowner's interest in the property at the date of this written request, as if the property was unaffected by the development the subject of the development application, having regard to the: existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and presence of improvements on the property and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the 'additional noise mitigation measures' in condition 6 of schedule 4; (b) the reasonable costs associated with: relocating within the local government areas of the affected Councils, or to any other local government area determined by the Secretary; obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is required; and (c) reasonable compensation for any disturbance caused by the land acquisition process.	N/A	No written requests have been received from landowners for acquisition.

Condition of Consent	Status	Comments
If, within 28 days of the Applicant making this offer, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Secretary for resolution. Upon receiving such a referral, the Secretary must request the President of the NSW Division of the Australian Property Institute (the API) to appoint a qualified independent valuer to: consider submissions from both parties; establish a fair market valuation for the land and determine reasonable costs and compensation for the acquisition, in accordance with paragraphs (a)-(c) above and any guidance or guidelines that the Secretary may prepare relating to this condition; and propose any appropriate fair and reasonable terms of acquisition. The appointed valuer is to provide a full report and explanation of their valuation, determinations and proposed terms of acquisition to the Secretary, the Applicant and the landowner. The Secretary must consider the report and decide whether the valuation, determinations and any proposed terms of acquisition are fair and reasonable and advise the parties accordingly. Within 14 days of receiving the Secretary's decision that the independent valuer's report is fair and reasonable, the Applicant must make a written offer to purchase the land at a price and according to terms not less than set out in the independent valuer's report. If the Secretary is of the opinion that the valuation and/or determination is not fair and/or reasonable, they must give notice to the parties that a further independent valuation and determination will be undertaken in accordance with this condition and duly request a further appointment by the API. If the landowner refuses to accept within 6 months a written offer duly made by the Applicant under this condition, then the Applicant's obligations to acquire the land must cease, unless otherwise agreed by the Secretary.		

Condition of Consent	Status	Comments
7. The Applicant must bear the full costs of any independent valuer's valuation, determination and report.	N/A	No written requests have been received from landowners for acquisition.
8. If the Applicant and landowner agree that only part of the land must be acquired, then the Applicant must pay all reasonable costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of the plan at the Office of the Registrar-General.	N/A	No written requests have been received from landowners for acquisition.
SCHEDULE 8: ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING AND REPORTING		
ENVIRONMENTAL MANAGEMENT STRATEGY		
1. The Applicant must prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must be submitted to the Secretary for approval by 30 April 2009, and: (a) provide the strategic framework for environmental management of the development; (b) identify the statutory requirements that apply to the development; (c) describe in general how the environmental performance of the development would be monitored and managed for the: mining area; surface facilities; other site components; and extended site; (d) describe the procedures that would be implemented to: keep the local community and relevant agencies informed about the operation and environmental performance of the development; receive, handle, respond to, and record complaints; resolve any disputes that may arise during the course of the development; respond to any non-compliance; manage cumulative impacts; and respond to emergencies; and (e) describe the role, responsibility, authority and accountability of all key personnel involved in the	Compliant	The Environmental Management Strategy was reviewed during the reporting period and was last approved on 7 February 2025. The EMS has been implemented.

Condition of Consent	Status	Comments
environmental management of the development; and (f) include: references to any strategies, plans and programs approved under the conditions of this consent; and a clear plan depicting all the monitoring to be carried out under the conditions of this consent. The Environmental Management Strategy approved by the Secretary must be implemented.		
MANAGEMENT PLAN REQUIREMENTS		

Condition of Consent	Status	Comments
2. Management plans required under this consent must be prepared in accordance with relevant guidelines, and include: (a) a summary of relevant background or baseline data; (b) details of: (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions); (ii) any relevant limits or performance measures and criteria; and (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; (c) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria; (d) a program to monitor and report on the: (i) impacts and environmental performance of the development; and (ii) effectiveness of the management measures set out pursuant to condition 2(c); (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible; (f) a program to investigate and implement ways to improve the environmental performance of the development over time; (g) a protocol for managing and reporting any: (i) incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria); (ii) complaint; (iii) failure to comply with statutory requirements; and (h) a protocol for periodic review of the plan. Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.	Compliant	Management Plans are progressively reviewed to meet these requirements.

Condition of Consent	Status	Comments
2A. Within three months of the: (a) submission of an incident report under condition 4 of Schedule 8; (b) submission of an Annual Review under condition 5 of Schedule 8; (c) submission of an Independent Environmental Audit under condition 6 of Schedule 8; or (d) approval of any modification of the conditions of this consent, the suitability of existing strategies, plans and programs required under this consent must be reviewed by the Applicant. If necessary, to either improve the environmental performance of the development or cater for a modification, the strategies, plans and programs required under this consent must be revised, to the satisfaction of the Secretary and submitted to the Secretary for approval within six weeks of the review. *Note: This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.*	Compliant	Management Plans have been reviewed as required (refer to Section 13.3). A review of all management plans was undertaken in FY25 to rebrand them from South32 to GM³. The Management Plan Review Log has been maintained.
REPORTING		
Incident Reporting		
3. Within 24 hours of detecting the occurrence of an incident that causes (or may cause) material harm to the environment, the Applicant must notify the Department and other relevant agencies of the incident.	N/A	There were no incidents that caused or had the potential to cause material environmental harm over the reporting period that related to operational activities. An incidence of foam in American Creek was identified by the EPA during a site inspection.

Condition of Consent	Status	Comments
4. Within 7 days of notifying the Department and other relevant agencies of such an incident, the Applicant must provide the Department and these agencies with a written report that: (a) describes the date, time, and nature of the incident; (b) identifies the cause (or likely cause) of the incident; (c) describes what action has been taken to date; and (d) describes the proposed measures to address the incident.	N/A	There were no incidents that caused or had the potential to cause material environmental harm over the reporting period.
Annual Review		
5. By the end of September each year (or other such timing as may be agreed by the Secretary), and for at least 3 years following the cessation of mining at the development, the Applicant must submit an Annual Review to the Secretary, CCC and all relevant agencies reviewing the environmental performance of the development to the satisfaction of the Secretary. This report must relate to the previous financial year and: (a) identify the standards and performance measures that apply to the development; (b) describe the development (including any rehabilitation) that was carried out in the previous financial year; (c) describe the development (including any rehabilitation) that is proposed to be carried out over the current financial year; (d) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years; (e) include a summary of the monitoring results for the development during the past year; (f) a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, including a comparison of these results against the: (i) relevant statutory requirements, limits or performance measures/criteria; (ii) requirements of any plan or program required under this consent; (iii) monitoring results of previous years; and (iv) relevant predictions in the documents listed in condition 2 of Schedule 2.	Compliant	The Annual Review is prepared to meet the requirements of this condition. The Annual review is submitted to the relevant stakeholders annually as per the requirements. The Annual Review is made available on the GM^3 website.

Condition of Consent	Status	Comments
(g) identify any non-compliance or incident which occurred in the previous financial year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence; (h) evaluate and report on: (i) the effectiveness of the noise and air quality management systems; and (ii) compliance with the performance measures, criteria and operating conditions in this consent; (i) identify any trends in the monitoring data over the life of the development; (j) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and (k) describe what measures will be implemented over the next financial year to improve the environmental performance of the development. Copies of the Annual Review must be submitted to the affected Councils and made available to the CCC and any interested person upon request.		
6. By 31 December 2011, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must: (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary; (b) include consultation with the relevant agencies and the CCC; (c) assess the environmental performance of the development and assess whether it is complying with the relevant requirements in this consent and any relevant EPL or mining lease (including any strategy, plan or program required under these approvals); (d) review the adequacy of strategies, plans or programs required under these approvals; (e) recommend measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under these approvals; and (f) be conducted and reported to the satisfaction of the Secretary.	Compliant	An Independent Environmental Audit was undertaken by Onward Consulting in FY24. The IEA Report and response to recommendations is provided on the GM³ website. The requirements of this condition relating to the audit were met. The next IEA will be undertaken by 31 December 2026.

Condition of Consent	Status	Comments
Note: This audit team must be led by a suitably qualified auditor and include experts in the fields of a) mine subsidence impacts and remediation and b) stream hydrology and water quality.		
7. Within three months of commencing an Independent Environmental Audit, or within another timeframe agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Secretary. Note: The audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.	Compliant	The FY24 IEA report, including the response to recommendations, was submitted to the Department as required. Progress with the actions identified in the response to recommendations is provided in Appendix 9.
Monitoring and Environmental Audits		
8. Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit. Note: For the purposes of this condition, as set out in the EP&A Act, "monitoring" is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an "environmental audit" is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.	Compliant	Noted.
COMMUNITY CONSULTATIVE COMMITTEE		
9. The Applicant must maintain a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. This CCC must be operated in general accordance with the Department's Community	Compliant	The DCCC is in place.

Condition of Consent	Status	Comments
Consultative Committee Guidelines: State Significant Projects (2016) to the satisfaction of the Secretary. *Notes*: *• The CCC is an advisory committee only.* *• In accordance with the guidelines, the committee should comprise an independent chair and appropriate representation from the Applicant, Council and the local community.*		Meetings are nominally held every two (2) months.
10. If required by the CCC, the Applicant must establish and maintain a trust fund, or other funding arrangement that may be agreed between the Applicant and the CCC. This fund must be: (a) managed by the Chair of the CCC to facilitate the functioning of the CCC; (b) used only if required for the engagement of consultants to interpret technical information and the like; (c) provided with $8,000 per annum (indexed according to the CPI) by the Applicant for the duration of mining operations and other activities under the consent, or as otherwise directed by the Secretary; (d) managed so that any monies unspent during each year are returned to the Applicant; (e) managed so that the Chair of the CCC causes a record of the finances of the fund to be kept and provided to the Applicant and the Secretary at the end of each year the fund is used.	Compliant	Funds will be released as required when requested by the CCC. There were no requests in FY25.
ACCESS TO INFORMATION		
11. Before the commencement of Modification 8 until the completion of all rehabilitation required under this consent, the Applicant must: (a) make the following information and documents (as they are obtained, approved or as otherwise stipulated within the conditions of this consent) publicly available on its website: (i) the documents referred to in condition 2 of Schedule 2 of this consent; (ii) all current statutory approvals for the development; (iii) all approved strategies, plans and programs required under the conditions of this consent; (iv) minutes of CCC meetings; (v) regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent;	Compliant	Condition 11 of Schedule 8 was included in the Consent with MOD 8 dated 13 July 2018. All of these documents were not required to be available prior to MOD 8. MOD 5 documents are available on the GM³ website. ICHPL does not have access to documents prior to MOD 5.

Condition of Consent	Status	Comments
(vi) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; (vii) a summary of the current stage and progress of the development; (viii) contact details to enquire about the development or to make a complaint; (ix) a complaints register, updated monthly; (x) the Annual Reviews of the development; (xi) audit reports prepared as part of any Independent Environmental Audit of the development and the Applicant's response to the recommendations in any audit report; (xii) any other matter required by the Secretary; and (b) keep such information up to date, to the satisfaction of the Secretary.		Approvals, strategies, plans, programs and other documentation is updated on the website as they become available. Monitoring data is provided in the 14-day report.

Appendix 3: Community Complaints Report - FY25

Date	Nature of Complaint	Actions / Follow Up
July 2024	Grievance 0045671 0 complaints received	Complaints or communications received through Grievance 0045671 are reported separately to this process.
5/07/2024	A community member sent an email to IC Enquiry inbox on 5 and 12 July with concerns regarding heavy vehicles using Gibsons Road. Concerns related specifically to road weight limit, speeding, and dissatisfaction with using this road to/from the mine.	An investigation identified and confirmed that the trucks in question are related to contractors linked to our operations. A formal communication was sent to all our contractors to reinforce the preferred route as per the Traffic Management Plan and driver behaviour as per the Drivers Code of Conduct. (Note: In-Vehicle Monitoring Systems (IVMS) did not detect speeding for 2 of the 3 vehicles. The third vehicle did not have IVMS.) The feedback was provided to the community member, who was satisfied.
18/07/2024	A community member called the Community Team at 2:40 pm on 17 July and at 12 pm on 18 July regarding light vehicles from the mine not stopping at the stop sign on Stones Road.	An investigation identified two contractors who subsequently issued a warning to all their workers reminding adherence to fully stop at all designated Stop Signs along Stones Road. The community member was made aware of the result and satisfied.
August 2024	Grievance 0045671 2 complaints received	Complaints or communications received through Grievance 0045671 are reported separately to this process.

Date	Nature of Complaint	Actions / Follow Up
12/08/2024	A member of the community called the Community Line at 13.08 regarding loud 'machinery' noises coming from Dendrobium Pit Top.	An investigation identified the potential source being a vacuum truck undertaking activities at a sediment pond located at the bottom car park of Dendrobium Pit Top. The community member was informed about the works and that these activities will run until Friday 16 August. No reply received. A notification was sent to all near neighbours to inform of these works.
20/08/2024	A community member emailed the Community Inbox regarding noise and duration being generated from vacuum truck operations from Dendrobium Pit Top.	An investigation confirmed that the noise was generated by a vacuum truck operating at the lower sediment pond at the Pit Top. The vacuum truck has been in operation for nine (9) days, with the work extended due to the excessive amount of sediment in the ponds. Completion of the work has been expedited and is expected to finish by Friday. The investigation outcome was communicated to the community member, who also provided some further suggestions for future work.
September 2024	Grievance 0045671 0 complaints received	Complaints or communications received through Grievance 0045671 are reported separately to this process.
September 2024	No complaints received for the month.	
October 2024	Grievance 0045671 0 complaints received	Complaints or communications received through Grievance 0045671 are reported separately to this process.

Date	Nature of Complaint	Actions / Follow Up
31/10/2024	A member of the Dendrobium Mine Community Consultative Committee contacted the Community Line (1:36 pm) regarding excess "black smoke" coming from a mine contractor shuttle bus travelling along Cordeaux Road. A registration number was provided.	An investigation with the mine contractor was conducted. The bus was taken out of rotation and sent for service. The community member was informed of the outcome of the investigation and was satisfied.
November 2024	Grievance 0045671 2 complaints received.	Complaints or communications received through Grievance 0045671 are reported separately to this process.
November 2024	No complaints received for the month.	
December 2024	Grievance 0045671 0 complaints received.	Complaints or communications received through Grievance 0045671 are reported separately to this process.
December 2024	No complaints received for the month.	
January 2025	Grievance 0045671 0 complaints received.	Complaints or communications received through Grievance 0045671 are reported separately to this process.

Date	Nature of Complaint	Actions / Follow Up
06/01/2025	A community member contacted the Community Line at 10:08 am to inform of increasing rail noise on 28 December at approximately 7 pm. They also noted multiple trains making noise between Christmas and New Year.	Investigations were undertaken by the contractor; however, the time lapse between the event occurrence and the community member's complaint prevented the contractor from identifying the specific train to perform acoustic testing. The contractor is aware of the issue and will continue routine monitoring.
20/01/2025	A community member emailed the Community mailbox regarding excessive horn use at the level crossing by some train drivers along the Kemira Valley Rail Line. The prolonged horn by some drivers is causing a nuisance at their residence.	The investigation by the rail contractor confirmed no hazards were detected on the day and independently verified that the horn length at the time in question was ~3 seconds. The rail contractor informed relevant personnel regarding the nature of the complaint. The community member has been notified of the outcome via return email with the rail contractor to review practices and ensure they remain appropriate for the crossing and its surroundings.
25/01/2025	A community member contacted the Community Call Line to inform of 'squealing' noise coming from the train heading to Kemira Valley Coal Loading Facility at approximately 5:53 pm.	The rail contractor identified the rail unit in question and undertook inspections. The investigation identified no obvious issues however monitoring would continue. The Community Member has been informed of this outcome via email.

Date	Nature of Complaint	Actions / Follow Up
25/01/2025	A community member submitted a contact request via the GM^3 corporate website, reporting an increase in 'coal dust' at their home over the past year.	The Environment team investigated, reviewing operations at Kemira Valley Coal Loading Facility, including activity levels and truck movements along Stones Road. The assessment found no increase beyond normal operations. Additionally, dust monitoring data has not recorded any significant changes (below the assessment criteria). The complainant was emailed with the investigation outcome.
27/01/2025	A community member called the Community Call Line regarding a loud noise coming from the Dendrobium Pit Top around 08:23 pm.	It was identified that the source of the noise was due to an operator unloading material into a bin along the upper portal road. The activity stopped. The night shift Undermanager spoke with the operator involved and communication of this event was circulated to the managers onsite to avoid similar activities occurring in the evening. The investigation outcomes were emailed to the complainant as requested.
27/01/2025	A community member called the Community Call Line at 10:18 am to report concerns about the train horn near the level crossing at Central Road. They stated that the horn used by trains is too loud and prolonged. No additional details were provided.	No contact details were provided from the community member preventing additional information to be gathered. The complaint was passed onto the rail contractor.

Date	Nature of Complaint	Actions / Follow Up
February 2025	Grievance 0045671 1 complaint received.	Complaints or communications received through Grievance 0045671 are reported separately to this process.
13/02/2025	A community member called the Community Call Line at 09:48 am to report 'screeching/ squealing' noise coming from a train as they were walking along the Mount Kembla Memorial Pathway as well as earlier in the morning. The train number was identified.	The rail contractor conducted a roll-by inspection and identified an issue with the train's main valve. Maintenance was carried out and the issue rectified.
March 2025	Grievance 0045671 0 complaint received.	Complaints or communications received through Grievance 0045671 are reported separately to this process.
08/03/2025	A community member emailed the Community mailbox at 08:43 am regarding “high levels of coal dust” at their property on Stones Road, Mt Kembla.	The Operational and Environment Team investigated activity (i.e. truck movements) and dust monitoring data, concluding no significant changes in activity or dust-levels recorded (below the assessment criteria). The community member has been informed of the outcome.

Date	Nature of Complaint	Actions / Follow Up
25/03/2025	A community member emailed the Community mailbox at 09:50 am regarding an increase in noise being heard from the pit top over three (3) consecutive nights.	A review of security and monitoring confirmed the noise was due to shift change vehicle movements, with additional ballast loading onto a truck outside standard hours on Sunday. The operator responsible was identified, and the site will reinforce that ballast loading should not occur after 6:00 pm. The community member was informed and satisfied with the outcome.
April 2025	Grievance 0045671 0 complaint received.	Complaints or communications received through Grievance 0045671 are reported separately to this process.
April 2025	No complaints received for the month.	
May 2025	Grievance 0045671 1 complaint received.	Complaints or communications received through Grievance 0045671 are reported separately to this process.
14/05/2025	A community member contacted the Community Team at 4:32 pm to report a bright light coming from the Kemira Valley Coal Loading Facility, which was shining directly into their residence.	The Dendrobium team investigated the concern and identified the light source as an existing fixture located at the end of the rail siding in Kemira Valley Coal Loading Facility. To minimise any ongoing impact, the light will be repositioned during the upcoming scheduled rail shutdown. The community member was informed and satisfied with the outcome.

Date	Nature of Complaint	Actions / Follow Up
16/05/2025	A community member emailed the Community mailbox at 4:30 pm reporting a noise disturbance during the early hours of Friday 16 May. The noise was noted at approximately 1:57 am and again two hours later.	Operational records confirm an underground loader surfaced briefly at 1:57 am and again between 2:20 am–2:40 am for material handling, before returning underground at 3:49 am. Mitigation measures are being reinforced to limit nighttime surface activity to essential operations only. A follow-up meeting has been offered to the community member, with no response received.
June 2025	Grievance 0045671 0 complaint received.	Complaints or communications received through Grievance 0045671 are reported separately to this process.
10/06/2025	A community member emailed the Community mailbox on 12 June 2025 at 5:35am reporting "machinery and a loud humming noise" observed over three (3) consecutive mornings: • Tuesday, 10 June from 4:00 am • Wednesday, 11 June from 4:30 am • Thursday, 12 June from 3:30 am	A review of CCTV footage, site noise monitoring data, and vehicle movements found no clear correlation between the described humming noise and site operations. A single LHD (loader) movement near the portal entry was identified at 4:17 am on Tuesday, 10 June. All supply fleet operators have been instructed to park loaders inside the portal and walk out if exiting before 6 am. This updated procedure has been communicated to the relevant teams. No site-related activity or noise sources were identified on Wednesday or Thursday. Increased public traffic was observed near the entrance during these early hours. The investigation outcome was provided to the community member via email, with no response received to date.

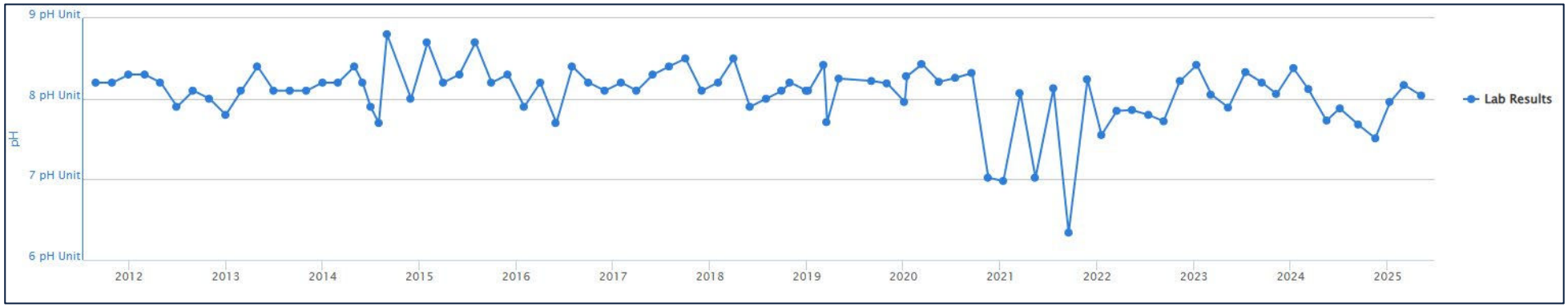
Date	Nature of Complaint	Actions / Follow Up
19/06/2025	A community member emailed the Community mailbox at 8:34 pm regarding 'machinery driving and loud clunking' noise being heard from Dendrobium Pit Top earlier that morning at approximately 1 am.	A review of operational activity confirmed that no loaders were on surface at the time, with activities being consistent with routine shift changeover. Noise monitoring also confirmed that levels remained within approved limits. The investigation outcome was emailed to the complainant, with no response received to date.

Appendix 4: Dendrobium Mine Long-Term Environmental Monitoring Data

Water Quality Monitoring Results

DEND 7

pH



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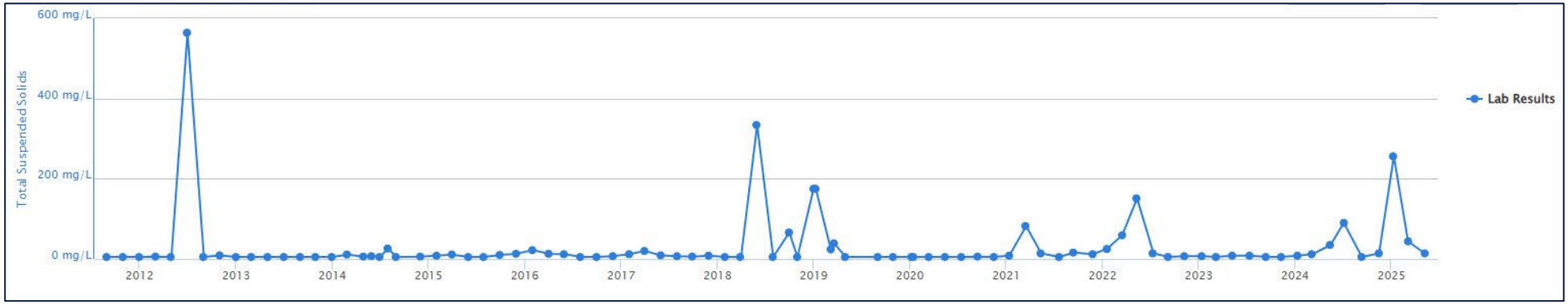

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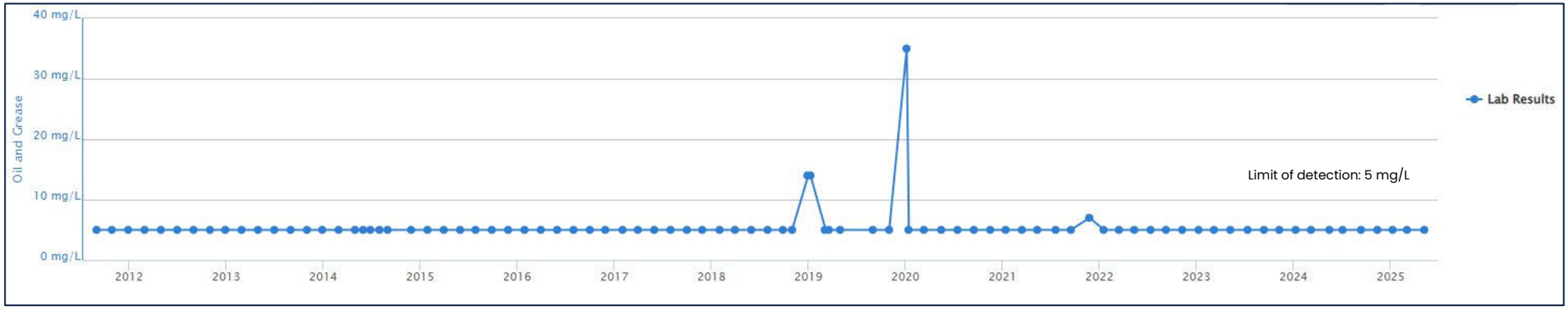

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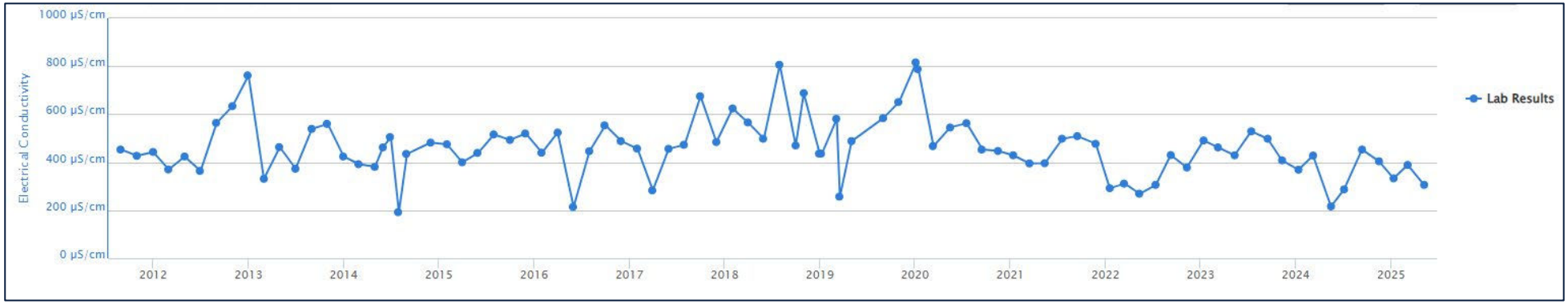
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DEND 10

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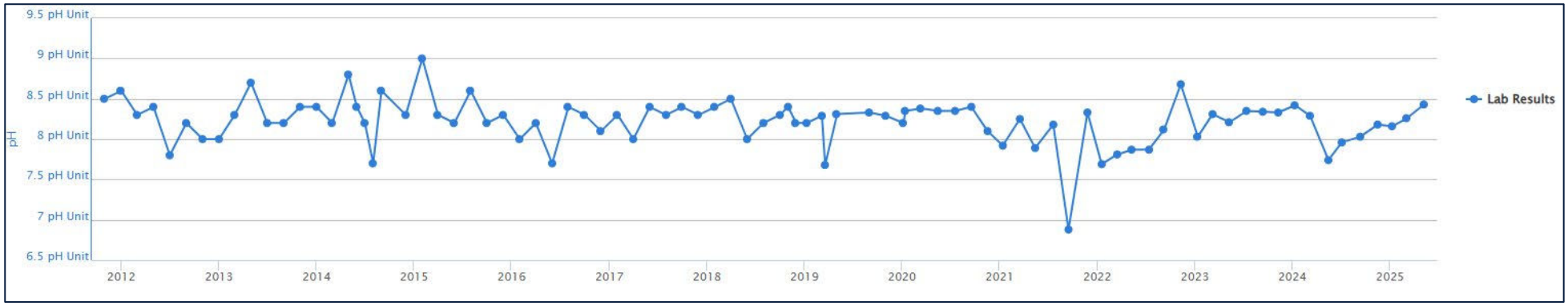
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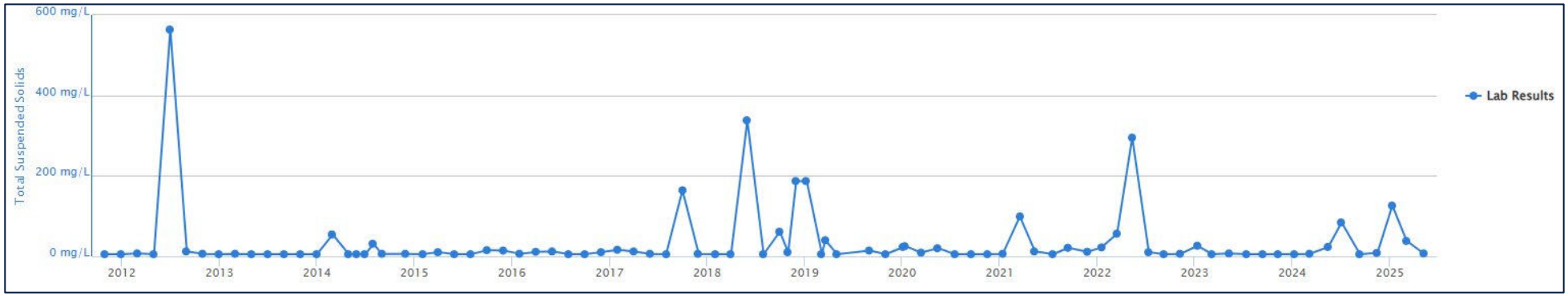
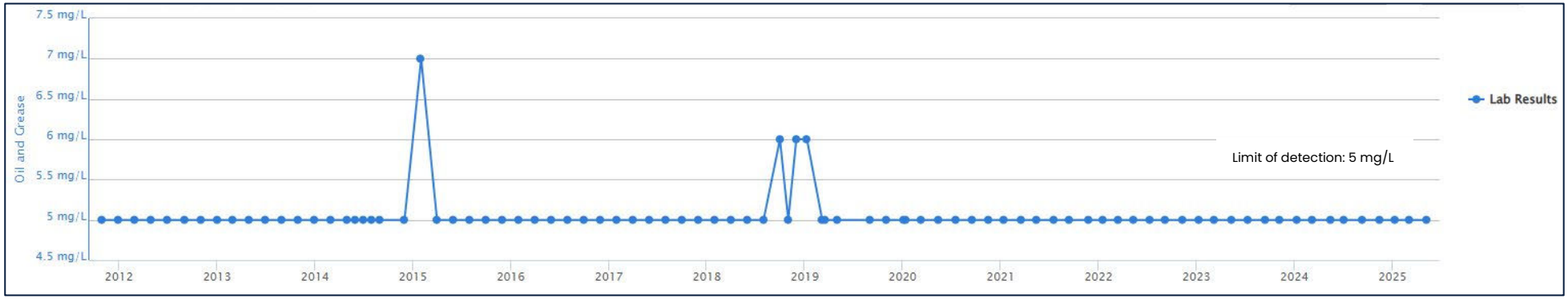
7.5 pH Unit
7 pH Unit
6.5 pH Unit
pH
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Lab Results

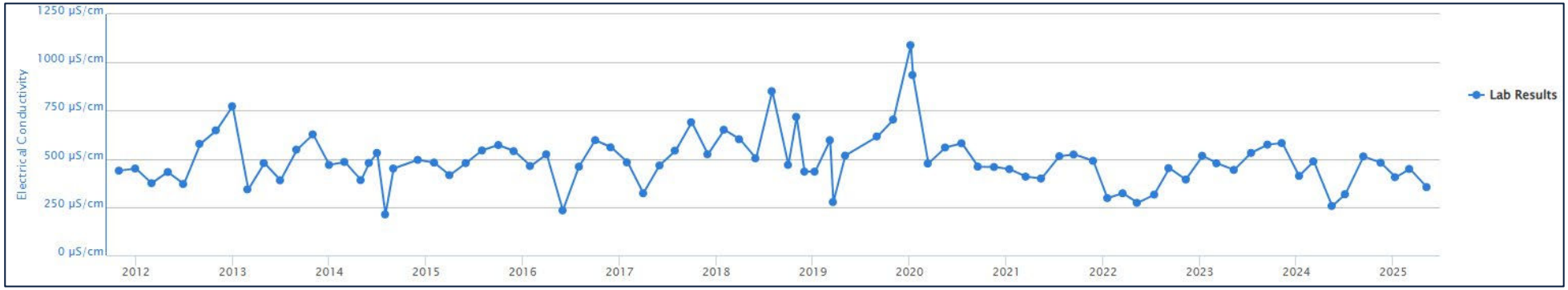
TSS



Oil and Grease

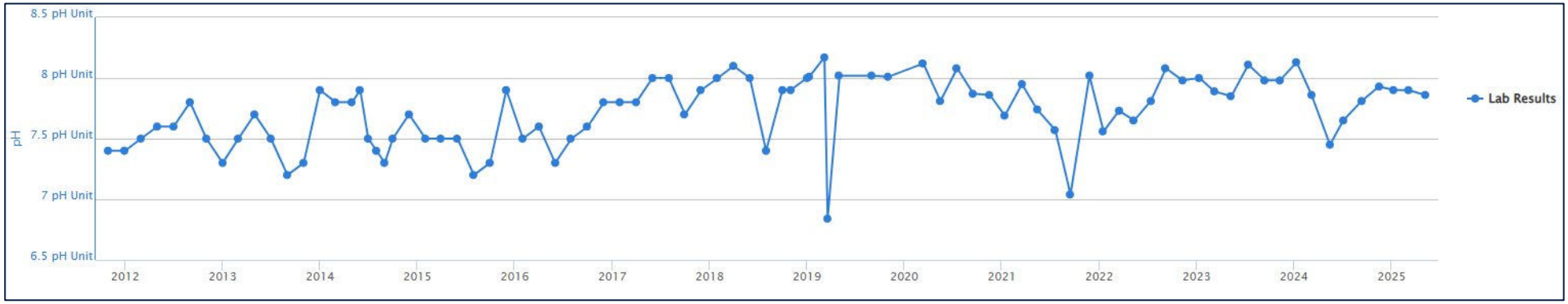


EC

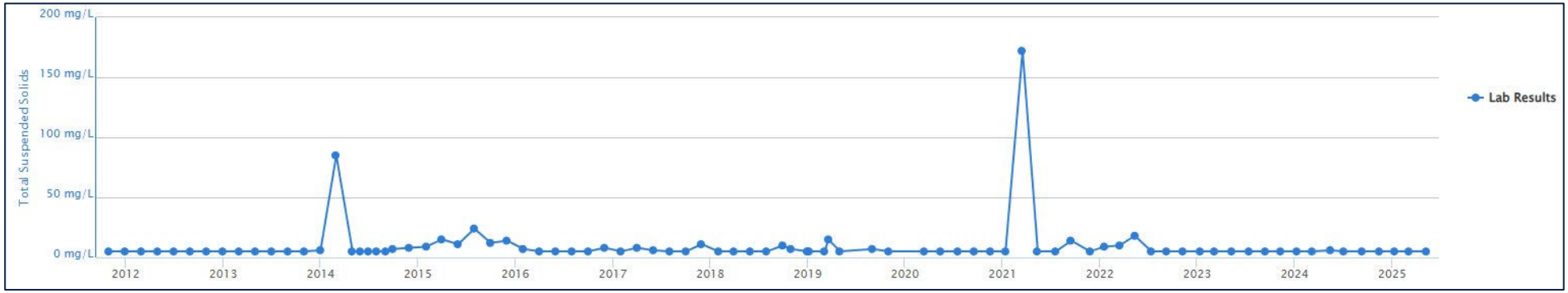

1250 µS/cm
1000 µS/cm
750 µS/cm
500 µS/cm
250 µS/cm
0 µS/cm
Electrical Conductivity
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Lab Results

DEND 12

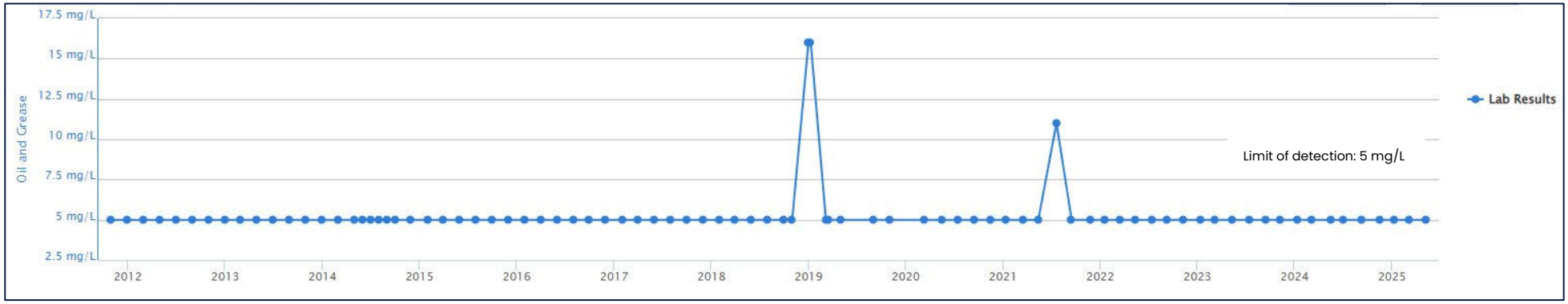
pH


8.5 pH Unit
8 pH Unit
7.5 pH Unit
7 pH Unit
6.5 pH Unit
pH
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Lab Results

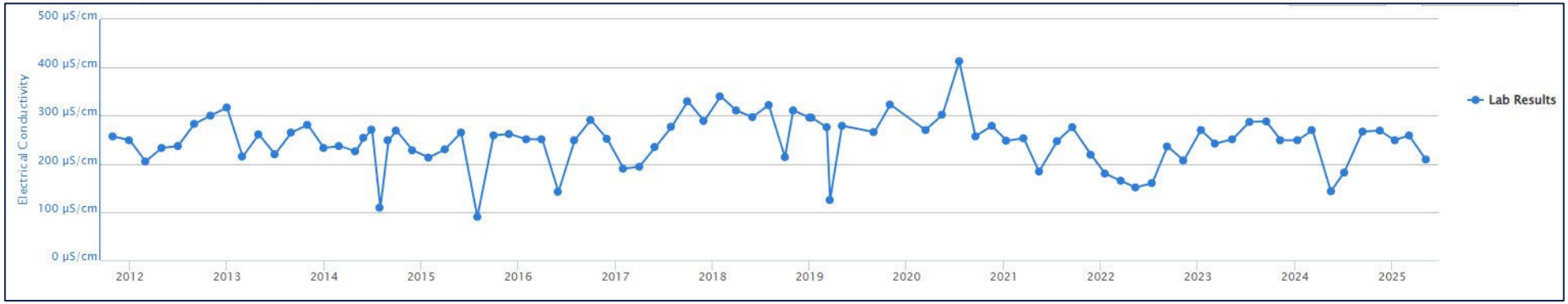
TSS



Oil and Grease

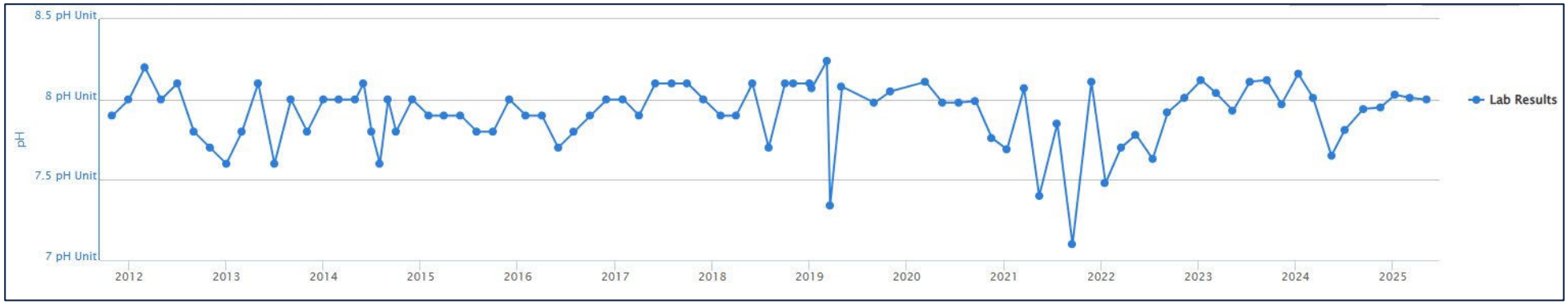


EC

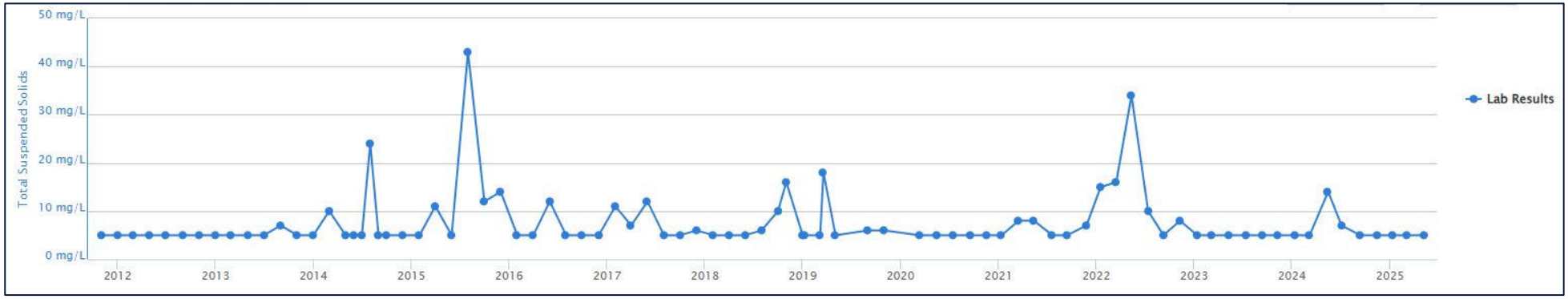

500 µS/cm
400 µS/cm
300 µS/cm
200 µS/cm
100 µS/cm
0 µS/cm
Electrical Conductivity
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Lab Results

DEND 13

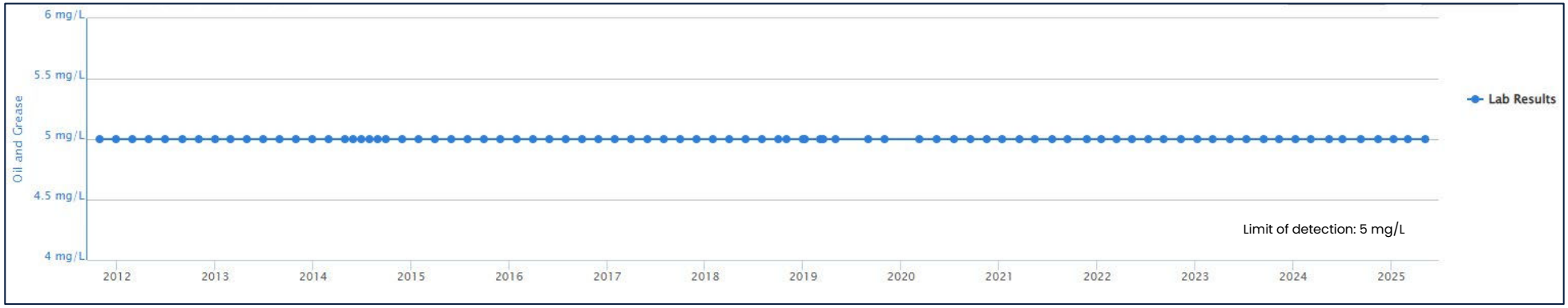
pH


8.5 pH Unit
8 pH Unit
7.5 pH Unit
7 pH Unit
pH
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Lab Results

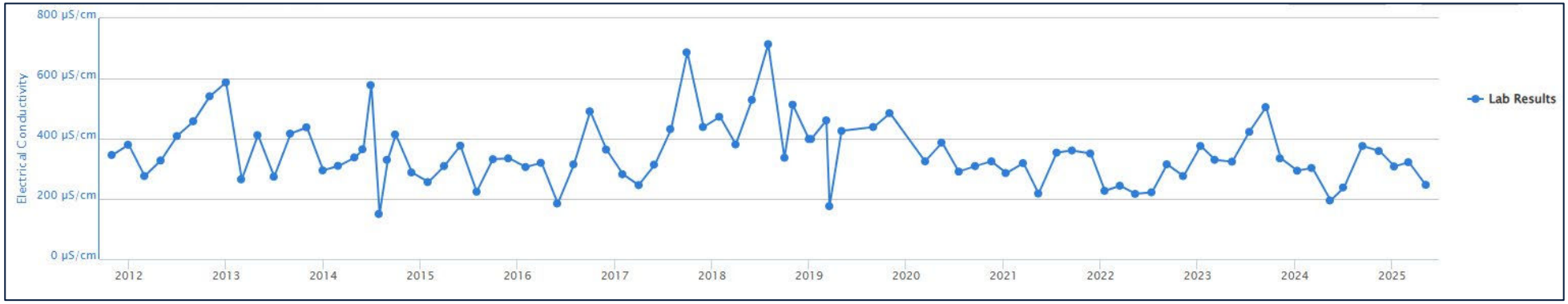
TSS



Oil and Grease

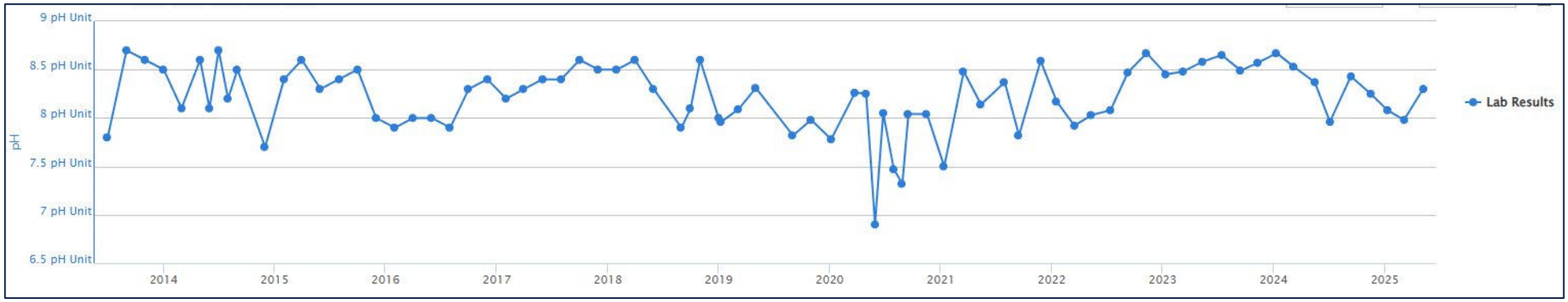


EC

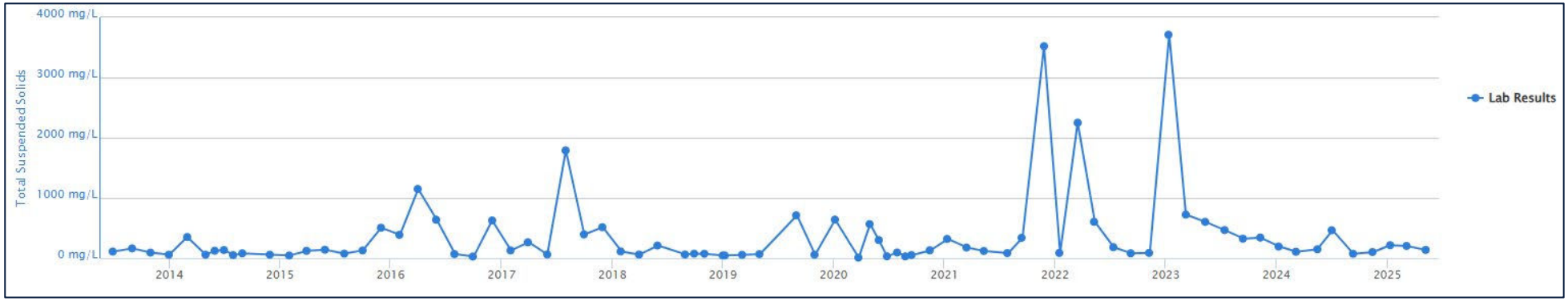


DEN-PTSP

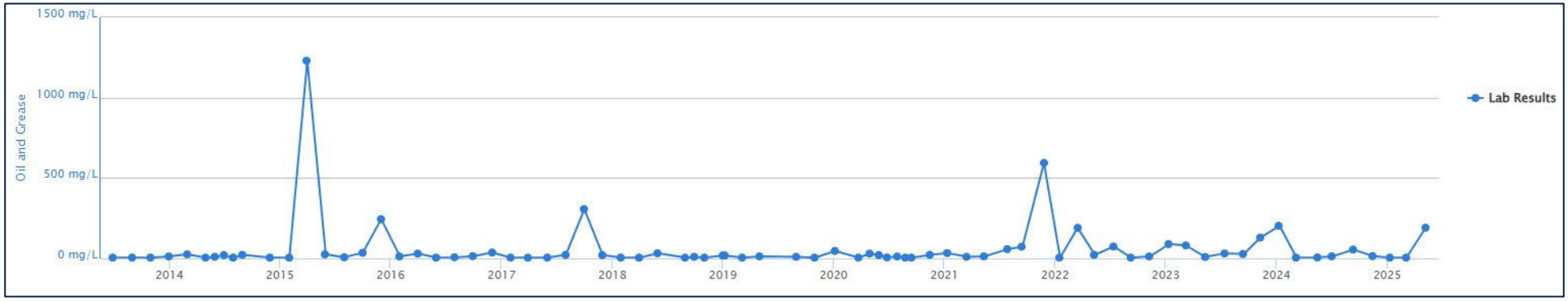
pH



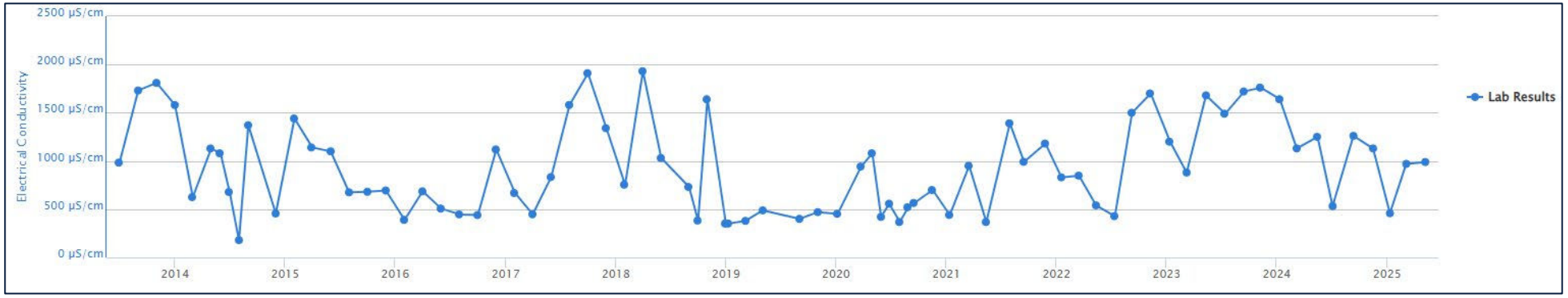
TSS



Oil and Grease

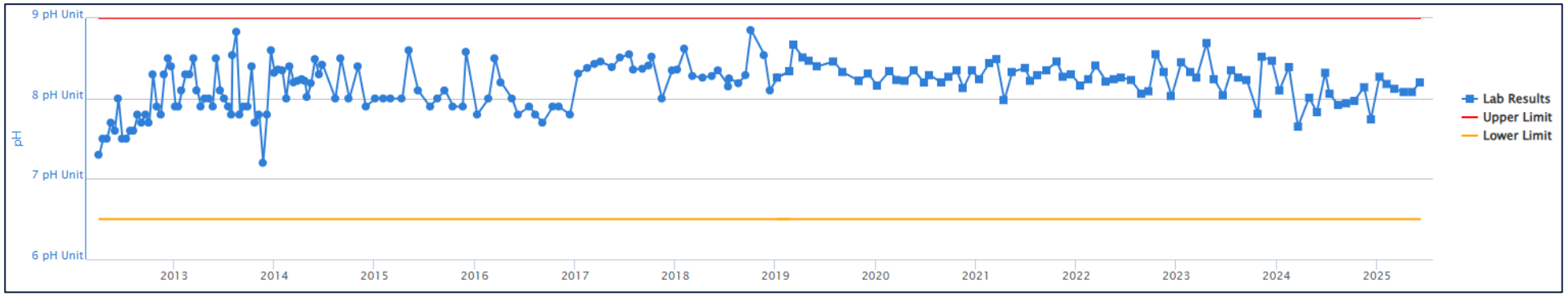


EC

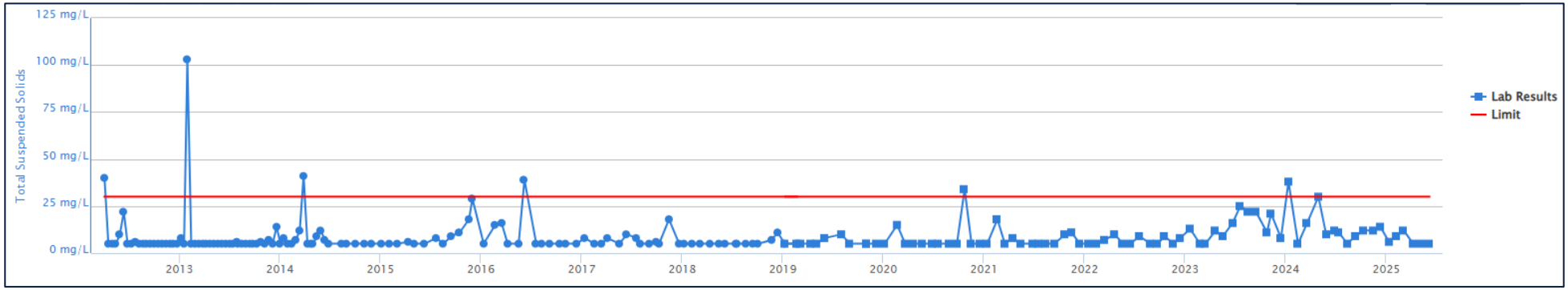

2500 µS/cm
2000 µS/cm
1500 µS/cm
1000 µS/cm
500 µS/cm
0 µS/cm
Electrical Conductivity
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Lab Results

LDP 5

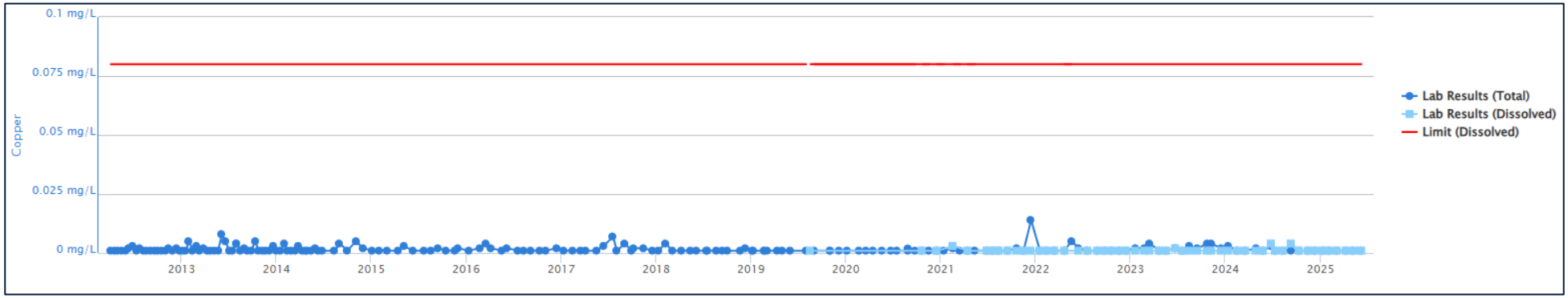
pH


9 pH Unit
8 pH Unit
7 pH Unit
6 pH Unit
pH
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Lab Results
Upper Limit
Lower Limit

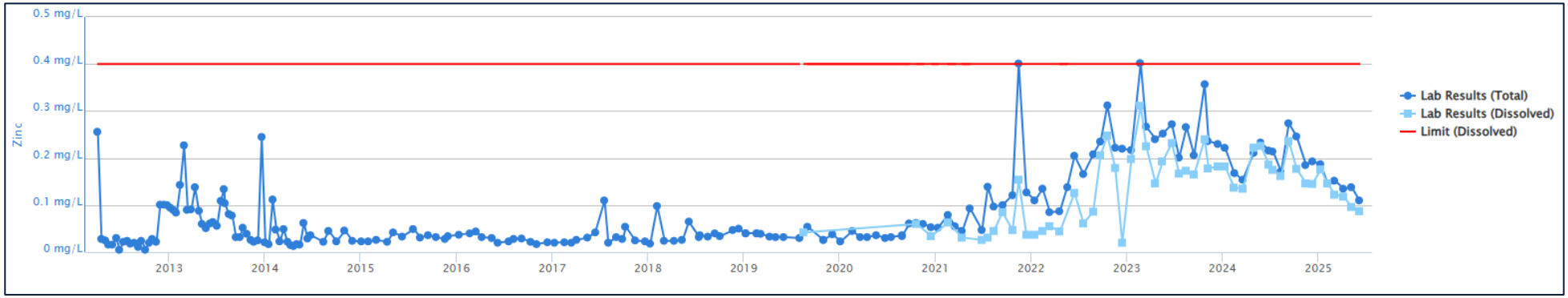
TSS


125 mg/L
100 mg/L
75 mg/L
50 mg/L
25 mg/L
0 mg/L
Total Suspended Solids
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Lab Results
Limit

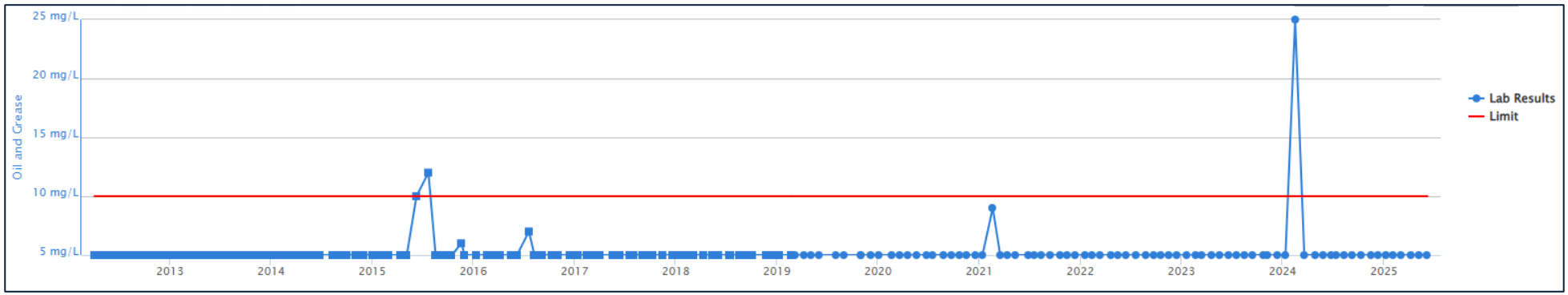
Copper


0.1 mg/L
0.075 mg/L
0.05 mg/L
0.025 mg/L
0 mg/L
Copper
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Lab Results (Total)
Lab Results (Dissolved)
Limit (Dissolved)

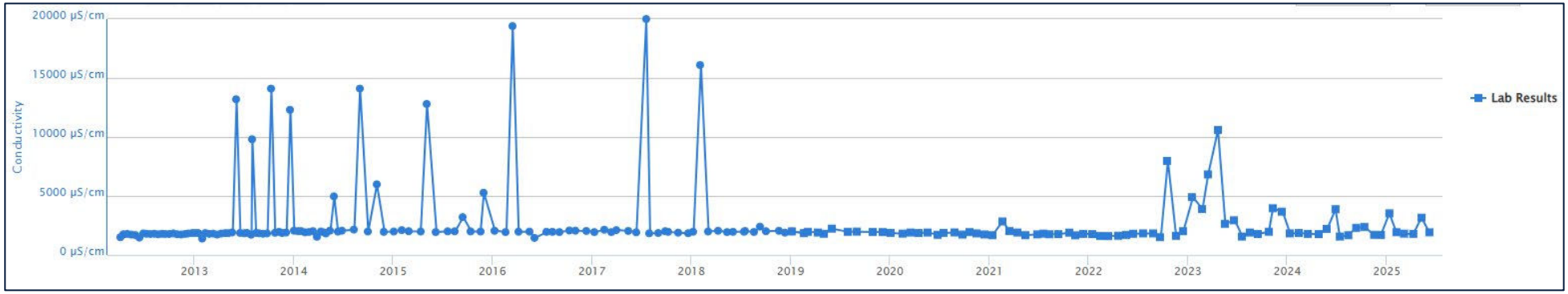
Zinc



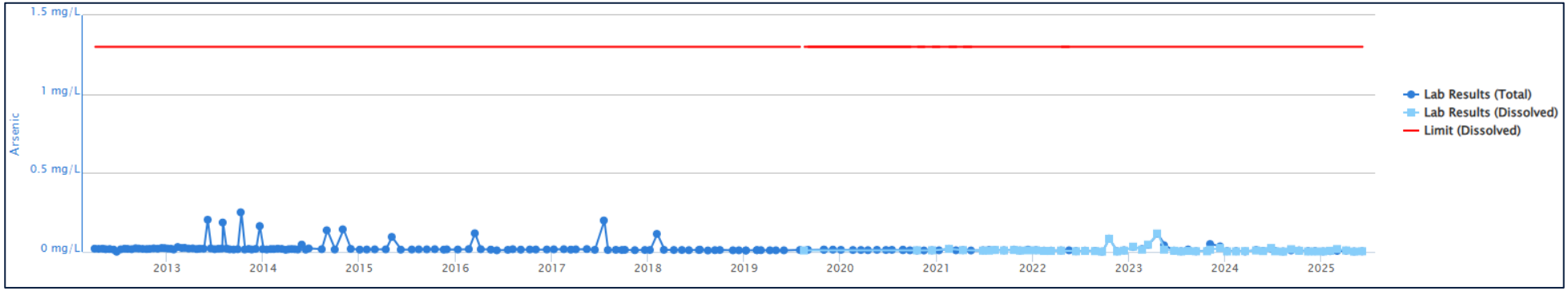
Oil and Grease



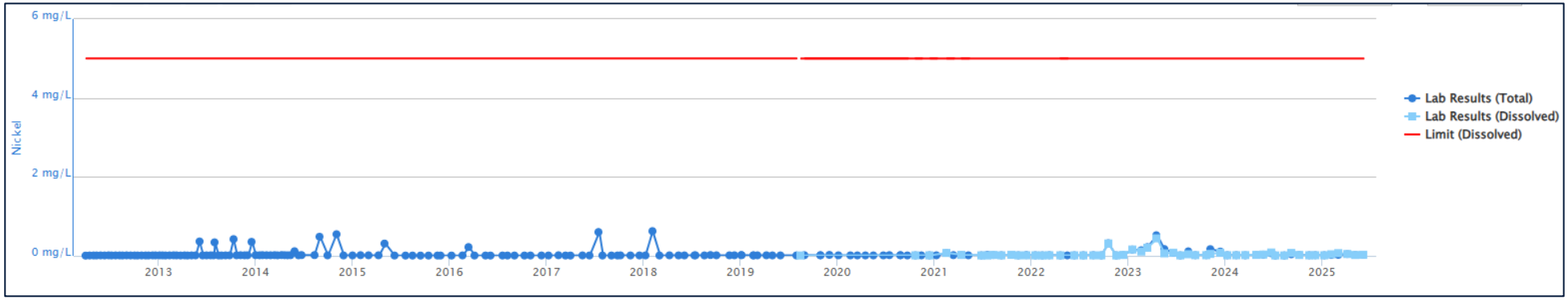
EC


20000 µS/cm
15000 µS/cm
10000 µS/cm
5000 µS/cm
0 µS/cm
Conductivity
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Lab Results

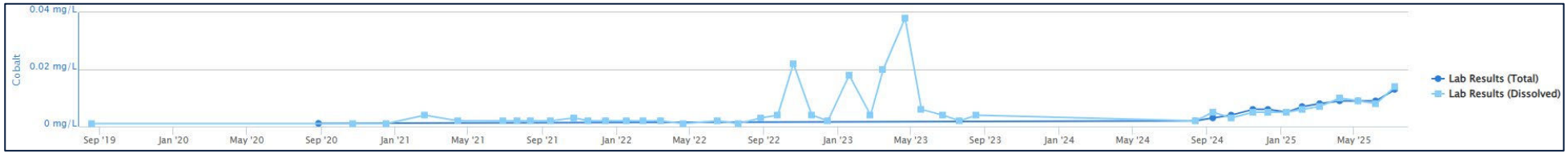
Arsenic


1.5 mg/L
1 mg/L
0.5 mg/L
0 mg/L
Arsenic
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Lab Results (Total)
Lab Results (Dissolved)
Limit (Dissolved)

Nickel

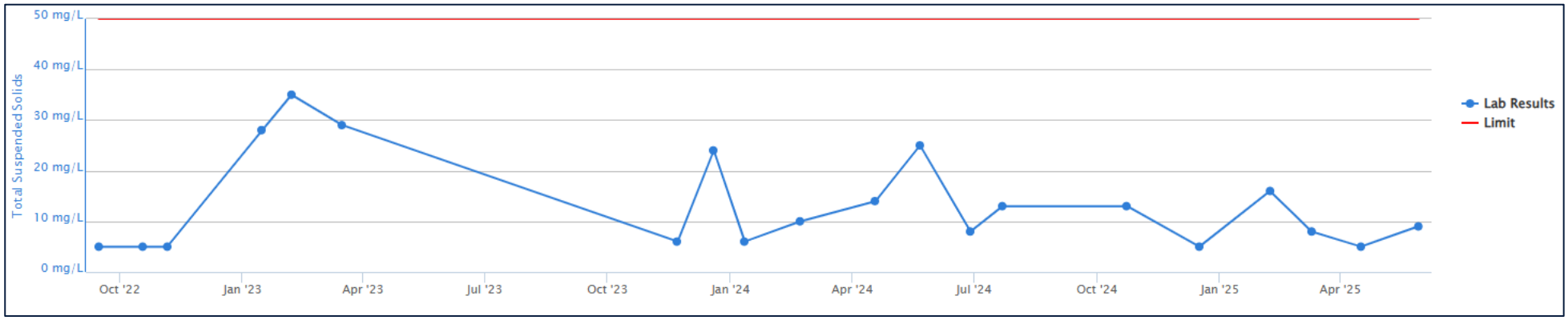


Cobalt

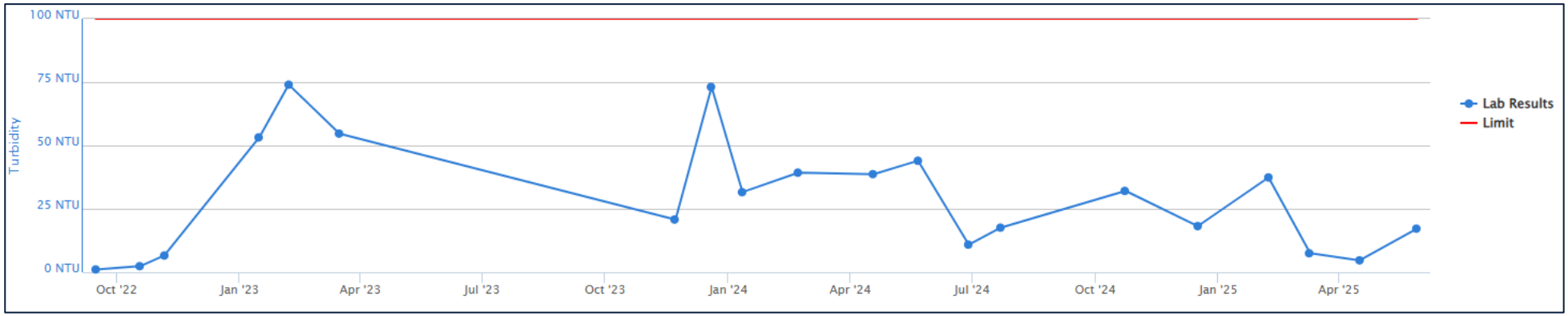


LDP 29

TSS

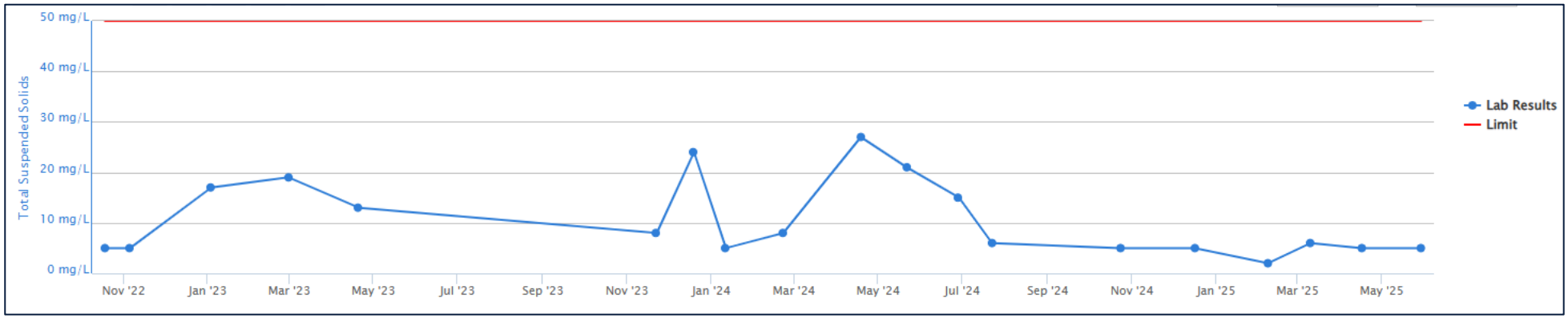


Turbidity

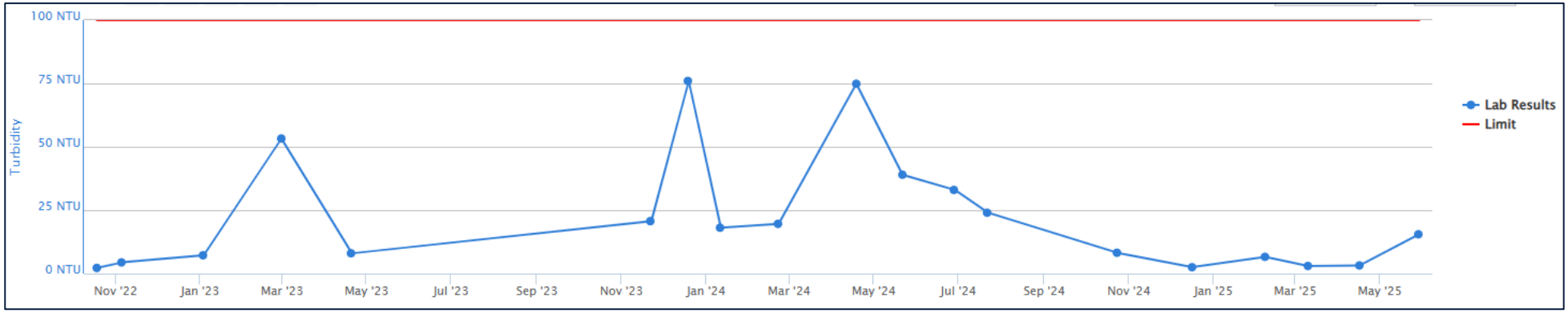


LDP 31

TSS



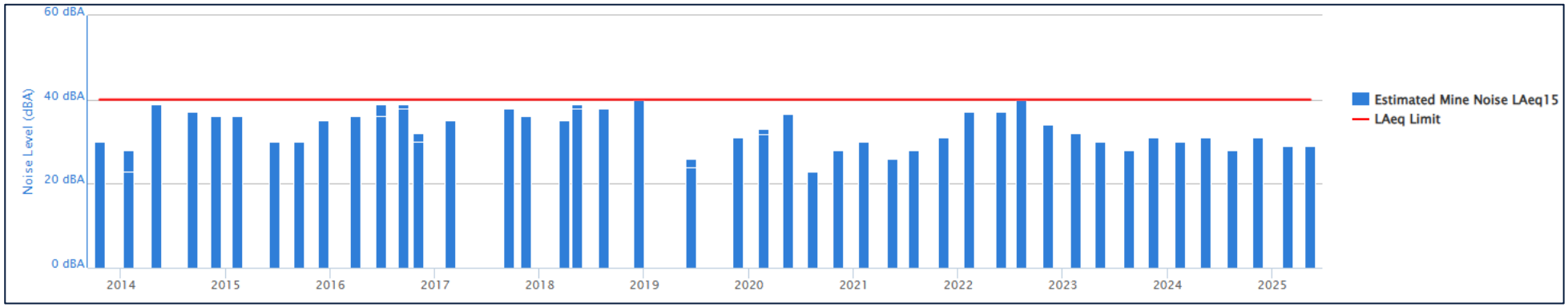
Turbidity



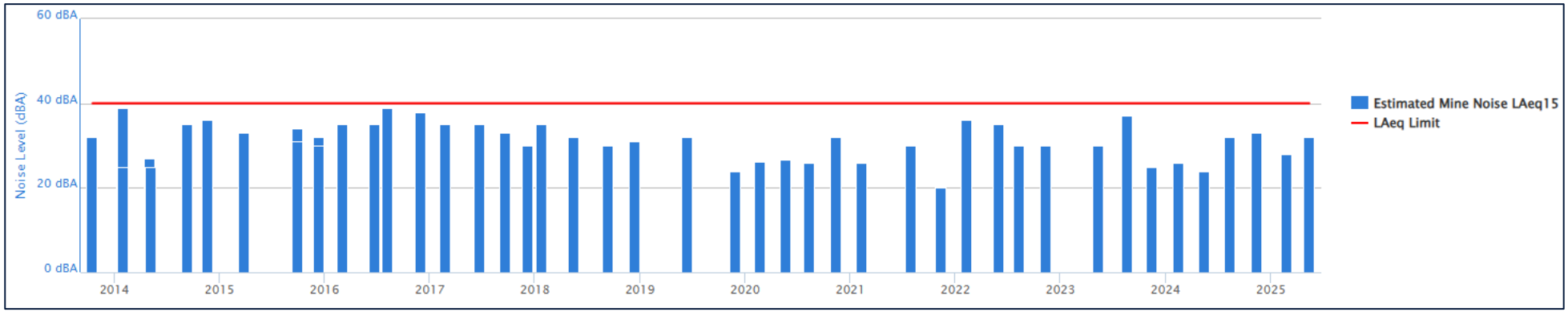
Noise Monitoring Results

R1

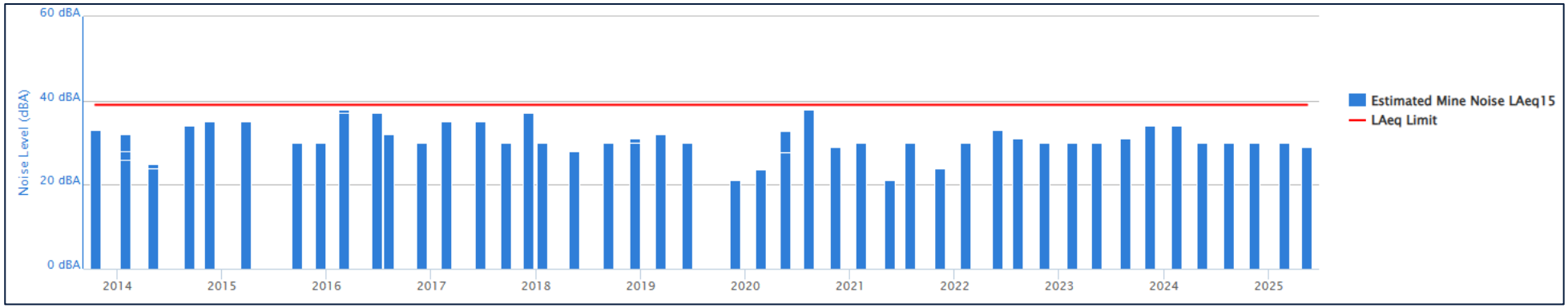
Day



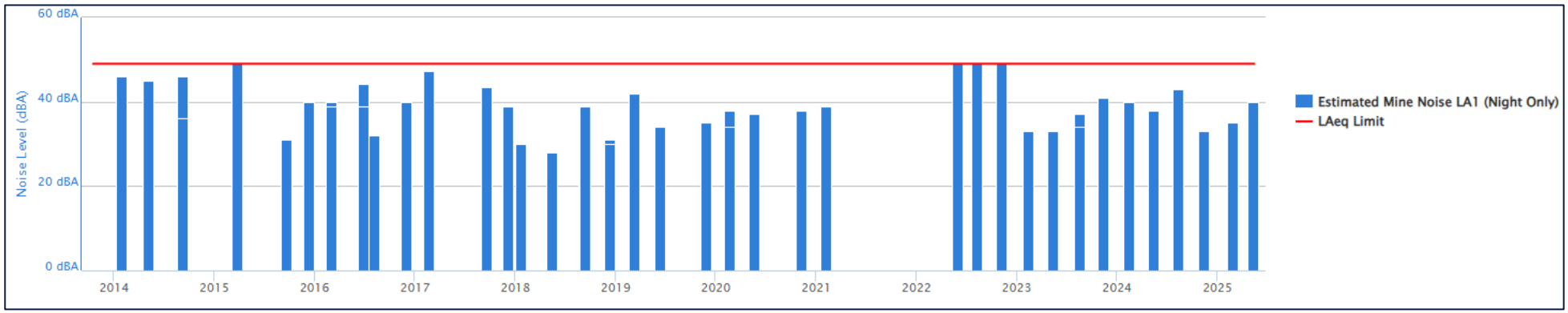
Evening



Night – LAeq 15

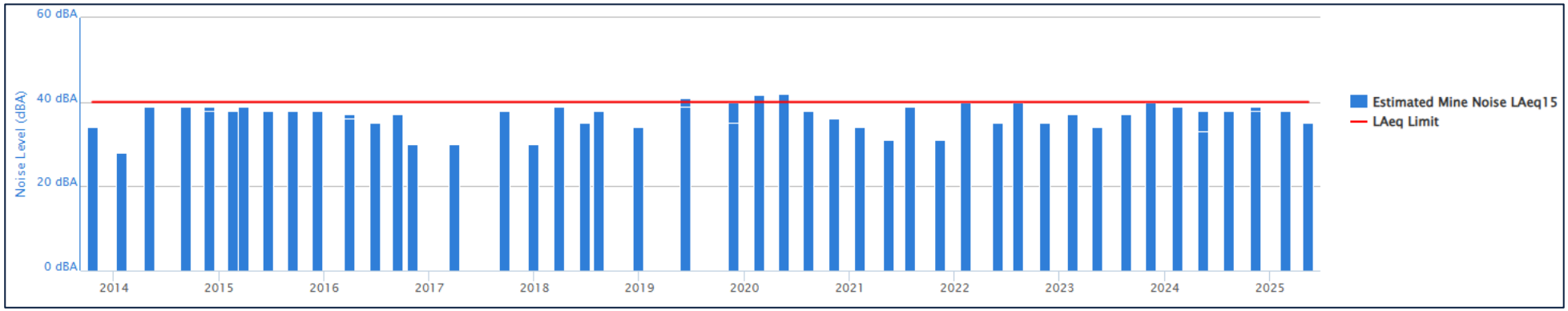


Night – LA1

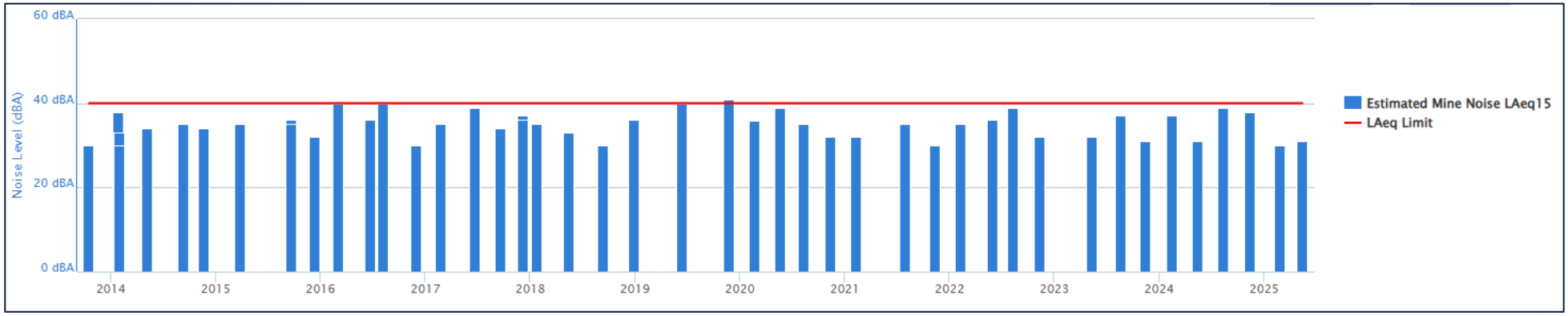


R6A

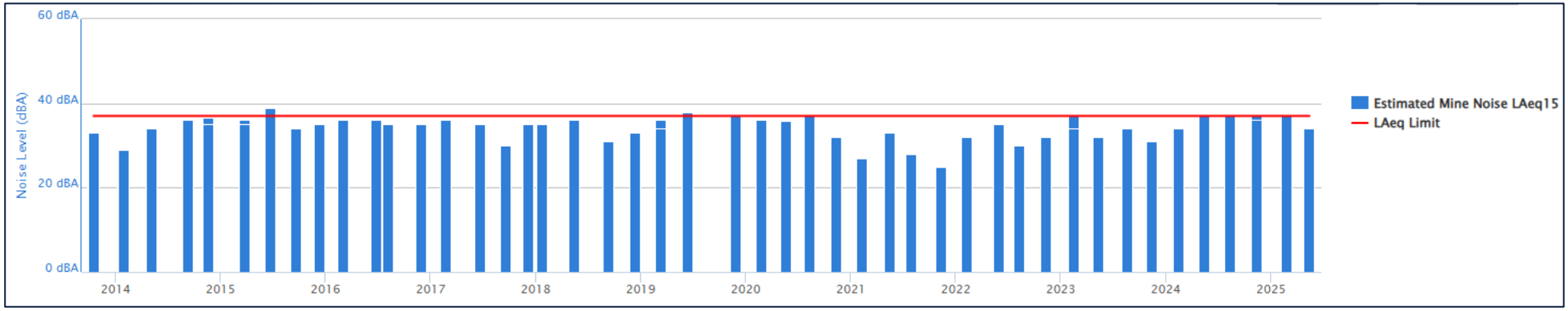
Day



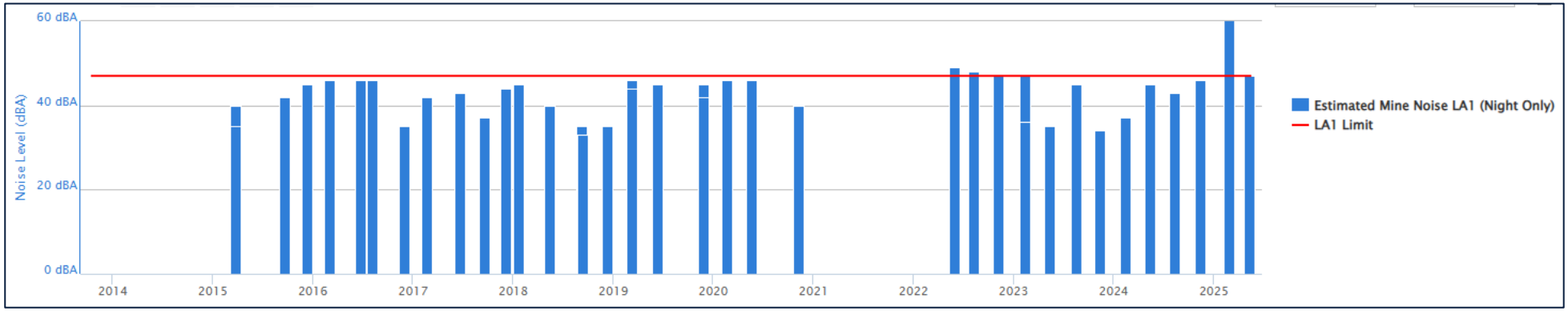
Evening



Night LAeq 15

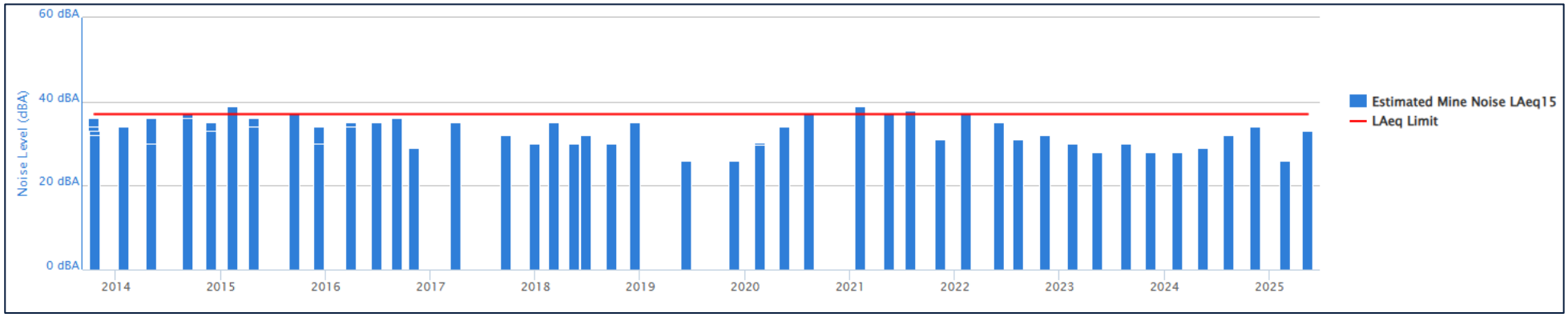


Night – LA1

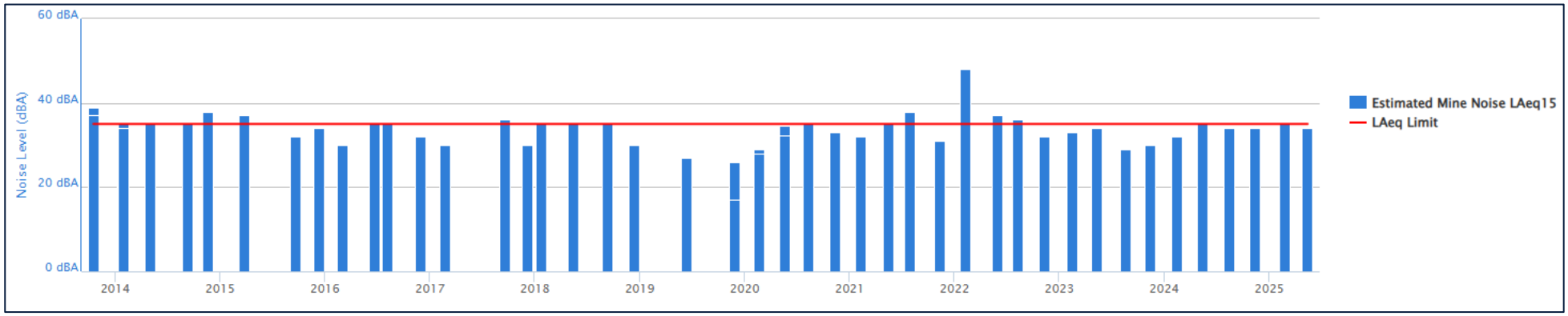


R39A

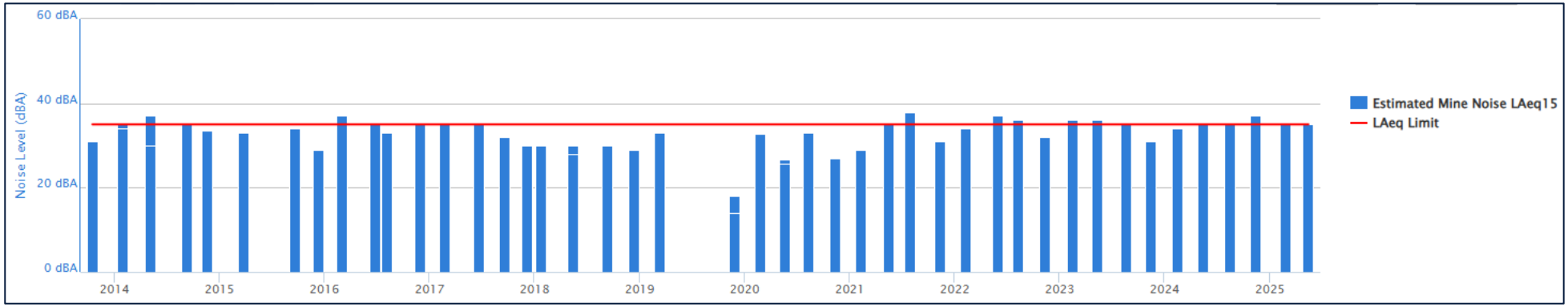
Day



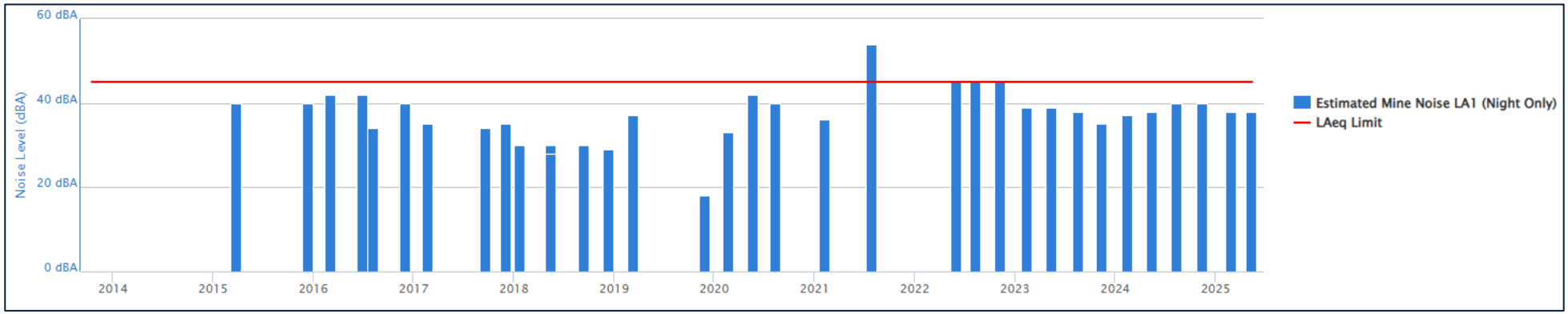
Evening



Night LAeq 15

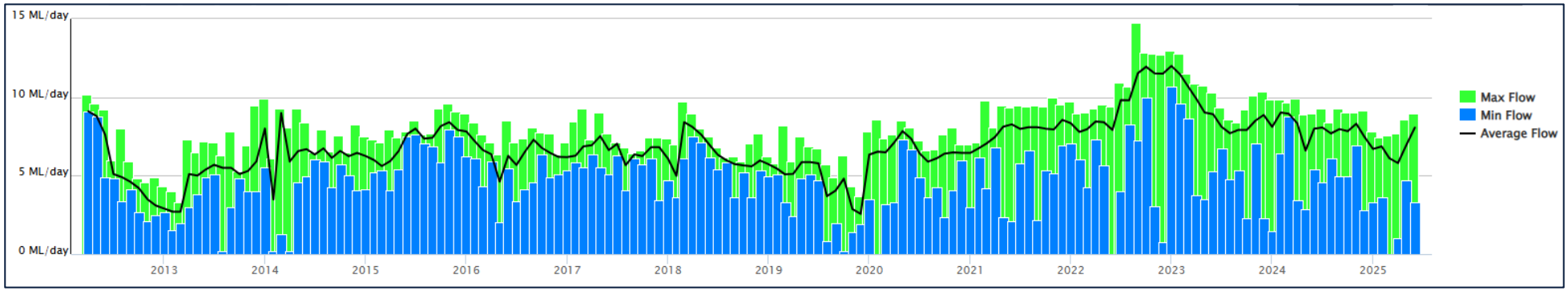


Night – LA1

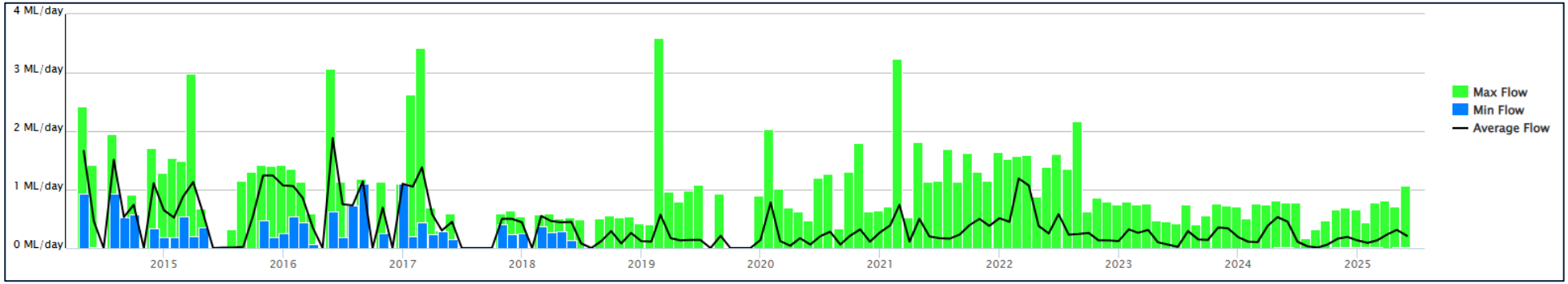


Water Discharge Volume Results

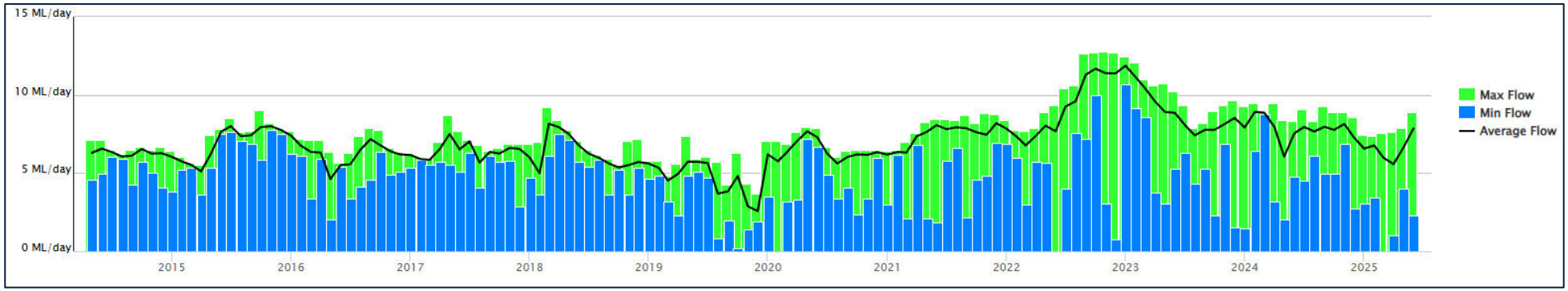
LDP 5



Point 25



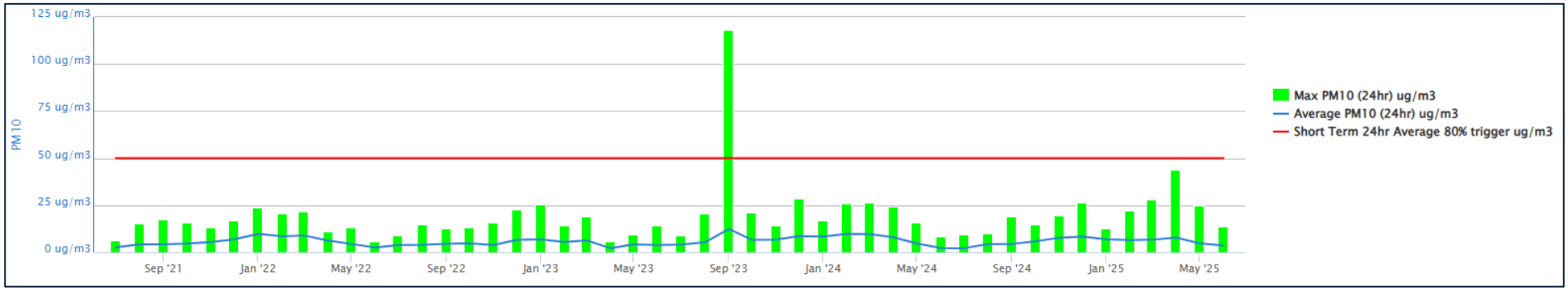
Point 24



Air Quality Monitoring

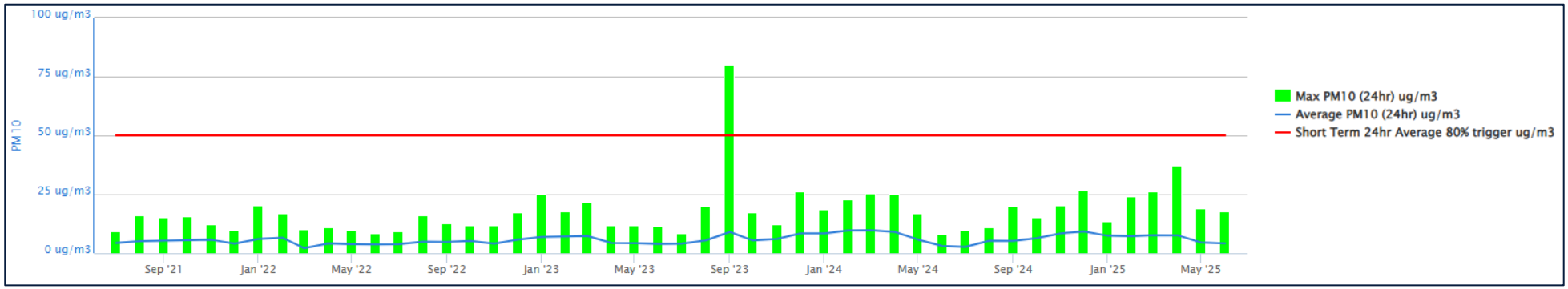
Point 20

Photometer PM_{10}



Point 21

Photometer PM_{10}



Previous Monitoring Data

Sites that have been previously monitored, but have now ceased, can be found within previous Annual Reviews and on the GM[3] website here.

Appendix 5: Subsidence Monitoring Program - Dendrobium Mine

SMP Commitments for the Reporting Period	Monitoring Frequency	Monitoring Undertaken
Subsidence Monitoring		
ALS over Areas 3A and 3C – including 3D Digital Terrain Model	ALS to be undertaken at conclusion of each longwall.	6/08/24 **(LW19A)**
Swamp Cross Lines	Prior to mining influence and at the conclusion of mining influence, and monthly, 100 m prior to and 400 m past the active mining face.	**LW19A**: 24/07/24. **LW22**: 22/11/24, 19/2/25, 26/2/25, 6/3/25, 9/4/25, 6/5/25, 2/6/25
Tributary Cross-Lines	Prior to mining influence and at the conclusion of mining influence, and monthly, 100 m prior to and 400 m past the active mining face.	**LW19A:** 31/7/24 **LW22:** 8/8/24
Wongawilli Creek Cross Lines	Prior to mining influence and at the conclusion of mining influence.	**LW19A**: 31/7/24 **LW22:** 8/8/24
Sandy Creek Waterfall (SCW)	Prior to mining influence and at the conclusion of mining influence, and weekly for 600 m of extraction or as advised by the SCW technical committee.	**LW19A:** 2/7/24 **LW22:** 16/10/24, 21/1/25, 14/4/25
TransGrid	Prior to mining influence and at the conclusion of mining	**LW19A:** 2/7/24, 27/12/24

	influence, and weekly, 100 m prior to and 400 m past the active mining face (LW19) weekly for 600 m of extraction (LW21).	**LW22:** 20/5/25, 26/5/25, 2/6/25, 10/6/25, 17/6/25, 26/6/25, 30/6/25
Dendrobium 3D GNSS network - Far field	Prior to mining influence and at the conclusion of mining influence.	**LW19A:** 26/7/24 **LW22:** 26/7/24
Endeavour Energy Power Poles	Prior to mining influence and at the conclusion of mining influence, and weekly, 100 m prior to and 400 m past the active mining face	**LW22:** 6/2/25, 25/2/25, 6/3/25, 13/3/25, 18/3/25, 25/3/25, 9/4/25, 16/4/25, 1/5/25, 6/5/25, 15/5/25, 20/5/25, 2/6/25, 10/6/25, 26/6/25, 30/6/25
Watercourses		
Observational, Photo Point and Water Monitoring		
Lake Avon, Lake Cordeaux, Native Dog Creek, Wongawilli Creek, Sandy Creek, Donalds Castle Creek, WC6, WC7, WC8, WC9, WC12, WC13, WC14, WC15, WC20, WC21, WC24, WC24A, WC26, WC26A, WC28, LC5, LC5A, LC6, LC7, LC7B, LC8 LC9, LC9A, CR36, SC7, SC10, SC10C, LA2, LA3, LA4, LA4A, LA5, ND1 and ND1C. **Reference Sites** Wongawilli Creek, Sandy Creek, WC11, SC9A, NDC1, DC10 and Swamp 24_Pool 10.	Monthly two (2) years pre and post mining, weekly when longwall is within 400 m of monitoring site. Quarterly for some features outside of 2-year post mining period. Reference Sites 6 monthly.	As per SMP commitments

Water Quality		
Wongawilli Creek and associated tributaries WWU1, WWU4, WC_Pool 38, WC_Pool 20, WC_Pool 104, WC_Pool 46, WC_Pool 49, WC_Channel 14, WC_FR6, WC21_Pool 5, WC21_Pool 30, WC21_Pool 53, WC12_Pool 1, WC15_Pool 2, WC15_Pool 9, WC15_Pool 28, WC7_Pool 1, WC17_Pool 0, WC13_Pool 3, WC14_Pool 3, WC20_Pool 8, WC24_Pool 10, WC26_Channel 4 **Lake Avon and associated tributaries** LA3_Pool 4, LA2_Pool 5, LA1, LA_1, LA4_S1, LA4_S2, LA5_S1, LA5_S2. **Lake Cordeaux and associated tributaries** LC_1, LC5_Pool 13, LC5_S1, LC5_S2, LC6_Rockbar 1, LC7_Pool 2, LC9_Pool 2. **Donalds Castle Creek** Donalds Castle Ck (FR6), DCL3, DC_Pool 22, DC13_Pool 2b, DCU **Sandy Creek and associated tributaries** SCk_Rockbar 5, Sandy Creek Arm, SC10C_Pool 1, SC10_Rockbar 3, SC7_S1 **Native Dog and associated tributaries** NDC_Pool 1, ND1_Pool 2, NDT1	Monthly two (2) years pre and post mining, weekly when longwall is within 400 m of monitoring site. Quarterly for some features outside of 2-year post mining period. Reference Sites six (6) monthly.	As per SMP commitments
Flow		
Wongawilli Creek and associated tributaries WWU, WWL, WWL_A, WC21S1, WC15S1, WC12S1, WC20S1, WC20S2, WC24S1, WC26S1, WC26S2 **Donalds Castle Creek and associated tributaries** DCU, DC13S1 and DCS2	Continuous one-hour logging intervals.	As per SMP commitments

Lake Avon and associated tributaries LA2S1, LA3S1 and LA4S1 **Lake Cordeaux and associated tributaries** LC5S1, LC6S1, LC9S1, CR36S1 **Native Dog Creek and associated tributaries** NDT1S1, NDCS1 **Sandy Creek and associated tributaries** SCL2, SC10S1, SC10CS1 **Reference** O'Hares Creek at Wedderburn, WWU, WC11S1		
Aquatic Ecology		
Sandy Creek Catchment Site 11 and 12 (SC10) Site 13 (SC10C) Site 9 (Sandy Creek) **Wongawilli Creek Catchment** Sites 6, X2 and X3 (WC21) Sites 1, 2, 3, 4, 5, 21, 22, X4, X5 and X6 (Wongawilli Creek) **Donalds Castle Creek Catchment** Site 14, X1 (Donalds Castle Creek) **Reference Sites** Sites X7 and X8 Sites 15 and 16 (Kentish Creek)	Two (2) baseline monitoring campaigns prior to mining during autumn and spring. Monitoring during mining in autumn and spring. Monitoring post-mining for two (2) years or as otherwise required. Monitoring target sites as mining progresses through the domain.	As per SMP commitments

Swamps		
Observational, Photo Point and Water Monitoring		
Swamps 01A, 01B, 03, 04, 05, 07, 08, 09, 10, 11, 12, 13, 14, 15A, 15B, 16, 23, 35A, 35B, 95, 145, 146, 147, 148, 149, 150, 151, 153, 154, 155, 156, 157 **Reference Sites** Swamps 7, 22, 24, 25, 33, 84, 85, 86, 87, 88 and 131	Monthly two (2) years pre and post mining, weekly when longwall is within 400 m of monitoring site. Quarterly for some features outside of 2-year post mining period. Reference Sites six (6) monthly.	As per SMP commitments
Erosion Monitoring		
Swamps 01A, 01B, 03, 04, 05, 07, 08, 09, 10, 11, 12, 13, 14, 15A, 15B, 16, 23, 35A, 35B, 95, 145, 146, 147, 148, 149, 150, 151, 153, 154, 155, 156, 157 **Reference Sites** Swamps 7, 22, 24, 25, 33, 84, 85, 86, 87, 88 and 131	Ground based surveys to be completed for each longwall after each longwall or to define any new erosions identified by ALS survey.	As per SMP commitments
Shallow Groundwater Level		
Swamps 01A, 01B, 03, 04, 05, 07, 08, 09, 10, 11, 12, 13, 14, 15A, 15B, 16, 23, 35A, 35B, 95, 145, 146, 147, 148, 149, 150, 151, 153, 154, 155, 156, 157 **Reference Sites** Swamps 7, 22, 24, 25, 33, 84, 85, 86, 87, 88 and 131	For open hole sites: Monthly monitoring pre, during and post mining for two (2) years to be reviewed annually Reference sites six (6) monthly for instrumented sites: Automatic groundwater level monitoring pre, during and post mining (1-hour interval or similar)	As per SMP commitments

	Monitoring post mining for five (5) years to be reviewed annually	
Soil Moisture		
Swamps 01A, 01B, 03, 04, 05, 07, 08, 09, 10, 11, 12, 13, 14, 15A, 15B, 16, 23, 35A, 35B, 95, 145, 146, 147, 148, 149, 150, 151, 153, 154, 155, 156, 157 **Reference Sites** Swamps 7, 22, 24, 25, 33, 84, 85, 86, 87, 88 and 131	For open hole sites: Monthly monitoring pre, during and post mining for two (2) years to be reviewed annually Reference sites six (6) monthly For instrumented sites: Automatic groundwater level monitoring pre, during and post mining (1-hour interval or similar) Monitoring post mining for five years to be reviewed annually	As per SMP commitments
Terrestrial Flora – Composition and Distribution of Species		
Swamps 15B and 15A Swamps 01A, 01B, 05, 11, 13, 14 and 23 **Reference Sites** Swamp, 22, 33, 86, 87, 88 and 131	Baseline monitoring campaigns at least two (2) years prior to mining during spring. Note: Swamps 23 and 14 baseline monitoring included both autumn and spring seasons for one year prior to mining Annual monitoring post mining in spring for two (2) years or as otherwise required. General observation of active mining areas during all other monitoring.	As per SMP commitments

Terrestrial Flora – Swamp Size and Ecosystem Function		
Swamp 15A, 15B, 148 Swamps 01A, 01B, 05, 8, 11, 13, 14 and 23 Swamps 7, 9, 16, 144, 145 and 153 **Reference Sites** Swamp 6, 22, 33, 33, 85, 86 and 131	Baseline mapping prior to mining with repeat mapping after each longwall or as determined by observational monitoring i.e. if dieback or invasion of non-swamp species is observed	As per SMP commitments
Terrestrial Fauna – Threatened Frog Species		
SC10C, SC10(1), SC10(2), 6CDL, WC13 and WC17 DC13, DC1, WC21, LA4A, ND1, NDC, ND2 and WC15 LC5, LC6, WC20, WC24 and WC26 **Reference Sites** WC10, WC11, SC7(1), SC7(2), SC7A, SC8, DC8, CR29, CR29D	Surveys are undertaken in winter each year to target active breeding periods (these can be variable depending on prevailing conditions)	As per SMP commitments

Landscape - Targeted Sites		
LC6_CL1 LC9_CL1 WC26_CL1 WC26_CL2 WC26_CL3 LW22_SS1 LW22_SS2 LW22_SS3 LW23_SS1 LW23_SS2 LW23_SS3 LW21a_SS1 LW21a_SS2 LW21a_SS3 LW21a_SS4 LW21a_SS5 LW21_SS3 LW21_SS1 LW21_RO2 LW21_RO1 LW21_FR6F LW21_AT1 LW22_AT1 LW22_FR6F LW23_AT1 LW23_FR6F LW21a_AT1 LW21a_AT2 LW21a_FR6C	A baseline survey prior to mining. Monthly monitoring of targeted sites within the 400m active mining area. Post-mining inspection of all sites following completion of the longwall.	As per SMP commitments

Inspection of Active Mining Area – Landscape Features, Vegetation, Watercourses		
All mapped cliff, steep slopes, and watercourse, swamp and fire trail sites in subsidence area. Refer to DA3A, 3B and 3C SMP. General observation of active mining areas. During mining recording includes impacts to: • Drainage • Disturbance of site erosion • Aggradations • Inundation • Rock fracturing • Changes in runoff • Changes in vegetation • Impacts to fauna / fish • Rockfalls • Soil cracking • Slumping	Weekly monitoring when longwall extraction is within 400 m.	As per SMP commitments

Cultural Heritage		
Browns Road Site 17 Browns Road Site 18 Browns Road Site 19 Dendrobium 3 DM 1 Sandy Creek Road 23 Cordeaux Reservoir; Sandy Creek Road 2 Sandy Creek Road 24 DM 10 Sandy Creek Road 1 Stone Arrangement Dendrobium 3C Isolated Find 1	Baseline archival recording: prior to longwall mining First impact assessment recording: following initial subsidence movement of the site. Sandstone shelter Aboriginal sites will be inspected during mining. Further impact assessment recording: 6 and 12 months after undermining or final subsidence movement of the site.	As per SMP commitments

Appendix 6: Summary of Observed Impacts and Triggers identified during the Reporting Period

Site ID	Impact/Trigger Type	Feature Affected	Identification Date	Trigger Level	Description	Refer to Report/s Dated
DA3A_LW19A_005 (Update)	Soil Cracking	Fire Road 6F	15/07/2024	2	Soil cracking along Fire Road 6F with hole formed.	11/03/2024 and 17/07/2024
DA3A_LW19A_006 (Update)	Rock Fracturing	Fire Road 6F	15/07/2024	2	Rock fracturing along Fire Road 6F.	13/03/2024 and 17/07/2024
DA3A_LW19A_029	Surface movement or rock displacement	Steep Slope	30/07/2024	1	Surface movement or rock displacement north of LW19A	01/08/2024
DA3A_LW19A_030	Soil Cracking	Steep Slope	30/07/2024	2	Soil cracking north of LW19A	01/08/2024
DA3A_LW19A_031	Rock Fracturing and Soil Cracking	Steep Slope	30/07/2024	2	Rock fracturing north of LW19A	01/08/2024
DA3A_LW19_044 (Update)	Iron Staining	Wongawilli Creek	22/08/2024	3	Iron staining in Wongawilli Creek	29/08/2024
S155_01	Soil moisture	Swamp 155	23/09/2024	2	Soil moisture level lower than baseline level.	27/09/2024
S156_01	Soil moisture	Swamp 156	24/09/2024	2	Soil moisture level lower than baseline level.	27/09/2024
155_01	Groundwater	Swamp 155	26/09/2024	2	Groundwater level lower than baseline level.	27/09/2024
DA3C_LW22_001	Soil Cracking	Access Track	9/10/2024	1	Small soil cracks on access track over LW22.	10/10/2024
DA3C_LW22_002	Soil cracking	Bushland	28/10/2024	2	Soil cracking and rock fracturing over LW22.	29/10/2024
DA3C_LW22_003	Soil cracking	Bushland	28/10/2024	1	Soil cracking, rock movement and rock fracturing over LW22.	29/10/2024
DA3C_LW22_004	Rock Fracturing	Bushland	4/11/2024	1	Rock fracturing and soil cracking in bushland over LW22.	7/11/2024
DA3C_LW22_005	Rock Movement	Bushland	4/11/2024	1	Rock movement in bushland over LW22.	7/11/2024
DA3C_LW22_006	Soil Cracking	Access Track	4/11/2024	1	Soil cracking across an access track over LW22.	7/11/2024
DA3C_LW22_007	Soil Cracking	Access Track	4/11/2024	1	Soil cracking and rock fracturing on an access track over LW22.	7/11/2024

DA3C_LW22_008	Iron Staining	LC6_Pool 22	13/11/2024	1	Localised iron staining in LC6_Pool 22.	15/11/2024
DA3C_LW22_009	Rock Fracturing	Small rock outcrop	20/11/2024	1	Rock fracturing at base of small rock outcrop.	21/11/2024
DA3C_LW22_010	Rock Movement	Bushland	27/11/2024	1	Rock movement in bushland over LW22.	29/11/2024
DA3C_LW22_011	Rock Movement	Bushland	27/11/2024	1	Rock movement in bushland over LW22.	29/11/2024
DA3C_LW22_012	Rock Fracturing	Bushland	27/11/2024	1	Rock fracturing in bushland over LW22.	29/11/2024
DA3C_LW22_013	Soil Cracking	Bushland	27/11/2024	1	Soil cracking and rock movement in bushland over LW22.	29/11/2024
DA3C_LW22_014	Rock Movement	Bushland	27/11/2024	1	Rock movement in bushland over LW22.	29/11/2024
154_01	Groundwater Level	Swamp 154	05/12/2024	1	Groundwater level recession greater than baseline level	9/12/2024
DA3C_LW22_015	Pool Level	LC6_Pool 22	05/12/2024	N/A	Water level in localised pool became dry	9/12/2024
DA3C_LW22_016	Rock Fracturing	LC6_Pool 28	16/12/2024	2	Rock fracturing on tributary LC6. Surface water also absent.	18/12/2024
DA3C_LW22_017	Rock Fracturing	LC6_Channel8	16/12/2024	2	Rock fracturing on tributary LC6. Surface water also absent.	18/12/2024
S154_01	Soil Moisture	Swamp 154	02/01/2025	2	Soil moisture level lower than baseline level.	2/01/2025
DA3C_LW22_015 (Update)	Pool Level	LC6	8/01/2025	N/A	Extension to length of LC6 observed to be dry or with reduction in surface water.	9/01/2025
DA3C_LW22_018	Rock Movement & Soil Cracking	Bushland	22/01/2025	2	Soil cracking and rock movement in bushland over LW22.	23/01/2025
DA3C_LW22_019	Rock Fracturing & Soil Cracking	Rock Outcrop	22/01/2025	2	Rock fracturing to outcrop and soil cracking in bushland over LW22.	23/01/2025
DA3C_LW22_020	Rock Fracturing & Rock Movement	Rock Outcrop	22/01/2025	2	Rock fracturing and rock movement in bushland over LW22.	23/01/2025
DA3C_LW22_021	Rock Fracturing	Rock Outcrop	22/01/2025	1	Rock fracturing to outcrop over LW22.	23/01/2025
DA3C_LW22_022	Rock Fracturing	Rock Outcrop	22/01/2025	1	Rock fracturing to outcrop over LW22.	23/01/2025
DA3C_LW22_023	Rock Movement	Rock Outcrop	22/01/2025	2	Rock movement between a rock outcrop and bushland over LW22.	23/01/2025
DA3C_LW22_024	Rockfall	Rock Step	22/01/2025	1	Small rockfall to a rock step 160m south of LW22.	23/01/2025

DA3C_LW22_025	Rock Fracture	LC6_Rockbar 15	29/01/2025	2	Rock fracturing to rockbar on LC6.	30/01/2025
DA3C_LW22_026	Rock Movement	Rock Outcrop	29/01/2025	1	Rock movement between outcrop and bushland over LW22.	30/01/2025
DA3C_LW22_027	Rock Fracturing	Rock Outcrop	29/01/2025	1	Rock fracturing on rock outcrop over LW22.	30/01/2025
DA3C_LW22_028	Rock Movement	Bushland	29/01/2025	1	Rock movement in bushland over LW22.	30/01/2025
DA3C_LW22_029	Rock Fracturing	Rock Outcrop	29/01/2025	1	Rock fracturing on rock outcrop over LW22.	30/01/2025
DA3C_LW22_030	Soil Cracking, Rock Fracturing & Rock movement	Rock Outcrop	4/02/2025	2	Soil Cracking, rock fracturing and rock movement in bushland over LW22.	5/02/2025
DA3C_LW22_031	Rock Fracturing	Rock Outcrop	4/02/2025	1	Rock fracturing on rock outcrop over LW22.	5/02/2025
DA3C_LW22_032	Rockfall and Rock Fracturing	Rock Outcrop	4/02/2025	1	Rock fracturing and small rockfall at an outcrop over LW22.	5/02/2025
DA3C_LW22_033	Rock Fracturing	Rock Outcrop	14/02/2025	1	Rock fracturing to an outcrop over LW22.	19/02/2025
DA3C_LW22_034	Rock Fracturing	Rock Outcrop	18/02/2025	1	Two separate rock fractures to an outcrop over LW22.	19/02/2025
DA3C_LW22_035 (LW21)	Rock Fracturing and Rock Displacement	WC20_Rockbar17	25/02/2025	1	Rock fracturing on rockbar on WC20. Likely a LW21 impact.	6/03/2025
DA3C_LW22_036	Rock Fracturing	LC6_Pool 31	27/02/2025	2	Rock fracture to pool on LC6.	6/03/2025
DA3C_LW22_037	Rock Fracturing and Rock Displacement	LC6_Channel 11	27/02/2025	2	Rock fracturing to channel on LC6.	6/03/2025
DA3C_LW22_038	Soil Cracking and Rock Movement	Bushland	27/02/2025	1	Soil cracking in bushland over LW22.	6/03/2025
DA3C_LW22_039	Rock Fracture	Rock Outcrop/ Step	27/02/2025	1	Fracture to rock step over LW22.	6/03/2025
DA3C_LW22_040	Rock Fracture	Rock Outcrop	5/03/2025	1	Fracture to rock outcrop.	6/03/2025
DA3C_LW22_041	Rock Movement	Rock Outcrop	5/03/2025	1	Movement of soil away from rock.	6/03/2025
DA3C_LW22_042	Rock Fracture	Rock Outcrop	5/03/2025	1	Fracture to rock outcrop.	6/03/2025
DA3C_LW22_043	Rock Fracture	Rock Outcrop	14/03/2025	1	Rock fracture to rock outcrop.	19/03/2025
DA3C_LW22_044	Rock Fracture	Rock Step	14/03/2025	1	Rock fracturing to rock step.	19/03/2025
DA3C_LW22_045	Rock Fracture	Rock Outcrop	18/03/2025	1	Rock fractures to rock outcrop	19/03/2025

DA3C_LW22_046	Soil Cracking and Rock Movement	Access Track	27/03/2025	2	Soil crack across access track which extends into bushland with some associated rock movement over LW22.	31/03/2025
DA3C_LW22_047	Soil Cracking and Rock Fracturing	Access Track	27/03/2025	1	Multiple soil cracks and rock fractures on an access track over LW22.	31/03/2025
DA3C_LW22_048	Rock Movement	Rock Outcrop	4/04/2025	1	Movement of soil away from rock.	7/04/2025
DA3C_LW22_049	Rock Movement	Rock Outcrop	4/04/2025	1	Movement of soil away from rock.	7/04/2025
DA3C_LW22_050	Rock Movement	Rock Outcrop	4/04/2025	1	Movement of soil away from rock.	7/04/2025
DA3C_LW22_046 (update)	Soil Cracking and Rock Movement	Access Track	27/03/2025, 8/04/2025	3	Soil crack across access track which extends into bushland with some associated rock movement over LW22.	31/03/2025
DA3C_LW22_051	Soil Cracking	Fire Road 6C	8/04/2025	1	Soil cracking over Fire Road 6C.	9/04/2025
DA3C_LW22_052	Soil Cracking	Access Track	8/04/2025	1	Soil cracking across access track.	9/04/2025
DA3C_LW22_053	Soil Cracking	Access Track	8/04/2025	1	Soil cracking across access track.	9/04/2025
DA3C_LW22_054	Rock Movement	Bushland	8/04/2025	1	Soil cracking and rock movement in bushland over LW22.	9/04/2025
DA3C_LW22_055	Soil Cracking	Base of Power Pole	14/04/2025	1	Soil cracking adjacent to a power pole over LW22.	17/04/2025
DA3C_LW22_056	Soil Cracking	Fire Road 6C	14/04/2025	1	Multiple soil cracks across Fire Road 6C.	17/04/2025
DA3C_LW22_057	Rock Fracturing	Rock Outcrop	14/04/2025	1	Rock fracturing to the edge of an outcrop over LW22.	17/04/2025
DA3C_LW22_058	Soil Cracking	Fire Road 6C	14/04/2025	1	Multiple soil cracks across Fire Road 6C.	17/04/2025
DA3C_LW22_058 (Update)	Soil Cracking	Fire Road 6C	14/04/2025, 07/05/2025	3	Multiple soil cracks across Fire Road 6C.	8/05/2025
DA3C_LW22_059	Soil Cracking	Fire Road 6C	07/05/2025	1	Multiple soil cracks across Fire Road 6C.	8/05/2025
DA3C_LW22_060	Rock Fracturing	LC5_Rockbar11	07/05/2025	1	Rock fracturing on rockbar on LC5	8/05/2025
DA3C_LW22_052 (Update)	Soil Cracking	Access Track	8/04/2025 12/05/2025	2	Soil cracking across access track.	13/05/2025
DA3C_LW22_060 (Update)	Rock Fracturing	LC5_Rockbar11	07/05/2025 12/05/2025	2	Rock fracturing on rockbar on LC5	13/05/2025
DA3C_LW22_061	Rock Fracturing	Bushland	12/05/2025	1	Rock fracturing to outcrop	13/05/2025

DA3C_LW22_062	Rock Fracturing	Boulder	19/05/2025	1	Rock fracturing to a boulder	20/05/2025
DA3C_LW22_063	Rock Fracturing	Rock Outcrop	2/06/2025	1	Rock fracturing to outcrop	4/06/2025
DA3C_LW22_064	Rock Fracturing	Rock Outcrop	2/06/2025	1	Rock fracturing and fragmentation to outcrop	4/06/2025
DA3C_LW22_065	Rock Fracturing	LC5_Rockbar11	10/06/2025	2	Rock fracturing to rockbar on LC5	11/06/2025
DA3C_LW22_066	Rock Fracturing	Rock Outcrop	10/06/2025	1	Rock fracturing, rock movement and soil cracking on/near rock outcrop	11/06/2025
DA3C_LW22_067	Rock Fracturing	Rock Outcrop	10/06/2025	2	Rock Fracturing to outcrop	11/06/2025
DA3C_LW22_068	Rock Movement	Rock Outcrop	10/06/2025	1	Movement of soil away from rock	11/06/2025
DA3C_LW22_069	Rock Movement	Rock Outcrop	16/06/2025	1	Movement of soil away from rock	17/06/2025
DA3C_LW22_070	Rock Movement	Rock Outcrop	16/06/2025	1	Movement of soil away from rock	17/06/2025
DA3C_LW22_071	Rock Movement	Rock Outcrop	23/06/2025	1	Movement of soil away from rock	24/06/2025
DA3C_LW22_072	Rock Movement	Rock Outcrop	23/06/2025	1	Movement of soil away from rock	24/06/2025
DA3C_LW22_073	Rock Fracturing	LC5	30/06/2025	1	Rock fracturing across LC5_Channel 7	2/07/2025
DA3C_LW22_074	Rock Fracturing	Rock Step	30/06/2025	1	Rock fracturing to a step over LW22.	2/07/2025
DA3C_LW22_075	Rock Fracturing	Rock Step	30/06/2025	1	Rock fracturing to a step over LW22.	2/07/2025
DA3C_LW22_076	Iron Staining	Bushland /LC6	30/06/2025	1	Iron staining originating in bushland flowing to LC6.	2/07/2025
DA3C_LW22_008 (Update)	Iron Staining	LC6	30/06/2025	2	Increase in iron staining in LC6	2/07/2025
07_07	Groundwater Level	Swamp 7	30/06/2025	2	Groundwater level lower than baseline level and recession greater than baseline level	2/07/2025

Appendix 7: WaterNSW Special and Controlled Areas Consent (F2020/1545) - Annual Statement of Compliance

Schedule 6 – Annual Statement of Compliance with Consent Conditions

Consent Holder:
Illawarra Coal Holdings Pty Ltd

Consent Number:
F2020/1545

Reporting Period:
1 July 2024 - 30 June 2025

Compliance with Consent Conditions

1. Were all the following documents complied with during the reporting period? (tick a box)

Consent/Approval	Yes	No
a. Conditions of this Consent;	✓	
b. All Statutory Approvals;	✓	
c. Any environmental management plans, rehabilitation plans, revegetation plans, soil and water management plans, water monitoring plans or other plans required by Water NSW.	✓	

2. If you answered "No" to any part of Question 1, please supply the name of the non-compliance / incident and the date the written report was provided to Water NSW, in the table below:

Non-Compliance / Incident (one line)	Date written report provided to Water NSW

3. How many pages have you attached?

The Statement of Compliance has been attached as an appendix to the:

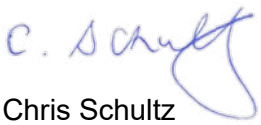
- Dendrobium Mine and Cordeaux Colliery Annual Review FY25 (Appendix 7)
- Appin Mine Annual Review FY25 (Appendix 13)

These Annual Reviews meet the requirement of Condition 4.2 of Consent F2020/1545 for an annual report to be submitted by 30 September for the reporting period.

4. Signature and certification

The Statement of Compliance must only be signed by a person(s) with legal authority to sign it as set out below:

- By affixing the common seal in accordance with *Corporations Act 2001*, or
- By two (2) Directors, or
- By a Director and a Company Secretary, or
- By a person delegated to sign on the company's behalf in accordance with the *Corporations Act 2001* and approved in writing by Water NSW to sign on the company's behalf.

Signature: 
Name: (printed) Chris Schultz
Position Superintendent Environment and Community - signed under Power of Attorney
Date: dated 24 September 2025

Signature:
Name: (printed)
Position
Date:

SEAL (if signing under seal)

The Consent Holder can request Water NSW approval for the compliance requirements of this Consent be linked to and built into other compliance reporting that may be required under approvals issued under the EP&A Act.

Appendix 8: Annual Rehabilitation Report

NSW GOVERNMENT

NSW Resources Regulator

ARR0001574

DENDROBIUM COLLIERY ANNUAL REHABILITATION REPORT

Monday 1 July 2024 to Monday 30 June 2025

Summary table

DETAIL	
Mine	Dendrobium Colliery
Reference	ARR0001574
Annual report period commencement date	Monday 1 July 2024
Annual report period end date	Monday 30 June 2025
Forward program	FWP0001481
Mining leases	ML 1566 (1992), ML 1510 (1992), CCL 768 (1973)
Lease holder(s)	Dendrobium Coal Pty Ltd, Illawarra Coal Holdings Pty Ltd
Contact	Amy Alice Bradbury
Date of submission	Tuesday 23 September 2025

Important

The department may make the information in your report and any supporting information available for inspection by members of the public, including by publication on its website or by displaying the information at any of its offices. If you consider any part of your report to be confidential, please communicate this to the department via the message function on this submission within the NSW Resources Regulator Portal.

Mine details

Project description

The Dendrobium Operations are managed in accordance with Development Consent 60- 03-2001, as modified (the Consent). Dendrobium Operations incorporate legacy sites and the Cordeaux Pit Top which are covered by CCL 768 and Development Consent D74/134 (Cordeaux). Dendrobium Mine is owned and operated by Dendrobium Coal Pty Ltd, a subsidiary company of Illawarra Coal Holdings Pty Ltd (ICHPL), a previously wholly owned subsidiary of South32 Limited. On 29 February 2024, South32 announced that they had entered into a binding agreement for the sale of ICHPL to Gear M Illawarra Met Coal Pty Ltd, trading as GM3, an entity owned by Golden Energy and Resources Pte Ltd (GEAR) and M Resources Pty Ltd. The transaction was completed on 29 August 2024. A Transitional Service Agreement was in place until 30 April 2025. Five major mining areas make up the approved mine plan for Dendrobium (Areas 1, 2, 3A, 3B and 3C). Cordeaux is under care and maintenance.

Life of mine

5 years

Current development consents, leases and licences

Development consents granted under the *Environmental Planning and Assessment Act 1979*

DA60032001
DA60032001
DA60032001
DA60032001
DA60032001
DA60032001
DA60032001
D74/134
DA60032001
DA60032001
DA60032001
DA60032001
DA60032001
DA60032001

Authorisations covering the mining area granted under the *Mining Act 1992*

ML 1566 (1992), ML 1510 (1992), CCL 768 (1973)

Any other approvals, licences, or authorities issued by government agencies that are relevant to the progress of mining operation and rehabilitation activities

Environment Protection Licence - 3241
Environment Protection Licence - 611
WaterNSW Access Consent - F2020/1545
AUTH 143 - Exploration Authorisation
AUTH 374 - Exploration Authorisation
AUTH 338 - Exploration Authorisation
Longwall 21A SMP Approval
Longwall 22 and 23 SMP Approval

Summary of the scope and/or purpose of the new applications or modifications to existing approvals (if applicable)

EPL 3241 was varied in August 2024, adding a requirement for Cobalt monitoring to Point 5. The licence was further varied in December to add a new wet weather water discharge point (32) to the licence and the removal of high-volume air samplers. Consent - F2020/1545 was reissued on 19 July 2024. On 11 March 2025, the consent expiry was extended by WaterNSW to 30 September 2025. Development Consent 60-03-2001 MOD 10 (Coal Processing) was approved on 9 August 2024. MOD 11 was submitted in June 2025.

Changes to land ownership and land use

No changes to land ownership and land use occurred during the annual reporting period.

Surface disturbance and rehabilitation activities during the reporting period

Surface disturbance and rehabilitation activities that were conducted and an analysis of the progress against the rehabilitation schedule

One minor slope stability project was completed at Dendrobium Pit Top, involving: the removal of slumped sediment; installation of multiple basalt filled gabion baskets and concrete blocks; and, improving drainage lines behind and in front of the wall to prevent further slumping. The temporary gas drainage plant was removed from Ventilation Shaft 2/3 site. Rehabilitation works and erosion and sediment improvements undertaken include: asphalting of the site entry road and yard; earthworks to shape the area of the removed temporary gas management infrastructure; installation of sediment controls including coir logs; jute mesh and rock check dams; spraying of soil binder and hydromulch; and, drainage improvements. The relocation of the power line to facilitate the removal of the redundant O'Briens Drift infrastructure was completed in June 2025. Additional rehabilitation works were completed in Kembla Heights for an area that was subject to subsidence in 2013. Rehabilitation works undertaken include: removal of weeds species; installation of new fencing to reduce the impact of feral deer; planting of 36 local natives tube stock; and, removal of dumped rubbish. Exploration rehabilitation across CCL 768 in FY25 was primarily focused on the rehabilitation of sites drilled in late FY24 and throughout FY25, and instrumentation termination and final surface remediations of sites no longer requiring monitoring. Rehabilitation is monitored for success over several years.

Rehabilitation planning activities that were conducted, including any specialist studies

The Rehabilitation Risk Assessment and Rehabilitation Management Plan (RMP) was revised in FY25. A study was undertaken to identify conceptual closure options for surface water management (SLR, 2025).

Overview of subsidence repair and/or remediation works undertaken

Subsidence impacts associated with underground mining operations, predominantly soil cracking, rock fracturing or rock movement, were monitored and reported as they were identified. Active remediation (fill and compaction) was undertaken for three soil cracking sites on Fire Road 6C and smaller unnamed trails. Cracks identified in bushland were monitored to verify they remediated naturally to avoid additional ground and vegetation disturbance. Where there is a potential safety risk near these sites, signage and caution tape is put in place. Any ongoing changes to these impacts will be monitored and rehabilitated as required. ICHPL commissioned trial grouting works at two affected pools (Pool 24 and 25) on tributary WC21, which were completed in 2022. Post-grouting monitoring of pool water levels and

recession was undertaken in FY23 and continued in FY24 due to low rainfall totals. A specialist report looking at the results of the rehabilitation trial was prepared, with data available at the end of FY24, and report finalised in July 2024. The report determined there was no observable improvement in the water-holding capacity of WC21 Pools 24 and 25 as a result of grouting. ICHPL is currently in consultation with WaterNSW regarding alternate measures to account for impacts at WC21.

Overview of rehabilitation management and maintenance activities

Erosion and sediment control at Dendrobium is managed in accordance with the approved Water Management Plan. One minor slope stability project was completed on Portal Road. Remediation involved: the removal of slumped sediment; installation of multiple basalt filled gabion baskets and concrete blocks; and, improving drainage lines behind and in front of the wall to prevent further slumping. Following the removal of the temporary gas drainage plant, erosion and sediment works were undertaken for the disturbed areas of the site. This included: earthworks to shape the area of the removed temporary gas management infrastructure; installation of sediment controls including coir logs, jute mesh and rock check dams; spraying of a soil binder and hydromulch; and, drainage improvements. Rehabilitation works were undertaken at the Kembla Heights site that was subject to subsidence in 2013. Works included: removal of weeds species; installation of new fencing to reduce the impact of feral deer; planting of 36 local natives tube stock; and, removal of dumped rubbish. Ongoing monitoring is occurring at this site to check plant health, weeds, and the protective barriers against grazing from fauna. Weeds are managed in accordance with the RMP. Weed control was undertaken at Dendrobium Pit Top area, Kemira Valley Coal Loading Facility, Kemira Valley Rail Line, Cordeaux Colliery and Corrimal No. 3 Shaft.

Details of any rehabilitation actions taken as required by any letters, notices or directions issued by government agencies, including the NSW Resources Regulator

A Groundwater and Surface Water Targeted Assessment Program (TAP) was conducted at Dendrobium Mine on 12 November 2024 by the Resources Regulator. Actions completed as a result of the TAP include: Rehabilitation Risk Assessment was updated; Water Management Plan was updated; a review of the conceptual closure surface water structures was undertaken by a specialist consultant; studies listed in the “Rehabilitation research and trials” table of the RMP; and, RMP updated to include the above dot points (where relevant). Following the rejection of the ESF2 application for an area of rehabilitation in Kembla Heights that was subject to subsidence in 2013, additional rehabilitation activities were undertaken as detailed above. Various submissions of the Final Land Use and Rehabilitation Plans, and Rehabilitation Objectives Statement was undertaken as advised by the Resources Regulator.

Details of any rehabilitation areas that have achieved the final land use

Remediation of the O'Briens Gap switchyard was completed in FY20. An ESF2 form was submitted to the Resources Regulator in FY23 and the site was inspected by the Resources Regulator in May 2024. A Notice of Satisfactory Rehabilitation was received from the Resources Regulator on 4 October 2024. Rehabilitation works at Corrimal No.2 Shaft were completed in 2005, and the works signed off by the then NSW Department of Primary Industries in 2008. An ESF2 form for Corrimal No. 2 Shaft was signed by WaterNSW (as the landholder) on 10 March 2025.

Key production milestones

MATERIAL	UNIT	FWP0001481 YEAR 1	THIS REPORT
Stripped topsoil (if applicable)	(m^3)	98	0
Rock/overburden	(m^3)	0	0
Ore	(Mt)	2.73	3.5
Reject material[1]	(Mt)	0.65	1
Product	(Mt)	2.08	2.5

[1] This includes coarse rejects, tailings and any other wastes resulting from beneficiation.

Disturbance and rehabilitation statistics

Current disturbance and rehabilitation progression

	ELEMENT	UNIT	THIS REPORT
A1	Total disturbance footprint – surface disturbance	(ha)	203.95
B	Total active disturbance	(ha)	163.27
C	Rehabilitation – land preparation	(ha)	1.53
D	Ecosystem and land use establishment	(ha)	0
E	Ecosystem and land use development	(ha)	2.1
F	Rehabilitation completion	(ha)	37.05

Rehabilitation key performance indicators (KPIs)

	ELEMENT	UNIT	THIS REPORT
G	New disturbance area	(ha)	-9.16
H	New rehabilitation commenced during annual reporting period	(ha)	0.38
I	Established rehabilitation	(ha)	39.16
J	Annual rehabilitation to disturbance ratio	%	-0.04
K	Rehabilitated land to total mine footprint	%	19.2

Progressive achievement of established rehabilitation

	ELEMENT	UNIT	THIS REPORT
L	**Established rehabilitation for agricultural final land uses**	%	0
M	**Established rehabilitation for native ecosystem final land uses**	%	99.35
N	**Established rehabilitation for other/non-vegetated final land uses**	%	0

Variation to the rehabilitation schedule

Identify the components of the most recent forward program that were not achieved

No components of the most recent forward program have flagged within this report. Stripped topsoil values were lower than expected due to delays in the Little John's Tree Frog (LJTF) pond construction project. An in-depth revision of the disturbance and rehabilitation spatial data was undertaken in FY25. This included the addition of pre-existing disturbed areas and the revision of rehabilitation status to meet the Resources Regulator guidelines.

Key factors that delayed progressive rehabilitation

A specialist report completed for the WC21 trial remediation works concluded that there was no observable improvement in the water-holding capacity of WC21 Pools 24 and 25 as a result of grouting. ICHPL engaged with WaterNSW to discuss alternate contingency measures in FY25, with consultation to continue in FY26.

Outline actions that will be included in the forward program and carried out to minimise disturbance and undertake progressive rehabilitation as far as reasonably practical

Consultation with WaterNSW will continue in FY26 regarding alternate contingency measures to remediation works on WC21.

Rehabilitation monitoring and research findings

Rehabilitation monitoring

The rehabilitation monitoring carried out in the annual reporting period

A specialist report looking at the results of the rehabilitation trial was prepared, with data available at the end of FY24, and report finalised in July 2024. The report determined there was no observable improvement in the water-holding capacity of WC21 Pools 24 and 25 as a result of grouting.

Status of performance against rehabilitation objectives and rehabilitation completion criteria

The monitoring program that has been implemented

Monitoring has continued at WC21 trial remediation site as per the WC21 and Donalds Castle Creek Rehabilitation Plan. Monitoring commenced at the Kembla Heights rehabilitation site that was subject to subsidence in 2013. Monitoring includes regular checks of plant health, weeds and the protective barriers against grazing from fauna.

Are all rehabilitation areas in Landform Establishment phase or higher represented in the monitoring program to assess performance against the rehabilitation objectives and approved or, if not yet approved rehabilitation completion criteria and final landform and rehabilitation plan?

Yes

Year rehabilitation areas will be included as part of the monitoring program

An appraisal of whether rehabilitation is moving towards achieving the proposed rehabilitation objectives, approved or, if not yet approved, rehabilitation completion criteria and final landform and rehabilitation plan as soon as reasonably practicable.

Due to the anticipated long life of the mine, and the requirement of most surface facilities for current operational requirements, detailed rehabilitation and monitoring programs will be developed closer to the time of closure. Rehabilitation plans will be formed to align with the proposed final landform and land use. Future actions regarding the trial remediation works along WC21 are in consultation with WaterNSW. Rehabilitation Objectives were approved by the Resources Regulator on 10 July 2025. Generally, rehabilitation is progressing towards achieving the rehabilitation objectives as approved and provided in the RMP on the GM3 website: https://gm3.au/dendrobium-mine/. Rehabilitation completion criteria were

submitted to the Resources Regulator on 11 September 2025. Feedback has not yet been received.

Appraisal description

There are performance issues preventing rehabilitation moving towards achieving the final land use as soon as reasonably practicable.

Rehabilitation monitoring program findings

Rehabilitation Monitoring is undertaken in accordance with the RMP, located on the GM3 website: https://gm3.au/dendrobium-mine/. ICHPL has continued to monitor sites associated with the WC21 trial remediation works; Pools 24 and 25 as well as nearby groundwater levels. For more details, refer to the WC21 and Donalds Castle Creek Rehabilitation Plan published on the GM3 website: https://gm3.au/dendrobium-mine/. Regular monitoring was undertaken at the rehabilitation site in Kembla Heights that was subject to subsidence in 2013. The monitoring commenced following the planting of local natives in April 2025 and includes regular checks of plant health, weeds and the protective barriers against grazing from fauna. Monitoring was undertaken at Ventilation Shaft 2/3 site where an area was cleared for the construction of gas drainage infrastructure. Improved erosion and sediment controls were implemented, including hydromulching of the disturbed area with native grasses and the use of a soil binder to stabilise the disturbance to allow for vegetation growth. Regular checks were undertaken during the monthly site inspections. Subsidence remediation monitoring is undertaken when travelling along tracks where remediation activities have occurred. A post-mining inspection of all sites is completed as part of the EoP Report.

Performance issues and their causes including identification of any knowledge gaps that must be addressed

The trail remediation final report determined there was no observable improvement in the water-holding capacity of WC21 Pools 24 and 25 as a result of grouting. ICHPL is currently in consultation with WaterNSW regarding alternate measures to account for impacts at WC21.

Outcomes of rehabilitation research and trials

RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS	ON TRACK?
RRT0001002	Investigations to Support Rehabilitation in WC21 and Donalds Castle Creek	The principal objective of the trial is to hold water in the two targeted pools following remediation activities.	Hand grouting, shallow pattern grouting and directional/angled grout curtain. Coffer dams and diversion piping will be used to divert any surface flow during works if required. It is likely that water will need to be pumped into the sites in order to assess the water holding potential of the pools following remediation. Overlying sediment will be managed during the drilling and grouting process.	30 Jun 2026	Ongoing	Yes
RRT0001131	Pond construction for Little John's Tree Frogs (LJTF) in Dendrobium Area 3 – TBC with WNSW	Installing 33 artificial ponds as habitat to promote breeding for LJTF within Dendrobium Area 3.	Types of ponds to be installed: Tank ponds: - Remove any vegetation in work area and commence digging of topsoil. Create a flat-bottomed surface large enough to fit the diameter of the tank and place a layer of sand over the base. The tank will be fitted into the ground, so the tank sits flush with the soil level. Secure tank. Clay-lined ponds: - Dig hole and compact soil, apply clay to pond by either by mixing clay or creating a clay blanket over the pond and then by compacting the pond area	1 Jun 2026	Not started	Yes

Outcomes of completed trials and research

N/A

Attachment 1 – Reporting Definitions

REPORTING CATEGORY		DEFINITION
A1	Total disturbance footprint – surface disturbance	All areas within a mining lease that either have at some point in time or continue to pose a rehabilitation liability due to surface disturbance activities. The total disturbance footprint is the sum of the total active disturbance, decommissioning, landform establishment, growth medium development, ecosystem and land use establishment, ecosystem and land use development and rehabilitation completion (see definitions below). Underground mining operations should not include the footprint of underground mining areas/subsidence management areas in the total disturbance footprint.
A2	Underground Mining Area	Underground mining operations areas/subsidence management areas.
B	Total active disturbance	Includes on-lease exploration areas, stripped areas ahead of mining, infrastructure areas, water management infrastructure, sewage treatment facilities, topsoil stockpile areas, access tracks and haul roads, active mining areas, waste rock emplacements (active/unshaped/in or out-of-pit), tailings dams (active/unshaped/uncapped) and temporary stabilised areas (e.g. areas sown with temporary cover crops for dust mitigation and temporary rehabilitation).
C	Rehabilitation – land preparation	Includes the sum of all disturbed land within a mining lease that have commenced any, or all, of the following phases of rehabilitation – decommissioning, landform establishment and growth medium development. Refer to the glossary of terms in this document for the definition of these phases of rehabilitation.

REPORTING CATEGORY		DEFINITION
D	Ecosystem and land use establishment	Includes the area which has been seeded/planted with the target vegetation species for the intended final land use. However, vegetation has not matured to a stage where it can be demonstrated that it will be sustainable for the long term and or require only a maintenance regime consistent with target reference/analogue sites. Typically, rehabilitation areas would be in this phase for at least two years (and usually more) before rehabilitation can be classified as being in the ecosystem and land use development phase. This phase does not apply to infrastructure areas that are being retained as part of final land use for the site.
E	Ecosystem and Land Use Development	Rehabilitation has matured to a level where target revegetation outcomes are on a trajectory towards meeting the final rehabilitation objectives and rehabilitation completion criteria (as verified by monitoring). This phase includes infrastructure areas that are to be retained for an approved post mining land use, following completion of all necessary measures to render the infrastructure fit for this purpose (for example structural integrity).
F	Rehabilitation Completion	The NSW Resources Regulator has determined in writing that the mining area has achieved the approved rehabilitation objectives and approved rehabilitation completion criteria and final landform and rehabilitation plan following the submission of *Form: ESF2 Rehabilitation completion and/or review of rehabilitation cost estimate and/or notification of mine or petroleum site closure.*
G	New active disturbance area	The area of any new active disturbance that has been created during the annual reporting period (definition A1 in Table 5).
H	New rehabilitation commenced during annual reporting period	The sum of any new rehabilitation commenced in the annual reporting period. These areas may be in the rehabilitation land preparation phase or the ecosystem & land use establishment phase (definitions C and D in Table 5).
I	Established rehabilitation (hectares)	The total area of land that is verified to be within either the ecosystem and land use development phase or the rehabilitation completion phase (definitions E & F in Table 5).

REPORTING CATEGORY		DEFINITION
J	Annual rehabilitation to disturbance ratio	The rehabilitation to disturbance ratio (H/G) indicates how many hectares of new rehabilitation are undertaken for each hectare of land disturbed during the year. A ratio of 1/1 indicates that the area of new rehabilitation and disturbance in that year are the same.
K	% Rehabilitated land to total mine footprint	The proportion of the total mine footprint (area of land that has been disturbed by past or present surface disturbance activities) that has established rehabilitation (I/A1 x 100). For open cut mining, the proportion of the total mine footprint verified to be "established rehabilitation" should substantially increase as an operation progresses towards mine closure.
L	Established rehabilitation for agricultural final land uses (hectares)	The percentage of total area of land that is verified to be within either the ecosystem and land use development phase or the rehabilitation completion phase (definitions E & F in Table 5) that have been returned to an agricultural final land use.
M	Established rehabilitation for native ecosystem final land uses (hectares)	The percentage of total area of land that is verified to be within either the ecosystem and land use development phase or rehabilitation completion phase (definitions E & F in Table 5) that have been returned to native ecosystem final land use.
N	Established rehabilitation for other/non-vegetated final land uses (hectares)	The percentage of total area of land that is verified to be within either the ecosystem and land use development phase or the rehabilitation completion phase (definitions E & F in Table 5) that have been returned to other/non-vegetated final land use.

Attachment 2 – Definitions

WORD	DEFINITION
Active	In the context of rehabilitation, land associated with mining domains is considered 'active' for the period following disturbance until the commencement of rehabilitation.
Active mining phase of rehabilitation	In the context of rehabilitation, the active mining phase of rehabilitation constitutes the rehabilitation activities undertaken during mining operations such as salvaging and managing soil resources, salvaging habitat resources, and native seed collection. This phase also includes management actions taken during operations to manage risks to rehabilitation and enhance rehabilitation outcomes such as selective handling of waste rock and management of tailings emplacements.
Analogue site	In the context of rehabilitation, an analogue site is a 'reference site' that represents an example of the defining characteristics (such as vegetation composition and structure or agricultural productivity) of the final land use. Characteristics of analogue sites can be assessed to develop the rehabilitation objectives and completion criteria for final land use domains.
Annual rehabilitation report and forward program	As described in the Mining Regulation 2016.
Annual reporting period	As defined in the Mining Regulation 2016.
Closure	A whole-of-mine-life process, which typically culminates in the relinquishment of the mining lease. It includes decommissioning and rehabilitation to achieve the approved final land use(s).
Decommissioning	The process of removing mining infrastructure and removing contaminants and hazardous materials.
Decommissioning Phase of Rehabilitation	Activities associated with the removal of mining infrastructure and removal and/or remediation of contaminants and hazardous materials. In the context of the rehabilitation management plan this phase of rehabilitation may also include studies and assessments associated with decommissioning and demolition of infrastructure or works carried out to make safe or 'fit for purpose' built infrastructure to be retained for future use(s) following lease relinquishment.

WORD	DEFINITION
Department	The Department of Regional NSW.
Disturbance	See Surface Disturbance.
Disturbance area	An area that has been disturbed and that requires rehabilitation. This may include areas such as on-licence exploration areas, stripped areas ahead of mining, infrastructure areas, water management infrastructure, sewage treatment facilities, topsoil stockpile areas, access tracks and haul roads, active mining areas, waste emplacements (active/unshaped/in or out-of-pit), tailings dams (active/unshaped/uncapped), and areas requiring rehabilitation that are temporarily stabilised (i.e. managed to minimise dust generation and/or erosion).
Domain	An area (or areas) of the land that has been disturbed by mining and has a specific operational use (mining domain) or specific final land use (final land use domain). Land within a domain typically has similar geochemical and/or geophysical characteristics and therefore requires specific rehabilitation activities to achieve the associated final land use.
Ecosystem and Land Use Development	This phase of rehabilitation consists of the activities to manage maturing rehabilitation areas on a trajectory to achieving the approved rehabilitation objectives and completion criteria. For vegetated land uses this phase may include processes to develop characteristics of functional self-sustaining ecosystems, such as nutrient recycling, vegetation flowering and reproduction, and increasing habitat complexity, and development of a productive, self-sustaining soil profile. This phase of rehabilitation may include specific vegetation management strategies and maintenance such as tree thinning, supplementary plantings and weed management.
Ecosystem and Land Use Establishment	This phase of rehabilitation consists of the processes to establish the approved final land use following construction of the final landform. For vegetated land uses this rehabilitation phase includes establishing the desired vegetation community and implementing land management activities such as weed control. This phase of rehabilitation may also include habitat augmentation such as installation of nest boxes.
Exploration	Has the same meaning as that term under the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.

WORD	DEFINITION
Final landform and rehabilitation plan	As defined in the Mining Regulation 2016.
Final land use	As defined in the Mining Regulation 2016.
Form and way	Means the form and way approved by the Secretary. Approved form and way documents are available on the Department's website.
Growth Medium Development	This phase of rehabilitation consists of activities required to establish the physical, chemical and biological components of the substrate required to establish the desired vegetation community (including short lived pioneer species. This phase may include spreading the prepared landform with topsoil and/or subsoil and/or soil substitutes, applying soil ameliorants to enhance the physical, chemical and biological characteristics of the growth media, and actions to minimise loss of growth media due to erosion.
Habitat	Has the same meaning as that term under the *Biodiversity Conservation Act 2016* and the *Fisheries Management Act 1994* (as relevant).
Indicator	An attribute of the biophysical environment (e.g. pH, topsoil depth, biomass) that can be used to approximate the progression of a biophysical process. It can be measured and audited to demonstrate (and track) the progress of an aspect of rehabilitation towards a desired completion criterion (i.e. defined end point). It may be aligned to an established protocol and used to evaluate changes in a system.
Land	As defined in the *Mining Act 1992.*
Landform Establishment	This phase of rehabilitation consists of the processes and activities required to construct the final landform. In addition to profiling the surface of rehabilitation areas to the approved final landform profile this phase may include works to construct surface water drainage features, encapsulate problematic materials such as tailings, and prepare a substrate with the desired physical and chemical characteristics (e.g. rock raking or ameliorating sodic materials).
Large mine	As defined in the Mining Regulation 2016.
Lease holder	The holder of a mining lease.

WORD	DEFINITION
Life of mine	The timeframe of how long a mine is approved to mine, from commencement to closure.
Mine rehabilitation portal	Means the NSW Resources Regulator's online portal that lease holders must use (via a registered account) to: ■ upload rehabilitation geographical information system (GIS) spatial data ■ develop rehabilitation GIS spatial data (using online tracing functions) ■ generate rehabilitation plans and rehabilitation statistics using the map viewer and Rehabilitation Key Performance Indicator functionalities. Data submitted to the mine rehabilitation portal is collated in a centralised geodatabase for use by the NSW Resources Regulator to regulate rehabilitation performance of lease holders.
Mining area	As defined in the *Mining Act 1992*.
Mining domain	A land management unit with a discrete operational function (e.g. overburden emplacement), and therefore similar geophysical characteristics, that will require specific rehabilitation treatments to achieve the final land use(s).
Mining land	As defined in the *Mining Act 1992.*
Native vegetation	Has the same meaning as that term under section 60B of the *Local Land Services Act 2013.*
Overburden	Material overlying coal or a mineral deposit.
Performance indicator	An attribute of the biophysical environment (for example pH, slope, topsoil depth, biomass) that can be used to demonstrate achievement of a rehabilitation objective. It can be measured and audited to demonstrate (and track) the progress of an aspect of rehabilitation towards a desired completion criterion, that is, a defined end point. It may be aligned to an established protocol and used to evaluate changes in a system.

WORD	DEFINITION
Phases of rehabilitation	The stages and sequences of actions required to rehabilitate disturbed land to achieve the final land use. The phases of rehabilitation are: ■ active mining ■ decommissioning ■ landform Establishment ■ growth medium development ■ ecosystem and land use establishment ■ ecosystem and land use development.
Progressive rehabilitation	The progress of rehabilitation towards achieving the approved rehabilitation completion criteria. This may be described in terms of domains, phases, performance indicators and rehabilitation completion criteria.
Rehabilitation Completion	The final phase of rehabilitation when a rehabilitation area has achieved the approved rehabilitation objectives and rehabilitation completion criteria for the final land use. Rehabilitation areas may be classified as complete when the NSW Resources Regulator has determined in writing that the relevant rehabilitation obligations have been fulfilled following submission of *Form ESF2 Rehabilitation completion and/or review of rehabilitation cost estimate* application by the lease holder.
Rehabilitation Completion criteria	As defined in the Mining Regulation 2016.
Rehabilitation cost estimate	As defined in the Mining Regulation 2016.
Rehabilitation management plan	As defined in the Mining Regulation 2016.
Rehabilitation objectives	As defined in the Mining Regulation 2016.
Rehabilitation risk assessment	As defined in the Mining Regulation 2016.
Rehabilitation schedule	The defined timeframes for progressive rehabilitation set out in the forward program.

WORD	DEFINITION
Relevant stakeholders	Means any persons or bodies who may be affected by the mining operations, including rehabilitation, carried out on the lease land, and includes: ■ the relevant development consent authority ■ the local council ■ the relevant landholder(s) ■ community consultative committee (if required under the development consent) or equivalent consultative group ■ affected land holder(s) ■ government agencies relevant to the final land use ■ affected infrastructure authorities (electricity, telecommunications, water, pipeline, road, rail authorities) ■ local Aboriginal communities, and ■ any other person or body determined by the Minister to be a relevant stakeholder in relation to a mining lease.
Risk	The effect of uncertainty on objectives. It is measured in terms of consequences and likelihood (AS/NZS ISO 31000:2009).
Secretary	The Secretary of the Department.
Security deposit	An amount that a mining lease holder is required to provide and maintain under a mining lease condition, to secure funding for the fulfilment of obligations under the lease (including obligations that may arise in the future).
Surface disturbance	Includes activities that disturb the surface of the mining area, including mining operations, ancillary mining activities and exploration.
Tailings	A combination of the fine-grained solid material remaining after the recoverable metals and minerals have been extracted from the mined ore, and any process water[2].
Waste	Has the same meaning as that term under the *Protection of the Environment Operations Act 1997*.

[2] Commonwealth of Australia (DITR), 2007. *Tailings Management*.

Attachment 3 – Rehabilitation Complaints

DATE	COMPLAINANT	COMPLAINT DETAILS	RESPONSE DETAILS	STATUS OF RESPONSE	DATE RESPONSE COMPLETED (IF APPLICABLE)

Attachment 4 – Stakeholder consultation

DATE	STAKEHOLDER	CONSULTATION ACTIVITIES AND FORMS	MATTERS SUBJECT TO CONSULTATION	ACTIONS TAKEN
2 Dec 2022	NSW Resources Regulator	Email correspondence.	Forward Program, particularly: Requesting IMC to nominate a contact person in relation to the mining lease(s) for the purposes of the Mining Act 1992; and, Requesting IMC publish the Forward Program on the IMC website (2/12/2022).	Evidence submitted of nominated contact person provided previously to the NSW Resources Regulator. Forward Program published to the IMC Website.
1 Jan 2025	WaterNSW, DPHI	Email correspondence and meetings. Note: Consultation occurred over multiple dates.	WC21 and DCC Rehabilitation Trial, particularly: Progress of WC21 Rehabilitation Trial; Final trial works report; and, Revised WC21 and DCC Rehabilitation Plan.	Ongoing consultation and discussion of alternative contingency measures for impacts at WC21.
18 Jul 2024	WaterNSW	Email correspondence.	Repair of subsidence induced soil cracking on Fire Road 6F, over Longwall 19A, DA3A mining area.	Soil cracks remediated.
20 Sep 2024	Sydney Water, National Parks and Wildlife Service	Email correspondence and onsite meetings. Note: Consultation occurred over multiple dates.	Progress of the O'Briens Gap Pumphouse Rehabilitation Project to satisfaction of landowners.	Continuation of O'Briens Gap Rehabilitation Project to satisfaction of the landowner (Sydney Water). Issue of site validation report and SWC acceptance via cancellation of Licence at the site for works on 31/01/2024. Consultation with NPWS and issue site validation report on 05/04/2024.
20 Sep 2024	Department of Planning and Environment, Biodiversity Conservation Division, WaterNSW, Dendrobium Community Consultative Committee	Email correspondence, inspections of WC21 trial rehabilitation site, offsite meetings, bi-monthly meetings, and onsite tour – 4/05/2023. Note:	WC21 and DCC Rehabilitation Trial, particularly: Update on the progress of WC21 Rehabilitation Trial; and, Success of WC21 Rehabilitation Trials (WaterNSW).	Revision of the WC21 and DCC Rehabilitation Plan. Ongoing consultation and discussion of alternative contingency measures for impacts at WC21. Commitment to revisit site once trial has progressed further.

DATE	STAKEHOLDER	CONSULTATION ACTIVITIES AND FORMS	MATTERS SUBJECT TO CONSULTATION	ACTIONS TAKEN
		Consultation occurred over multiple dates.		
30 Jun 2023	-	-	-	-
21 May 2024	Resources Regulator	Email correspondence and site inspection with Resources Regulator (21/05/2024).	Progress of rehabilitated site (O'Briens Gap Switchyard).	Rehabilitation completion report submitted to Resources Regulator on 13/06/2023 for this site pursuant to obtaining formal rehabilitation sign-off from Resources Regulator.
10 May 2024	Resources Regulator	Email correspondence, submission of ESF2 form (10/05/2024), and site inspection.	Seeking sign off on rehabilitation undertaken for localised surface failure - Harry Graham Drive.	Awaiting feedback following submission of ESF2 form.
29 Aug 2022	Department of Planning and Environment, Environment Protection Authority	Email correspondence. Note: Consultation occurred over multiple dates.	Tree removal at Dendrobium Pit Top, including: Complaint received on tree removal and noise at Dendrobium; and, Inclusion of Special Condition for slope stabilisation work within EPL 3241.	Response provided by IMC and accepted by Department of Planning and Environment. Special condition approved in EPL. CEMP for the Slope Stabilisation work submitted to the EPA as required. CEMP accepted by the Environment Protection Authority.
30 Jun 2023	NSW Resources Regulator, Landholders	Email correspondence. Note: Consultation occurred over multiple dates.	Application for part cancellation of CCL 768 for area covered by rehabilitated powerlines approved by NSW RR.	Correspondence issued to affected Landholders informing them that Leases have been cancelled.
6 Sep 2022	Department of Planning and Environment, NSW Resources Regulator, Dendrobium Community Consultative Committee	Email correspondence and meetings. Note: Consultation occurred over multiple dates.	Rehabilitation Management Plan, particularly: Feedback on draft rehabilitation management plan; Meetings to discuss rehabilitation objectives and spatial data following refusal; and, Provide information and discuss rehabilitation plan.	RMP revised. Rehabilitation objectives and spatial data revised and resubmitted in RMP.

DATE	STAKEHOLDER	CONSULTATION ACTIVITIES AND FORMS	MATTERS SUBJECT TO CONSULTATION	ACTIONS TAKEN
27 Aug 2024	Resources Regulator and WaterNSW	Email correspondence and site inspection (27/08/2024).	Corrimal No. 2 Shaft, particularly: Seeking sign off on rehabilitation undertaken.	ESF2 form signed by WaterNSW (as the landholder) (10/03/2025).
4 Oct 2024	Resources Regulator	Email correspondence.	Localised surface failure – Harry Graham Drive, particularly: Refusal of ESF2 form.	Additional rehabilitation works undertaken onsite.
7 Mar 2025	Resources Regulator	Email correspondence and meetings. Note: Consultation occurred over multiple dates.	Rehabilitation Management Plan (RMP), particularly: Discussion of rehabilitation objectives and FLRP spatial data following refusal; and, Resubmission of completion criteria (11/09/2025).	Rehabilitation objectives and spatial data revised and approved. RMP revised.
21 Sep 2022	NSW Resources Regulator	Email correspondence.	Inclusion of securities for exploration in Rehabilitation Cost Estimate (RCE) for CCL 768 (21/09/2022).	RCE revised and submitted to the NSW Resources Regulator.
1 Jan 2025	WaterNSW	Email correspondence. Note: Consultation occurred over multiple dates.	Repair of subsidence induced soil cracking on Fire Road 6C, over Longwall 22, DA3C mining area.	Soil cracks remediated.
4 Oct 2024	Resources Regulator	Email correspondence.	O'Briens Gap Switchyard Rehabilitation, particularly: Seeking sign off on rehabilitation undertaken.	Notification of satisfactory rehabilitation received (4/10/2024). RMP and spatial data updated accordingly.

Attachment 5 – Plans

Plan 1A - Current Status of Mining and Rehabilitation-DEN.zip

Plan 1B - Current landform contours-DEN.zip

Appendix 9: Independent Environmental Audit Progress - FY25

Development Consent 60-03-2001

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
Schedule 2, Condition 1	The Applicant must implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development.	The audit determined non-compliances in relation to documentation of subsidence performance measures for Swamp 15a in the SIMMCP for LW 19, which are inconsistent with the requirements of Condition 8 of the SMP Approval for LW 19. This has resulted in these performance measures being incorrectly adopted in EOP reporting for LW 19. The incorrect documentation of these performance measures as 'minor' and 'no significant change', instead of 'negligible', has resulted in development and implementation (i.e. triggering) of TARPs for LW 19 that are not correctly considering potential impacts and potential exceedance of performance measures for Swamp 15a. There was no evidence to indicate harm to the environment has occurred due of the incorrect documentation of performance measures, as this was not able to be confirmed during the audit.	NC	Corrective Action (CA): Undertake an independent review of the study into the coincidence/causality of vegetation change (ecosystem functionality) and groundwater change at Swamp 15a. The study is to be completed by a suitably qualified expert in coastal upland swamps approved by DPE. Given rehabilitation of upland swamps has been deemed impractical, if the findings of the study and/or review conclude the causes are likely to be related to mining activities, consider the need for additional strategic offsets for	It is noted that the performance measures in relation to Swamp 15a have been updated in the Longwall 19A Swamp Impact, Monitoring, Management and Contingency Plan (SIMMCP) in consultation with the Department to be consistent with approved performance measures, since the LW19 SIMMCP was approved. Monitoring and assessment of Upland Swamps is subject to independent review by the Independent Panel as a result of	The ecological data review was updated in FY25 based on the 2023 monitoring data to inform the hydrological review. The hydrological report reviewed the structure and hydrogeology of Swamp 15a and results were found to be consistent with the performance measure of "negligible change in ecosystem

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
		However, as a consequence of adopting the incorrect performance measures, a non-compliance has been identified in relation to the requirement to implement all reasonable and feasible measures to prevent or minimise harm to the environment due to the incorrect development and implementation (i.e. triggering) of TARPs, and associated reporting. Further discussion is provided at Schedule 3, Conditions 5 and 6, and Section 3.3.3.2.		upland swamps in consultation with BCS to ideally be located within the impacted catchment or Metropolitan Special Areas (if required).	Subsidence Management Plan (SMP) Applications and supporting assessments being referred to the Independent Panel. The commissioning of a study into the coincidence/causality of vegetation change (ecosystem functionality) and groundwater change at Swamp 15a was an outcome of meetings with the Independent Panel in relation to the Longwall 19A SMP and is not a condition of consent or a requirement under a SMP Approval. This study is currently underway and will be provided to agencies upon completion. The study would recommend any	functionality." Reports were submitted to the Department. On 18/12/2024, the Department requested that ICHPL continue to review and report on monitoring within Swamp 15a as part of each annual review, including statistical comparison against control sites and assessment against performance measures for the swamp.

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					further investigations required including the need for any additional independent review. ICHPL will consider in consultation with agencies any recommendations of the study. The study is planned to be completed by 30 June 2024.	This reporting will be undertaken. **Closed**
Schedule 3, Condition 5	The Applicant must ensure that subsidence does not cause erosion of the surface or changes in ecosystem functionality of Swamp 15a and that the structural integrity of its controlling rockbar is maintained or restored, to the	As discussed in Schedule 3, Condition 6, review of the SIMMCP for LW 19 (Area A) indicates performance measures for Swamp 15a (as detailed in Table 6-1 of the SIMMCP), are inconsistent with the requirements of Condition 8 of the SMP Approval for LW 19 as follows: - 'minor' change in the size of the swamps, with the performance measure in the SMP Approval for LW 19 being 'negligible'; - 'minor' change in the ecosystem functionality of the swamps, with the performance measure in the SMP Approval for LW 19 being 'negligible'; and	NC	CA: Duplicate recommendation. Refer to Schedule 2, Condition 1.	ICHPL disagree this constitutes a non-compliance. Despite incorrect documentation of performance measures in the SIMMCP, there is no evidence to suggest *subsidence* has caused erosion of the surface or changes in ecosystem functionality of Swamp 15a or that the structural integrity of	The ecological data review was updated in FY25 based on the 2023 monitoring data to inform the hydrological review. The hydrological report reviewed the structure and hydrogeology of Swamp 15a

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
	satisfaction of the Secretary.	- 'no significant change' to the composition or distribution of species within the swamps, with the performance measure in the SMP Approval for LW 19 being 'negligible'. Negligible is defined in the SMP Approval for LW 19 as *'Small and unimportant, such as to be not worth considering'*, while Schedule 3, Condition 5 requires that subsidence *'does not cause erosion of the surface or changes in ecosystem functionality at Swamp 15a'*. The incorrect documentation of performance measures in the SIMMCP for LW 19 and in EOP reporting for LW 19 has the potential for impacts on Swamp 15a due to mining to go unreported. While the report '*Ecological data review: Swamp 15A Stage 2 technical memo'* (Niche, 2023) found *'overall TSR is primarily being influenced by catchment-scale factors rather than factors at the swamp scale'*, given that the shallow groundwater and soil moisture TARPs have been triggered at Swamp 15a, it is considered plausible			its controlling rockbar has not been maintained or restored, to the satisfaction of the Secretary. Refer to Schedule 2, Condition 1.	and results were found to be consistent with the performance measure of "negligible change in ecosystem functionality." Reports were submitted to the Department. **Closed**

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
		there may be potentially unreported impacts on ecosystem functionality due to mining activities at Swamp 15a. Furthermore, Attachment H of the LW 19 EOP Report concludes: *'Impacts to swamp communities are apparent in the post-mining period. This is anticipated based upon the proximity of these swamps to the longwalls…'.* The incorrect documentation of these performance measures as 'minor' and 'no significant change', instead of 'negligible' (per the SMP Approval for LW 19) and *'does not cause erosion of the surface or changes in ecosystem functionality at Swamp 15a'* (per Schedule 3, Condition 5), has resulted in development and implementation (i.e. triggering) of TARPs for LW 19 that are not adequately considering compliance with Schedule 3, Condition 5 and Condition 8 of the SMP Approval for LW 19. Given this discrepancy, there is potential for unreported impacts on Swamp 15a. Therefore, a non-compliance (low risk) has been identified in relation to adequate detection of change in				

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
		ecosystem functionality of Swamp 15a due to mining at LW 19, potentially resulting in: - moderate environmental consequences, considered unlikely to occur; or - low environmental consequences, considered likely to occur. It was noted during the interview process that IMC are undertaking a study into the coincidence/causality of vegetation change (ecosystem function) and groundwater change at Swamp 15a. Therefore, ***CA01*** has been identified in relation to undertaking this study.				
Schedule 4, Condition 11	During the development, the Applicant must ensure that it has a suitable meteorological station in the vicinity of the site that is generally in accordance with the requirements in the guideline Approved Methods for Sampling of Air	The meteorological stations were inspected on 9 October 2023 and a sample of meteorological data (August to October 2023) was reviewed. This showed: – meteorological stations are not strictly located in accordance with the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW but have been positioned as best as possible given the site constraints, surrounding infrastructure, terrain and vegetation. The Dendrobium Pit Top meteorological station is situated on the top of buildings, approximately 6 to 7 m above ground, with the site	Compliant	OFI: Assess opportunities to improve the exposure of the meteorological station (e.g. using taller masts to get to approximately 10 m).	A review of meteorological station will be undertaken to assess improvement opportunities by 30 June 2024.	Upon further review during FY25 the height of the meteorological station was deemed to be sufficient. The station is on top of a 6-7 m building and a mounted a further 7-8 m above the building roof.

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	Pollutants in New South Wales.	inspection completed on 9 October 2023 indicated the meteorological station is potentially not of sufficient height to avoid influence of the building in measuring local winds; and – the meteorological stations collect relevant data to assist with evaluating air quality monitoring results. The data include wind speed, wind direction, temperature, rainfall and barometric pressure, collected at 10-minute intervals. IMC operates a suitable meteorological station in the vicinity of the site which is generally in accordance with the requirements of the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW; however, OFI04 has been made to identify opportunities to improve the exposure of the meteorological station.				The station is approximately 14 m from ground level. If the station is moved higher it may compromise temperature and humidity data. The station is positioned away from any potential influences from buildings to provide reliable wind speed and direction data. **Closed**.
Schedule 4, Condition 18	Condition 18: For rehabilitation works within the Metropolitan Special Area, the Applicant must ensure that these	During conduct of the 2023 IEA, WaterNSW was consulted and identified the following in relation to rehabilitation: The only rehabilitation attempted is remediation trial of two pools in Wongawilli Creek tributary WC21 during 2021-2022 as per the Donalds Castle	Compliant	OFI: To ensure compliance with the requirement to remediate physical damage to watercourses subject to subsidence impacts as soon as reasonably	Consultation with agencies has occurred throughout development of the WC21 and DCC Rehabilitation Plan, however,	Revision 6 of the WC21 Rehabilitation Plan was submitted in October 2024.

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
	works are carried out to the satisfaction of WaterNSW.	Creek and WC21 Rehabilitation plan. Very limited success is reported to date. The WC21 and Donalds Castle Creek Rehabilitation Plan is required by Condition 15 of the SMP Approvals for LW 17 and LW 18. Review of documentation during completion of the 2023 IEA indicates rehabilitation trials as part of the WC21 and Donalds Castle Creek Rehabilitation Plan were approved during the FY22 Annual Review period, with the trial rehabilitation program commencing November 2021 in relation to drilling and grouting of the two pools in WC21 (i.e. Pool 24 and Pool 25). However, these works were paused in December 2021 due to restricted access to WaterNSW Special Area during wet weather. Ongoing La Nina conditions restricted access to the Metropolitan Special Areas until September 2022 and lead to track damage requiring repair prior to recommencement of works. Following track repairs the grouting trial resumed and was completed in November/December 2022. The post remediation verification works were undertaken in December 2022 and January 2023 and involved drilling of		practicable, commence specific engagement with WaterNSW, BCS and DPE during the period in which continuation of monitoring is being undertaken until 3-6 months of average or above average rainfall occurs (as proposed in WC21 and Donalds Castle Creek Rehabilitation Plan [Rev 5, 31 August 2023 – currently waiting for DPE approval]). would focus on: – confirming agreement regarding the appropriate path forward should 3-6 months of average or above average rainfall not result in significantly different monitoring results, to establish whether: – more grouting is required; or – modification to grouting/remediation techniques is required. – whether any	consideration/inclusion of the recommended focus points will be addressed following feedback to the latest revision of the Rehabilitation Plan, currently awaiting determination. Dependent on the timing of feedback and rainfall patterns, it is anticipated that the Rehabilitation Plan will be revised by 30 June 2024.	The Department responded on 4 June 2025 requesting an update to the plan following assessment of further results, with the revised plan to be submitted by 30 September 2025. **Ongoing**

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		two post verification holes using a small track mounted drill rig. Geotechnical logging, geophysical logging and packer testing was also undertaken on the post grouting verification holes. An update of the WC21 and Donalds Castle Creek Rehabilitation Plan (Rev 4, 31 January 2023) was completed to report on progress of rehabilitation trials undertaken at Pool 24 and Pool 25, with approval provided 24 May 2023. With completion of these works, post-grouting monitoring of pool water levels commenced and was required to be undertaken for a period of six (6) months prior to undertaking an assessment of the outcome of the trial. This assessment required consideration of the post remediation verification hole logging, piezometer data (S2337/S2338) and pool water level data collected during the monitoring period. Correspondence from DPE approving the revised WC21 and Donalds Castle Creek Rehabilitation Plan (Rev 4, 31 January 2023) noted: – a revision to the WC21 and Donalds Castle Creek Rehabilitation Plan is required to report on the results of the trial and needed to be submitted to DPE		remediation is likely to be successful at WC21; – whether separate remediation trials should also commence at Donalds Castle Creek, rather than focusing efforts at WC21 only; – whether the environmental impacts of remediation (e.g. associated with the existing or any modified remediation technique required at WC21 and Donalds Castle Creek) would exceed the environmental benefits; and – whether alternative measures and/or programs required to be implemented in the catchment to offset the impacts to WC21 and Donalds Castle Creek, and at what point the need to offset impacts would be determined necessary.		

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
		by 31 August 2023; and – the BCS advice on the broader rehabilitation plan needing to be considered and responded to during revision to the WC21 and Donalds Castle Creek Rehabilitation Plan. The revised WC21 and Donalds Castle Creek Rehabilitation Plan (Rev 5, 31 August 2023) was submitted on 31 August 2023, with the following noted: – evidence of receipt by DPE provided on 31 August 2023; and – response from WaterNSW provided 27 September 2023. The results of post-grouting monitoring of pool water levels at Pool 24 and Pool 25 reported in the WC21 and Donalds Castle Creek Rehabilitation Plan (Rev 5, 31 August 2023) indicate the grouting has potentially not been successful. However, the WC21 and Donalds Castle Creek Rehabilitation Plan (Rev 5, 31 August 2023) proposes continuation of monitoring until sufficient rainfall occurs, with South32 IMC committing to review rainfall data every 6 months to determine if sufficient rainfall (i.e. average, or above average rainfall during the period) has occurred to repeat the assessment. The assessment would then be repeated,		OFI: To ensure compliance with the requirement to remediate physical damage to watercourses subject to subsidence impacts 'as soon as reasonably practicable', a detailed program for completion of remediation to WC21 and Donalds Castle Creek is to be included in a future revision to the WC21 and Donalds Castle Creek Rehabilitation Plan	A detailed program was not included in the Rehabilitation Plan as agencies first wanted to undertake the rehabilitation trial at WC21 Pool 24 and 25 site, where results could be reviewed before agreeing to/approving further works. A detailed program will be developed following an assessment of results from the trial. Dependent on the timing of feedback and rainfall patterns, it is anticipated that the Rehabilitation Plan will be revised by 30 June 2024.	Revision 6 of the WC21 Rehabilitation Plan was submitted in October 2024. The Department responded on 4 June 2025 requesting an update to the plan following assessment of further results, with the revised plan to be submitted by 30 September 2025. **Ongoing**

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
		and the WC21 and Donalds Castle Creek Rehabilitation Plan (Rev 5, 31 August 2023) would be updated with the results. In addition, results from the trial will be included in relevant EOP reports and the 2023/2024 Annual Review. Correspondence from WaterNSW provided on 27 September 2023 indicates support for the above. Average or above average rainfall is an undefined period and likely to be affected by current El Nino conditions. In addition, the auditor considers it likely a sufficient rainfall event is unlikely to result in significantly different monitoring results to those currently reported WC21 and Donalds Castle Creek Rehabilitation Plan (Rev 5, 31 August 2023). Therefore, OFI05 and OFI06 have been identified, with OFI05 including consideration to commencement of rehabilitation trials at Donalds Castle Creek (i.e. due to potential for different watercourses to respond differently to remediation attempts). These OFIs have been made with consideration to the requirements of Schedule 4, Condition 18A of DA 60-03-2001, which requires IMC to remediate physical damage to watercourses subject to subsidence				

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
		impacts as soon as reasonably practicable.				
Schedule 4, Condition 18A	The Applicant must rehabilitate the site in accordance with the conditions imposed on the mining lease(s) associated with the development under the Mining Act 1992. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the documents listed in condition 2 of Schedule 2, and comply with the objectives in Table 7.	Review of relevant documentation indicates this condition was introduced due to Modification 9 to DA 60-3-2001, approved on 8 July 2022. The following in relation to rehabilitation during the audit period: – FY21: Review of documentation indicates compliance with the requirements of this condition during FY21 is not relevant due to the introduction of Schedule 4, Condition 18A occurring after the FY21 reporting period. However, the following is noted in relation to rehabilitation: Rehabilitation cost estimate (RCE): The RCE for the Dendrobium operations was reviewed during the reporting period. This RCE was provided as Appendix B to the FY21 Annual Review. Progressive rehabilitation: Legacy sites rehabilitated were either not within the CCL 768 boundary or had a very small footprint (i.e. Summit Park Switchyard, Mt Keira [approximately 150 m2 hand-seeded with grass seed], O'Brien's Gap Switchyard [approximately 300 m2 hand-seeded with grass seed], Greenhills Substation [approximately	Compliant	OFI: Duplicate recommendation. Refer to Schedule 4, Condition 18.	Refer to Schedule 4, Condition 18.	The ecological data review was updated in FY25 based on the 2023 monitoring data to inform the hydrological review. The hydrological report reviewed the structure and hydrogeology of Swamp 15a and results were found to be consistent with the performance measure of "negligible change in ecosystem functionality." Reports were submitted to

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
		2,000 m2 hydro-mulched]). Completion of rehabilitation: Completed rehabilitation areas increased by 0.12 hectares (ha), with 7.97 ha in financial year (FY) and 8.09 ha in Rehabilitation cost estimate (RCE): The RCE for the Dendrobium operations was reviewed during the reporting period. This RCE was provided as Appendix B to the FY21 Annual R- FY22: Review of documentation indicates compliance with the requirements of this condition during FY22 is not relevant due to the introduction of Schedule 4, Condition 18A occurring after the FY21 reporting period. However, the following is noted in relation to rehabilitation: RCE: The RCE for the Dendrobium operations was reviewed during the reporting period. This RCE was provided as Appendix B to the FY22 Annual Review. Progressive rehabilitation: Investigations and studies were conducted into the removal of redundant infrastructure associated with O'Brien's Drift, particularly at the KVCLF. Completion of rehabilitation: Completed rehabilitation areas increased by 32.91 hectares (ha), from 8.09 ha in FY21 to 41 ha in FY22, with				the Department. **Closed**

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
		completion of a rehabilitation campaign to demolish and rehabilitate redundant powerline circuits that traverse urban and rural residential areas generally located to the East of the Illawarra Escarpment State Conservation Area. To conclude this phase of rehabilitation work, a part lease relinquishment application for CCL 768, which was lodged with the NSW Resources Regulator. The report was accepted in July 2022. a– FY23: Review of documentation indicates compliance with the requirements of this condition during FY23, with the following noted: Progressive rehabilitation: Vegetation removal and topsoil stripping occurred at the Ventilation No. 2 and 3 Shafts in preparation of gas management and ancillary infrastructure. This rehabilitation was sighted during the site inspection completed for the audit. Land preparation works were undertaken for a land slip that occurred on the western boundary of the Dendrobium Pit Top; including soil nails, shotcrete and soil reinforcing mesh as designed by a specialist engineering consultant. Works commenced in FY23 and were completed in FY24.				

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
		Investigations and studies continued into the removal of redundant infrastructure associated with O'Brien's Drift. These included a Hazardous Building Materials Survey, engineering for belt removal and design work associated with the Endeavour Energy powerline relocation. nA Hazardous Building Materials Survey was undertaken for the Corrimal No. 3 site and Cordeaux Pit Top redundant coal bins, which are planned to be removed in FY24/FY25. Rehabilitation monitoring: No rehabilitation monitoring was undertaken in the reporting period at surface facilities, with no recent rehabilitation has been undertaken. Completion of rehabilitation: Completion of progressive rehabilitation in relation to exploration drilling within CCL 768 focussing on sites drilling in FY22 and FY23, with rehabilitation completed at the cessation of drilling and/or monitoring. Rehabilitated areas are monitored for success over several years. With consideration to the above and the requirements of DA 60-03-2001 (i.e. Schedule 4, Condition 18A), which requires IMC to remediate physical damage to watercourses subject to				

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
		subsidence impacts as soon as reasonably practicable, OFI05 and OFI06 have been identified.				
Schedule 8, Condition 2	Management plans required under this consent must be prepared in accordance with relevant guidelines, and include: …	Status of 2020 IEA Recommendation: The AQGHGMP was reviewed, updated and approved by DPE 8 June 2021, and included a section (7.2.2) on adaptive management. 2023 IEA Findings Review of relevant documentation verifies compliance with the requirements of this condition. – TMP addresses (a), (b), (c), (d), (e), (f) and (g); – WMP addresses (a), (b), (c), (d), (e), (f) and (g); – ACHMPs address (a), (b), (c), (d), (e), (f) and (g); – Waste Management Plan addresses (a), (b), (c), (d), (e), (f) and (g); – Bushfire Management Plan addresses (a), (b), (c), (d), (e), (f) and (g); – LVAMP addresses (a), (b), (c), (d), (e), (f) and (g); – AQGHGMP addresses (a), (b), (c), (d), (e), (f) and (g); – NMP addresses (a), (b), (c), (d), (e), (f) and (g). This notwithstanding, the OFI07 has been identified.	Compliant	OFI: Amend the NMP as follows: – Section 3.5 Guidelines and Standards to include reference to Approved Methods for the Measurement and Analysis of Environmental Noise in NSW (EPA, 2022); and – Section 7.2.1, Point 3 from 'Residential Background Level (RBL)' to 'Rating Background Level (RBL)'. **All other recommendations associated with Condition 2 of Schedule 8 were closed in FY24.**	Noted. To be included in next revision of the Noise Management Plan (NMP) by 31 August 2025 (next scheduled review date for NMP).	Noise Management Plan was updated to include this requirement. **Closed**

SMP Approvals – Longwall 19

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
8	The Applicant must ensure that the development does not cause any exceedance of the performance measures in Table 1, to the satisfaction of the Secretary.	The audit determined non-compliances in relation to documentation of subsidence performance measures for Swamp 15a in the SIMMCP for LW 19, which are inconsistent with the requirements of the SMP Approval for LW 19. This has resulted in these performance measures being incorrectly adopted in EOP reporting for LW 19. The incorrect documentation of these performance measures as 'minor' and 'no significant change', instead of 'negligible', has resulted in development and implementation (i.e.	NC	CA: Duplicate recommendation. Refer to DA 60-03-2001 - Schedule 2, Condition 1.	ICHPL disagree that this constitutes a non-compliance. There is no evidence to suggest the *development* has caused any exceedance of the performance measures in Table 1. It is noted that the basis of approving Longwall 19 was made on the intent of Condition 5 of Schedule 3 of the Consent being to prevent major impacts in relation to erosion of the surface and changes in ecosystem functionality in Swamp 15a as stated in the Department's Reasons for Approval. Refer to Schedule 2, Condition 1 for response to Corrective Actions.	The ecological data review was updated in FY25 based on the 2023 monitoring data to inform the hydrological review. The hydrological report reviewed the structure and hydrogeology of Swamp 15a and results were found to be consistent with the performance measure of "negligible change in ecosystem functionality." Reports were submitted to the Department. **Closed**

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
		triggering) of TARPs for LW 19 that are not correctly considering potential impacts and potential exceedance of performance measures for Swamp 15a. There was no evidence to indicate that any harm to the environment has occurred due to the incorrect documentation of performance measures, as this was not able to be confirmed during the audit. As a result, the SIMMCP for LW 19 was not developed or implemented to ensure exceedance would not occur. Therefore, a non-compliance has been identified in relation to ensuring the development does not cause any				

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
		exceedance of the performance measures. Further discussion is provided at Schedule 3, Conditions 5 and 6 in Section 3.3.1, with ***CA01*** identified.				

Schedule 8A, Part 2 of the Mining Regulation 2016 (NSW)

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
Clause 4(1) of Schedule 8A, Part 2 of the Mining Regulation 2016.	The holder of a mining lease must take all reasonable measures to prevent, or if that is not reasonably practicable, to minimise, harm to the environment caused by activities under the mining lease.	The audit determined non-compliances in relation to documentation of subsidence performance measures for Swamp 15a in the SIMMCP for LW 19, which are inconsistent with the requirements of the SMP Approval for LW 19 and conditions of DA 60-03-2001. This has resulted in these performance measures being incorrectly adopted in EOP reporting for LW 19. The incorrect documentation of these performance measures as 'minor' and 'no significant change', instead of 'negligible', has resulted in development and implementation (i.e. triggering) of TARPs for	NC	CA: Duplicate recommendation. Refer to DA 60-03-2001 - Schedule 2, Condition 1.	Refer to Schedule 2, Condition 1.	The ecological data review was updated in FY25 based on the 2023 monitoring data to inform the hydrological review. The hydrological report reviewed the structure and hydrogeology of Swamp 15a and results were found to be consistent with the performance measure of "negligible change in ecosystem functionality." Reports were submitted to the Department. **Closed**

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
		LW 19 that are not correctly considering potential impacts and potential exceedance of performance measures for Swamp 15a. There was no evidence to indicate that any harm to the environment has occurred due to the incorrect documentation of performance measures, as this was not able to be confirmed during the audit. However, a non-compliance has been identified in relation to the requirement to implement all reasonable and feasible measures to prevent or minimise harm to the environment due to the incorrect development and implementation (i.e. triggering) of TARPs, and associated reporting, as a				

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	ICHPL Response December 2023	FY25 Progress
		consequence of adopting the incorrect performance measures. Further discussion is provided in Section 3.3.1 and 3.3.3 (i.e. Schedule 3, Conditions 5 and 6), with ***CA01*** identified.				

Appendix 10: Area 3C Monitoring Network Independent Review - Progress

Recommendation	ICHPL Response March 2024	Proposed Timeframe	FY25 Progress
Deep groundwater level monitoring network More than two years of baseline data should also be available for the proposed monitoring locations (DE-A1-04 and DE-A1-01) provided that these two nested facilities can be installed prior to July 2024. From a BACI analysis point of view the network could be improved by the addition of suitable unimpacted groundwater level control sites in the lower Hawkesbury Sandstone (HBSS) and upper Bulgo Sandstone (BGSS).	DE-A1-04 – ICHPL commit to install this site prior to July 2024 where access permits.	Complete	Four sites installed- S2676, 2676A, B and C. Full piezo string in S2676. A and B holes are single shallow vented piezo (verification of grouted piezo methodology), and C is a water sampling site. Data is from 31/10/2024 (weather and catchment access delays)
	DE-A1-01 – This monitoring location has been installed.	Complete	Previously completed
	Other piezometers around Dendrobium are already installed and monitoring groundwater unimpacted by Area 3 (other than possible far field effects). Therefore, for this purpose, multi-VWP bores operated by ICHPL on the western edge of Dendrobium Area 5 represent suitable options, i.e. bores S2324 and S2325, which have records back to 2016. There are others in Area 5 that may also serve as reference sites – the performance or reliability of individual piezometers may vary. Additionally, NSW government has monitored bores to the northwest of Dendrobium Area 5 since late 2021.	Complete	ICHPL Bores on western edge and NSW Government bores on northwest of Dendrobium Area 5 are used as additional reference sites as included in the DA3C WIMMCP and monitoring ongoing.

Recommendation	ICHPL Response March 2024	Proposed Timeframe	FY25 Progress
	ICHPL has already received access to these data sets and these sites will also be considered as Reference sites.		
Deep groundwater quality monitoring network Quarterly sampling (rather than annual sampling) at all Area 3C monitoring points would need to be commenced as soon as possible to ensure that two years of baseline data can be collected. Depending on the variability observed during the two year baseline monitoring period then sampling frequencies could subsequently be reduced to annual.	It is ICHPLs position that groundwater quality during the baseline period is very stable due to the groundwater flows typically being very small/slow. On this basis ICHPL commit to quarterly sampling for the first year (where access permits), and would review whether to continue quarterly or return to less frequent sampling at that time.	Complete	Quarterly sampling continues at sites listed in the Area 3C WIMMCP- Groundwater Monitoring Program.
The network could also be improved by the inclusion of an additional upper BGSS sampling point at S2659.	ICHPL will investigate whether this improvement is feasible.	Complete	An adjacent hole at the same site (S1969) contains a sample pump at 43 m which provides sampling points at 43 m, 55 m, 109 m (BGSS) and 219 m (SBSS) at this site. Monitoring continues at these sites.
Consideration should also be given to establishing unimpacted reference (or control) groundwater quality monitoring points in the lower HBSS and upper BGSS for BACI analysis and TARP purposes.	As above for groundwater level reference/control sites	Complete	ICHPL Bores on western edge and NSW Government bores on northwest of Dendrobium Area 5 are used as additional reference sites as included in the DA3C WIMMCP.

Recommendation	ICHPL Response March 2024	Proposed Timeframe	FY25 Progress
Surface water level monitoring network Monitoring frequencies are either continuous, at sites equipped with data loggers, or weekly/monthly[29] at sites which are manually monitored.	Monitoring frequencies will continue to be undertaken where access is permitted.	Ongoing	Ongoing
Surface water quality monitoring network The weekly/monthly[1] monitoring frequency is considered to be sufficient to identify any changes in basic water quality parameters before, during and after mining.	Weekly/monthly monitoring will continue to be undertaken where access is permitted.	Ongoing	Ongoing
Surface water flow monitoring network The analysis of baseline monitoring periods also suggests that two of the proposed flow monitoring points (LC7S1 and LC9S1) would need to be installed as soon as possible to ensure that more than two years of baseline monitoring data is available for these locations. • LC7S1 before July 2024 • LC9S1 before August 2025	Proposed flow monitoring points LC7S1 and LC9S1 are planned to be installed 12 April and 17 April 2024 respectively where access permits. ICHPL commit to installing these points to ensure more than two years of baseline data.	LC7S1 – complete LC9S1 – complete	LC7S1 – installed 21 June 2024. LC9S1 – installed 17 October 2024. Flooding conditions observed at the initially-approved site identified issues with the location resulting in a delay in install of the final location.

[29] Surface water level and quality monitoring sites are visited monthly for two years before and after mining and weekly during the period when longwall mining is occurring within 400 m of the monitoring site.