

**MOOLARBEN COAL OPERATIONS - COMMUNITY CONSULTATIVE COMMITTEE
MEETING No. 61**

Date: Tuesday 7th June 2022
Time: 4:07pm
Location: Moolarben Coal Training Centre
Attendance: Independent Chairperson
Lisa Andrews (LA)

Community Members

Dr Julia Imrie (JI)
Bev Smiles (BS)
Cr Katie Dicker (KD) – MWRC Delegate

Moolarben Coal Operations

Steve Archinal (SA) *(left at 4.11pm)*
Brian Wesley (BW)
Trent Cini (TC)
Morgan Yeatman (MY)
Mat Croake (MC) *{Minute taker}*

Apologies

Aliesha Lonsdale (AL)
Helen Ungaro (HU)
David Stokes (DS)
David Lowe (DL)
Cr Des Kennedy (DK)

Meeting 61 Agenda and Presentation and Meeting 60 Minutes were provided to all meeting attendees.

1. Introduction and Welcome

Lisa Andrews (LA) opened the meeting and welcomed all attendees to the Moolarben Coal Operations (MCO) Community Consultative Committee (CCC). SA advised the CCC he will be leaving MCO on the 10th of June 2022 and BW will be the Acting General Manager for MCO. LA and JI both expressed their appreciation of SA's contribution to the MCO CCC. SA then left the meeting.

LA advised there are no changes to the declarations by the CCC members. LA advised she will contact BW to obtain his declaration (**Action 1**).

2. Apologies

Helen Ungaro (HU)
Aliesha Lonsdale (AL)
David Stokes (DS)
David Lowe (DL)
Cr Des Kennedy (DK)

3. Business Arising from Previous Finalised Minutes

LA confirmed previous meeting minutes finalised and distributed on 8th of April 2022.

BS asked MCO to confirm there wasn't any sediment dam releases in 2022. BS commented on the sediment dam releases identified in the Independent Environment Audit (IEA). TC confirmed the IEA period is for the three years prior to September 2021. TC advised the CCC, MCO has not had a sediment dam release in 2022.

TC informed the members that the previous actions items will be addressed during the presentation.

Actions from Meeting 60:

1. MCO to provide Goulburn River sampling results from the rainfall event on the 7th March 2022
2. MCO to include a legend on noise monitoring figure in presentation
3. MCO to notify CCC when the OC3 extension is on public exhibition
4. MCO to confirm the source of stemming rock for the site

No further actions or business arising from CCC Meeting 60.

Correspondence as sent with the Meeting Notice on 26/5/22 with 2 additional items:

- 29/3/22 – Draft minutes sent to CCC for review (comments received back & incorporated into minutes).
- 31/3/22 – Email from JI with request for GW data & mine water make as well as request for future site visit of surface water management system. This request emailed to MCO the same day.
- 6/4/22 – Email to members advising of OC3 extension project EPBC referral on public exhibition.
- 8/4/22 – Email to members with the finalised minutes and information from Cr Dicker regarding the electronic detour sign.
- 6/4/22 – Email from JI asking about public comments on EPBC Act referrals. Responded on 8/4/22 that comments re open for 10 business days.
- 12/4/2022 – Email to members with the IEA compliance report link.
- 11/5/2022 - Email from TC regarding the Moolarben Open Cut 3 Extension Project Bore Census. Forwarded to members the same day.
- 12/5/2022 – Email response from JI providing information for the Bore Census. Forwarded through to MCO the same day.
- 26/5/2022 – Email to members with the Meeting Notice, Agenda & site requirements.

- 29/5/22 – Email from JI with request for access to MCO 2021 Annual Review; IWQS; UG4 Extraction Plan; AGE 2021 UG4 GW Report with reminder for GW data. Forwarded to MCO for action on 30/5/22.
- 3/6/22 – Email to members with the reminder for this meeting.

CCC Update Presentation

TC welcomed CCC members and provided an update on COVID-19 management actions. BS asked MCO if Covid-19 is still causing staffing challenges. TC confirmed Covid-19 is still impacting crews and staffing in general.

TC provided an update on the Community Support Program (CSP).

TC provided an operations update and general comments on current mine progress. TC advised the CCC that UG1 LW105 is completed which effectively completes UG1 mining. TC provided an update on status of the UG4 LW401-408 Extraction Plan. BS asked MCO when UG4 is likely to start secondary extraction. TC advised approximately mid July 2022. JI asked if MCO has consulted with the Independent Advisory Panel for Underground Mining (IAPUM) TC advised MCO met with the IAPUM in March 2022. JI asked if the recommendations from the IAPUM have been adopted. TC advised MCO provided the DPE a response addressing the IAPUM recommendations as part of the UG4 LW401-408 Extraction Plan.

JI asked if MCO's discharge parameters will change as a result of the Independent Water Quality Study (IWQS). TC advised MCO are not seeking to change its discharge parameters as a result of the IWQS. BS asked if the study allowed 15 megalitres of discharge per day. TC advised the discharge limits are already approved and can be found in MCO's Environmental Protection License (EPL). BS commented the three local mines have a large cumulative amount of water being released daily.

TC addressed CCC# 60 Action item 4. MCO sources its stemming material from Mudgee Dolomite & Lime (MDL) on Buckaroo lane in Mudgee. BS commented the MDL have a number of quarries around the area.

TC provided an exploration update. JI asked if the current drilling is for exploration or monitoring. TC advised current drilling is for exploration.

TC addressed CCC# 60 Action item 1 and CCC# 60 Action item 2. MCO provided the Goulburn River Surface Water (SW) monitoring results from the rainfall event on the 7th of March 2022 to the CCC. TC informed the CCC a legend has been added to monitoring figures in the presentation.

MY provided an update on environmental monitoring. JI commented on the reduced volume of water from the Water Treatment Plant (WTP). TC explained the reduced volume of treated water being discharged is a result of WTP maintenance and outages associated with upgrades. A general discussion was held surrounding the upper limit of MCO's daily discharge limit. TC confirmed MCO's current daily discharge limit is 15 megalitres. MCO can exceed this limit during periods of prolonged wet weather following written approval from the EPA.

JI asked about location and storage of brine water in Dams 204 and 214 onsite . TC confirmed MCO is storing brine water in MCO's Brine Dams contained in the water management system. TC confirmed the brine water is being blended and used for dust suppression.

JI asked if MCO has discharged from EPL Licensed Discharge Point (LDP) 02. TC advised LDP 02 has not been used for discharge and is a sediment dam located in Open Cut 2.

JI expressed her interest in viewing sediment, brine and mine water dams onsite. TC confirmed a site tour will be held at the September 2022 CCC meeting and aspects of MCO's water management system including dams can be viewed.

MY noted the zinc levels for the treated discharge water in April. BS asked why the increase in zinc levels. TC advised elevated levels of zinc are generally related to presence in the feed water. TC confirmed the sampling timeframes for Oil & Grease (O&G) and metals.

MY commented on the SW05 Electrical Conductivity (EC) levels since the last CCC meeting in March 2022. BS asked which SW monitoring sites had compliance levels. TC advised the CCC the SW sites with trigger levels are explained in MCO's Surface Water Management Plan (SWMP). BS asked if the SW sites with trigger levels can be marked on the legend of SW monitoring slide in the CCC presentation **(Action 2)**.

Jl commented on the SW05 EC levels in 2021 and whether MCO had more information. TC explained the investigation results including the influence of climatic conditions, Moolarben Dam and upstream EC levels.

MY commented on the TSS results in Wilpinjong Creek. BS asked if water flow in Wilpinjong Creek is monitored. TC confirmed MCO have a flow monitoring site in Wilpinjong creek.

BS commented on the legend being added to noise monitoring slides of the CCC presentation.

MY provided an update on complaints.

MC provided a rehabilitation and offset management update. Jl commented she has noticed an increase in natural regeneration on her property from the high seasonal rainfall over the past 2 years. BS asked if the natural regeneration is evident on MCO offsets. MC confirmed there is evidence of natural regeneration on MCO Biodiversity Offset Area's (BOA's). BS asked if natural regeneration is tracked. TC advised the natural regeneration is monitored on the offsets. BS commented the success of natural regeneration has its own challenges, including natural thinning and fire management.

TC provided information on the proposed Underground 2 Modification.

TC provided an update on the Open Cut 3 Extension Project. TC addressed CCC# 60 Action item 3. Jl asked if overburden will be placed within 200m of the creeks in the project area. TC confirmed the open cut pit will not be within 200m of the creeks. However, there will be infrastructure within the 200m zone. Jl commented on the risk of overburden storages close to creeks and the chance of sediment movement into water courses.

TC expressed his appreciation to the CCC for their response and input to the Bore Census for the OC3 Extension Project.

MCO is to send the CCC chairperson a copy of the next newsletter when available **(Action 3)**.

KD asked how the consultants are chosen to conduct the studies associated with the Environmental Impact Assessment (EIS). TC advised the consultants are chosen on expertise and commercial aspects. BS asked if the biodiversity surveys have been completed. TC advised the biodiversity surveys have been progressively undertaken to capture the different survey timing requirements.

TC provided an employment update. BS asked if the current apprentices and trainees will fill the vacancy void at MCO. TC commented the recruitment of apprentices' and trainees will be decided by their respective supervisor.

TC provided a summary of the 2021 Annual Review Report including activities during the reporting period, environmental performance, water management, rehabilitation, and community engagement. Jl advised of only receiving the 2021 Annual Review Report that morning made it difficult to read and provide informed comment in time for the CCC meeting. LA advised that she would be happy to receive any questions from Jl on the report for forwarding on to MCO for response.

KD asked MCO to further explain a blasting fume event. TC provided an explanation on how fume is generated, the categories of fume and reporting requirements of a fume event.

Jl commented the AR stated Ground Water (GW) take was 28% greater than predicted for 2021. TC explained the increase in GW take was attributed to the above average rainfall observed in 2021. Jl commented that in her opinion, the general declining trend of GW levels was inconsistent with an expected rise due to GW recharge from the above average rainfall. Jl commented in her experience Mine GW model predictions in the Ulan area have repeatedly under-estimated groundwater make and she is concerned about the long term impact of UG4 dewatering on the Goulburn River.

Jl asked if the recommendations from the Independent Environmental Audit (IEA) have been adopted, in particular the recommendations to review trigger levels, assess potential impact of a reversal in gradient in UG4 area and increased monitoring between UG4 and the Goulburn River. TC advised the UG4 LW401-408 Extraction Plan will address monitoring near the Goulburn River. Jl explained she is particularly concerned about the trigger level for PZ105 which is set below the adjacent river water level.. TC advised the UG4 LW401-408 Extraction Plan will address the GW monitoring requirements.

Jl raised the issue of timely access by the CCC to mine reports. The 2021 Annual Review is just available but not the UG4 LW401-408 Extraction Plan, IWQS or the UG4 AGE groundwater report. TC advised the CCC that the requested draft reports have been submitted to the DPE and the EPA, when these reports are approved by the department they will be made available to CCC members, TC also advised that if there are further questions regarding the information in the 2021 Annual Review to raise them via the CCC chairperson.

Jl asked how the subsidence impacts will be monitored in the adjoining Munghorn Gap Nature Reserve and GR National Park. TC and BW explained how subsidence is generally observed post longwall mining.

BS asked where the complainants are generally located. TC advised that more information is available in the appendix of the 2021 Annual Report. BS asked how MCO manages those particular complainants. TC advised the engagement strategies used by MCO and all complaints are managed in accordance with MCO's Complaints Response Procedure.

BS expressed her concerns for noise impacts in the community, in particular on the complainants. TC advised noise monitoring results are compliant with the approved noise management plan. BW commented the Project Approval (PA) limits are designed to protect the community from excessive noise levels. BS expressed her frustration with the NSW process.

BS advised she reported a blasting complaint in the last quarter. She asked MCO if the blast she reported was different from usual blasting designs or techniques. TC advised the blast BS reported to MCO did not differ from usual blasting design or techniques.

BS asked if the recent blast exceedance can be included at the next CCC meeting **(Action 4)**.

4. General Business

BS tabled a letter from Mudgee District Environment Group (MDEG) expressing community concern of potential impacts to the Drip and the Goulburn River to the CCC chairperson. LA to provide the letter to MCO **(Action 5)**.

KD asked if MCO are planning on conducting Community Open Days at the mine. TC advised MCO currently has no plans to hold Community Open Day at MCO.

5. Next Meeting: 6th September 2022 at 2:30pm for site inspection with CCC to follow. Suggestions for itinerary included: viewing of aspects of MCO's water management system, including Sediment water dams, Mine water dams, and Brine water dams, and the proposed OC3 extension area. TC commented that this would cover a large area and may not be possible to include all aspects, however, MCO would put together an itinerary for the site inspection.

Meeting closed at 5:35pm with LA thanking members for their attendance and participation.

Action Items:

Item	Action	Responsibility
1	Provided BW with a Declaration of pecuniary or other interests form.	CCC Chairperson
2	Update the SW slides to identify SW sites that have compliance trigger points	MCO
3	Provide OC3 extension Project newsletter to the CCC Chair when available.	MCO
4	Provide an update on the blast overpressure exceedance at the next CCC meeting.	MCO
5	Provide MDEG letter tabled during General Business to MCO for response.	CCC Chairperson

Community Consultative Committee Update

June 2022

Moolarben Coal Operations



COVID – 19 Update

- Yancoal continues to proactively manage and monitor the situation.
- Site access requirements including;
 - Temperature screening,
 - Drive through testing facilities, and
 - enhanced cleaning.
- Continued implementation of masks were social distancing is not able to be maintained and reinforcement of hygiene practices.



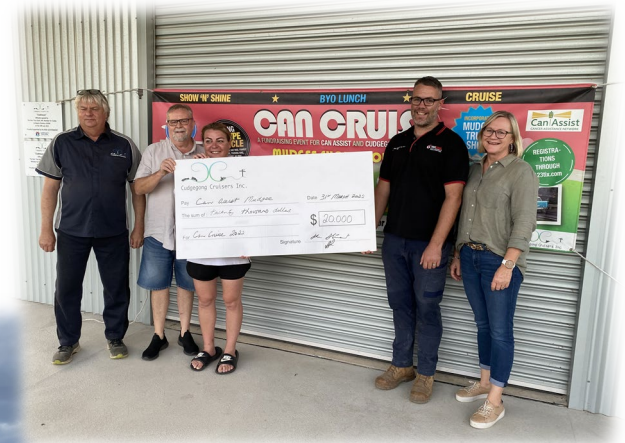
2022 Community Support Program (CSP)

2022 Yancoal-Moolarben Coal CSP

- 21 CSP events or programs have been completed thus far in 2022
- 7 additional applications have been received since applications closed last November

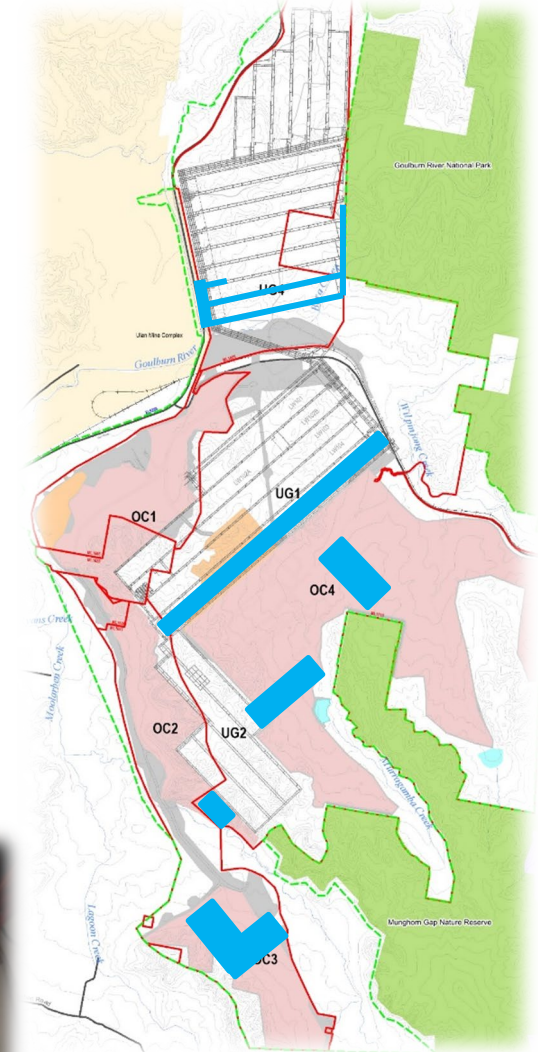
CSP events thus far in 2022 include;

- Can Cruise
- Mountain Bike Training days
- Mudgee Legends Pro Am Shootout



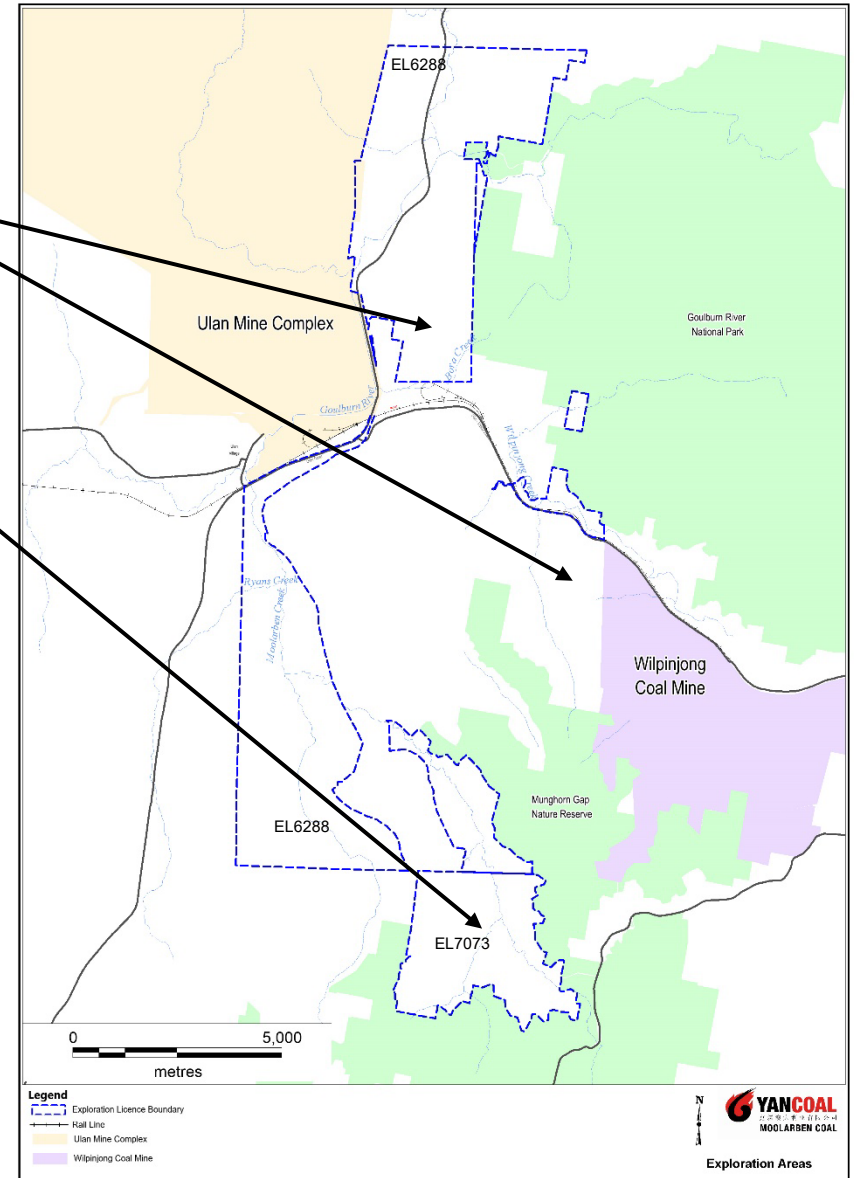
Operational Update

- Underground 1 longwall in 105 completed.
- Open cut operations in OC2, OC3 & OC4.
- Underground development in UG4.
- LW401-408 Extraction Plan submitted.
- WTP continue as required.
- IWQS subject to DPE approval.



Exploration Update

- Drilling – programs planned to commence in ML1605 and ML1715
- Drilling is planned to continue in EL7073.
- Rehabilitation and monitoring activities have continued during the period.



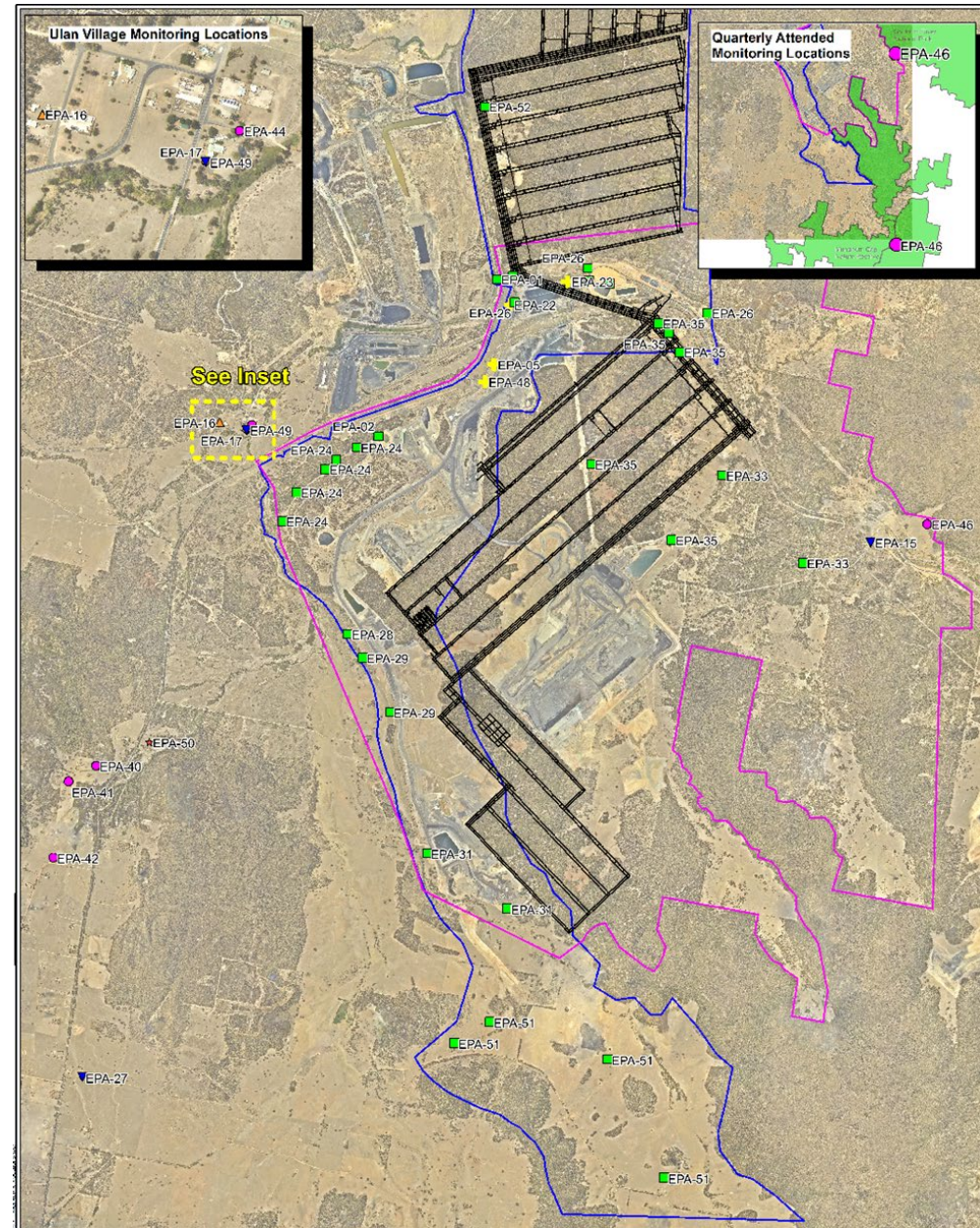
Environmental Monitoring

Monitoring network

- Water;
- Air Quality;
- Blasting;
- Noise;
- Meteorology.

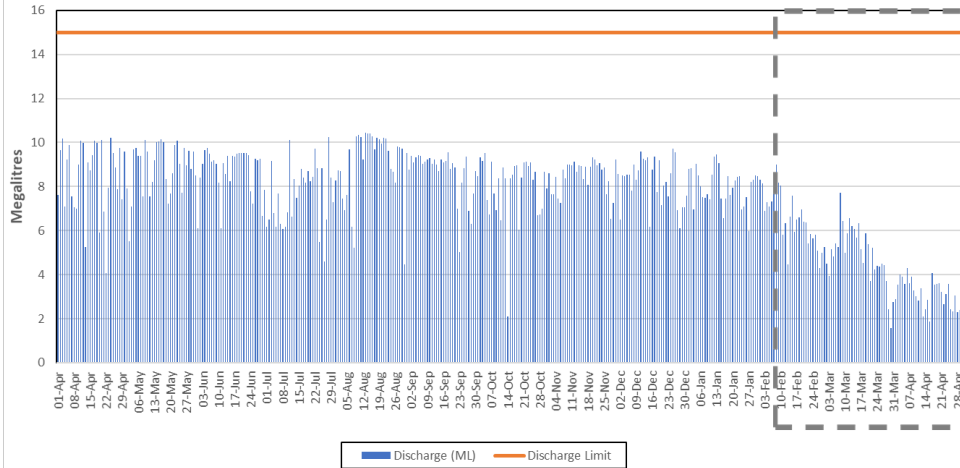
EPL Monitoring Locations

- | | | | |
|---|---------------------------|---|---------------------------------------|
| ▼ | Real Time TCOM | — | Approved Underground Workings |
| + | Effluent Monitoring | □ | Stage 2 Disturbance Approval Boundary |
| ■ | Water Discharge Point | □ | Stage 1 Disturbance Approval Boundary |
| ● | Attended Noise Monitoring | | |
| ◆ | Blast Monitoring | | |
| ★ | Weather Station | | |
| ▲ | PM10 Monitoring | | |

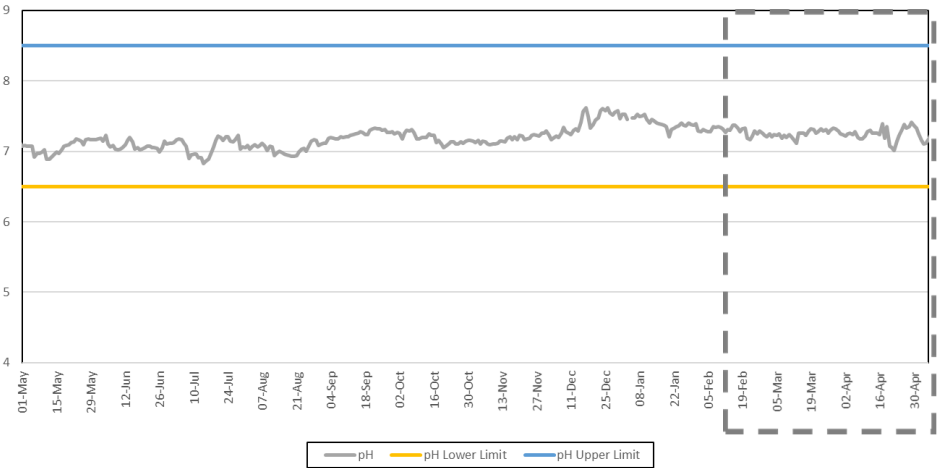


Water Release

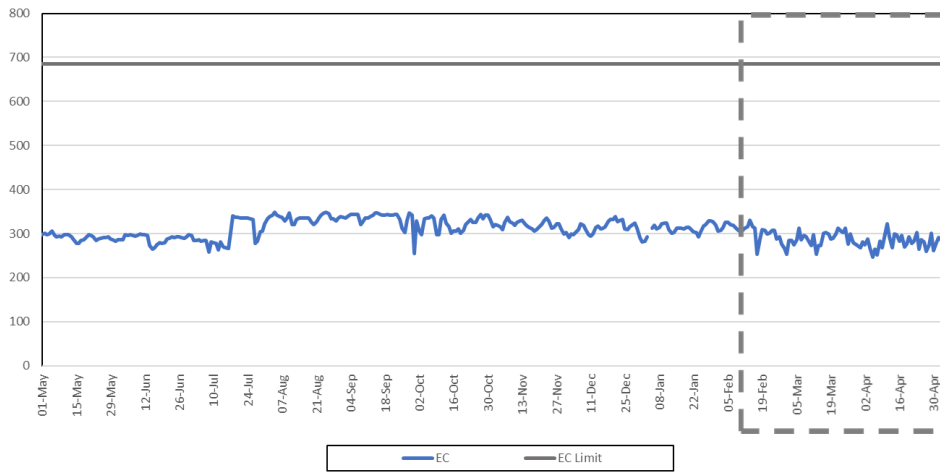
EPA 1 Daily Discharge Volumes
Apr 2021 - Apr 2022



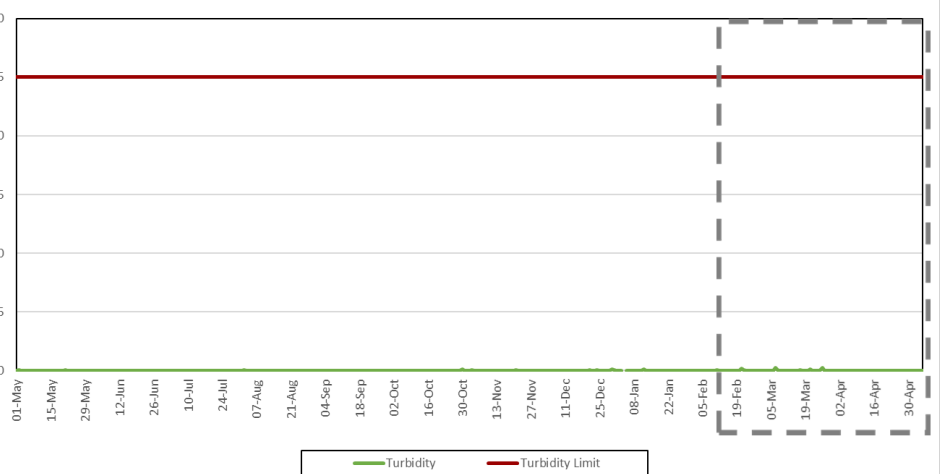
EPA 1 Daily Average pH
Apr 2021 - Apr 2022



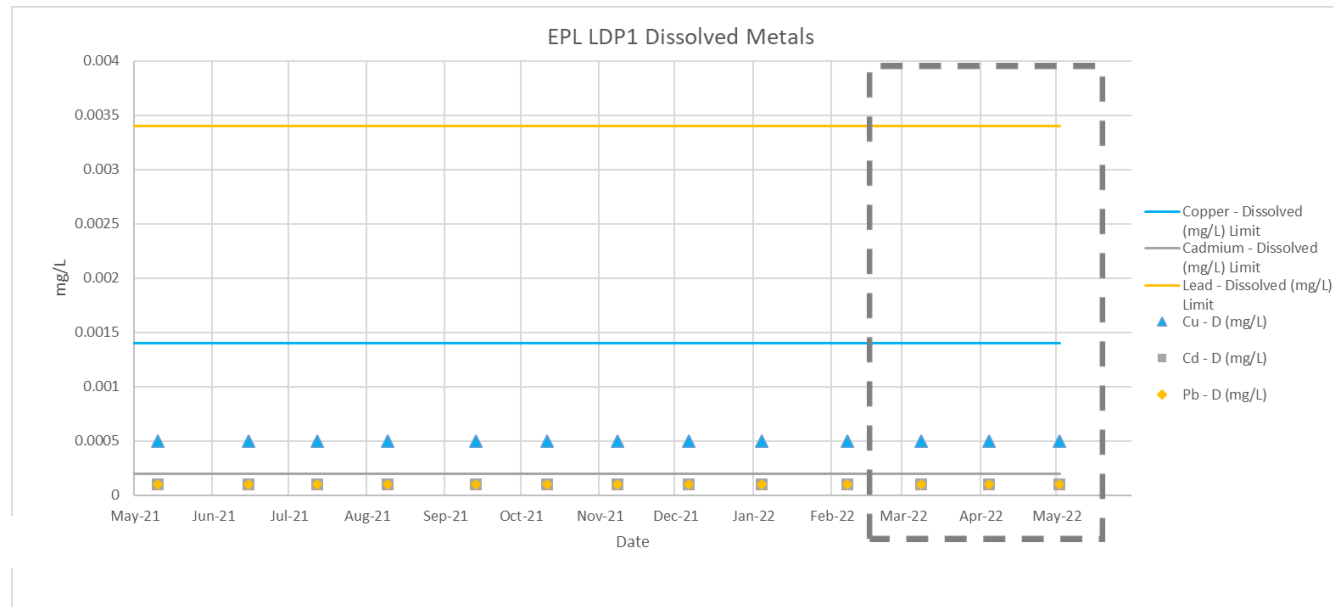
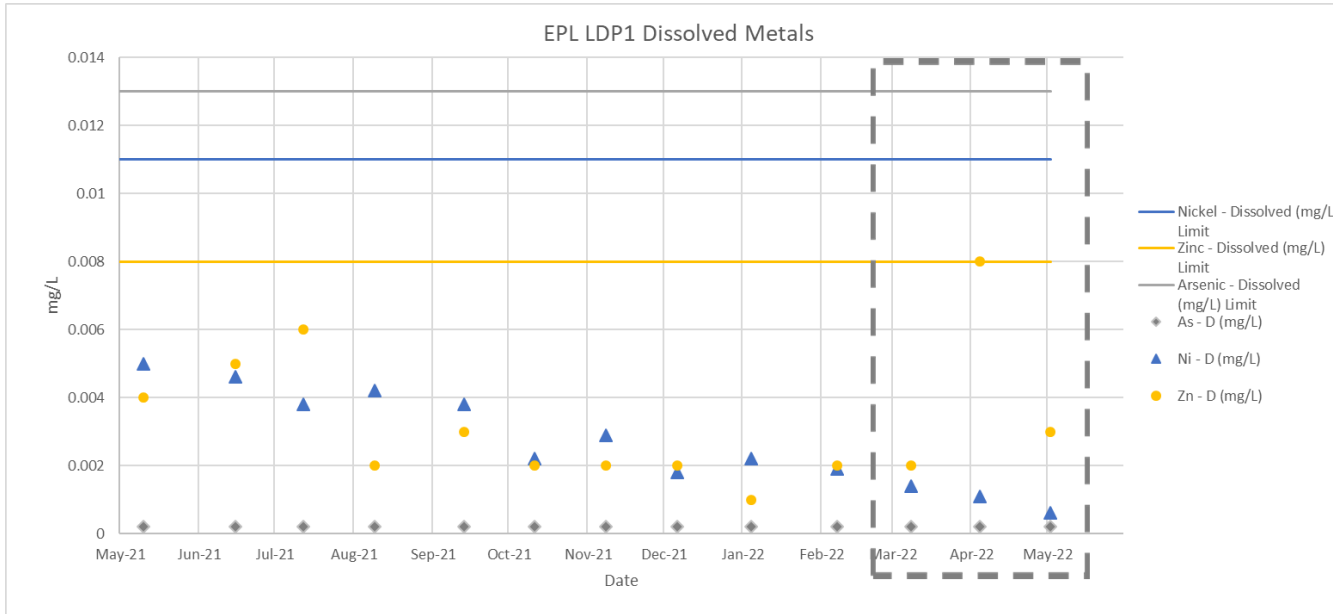
EPA 1 Daily Average EC
Apr 2021 - Apr 2022



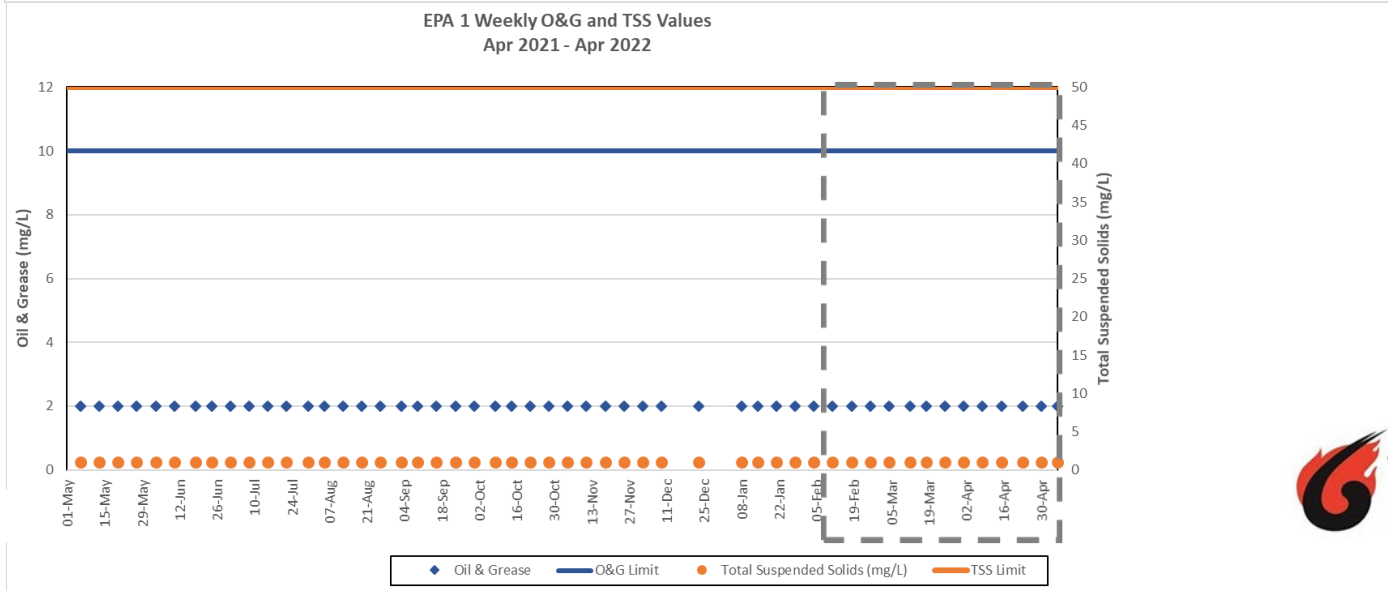
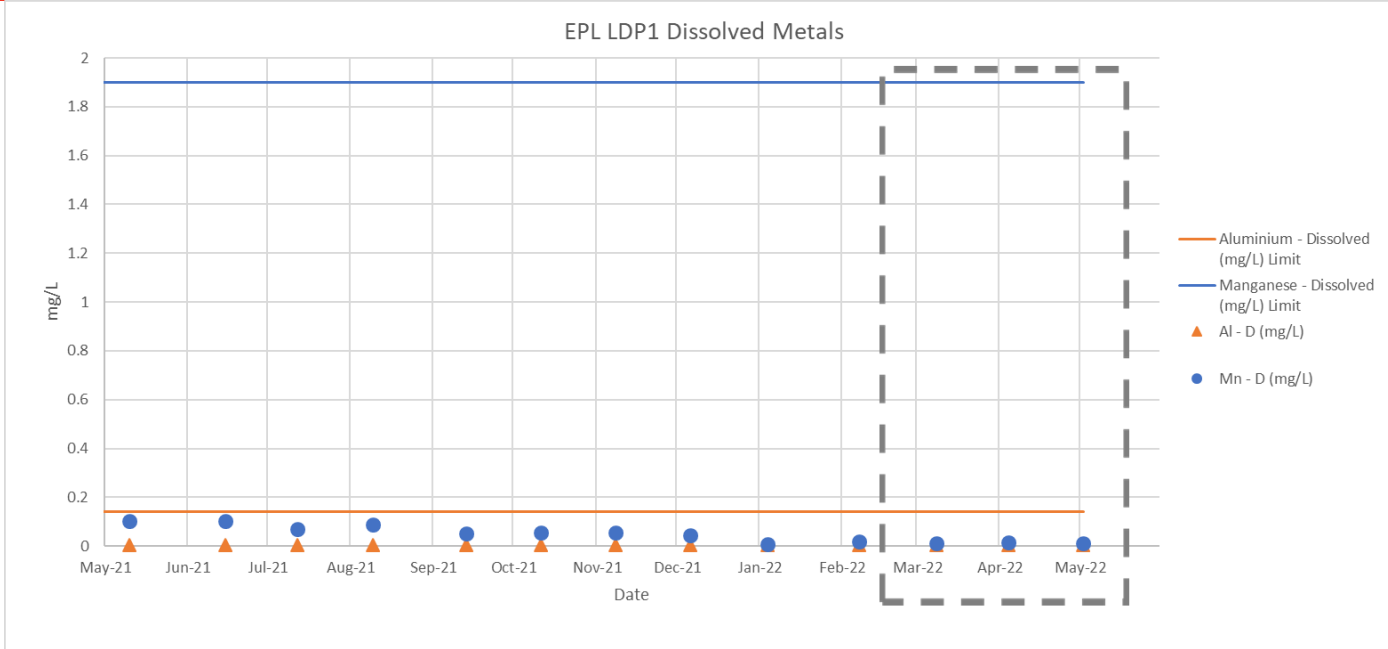
EPA 1 Daily Average Turbidity
Apr 2021 - Apr 2022



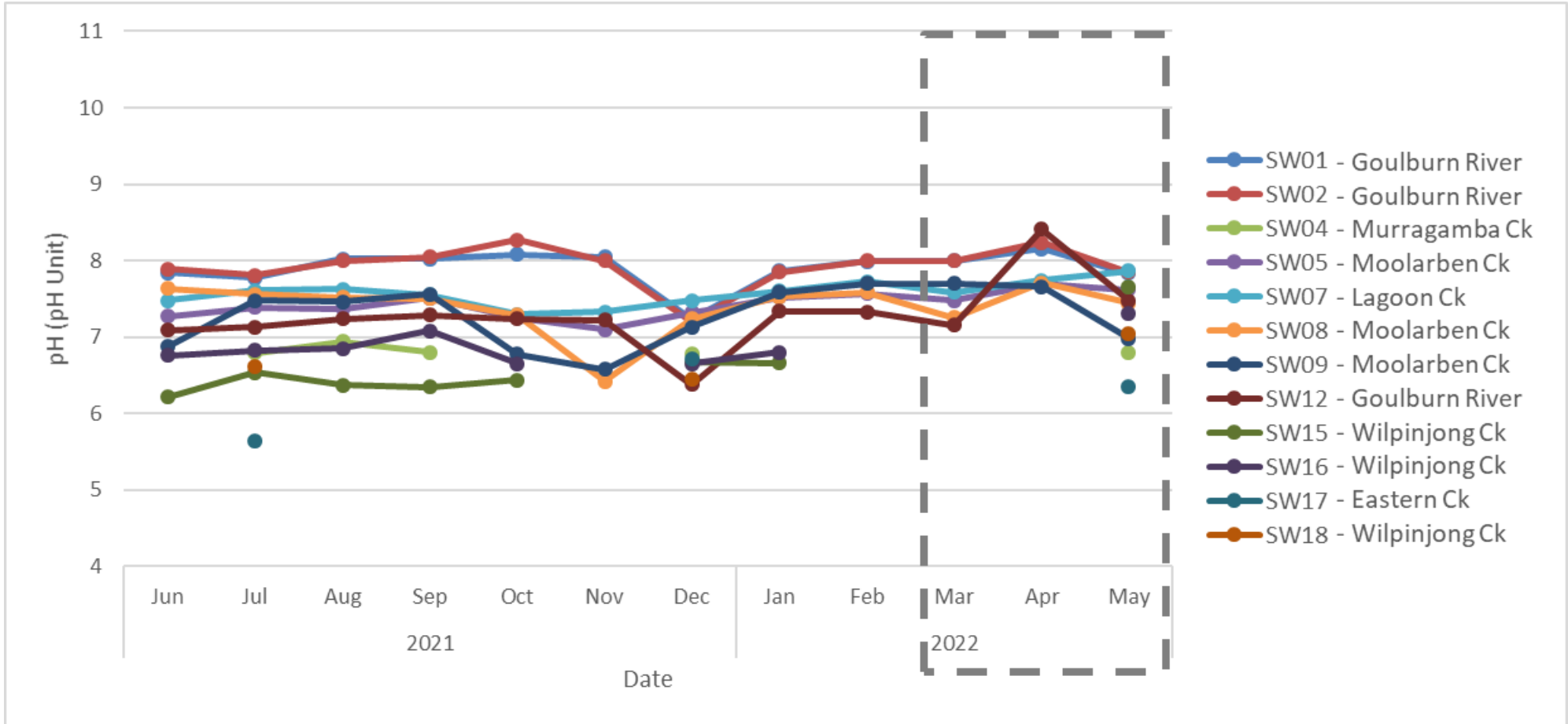
Water Release



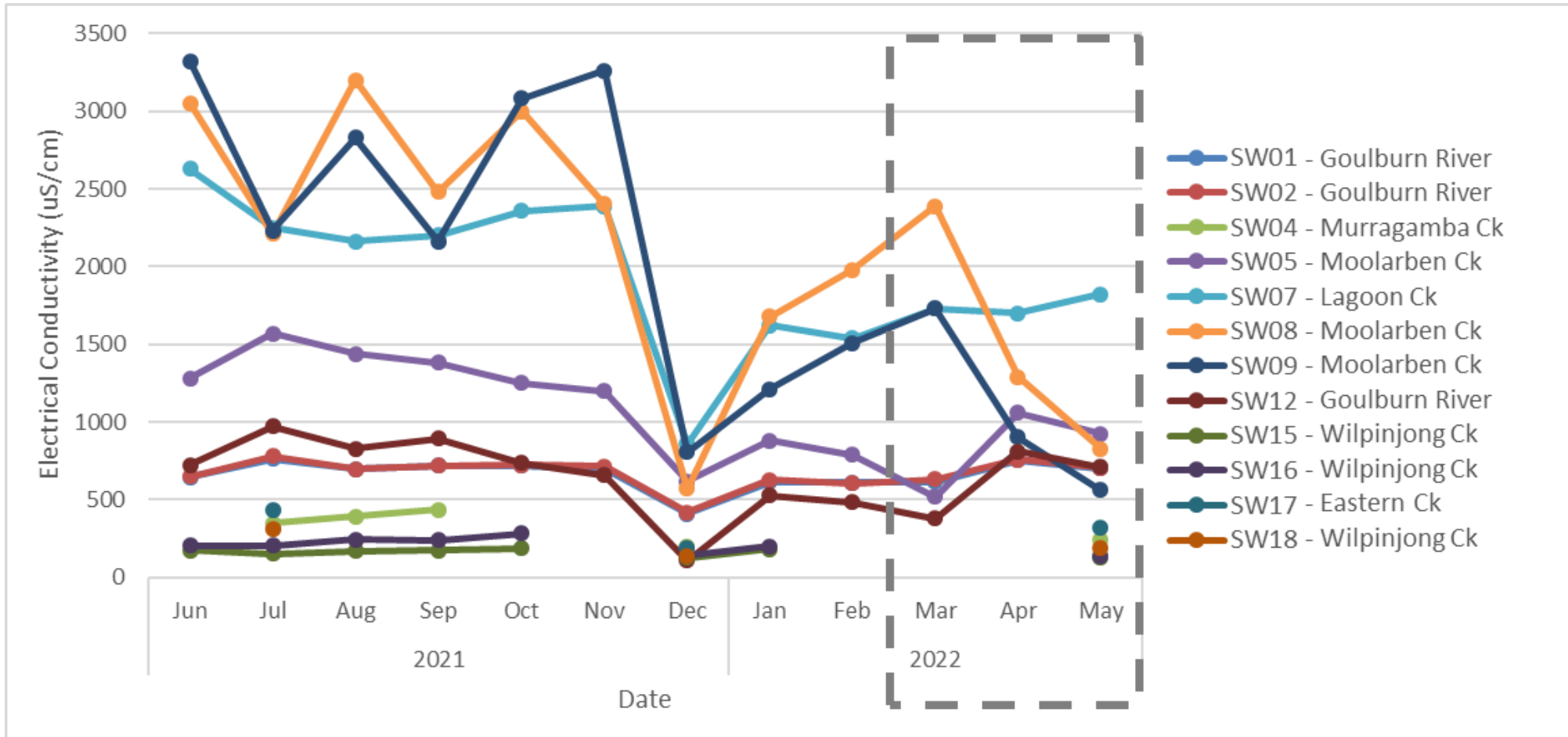
Water Release



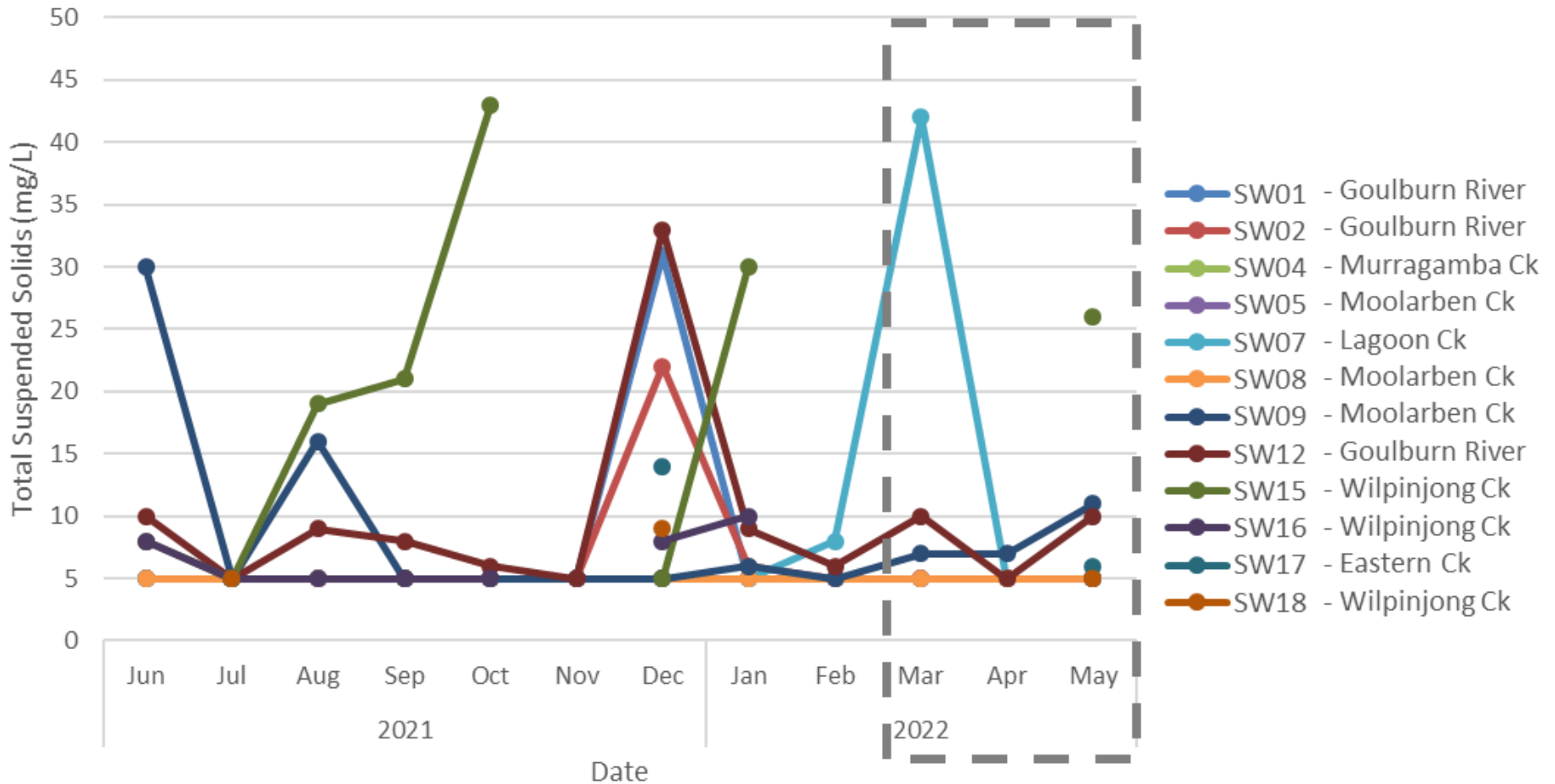
Water Quality - pH



Water Quality - EC



Water Quality - TSS



Air Quality

Site	April 2021 PM10 Annual Average ($\mu\text{g}/\text{m}^3$)	April 2022 PM10 Annual Average ($\mu\text{g}/\text{m}^3$)	Air Quality PM10 Annual Average Criteria ($\mu\text{g}/\text{m}^3$)
TEOM 01	13.6	12.0	25.0
TEOM 07	12.4	11.3	25.0
TEOM 04	9.3	7.7	25.0

Site	April 2021 PM2.5 Annual Average ($\mu\text{g}/\text{m}^3$)	April 2022 PM2.5 Annual Average ($\mu\text{g}/\text{m}^3$)	Air Quality PM2.5 Annual Average Criteria ($\mu\text{g}/\text{m}^3$)
TEOM 07	5.1	4.0	8.0

Monthly monitoring reports are available on our website:

www.moolarbencoal.com.au/page/environment/environmental-monitoring/

Noise Monitoring

- All monthly & quarterly attended noise monitoring within criteria.
- Continued implementation of:
 - Planning controls - scheduling
 - Engineering controls - attenuation
 - Operational controls - bunds/screens
 - Real-time monitoring triggers
 - Real-time response protocols

LEGEND

- Exploration Licence Boundary
- Mining Lease Boundary
- Rail Line
- Watercourse

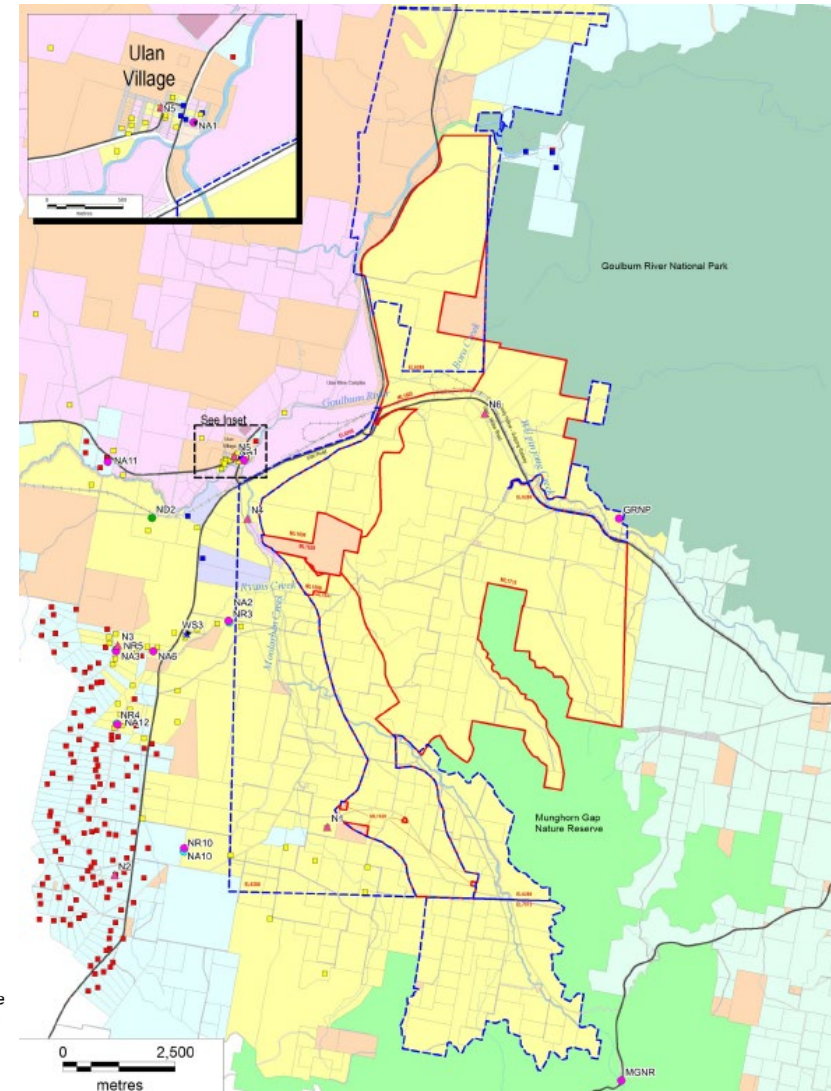
Ownership

- Yancoal
- Ulan Coal Mines Limited
- Wilpinjong Coal Mine
- Privately Owned
- Crown
- Commercial

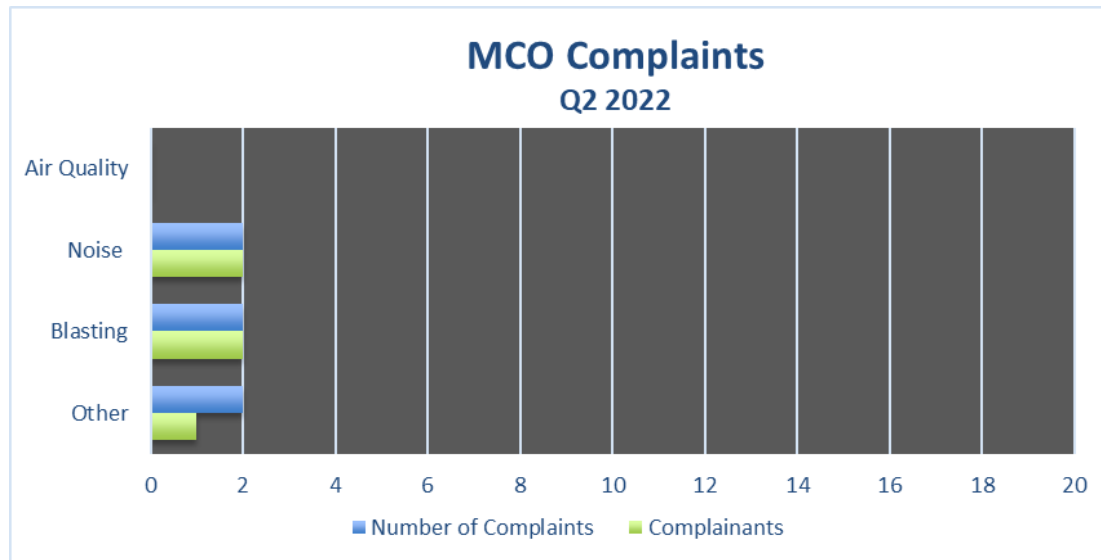
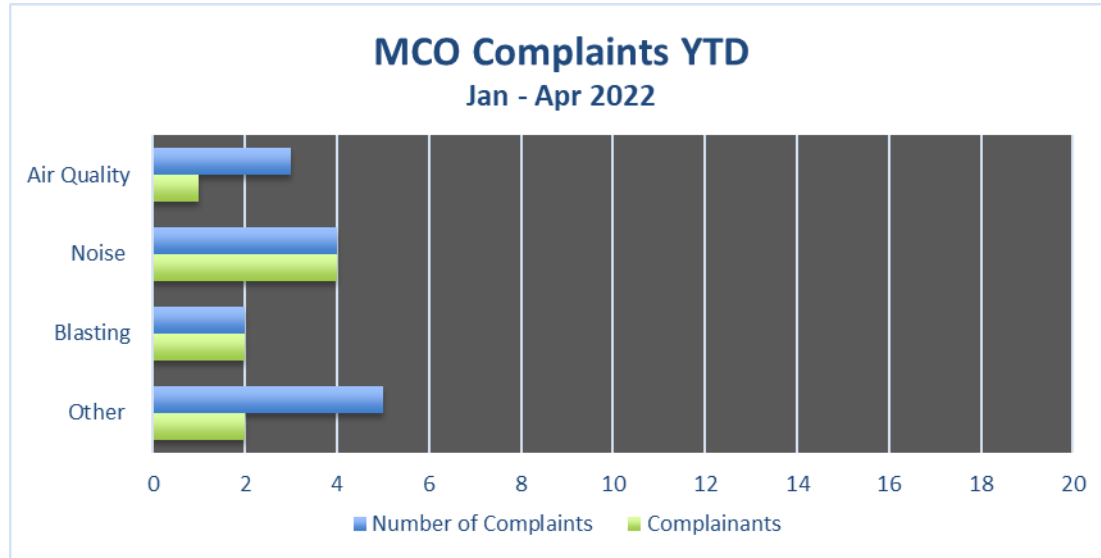
- National Park
- Nature Reserve
- Mine Owned Receiver
- Private Receiver
- Commercial Receiver

Noise Monitoring Locations

- Real-time Noise Monitoring Site
- Attended Noise Monitoring Site
- Directional Receiver
- Background Noise Monitoring
- Weather Station

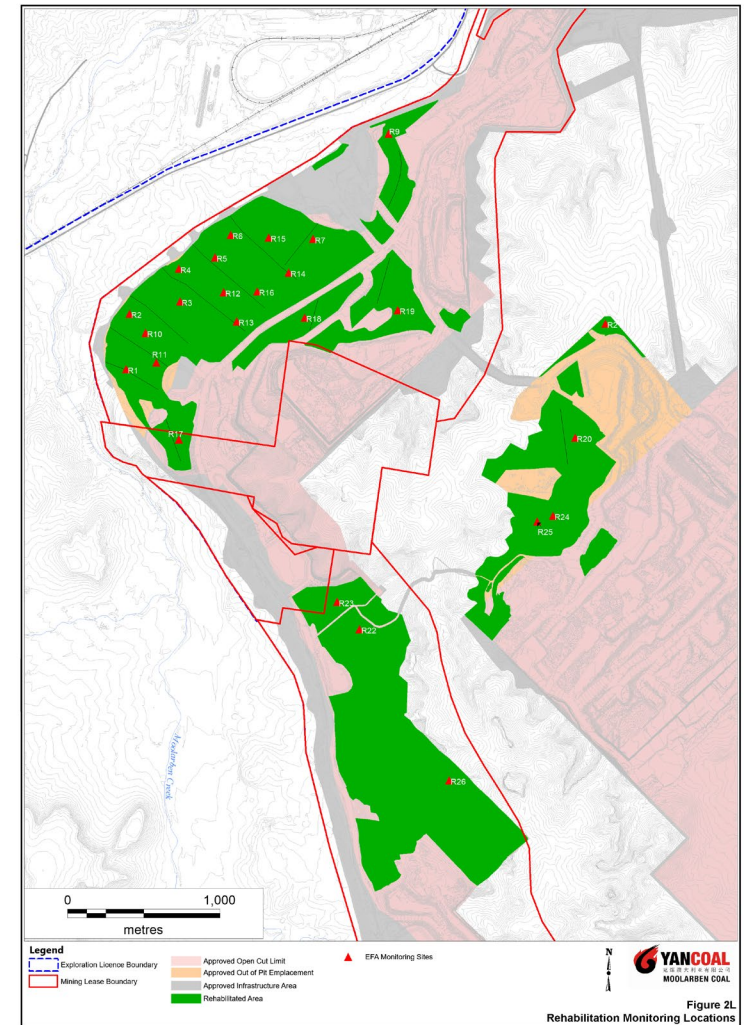


Community Complaints

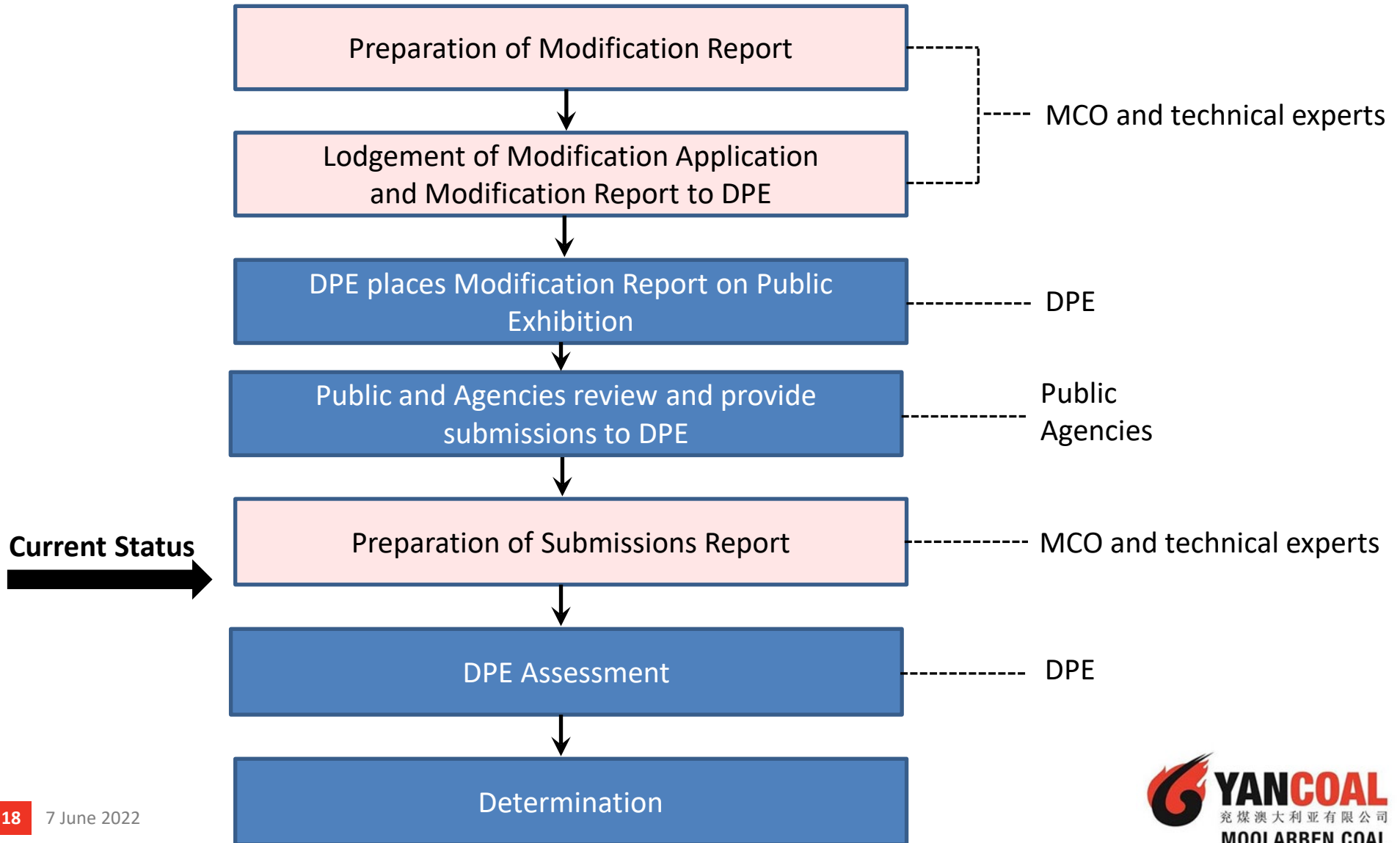


Rehabilitation Update

- Rehabilitation maintenance works are continuing.
- Autumn field monitoring has been completed.



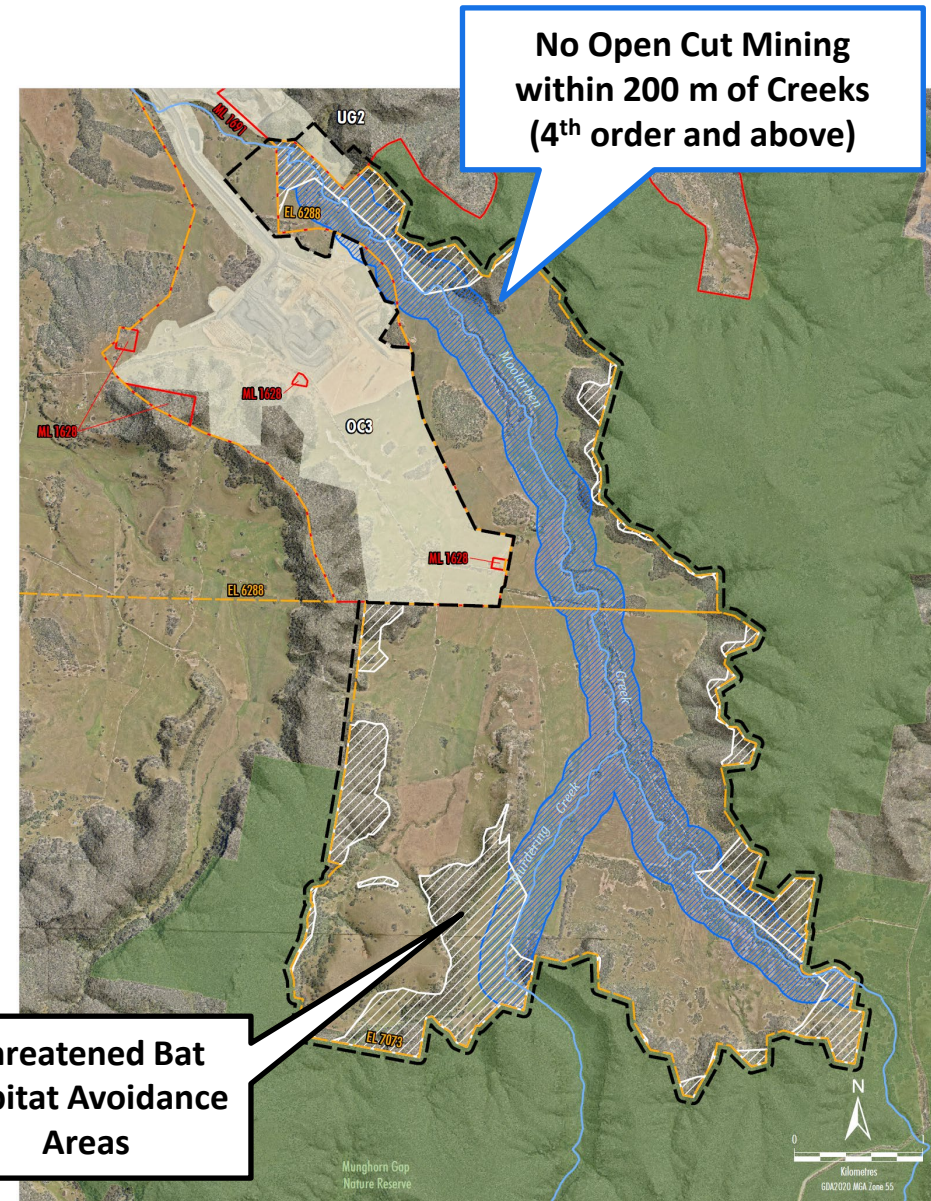
Underground 2 Modification



OC3 Extension Project

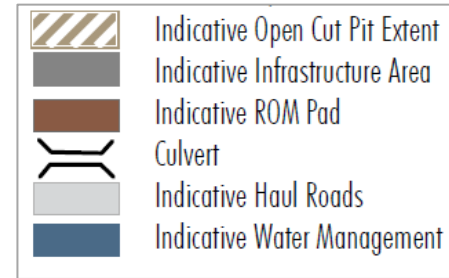
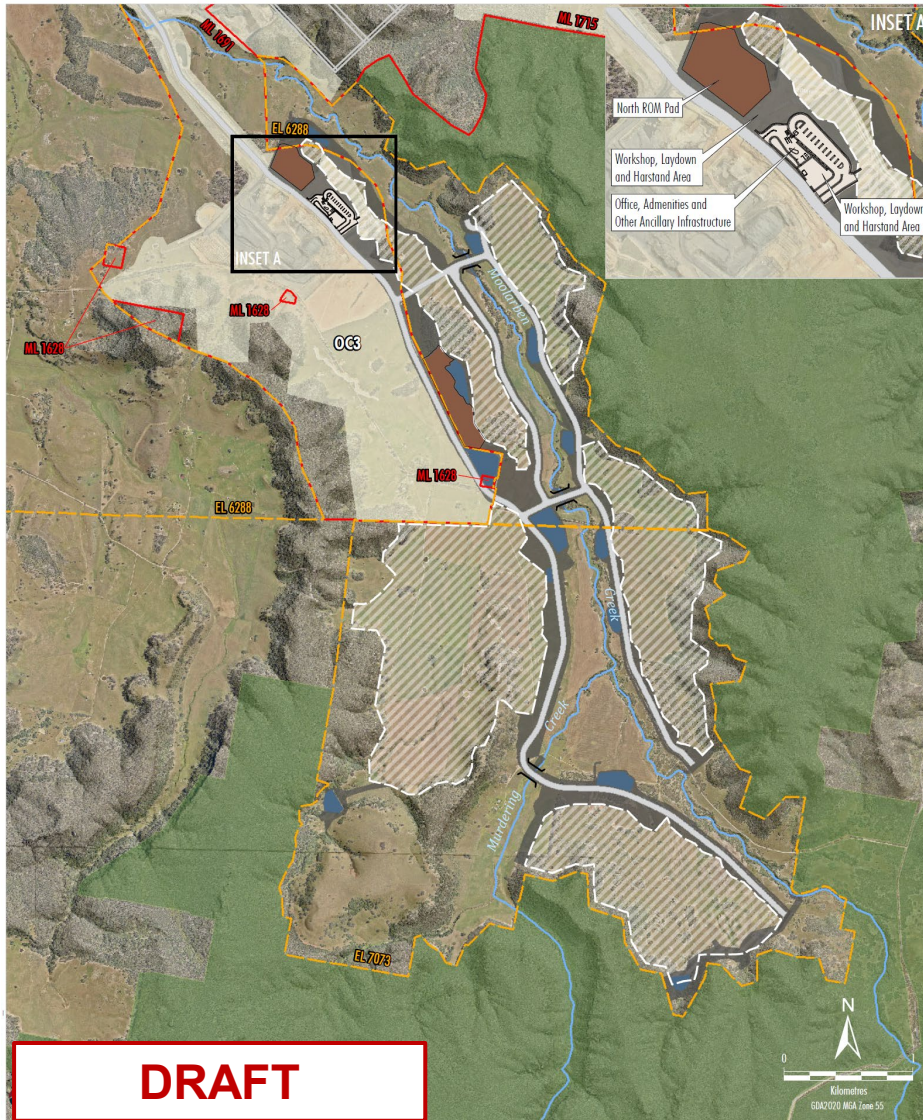
Project Description Overview

- Extension of open cut operations within ML 1691, EL 6288, and EL 7073.
- Extraction of up to 9 Mtpa of ROM coal (which is less than the approved OC3 extraction rate of 10 Mtpa), with a total of 39.5 Mt over the life of the Project.
- Mining operations between approximately 2025 to 2034.
- Extension of employment of the existing Stage 1 open cut workforce.
- Construction and operation of new ancillary and water management infrastructure.
- Construction of haul road creek crossings.



OC3 Extension Project

Draft General Arrangement

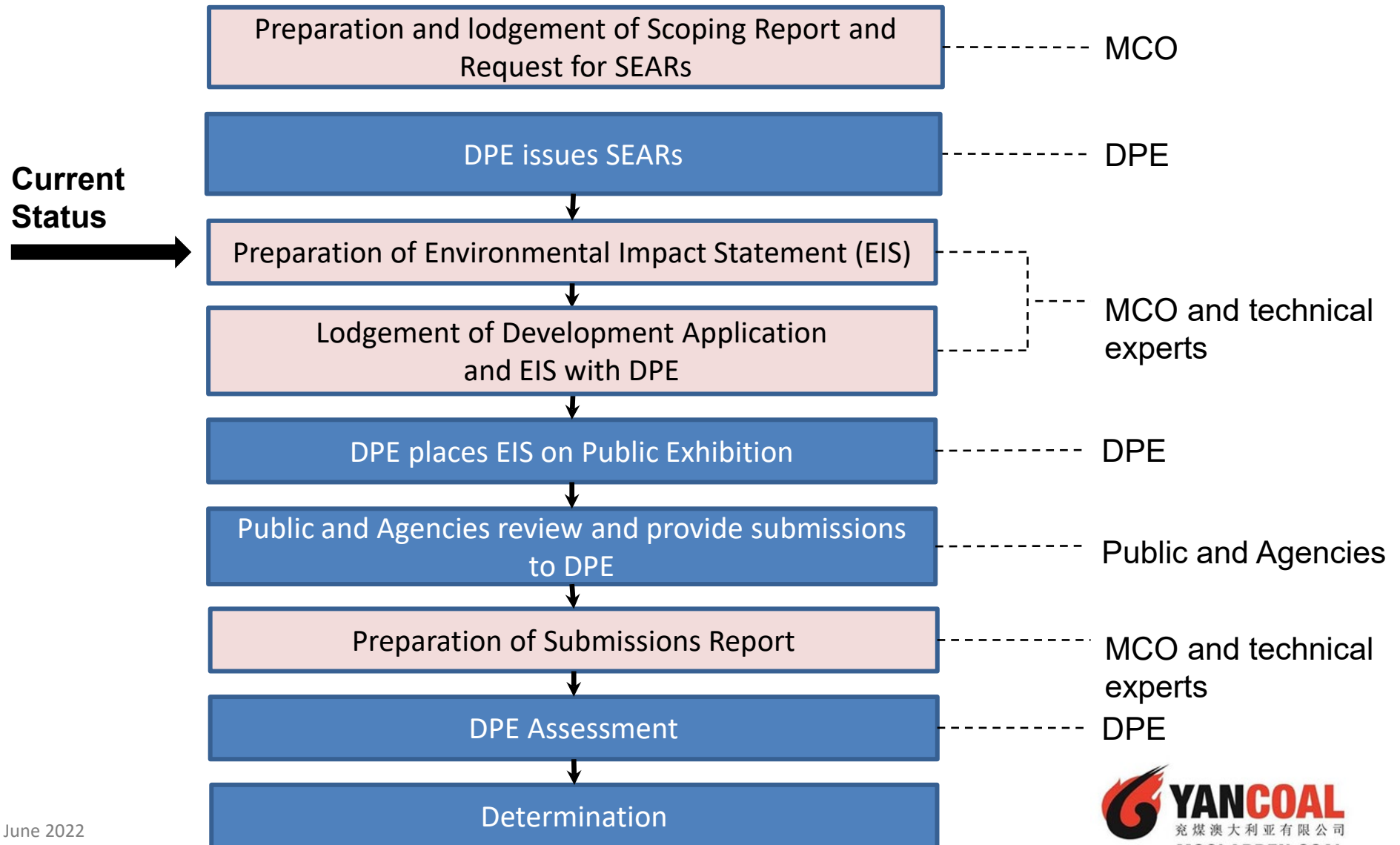


OC3 Extension Project

Progress Update

- Project determined a 'Controlled Action' by DAWE – May 2022.
- Specialist studies to inform SSD application progressing in parallel with resource definition and mine planning:
 - Bore census and groundwater feature identification.
 - Modelling of amenity impacts.
 - Biodiversity and heritage surveys.
- Stakeholder engagement will continue throughout the preparation of the EIS and is anticipated to include:
 - Project Newsletter.
 - Phase 3 of Social Impact Assessment consultation.
 - Ongoing consultation with Registered Aboriginal Parties regarding Aboriginal Cultural Heritage Assessment.
- **EIS lodgement proposed in Q3 2022.**

OC3 Extension Project



Employment Update

Current Traineeships

- 9 Underground
- 17 Open Cut Operator
- 1 Administration
- 1 Land Conservation
- Continuing to recruit for Underground and Open Cut Trainees



Apprentices

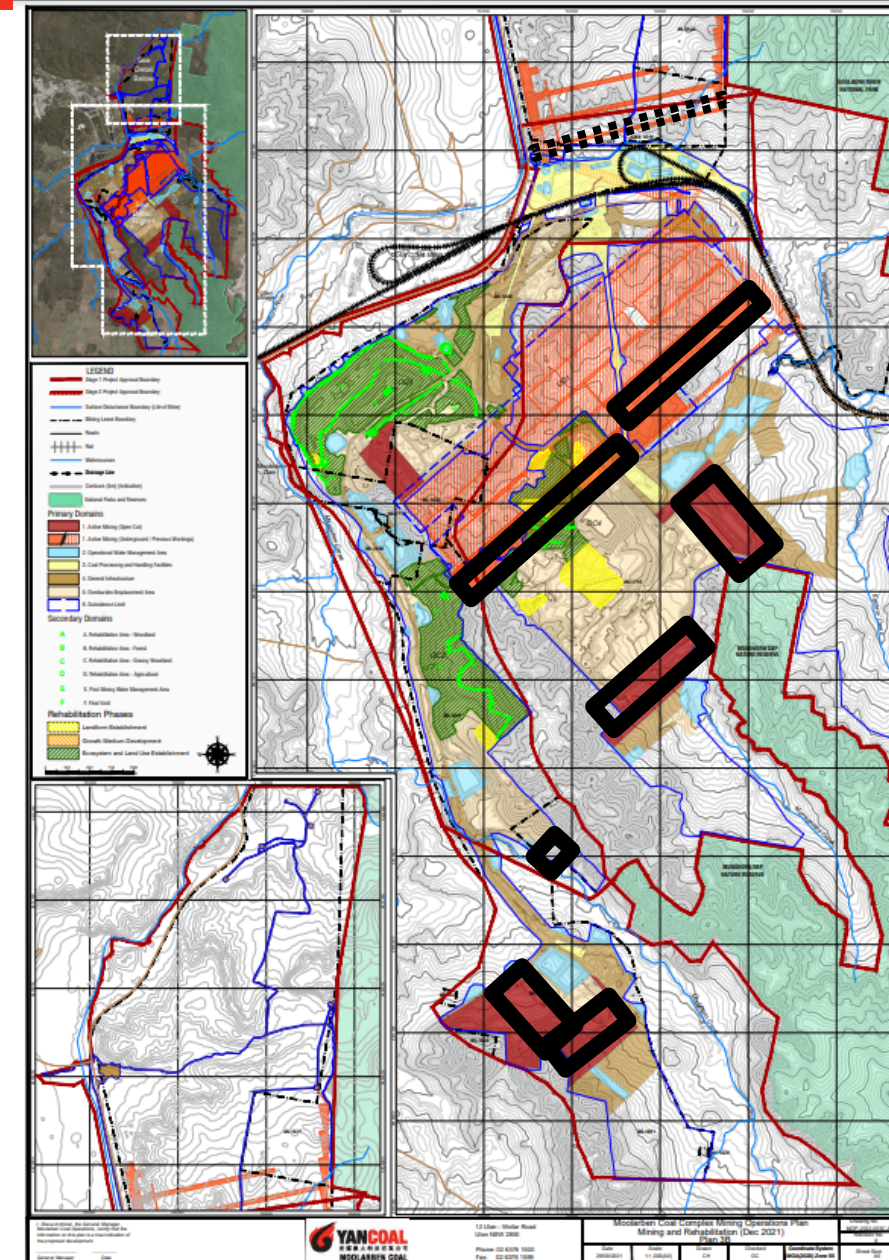
- Currently 3 Underground, 13 Open Cut and 9 at the CHPP

Annual Review Summary

- Activities During the Reporting Period
- Environmental Performance
- Water Management
- Rehabilitation
- Community

Activities During the Reporting Period

- Mining operations in OC2, OC3, OC4 and UG1
- Progressive rehabilitation in OC2 and OC4
- Construction of UG4 surface infrastructure and dewatering infrastructure
- 14.4Mt washed and 18.4Mt railed
- Exploration in EL6288 and EL7073



Noise, Blasting and Air Quality

■ Noise

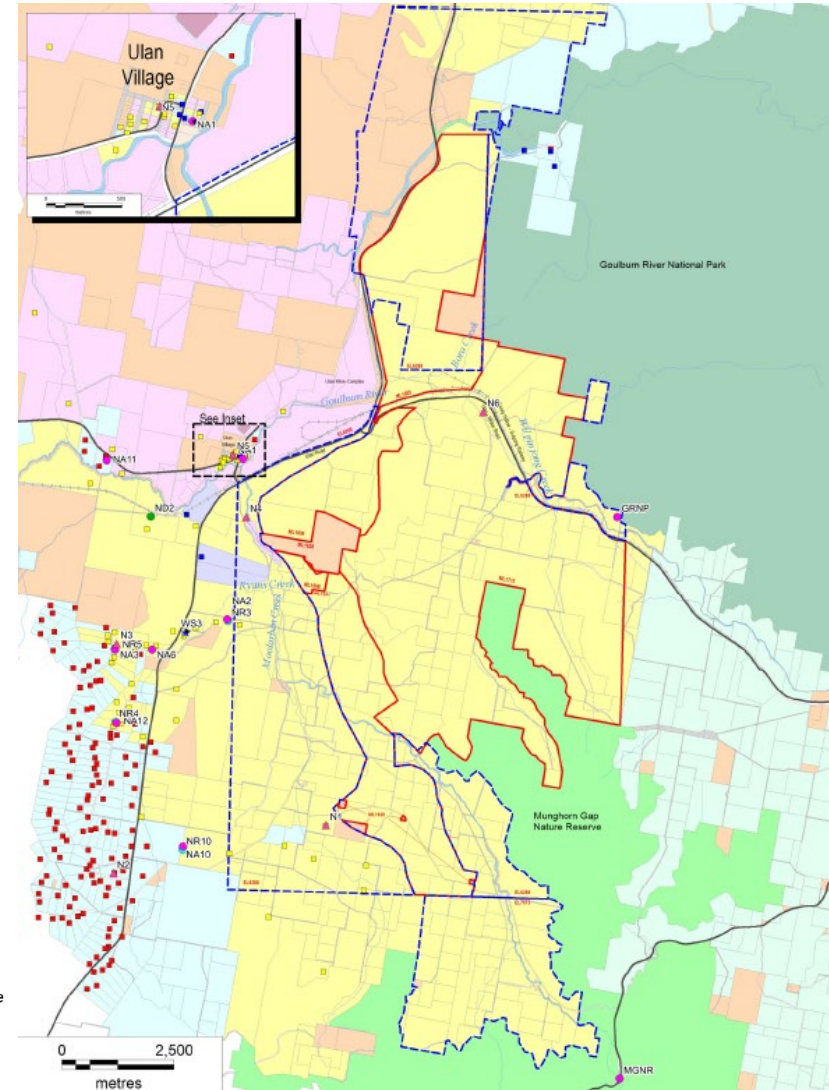
- All attended noise monitoring within criteria.

■ Blasting

- No reportable fume events.
- All vibration or overpressure results within criteria.

■ Air Quality

- Annual average PM10 and PM2.5 within criteria.
- All dust deposition results below criteria.



LEGEND

- Exploration Licence Boundary
- Mining Lease Boundary
- Rail Line
- Watercourse

Ownership

- Yancoal
- Ulan Coal Mines Limited
- Wilpinjong Coal Mine
- Privately Owned
- Crown
- Commercial

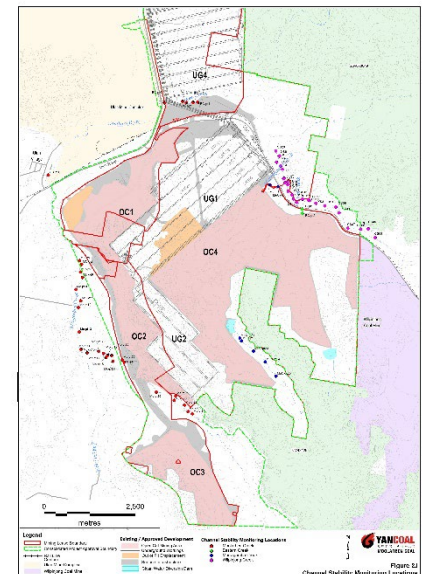
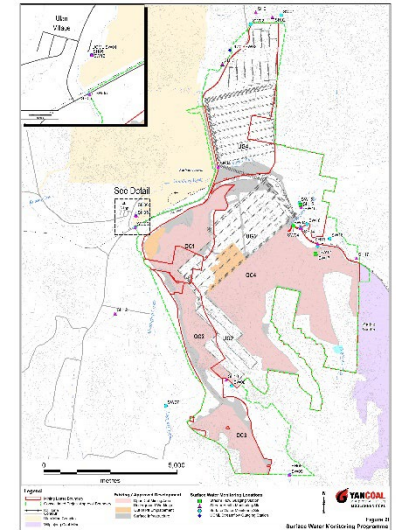
- National Park
- Nature Reserve

- Mine Owned Receiver
- Private Receiver
- Commercial Receiver

Noise Monitoring Locations

- Real-time Noise Monitoring Site
- Attended Noise Monitoring Site
- Directional Receiver
- Background Noise Monitoring
- Weather Station

- Water
 - Above average rainfall (899.4mm vs Avg of 651mm).
 - 3,097ML of treated water discharged.
 - Surface water influenced by climatic conditions and generally consistent with historical range.
- Stream Health
 - Aquatic habitat condition influenced by wetter conditions and high flow events.
 - Climatic factors and flow regimes continue to be the dominant influence on aquatic ecology.
- Channel Stability
 - Stability was variable within each creek. Active erosion predominantly the result of natural influences exacerbated by past land use.

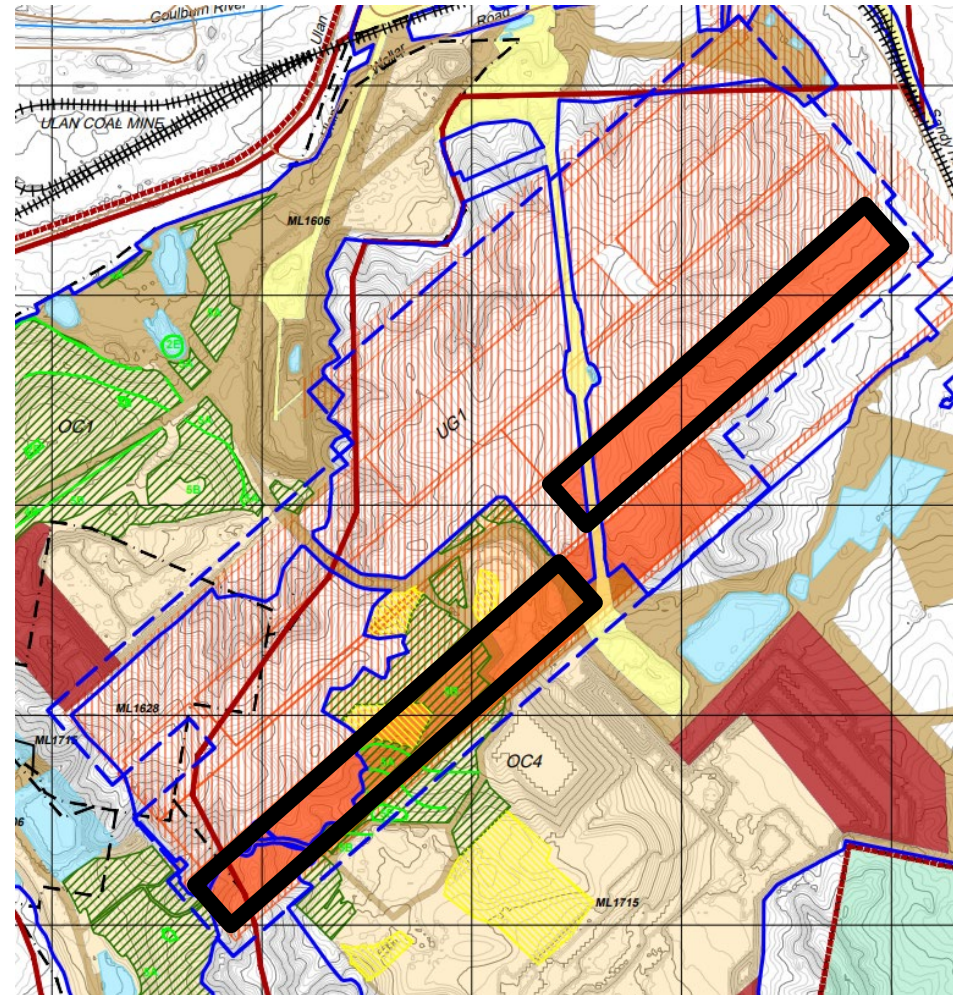


Groundwater

- MCO monitors a network of piezometers in accordance with the Groundwater Management Plan. The monitoring program includes monthly monitoring of standing water level in standpipes, and pressures for vibrating wire piezometers.
- Groundwater level trends during 2021 were influenced by the Rainfall Cumulative Deviation (RCD), Underground mining operations, open cut mining operations and regional depressurisation.
- Alluvium bores were generally stable or declined by up to 1.2m during the period, trends were consistent with some drawdown above model predictions observed.
- Groundwater levels in Triassic bores remained relatively stable over the period with changes less than 0.6m during the reporting period with the exception of PZ103C, trends were consistent with model predictions.
- No groundwater level investigations were triggered during the reporting period.

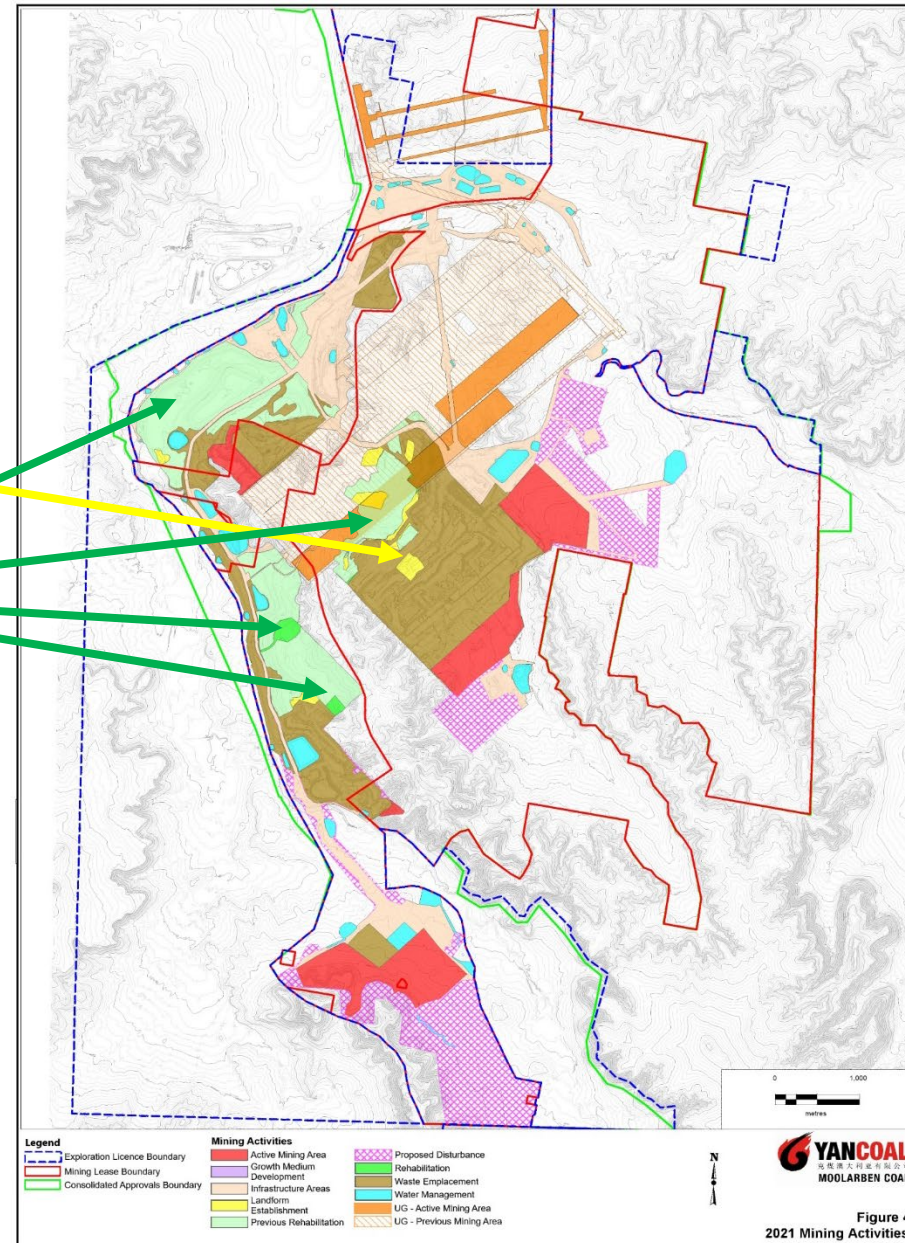
Mine Subsidence

- Secondary extraction undertaken in Longwall LW104 and LW105.
- Subsidence impacts during the period were consistent with predictions. Vertical subsidence was generally below predictions
- No performance measures exceeded.
- No built features impacted by subsidence.



Rehabilitation

- **Activities**
 - Progressive rehabilitation in OC2 and OC4
 - Maintenance of existing rehabilitation
- **Status**
 - 6ha Landform Establishment.
 - 10ha Growth Medium development.
 - 360ha Ecosystem and Landuse Establishment.



Incidents, Compliance and Complaints

■ Incidents and non-compliances

- Non-continuous PM10 Monitoring – Power supply loss and routine maintenance
- Oil & Grease samples were not collected on two occasions during discharge
- Subsidence monitoring lines G, H, I, and Essential Energy monitoring line was not monitored in the required timeframe
- During construction of Dam 413 a rainfall event resulted in release of sediment water into Eastern Creek

■ Complaints

- 39 direct complaints from 10 complainants.
- Increase from the previous reporting period but consistent with 2019.
- 52% of complaints were received from 2 complainants.
- Noise the primary issue of concern.

Community

■ Engagement

- Coordinated COVID-19 support of local health services.
- Moolarben Spirit Awards Program promoting positive contributions in schools.
- Max Potential Program at Club Mudgee
- Active participation in Wild Dog Groups and the LLS.
- Direct engagement.
- Yancoal cadet student placements



■ Community Support

- Donations and sponsorships provided across 37 local groups and organisations.





29 June 2022

