

**MOOLARBEN COAL OPERATIONS - COMMUNITY CONSULTATIVE COMMITTEE
MEETING No. 57**

Date: Tuesday 8th June 2021
Time: 4:00 pm
Location: Moolarben Coal Board Room
Attendance: Independent Chairperson
Lisa Andrews (LA)

Community Members

Dr Julia Imrie (JI)
Bev Smiles (BS)
Aleshia Lonsdale (AL)

Moolarben Coal Operations

Steve Archinal (SA)
Graham Chase (GC)
Trent Cini (TC)
Mat Croake (MC) {Minute taker}

Apologies

Helen Ungaro (HU) – Community representative
Cr Des Kennedy (DK) – Mayor, MWRC
Cr John O’Neill (JO) – MWRC delegate
David Stokes (DS) – Community representative
Chris Pilley (CP) Mudgee Business Chamber Representative

Meeting 57 Agenda and Presentation and Meeting 56 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) CCC. LA advised the CCC attendees that Stephen Alcorn (SA) has resigned from the MCOCCC due to personal reasons. Chris Pilley (CP) will be taking his position in the interim, representing the Mudgee Business Chamber.

2. Apologies

Helen Ungaro (HU)
Cr Des Kennedy (DK)
Cr John O'Neill (JO)
David Stokes (DS)
Chris Pilley (CP)

3. Business Arising from Previous Finalised Minutes

LA confirmed previous meeting minutes finalised and distributed on 29 March 2021.

LA, GC, and TC discussed previous actions items being:

- 1. CCC to be notified following approval of the UG4 extraction plan LW401 to LW408. Covered in presentation.*
- 2. CCC to be notified when aerial survey is to be conducted. Complete and covered in presentation.*

No further actions from CCC Meeting 56.

Jl asked about the timing of the submission of the UG4 Extraction Plan and whether additional UG4 groundwater monitoring will be included in the extraction plan. GC confirmed the monitoring requirements associated with UG4 will be reviewed as part of the UG4 extraction plan. Jl raised her concerns that prior to approval, the CCC will not have the opportunity to review and comment on the UG4 Extraction Plan, considering the sensitivity of UG4 location adjacent to the Goulburn River. BS asked if that was consistent with the CCC guidelines. LA confirmed that the process was not governed by the CCC guidelines, but by the requirements of the conditions of approval.

4. Correspondence

Correspondence to the CCC since meeting 56 included the following:

- 16/2/21 – Draft minutes sent to CCC for review (comments received back & incorporated into minutes).*
- 25/3/21 – Email to members with information regarding Action Item 2 from the previous meeting (notify CCC when the aerial survey is to be conducted).*
- 22/3/21 – Email from Jl requesting that the size of the graph depicting mine water discharge data be increased in size for easier reading. This request was forwarded through to MCO.*
- 29/3/21 – Email with finalised minutes sent to CCC members.*
- 21/4/21 – Email from Stephen Alcorn, Mudgee Business Chamber resigning from the CCC as he is moving out of the area for personal reasons. I responded by thanking him for his interest in the project. Note: A new representative will be provided.*
- 4/5/21 – Email from MCO advising that the Annual Review has been approved by DPIE & uploaded to the website. This information forwarded to members on 5/5/21.*
- 19/5/21 – Email to DPIE with chair's CCC annual report for 2020-21.*
- 31/5/21 – Email to members with the meeting notice, agenda & correspondence for this meeting.*

- 1/6/21 – Email to Chris Pilley welcoming him to the CCC, providing details of the next meeting and requesting completion of Code of Conduct & Pecuniary Interest Forms.
- 3/6/21 – Email from JI with request for water data. This request was sent through the MCO for action.*
- 8/6/2021 – Email apologies from Cr O’Neill (MWRC) and Chris Pilley (MBC).

5. CCC Update Presentation

TC welcomed CCC members to MCO and provided an update on COVID-19 management actions.

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

TC provided an operational update. BS asked where MCO is currently mining. GC confirmed the current mining areas on the presentation figure. **Action** – Include current mining locations on a figure in future CCC presentations.

TC addressed CCC members question about whether more groundwater monitoring will be installed around UG4. TC advised the groundwater monitoring network will be reviewed as part of the UG4 Extraction Plan. JI asked who MCO use as a groundwater consultant. TC advised MCO is currently using Australasian Groundwater and Environment (AGE) as its groundwater consultant. JI queried the suitability of the groundwater Trigger level currently set at 367.4 mAHD for PZ105C (2020 AR) which is over 6 meters below surface water levels in the adjacent Goulburn River. JI asked MCM to explain the rational for this trigger level considering that in her opinion it is likely to result in a significant reversal of the hydraulic gradient away from the river and towards UG4 depressurised zone. JI asked how it complies with the *negligible impact or environmental consequences on the Goulburn River and the bed of the Goulburn River* (Approval condition -Water Resources Table 14).

GC described how the triggers were set by the approved expert, based and as outlined in the Groundwater Management Plan, noting the groundwater monitoring network including locations and triggers will be reviewed as part of the UG4 extraction plan.

JI asked if the aerial survey discovered any geological anomalies. TC explained the results for the survey are currently being processed. GC explained that some of the preliminary data has been reviewed and basalt intrusions are evident.

TC provided an exploration update.

TC provided an update on environmental monitoring. BS asked why MCO are only releasing 10ML of treated water per day, when MCO is allowed to release 15ML of treated water per day. GC confirmed treated water release volumes are determined on operational needs. GC also noted that MCO is likely to be releasing closer to 15ML per day of treated water in 2022.

JI asked if there was a reason for a rise in EC of the treated water released in relation to the quality of groundwater inputs. GC explained the EC of treated water is controlled by the water treatment plant. TC explained the staged approach to increasing release water EC as a precautionary measure.

BS commented on the Goulburn River water level at the Ringwood Road river crossing. BS believes if all three mines are releasing at their respective maximum daily allowance of 45ML per day, access on Ringwood road would be restricted more often after rain events. LA asked if this has been addressed in the approval process. TC advised he would have to investigate.

BS asked where the higher pH monitoring points were located. GC confirmed the surface water monitoring points BS was referring to was SW01 and SW02. TC confirmed the pH readings for SW01 and SW02 are consistent with historical readings for each site.

JI asked where the noise complaints were from. TC confirmed the Cooks Gap area. GC explained the potential noise contributors across MCO open cut areas and not from one open cut area in particular. LA asked if MCO made

operational changes in response to a complaint. GC explained operational changes are considered on a case by case basis.

TC provided a rehabilitation and offset management update. TC provided a general discussion on the rehabilitation monitoring in OC2, in particular the change of post mining use from agricultural to native vegetation. BS asked what vegetation community will be in OC2. GC confirmed the vegetation community will be Box Gum Shrubby Woodland and Sedimentary Ironbark Forest. BS asked if MCO is currently conducting monitoring in OC2. TC confirmed monitoring is taking place in OC2. BS asked if there is specific completion criteria for OC2. TC confirmed the completion criteria for OC2 is available in the Rehabilitation Management plan on MCO's website.

BS queried why the offset area in the OC2 rehabilitation area was not included in the Biodiversity Offset Area location figure. GC explained offset credits and land based offsets. GC explained MCO's offset credit requirements for the OC2 rehabilitation. BS asked how long MCO has owned the Bobadeen Offset area. TC confirmed MCO purchased the property before it was a biodiversity offset area, GC explained how the monitoring program including native vegetation regeneration, which influences vegetation planting programs.

GC provided information on the proposed Underground 2 (UG2) Modification including a general overview of the modification and indicative project timing. BS asked why the cut height has changed from 3m to 3.5m. GC explained the change in cut height is to accommodate the variation in the seam height throughout UG2, similar to UG1. BS asked if subsidence impacts will increase. GC explained subsidence impacts will be assessed during the modification process. LA asked if the UG2 modification will need to be advertised. GC confirmed that it will.

GC provided an update on the Open Cut Extension Project. GC provided an overview of the project including indicative project timings and context. BS asked about the timing of submission in conjunction with the UG2 modification. [MCO Notes that the OC extension project submission is expected to be mid 2022] BS asked when the Social Impact Assessment (SIA) will start. GC confirmed the SIA is expected to start in June 2021. GC provided the CCC with a general overview of the SIA process.

GC advised that the SIA consultants will contact the CCC members as part of the SIA. GC asked the CCC to contact the CCC chairperson or MCO if they have any concerns regarding participation in the SIA for the Open Cut Extension Project. BS raised her concerns regarding the cumulative impact of the multiple expansion projects in development across all three mines in the Wollar-Ulan region.

TC provided an employment update. LA asked the duration of the apprenticeships. SA advised MCO apprenticeships are generally 4 years.

TC presented the 2020 Annual Review summary. JI asked if OC4 was nearly completed. SA advised OC4 is approximately 35% completed.

TC addressed CCC member's question relating to the clarification of total rainfall/runoff in the Annual Review site water balance. Total rainfall run-off is the surface water run-off captured on site only. JI asked how much water-make the underground is experiencing. GC confirmed approximately 130 litres per second is coming from underground operations including inflows, MCO water supply and recirculation from the open cut operations. GC discussed the recirculation sources and supply required to the underground of up to 2ML per day. JI asked if the water balance included the proportion of surface water recharge to groundwater being intercepted by the underground mine. GC confirmed that rainfall run-off in operational areas is being captured in pits or required dams.

TC addressed CCC member question about which bores that experienced drawdown above the model predictions. TC confirmed the location of the bores that experience drawdown greater than predicted were north east of UG1 and OC4 had experienced, with drawn down being within the range expected, although early than modelled. JI commented the alluvial bores continue to fall with little sign of recharge despite the high rainfall recorded in 2020. JI referred to the decrease in groundwater levels as per PZ186 data from the 2020 Annual Review document and questioned why they was not mentioned or discussed in the main report. TC advised the results from PZ186 are available on the 2020 Annual Review. JI asked if PZ186a was monitoring the alluvium. JI commented on their

significance if comparable falls in the upper groundwater levels were caused by UG4 in the Goulburn River alluvium. GC advised that PZ186a is monitoring within the paleochannel. [MCO Note: The following water level changes were observed in PZ186 and PZ186a during 2020: 186a (Palaeochannel) -1.0m, PZ186-40 (Permian) - 5.3m, PZ186-65 (Permian) -13.7m, PZ186-86 (Permian) - 10.8m and PZ186-114 (Ulan) +1.4m].

Jl asked the depth of subsidence observed above UG1. GC confirmed the predicted subsidence impact is approximately 2.2m and MCO has observed subsidence impacts of approximately 1.9m.

BS asked how the rehabilitated areas have coped with above average rainfall. TC discussed that the rehabilitation has performed well and noted that some drainage repairs were included in the current maintenance programs after rainfall events. BS asked if MCO have observed issues with rehabilitation adjoining the highwalls. TC explained the rehabilitation is expected to settle overtime and it is included as part of the maintenance programs where required.

Jl asked if the sediment water released from the DAM304 incident reached Moolarben Creek. TC confirmed the water did reach Moolarben Creek, however DAM304 is an EPA release point and the water quality analysis from the discharged water was compliant with the EPL release criteria.

6. General Business

Nil general business from the CCC attendees.

7. Next Meeting: 7 September 2021, commencing at 4pm on site.

Meeting closed at 5:35pm with LA thanking all for their attendance.

Action Items:

Item	Action	Responsibility
1	Include current mining locations on a figure in future CCC presentations.	MCO
2	Investigate whether the Goulburn River water level at Ringwood Road River crossing has been considered by the three mines when releasing respective maximum daily allowances.	MCO

Community Consultative Committee Update

June 2021

Moolarben Coal Operations



COVID – 19 Update

- Proactively managing the situation to safeguard the health and safety of our people.
- Yancoal continues to monitor the situation and health advice.
- Site access restrictions continue.
- Screening people on entry (Thermal Cameras).
- Implementation of social distancing and reinforcement of hygiene practices.
- Enhanced cleaning.
- Community support focused on COVID response and health.



2021 Community Support Program (CSP)

2021 Yancoal-Moolarben Coal CSP events thus far include;

Mudgee Men's Shed metal work equipment upgrade.



Construction of the tree guards is complete. Installation scheduled for June.

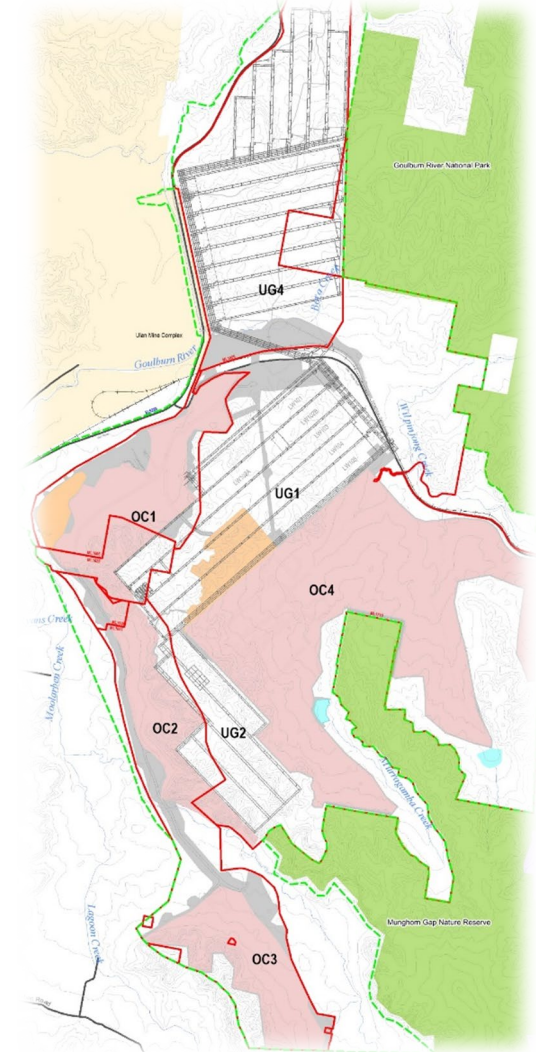


2021 Can Cruise



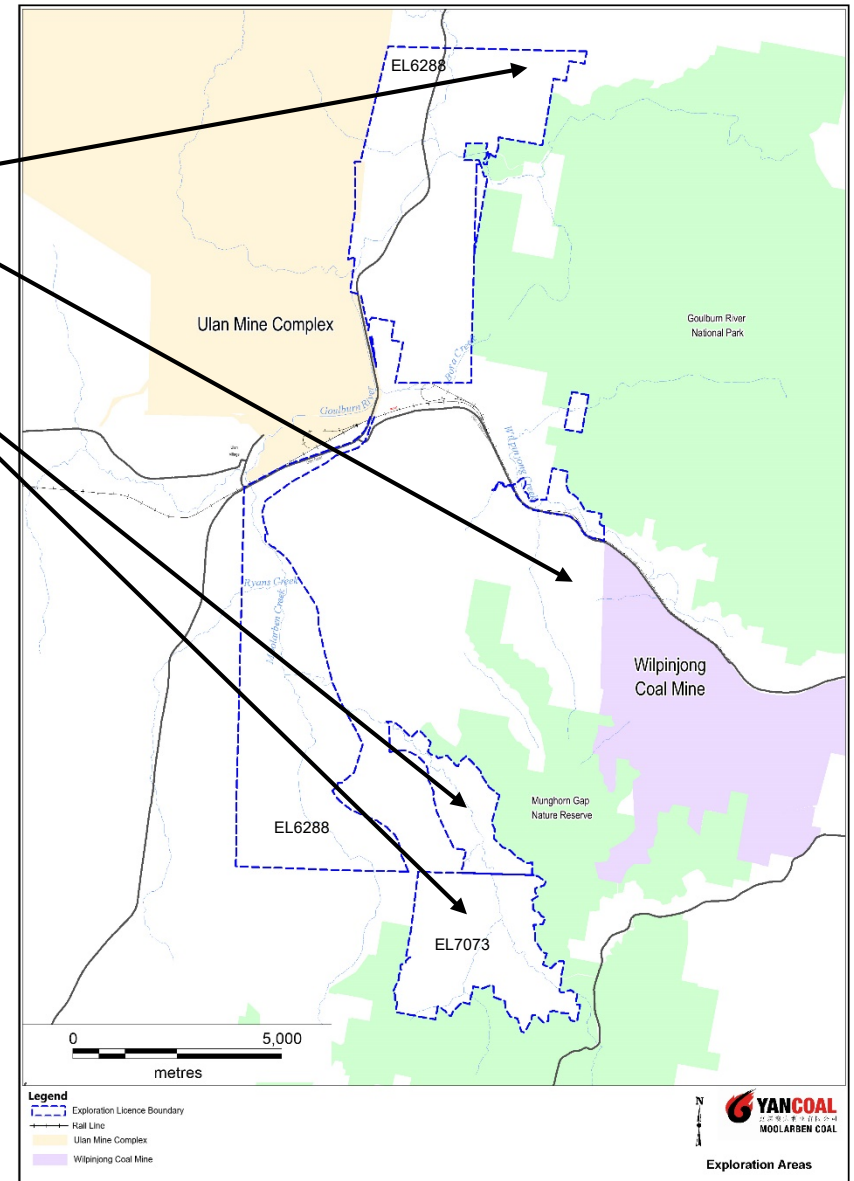
Operational Update

- Open cut operations in OC2, OC3 & OC4.
- Underground 1 longwall operations in 104.
- Underground development in UG4.
- LW401-408 Extraction Plan being prepared.
- Water Treatment Plant operations continue as required.
- UG4 surface infrastructure - construction continues.



Exploration Update

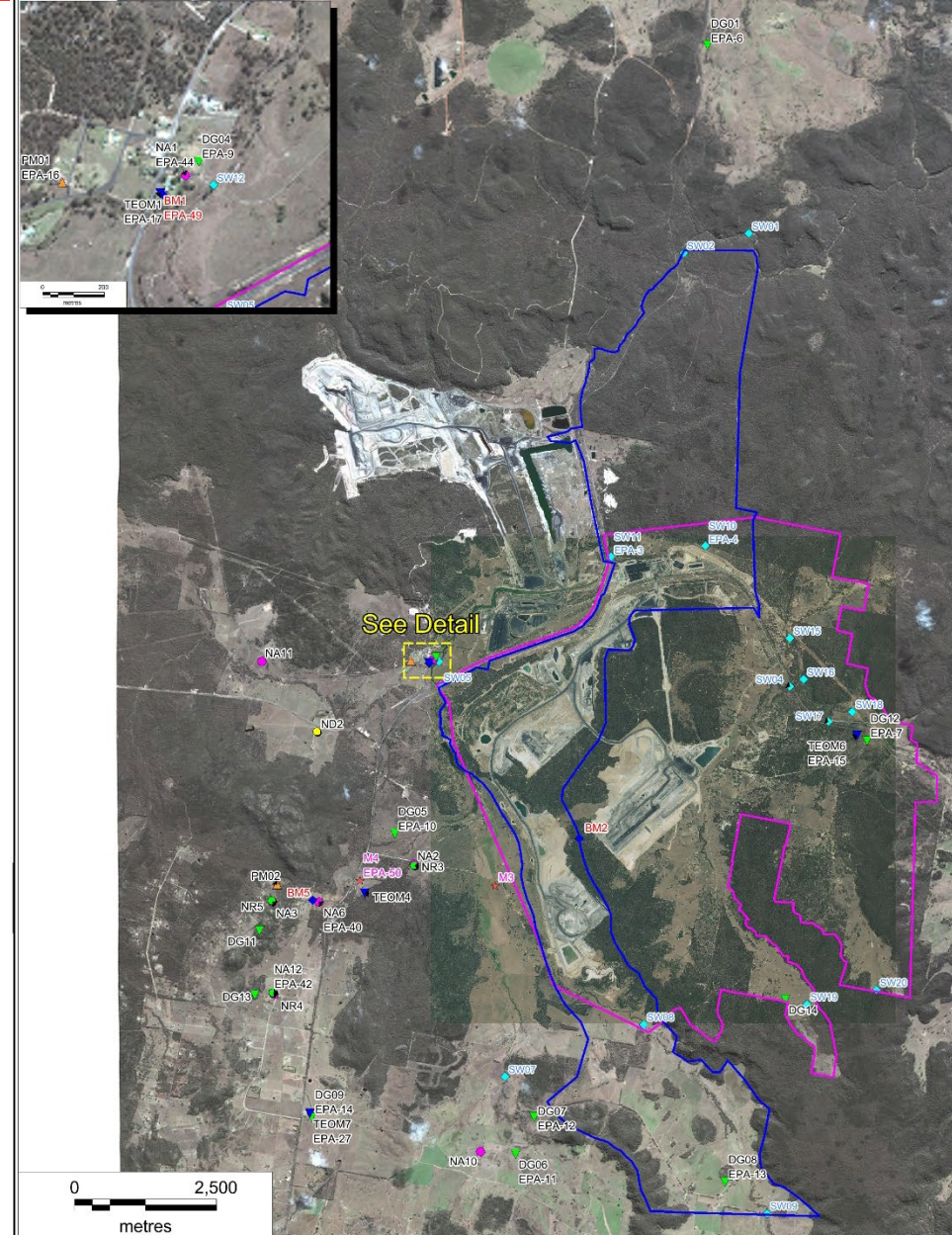
- Drilling – programs planned in EL6288 north and ML1715
- Drilling commenced in EL7073 and EL6288
- Aerial survey – now completed.
- Rehabilitation and monitoring activities have continued during the period.



Environmental Monitoring

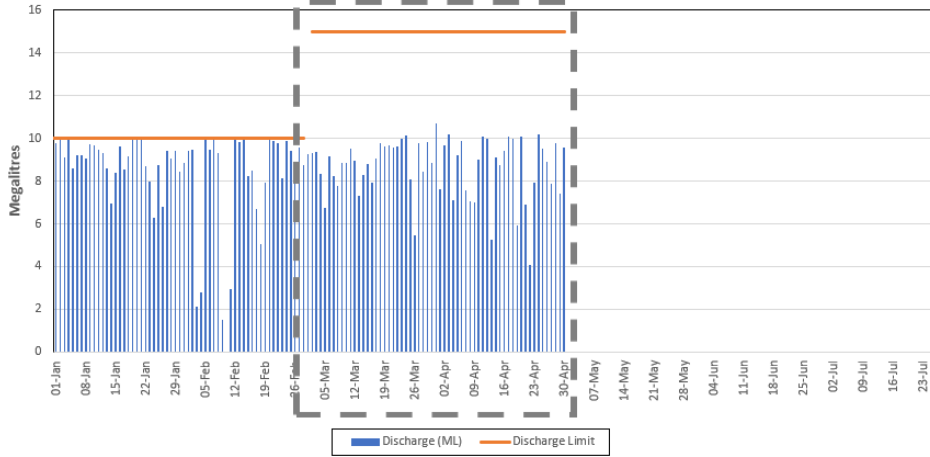
Monitoring network

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

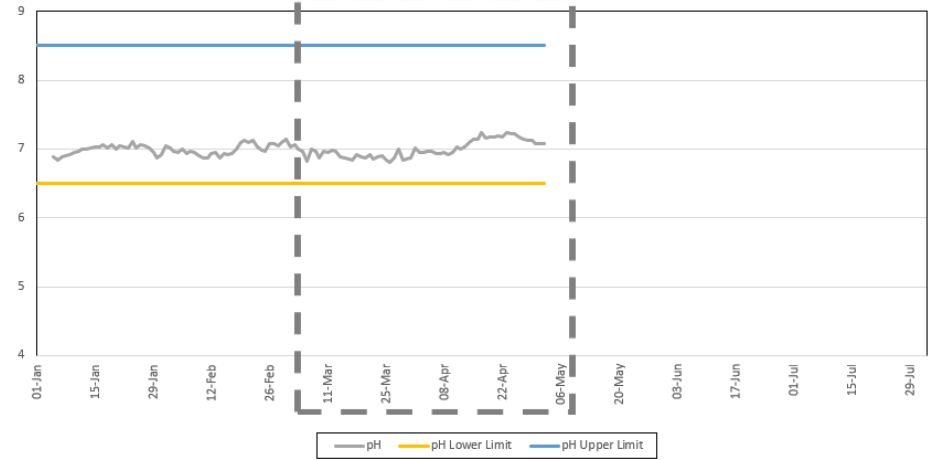


Water Release

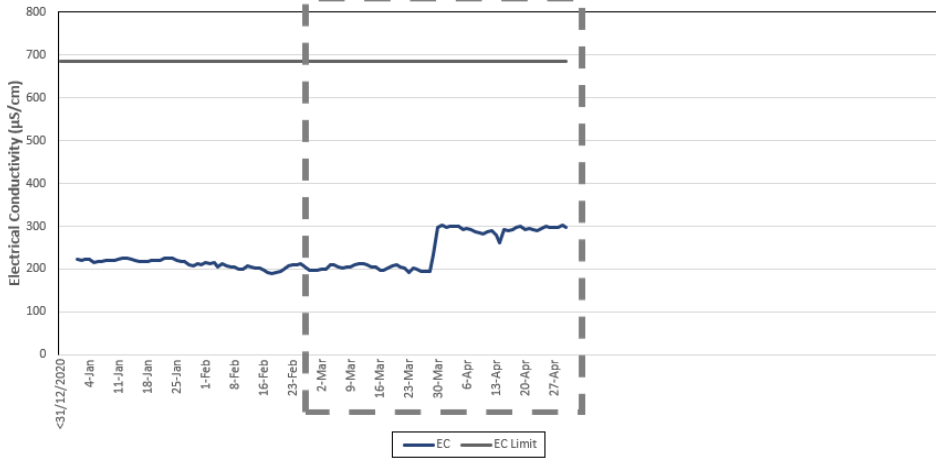
EPA 1 Daily Discharge Volumes
January - April 2021



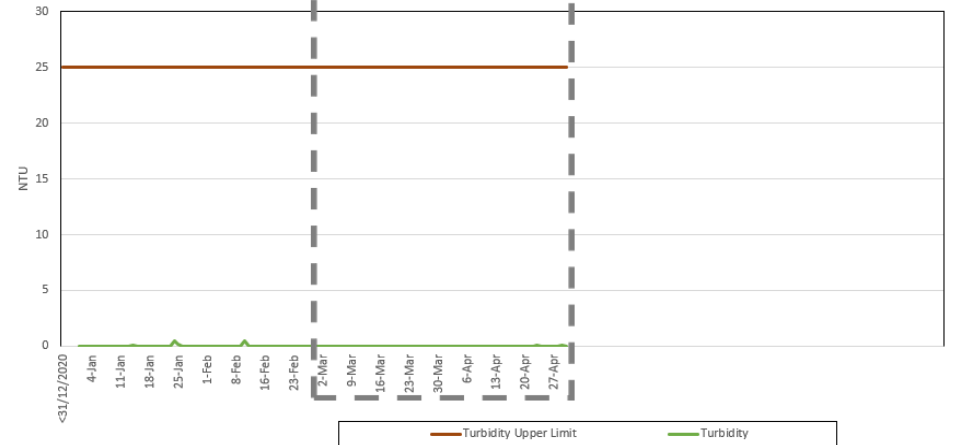
EPA 1 Daily Average pH
January - April 2021



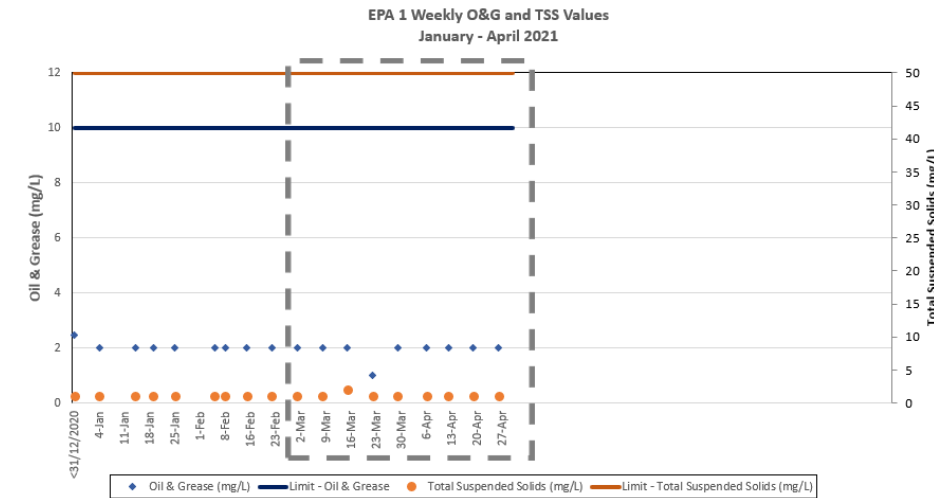
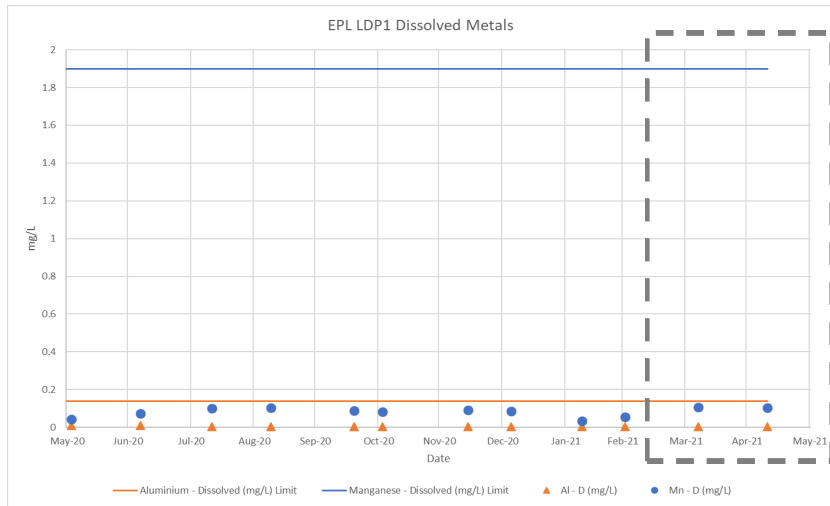
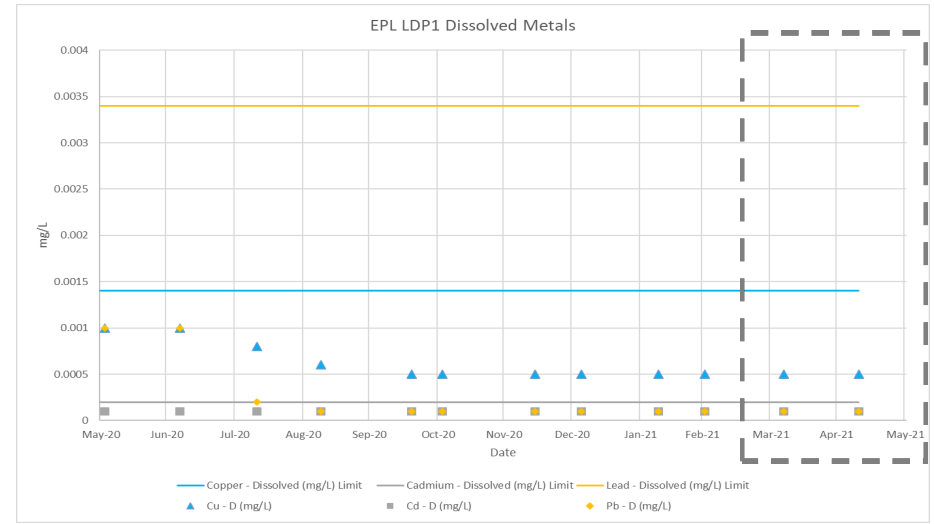
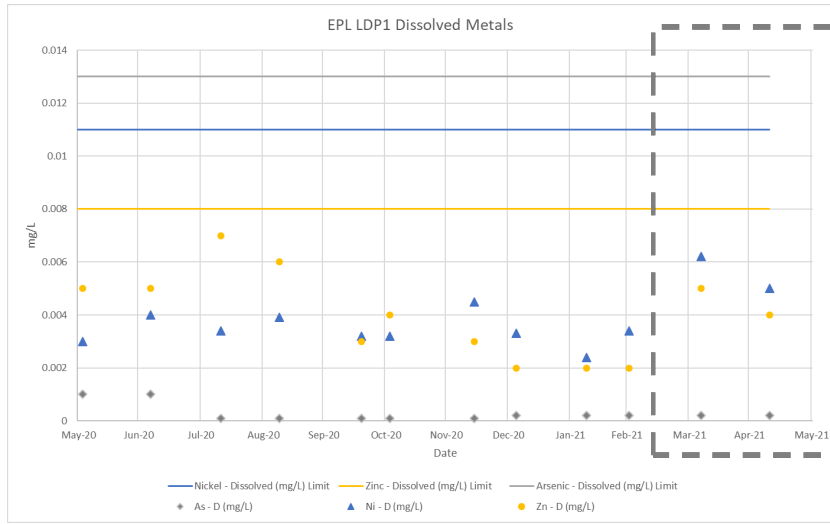
EPA 1 Daily Average EC
January - April 2021



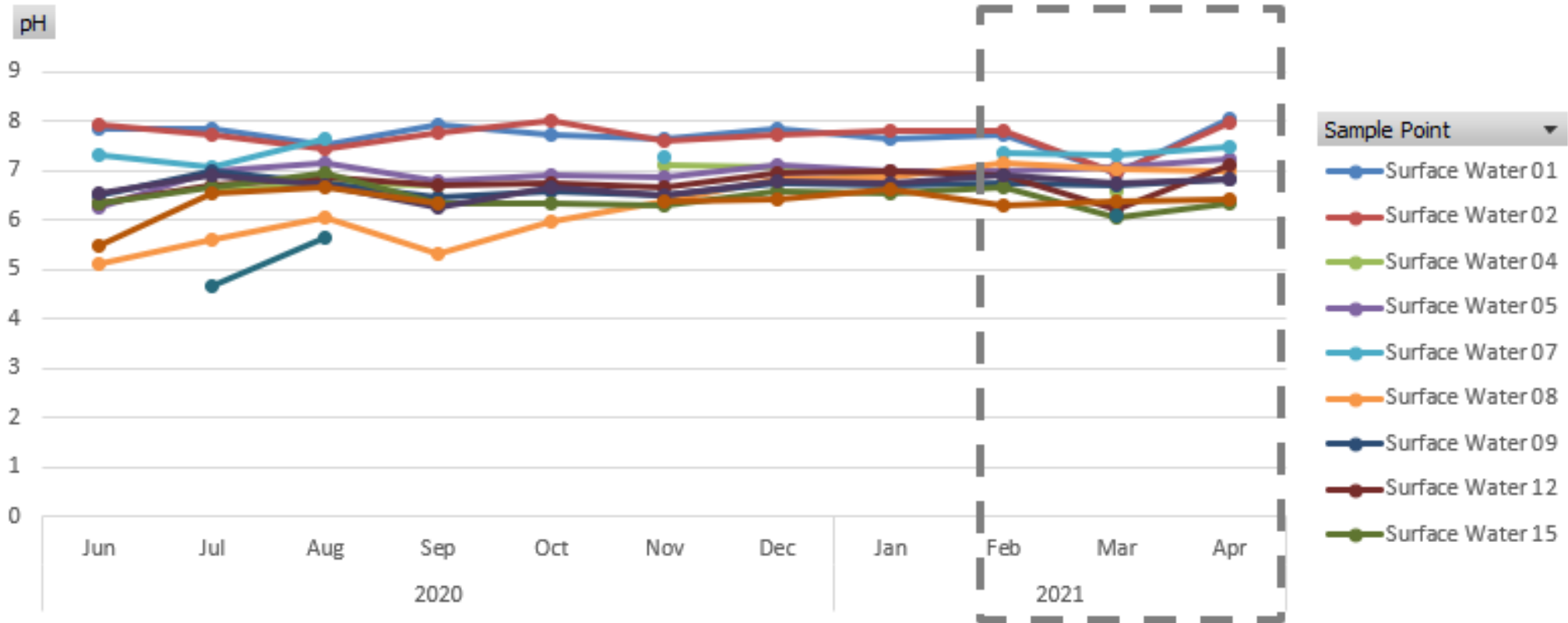
EPA 1 Daily Average Turbidity
January - April 2021



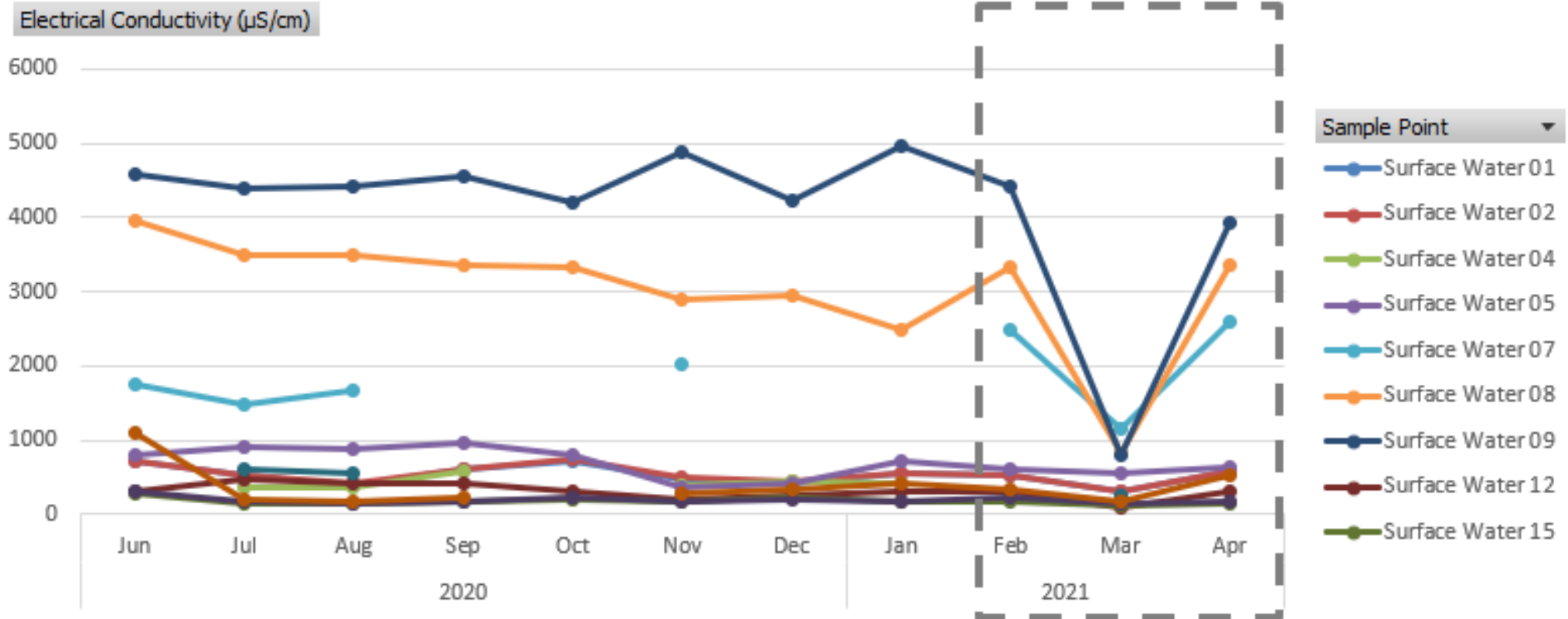
Water Release



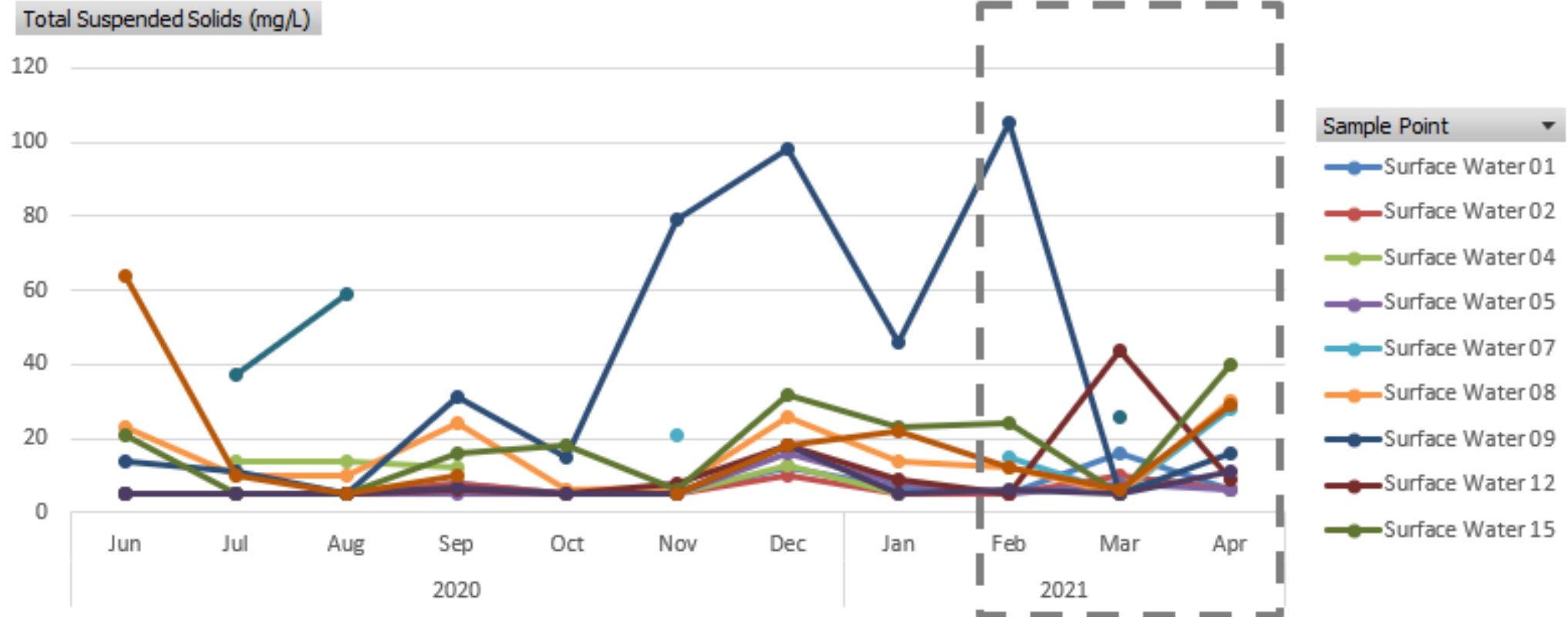
Water Quality - pH



Water Quality - EC



Water Quality - TSS



Air Quality

Site	April 2020 PM10 Annual Average ($\mu\text{g}/\text{m}^3$)	April 2021 PM10 Annual Average ($\mu\text{g}/\text{m}^3$)	Air Quality PM10 Annual Average Criteria ($\mu\text{g}/\text{m}^3$)
TEOM 01	17.3	13.6	25.0
TEOM 07	14.6	9.3	25.0
TEOM 04	18.3	12.4	25.0

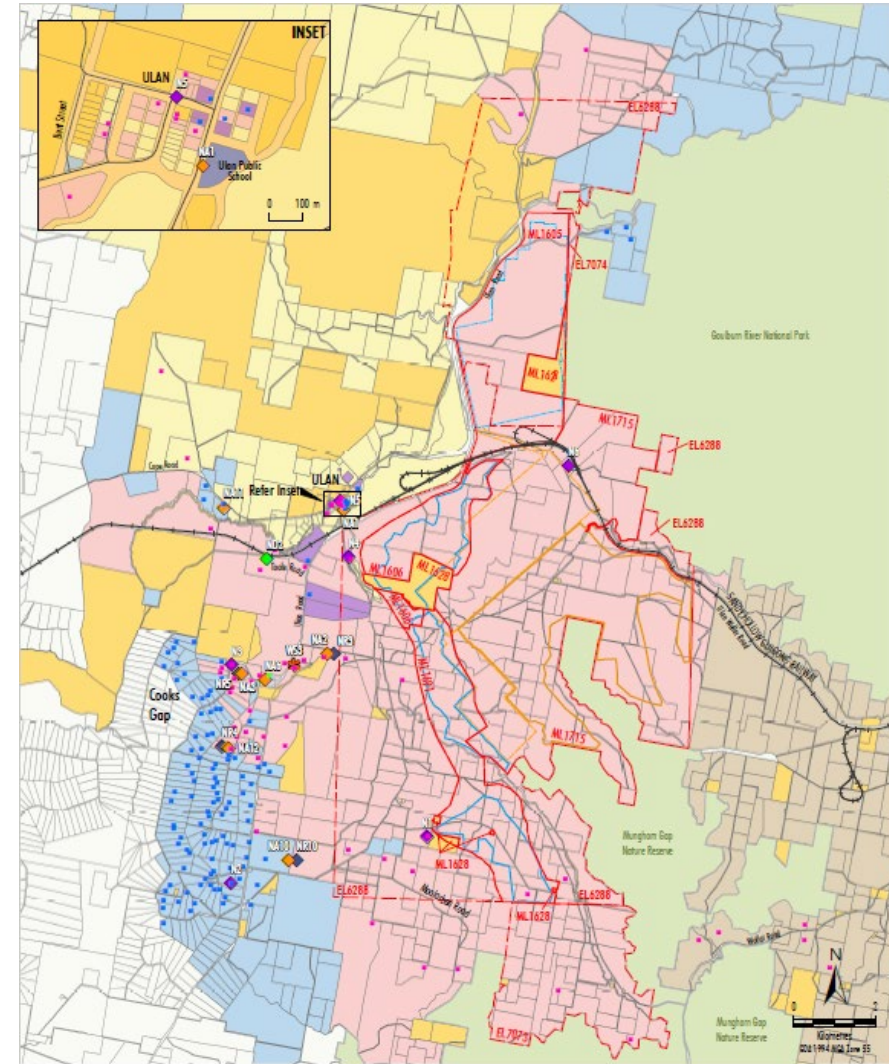
Site	April 2020 PM2.5 Annual Average ($\mu\text{g}/\text{m}^3$)	April 2021 PM2.5 Annual Average ($\mu\text{g}/\text{m}^3$)	Air Quality PM2.5 Annual Average Criteria ($\mu\text{g}/\text{m}^3$)
TEOM 07	6.0	5.1	8.0

Monthly monitoring reports are available on our website:

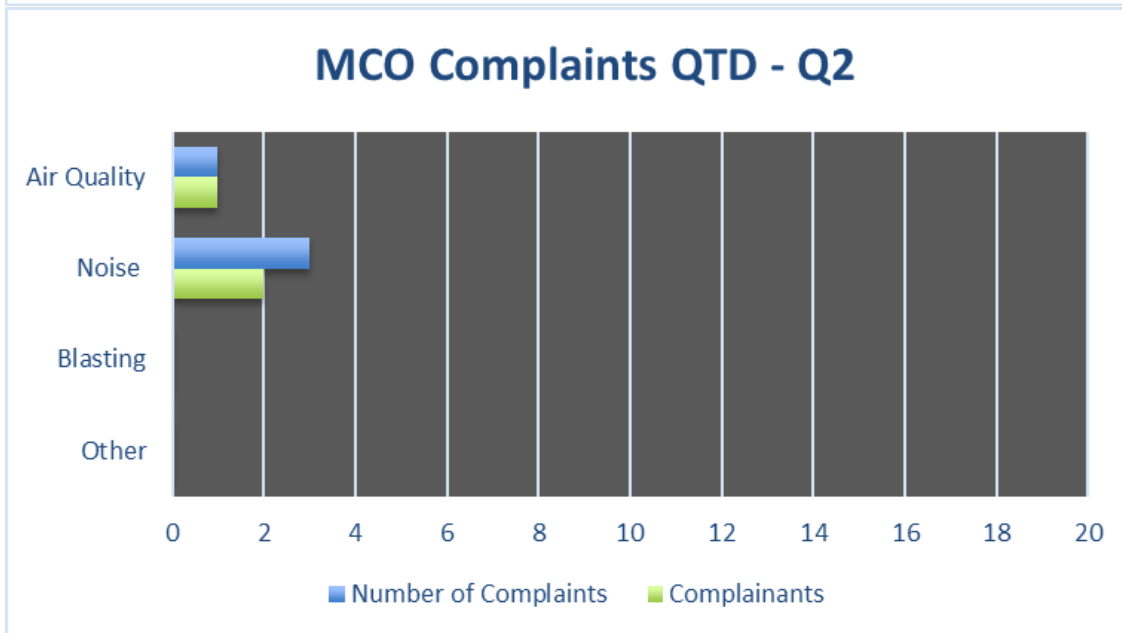
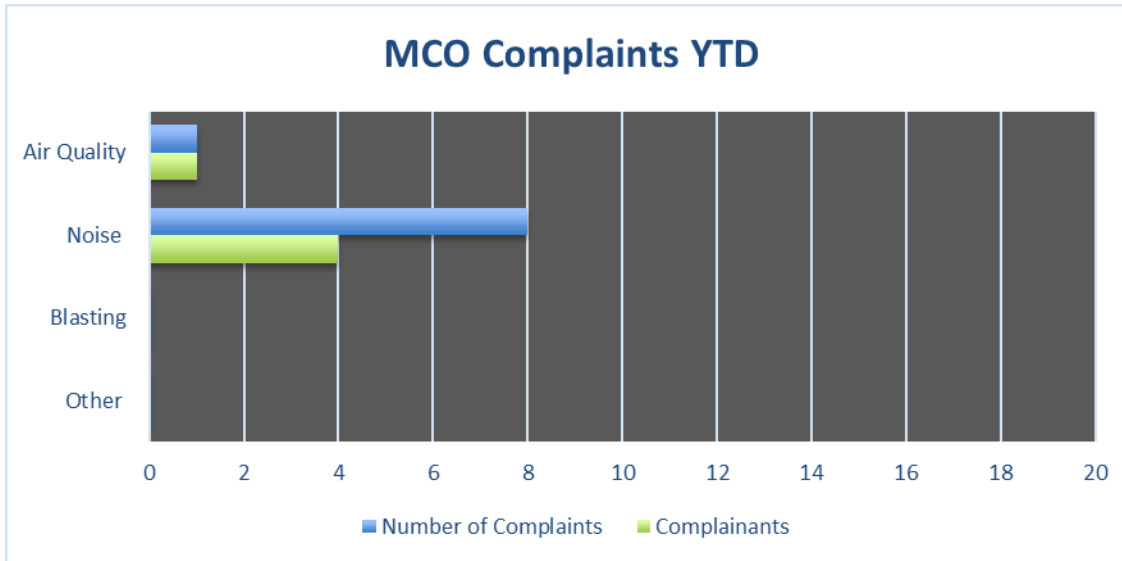
www.moolarbencoal.com.au/page/environment/environmental-monitoring/

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

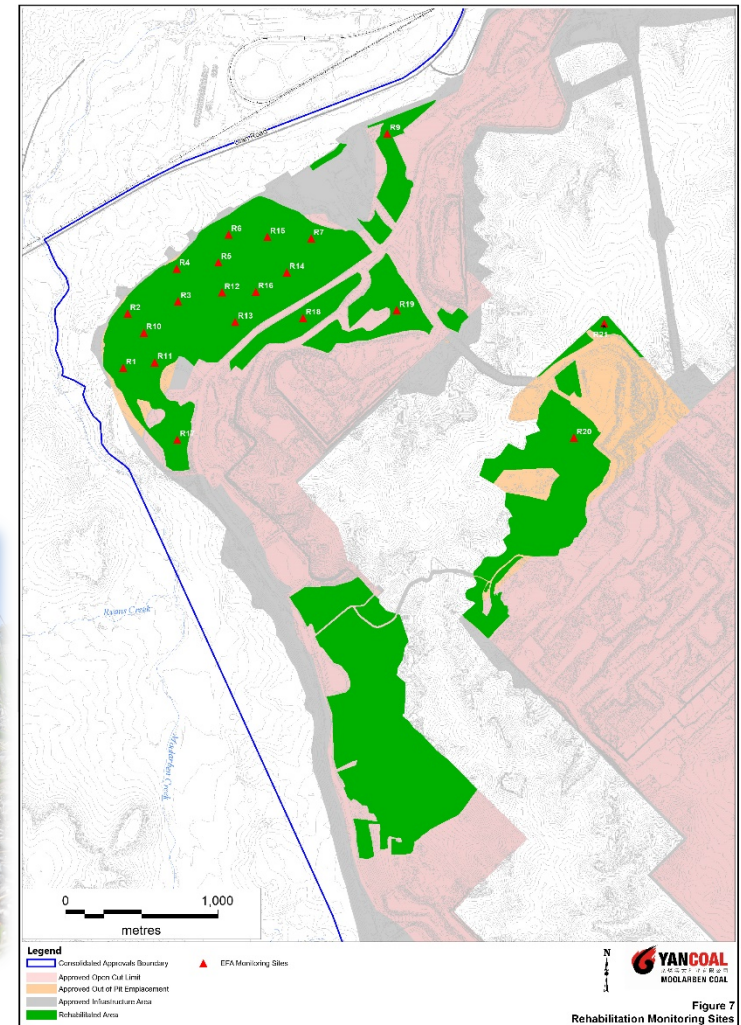


Community Complaints



Rehabilitation Update

- Rehabilitation maintenance works are continuing.
- Autumn rehabilitation monitoring now completed.



Biodiversity Offset Areas Update

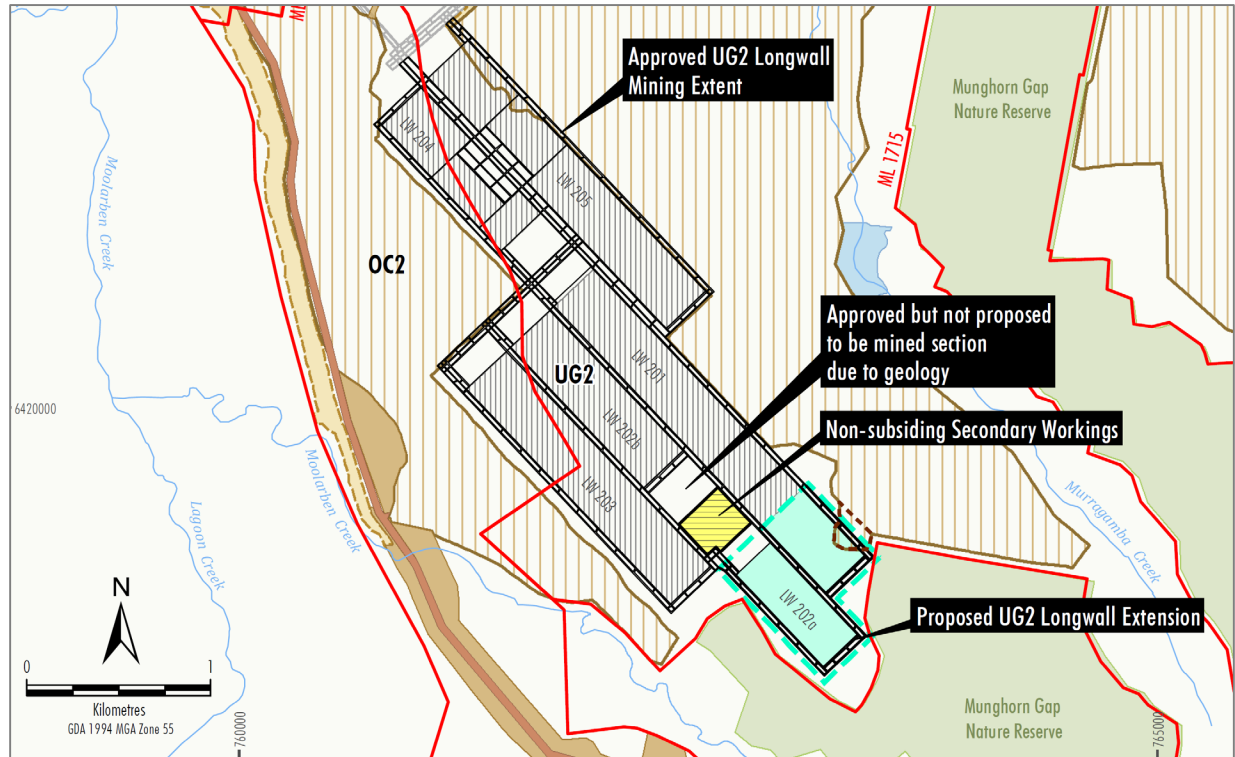
- 2021 Planting program is underway
- Weed control and offset maintenance works have continued.
- Autumn monitoring is now complete



Underground 2 Modification

Modification Description

- Extension of two longwall panels
- Increase in maximum extraction height from 3.0m to 3.5m
- Non-subsiding secondary workings beneath cliff feature
- Approved section of LW202 not to be mined due to geology



Underground 2 Modification

Indicative Timing

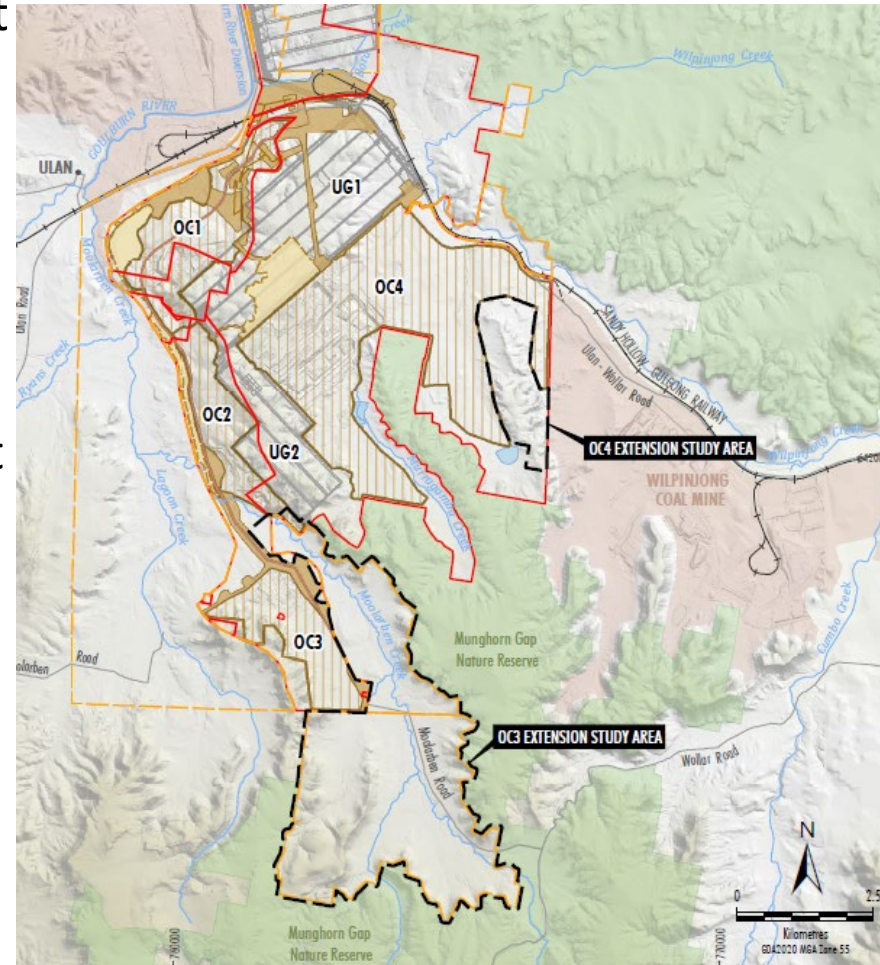
- Specialist Assessments → Commenced
- EPBC Referral Lodgement → Q3 2021
- Modification Report Lodgement → Q3/Q4 2021

Stakeholder Engagement

- Briefing relevant agencies → June to July 2021
- Community newsletter → June 2021
- Registered Aboriginal Party consultation process for ACHA → Ongoing

Open Cut Extension Projects

- Two areas under investigation for open cut extension projects:
 - OC3 extension within EL 6288 and EL 7073
 - OC4 extension within ML 1715
- Exploration in progress
- Baseline environmental and feasibility studies commenced to inform development applications
- Project Scope will be informed by
 - Exploration
 - Baseline studies
 - Feasibility study
 - Stakeholder engagement
- Separate applications for OC3 and OC4 extensions likely.



Open Cut Extension Projects

Social Impact Assessment

- A component of the Scoping Report and EIS is the Social Impact Assessment (SIA).
- Social engagement specialist CDM Smith to undertake SIA's for the open cut extension projects, including:
 - Identification and assessment of potential social impacts and benefits of the projects.
 - Focused engagement with key stakeholders to inform the SIA's.
- CDM Smith will be in contact with CCC members regarding your interest to participate in initial engagement as part of the SIA, tentatively planned to occur later in June or July.

Employment Update

Current Traineeships

- 8 Underground
- 1 Administration
- 3 Land Conservation

Apprentices

- Currently 4 Underground,
12 Open Cut and 8 at the CHPP

General

- 2020 Moolarben Spirit Award presentation night – March 2021
- Mock interviews & Try a Trade – May 2021

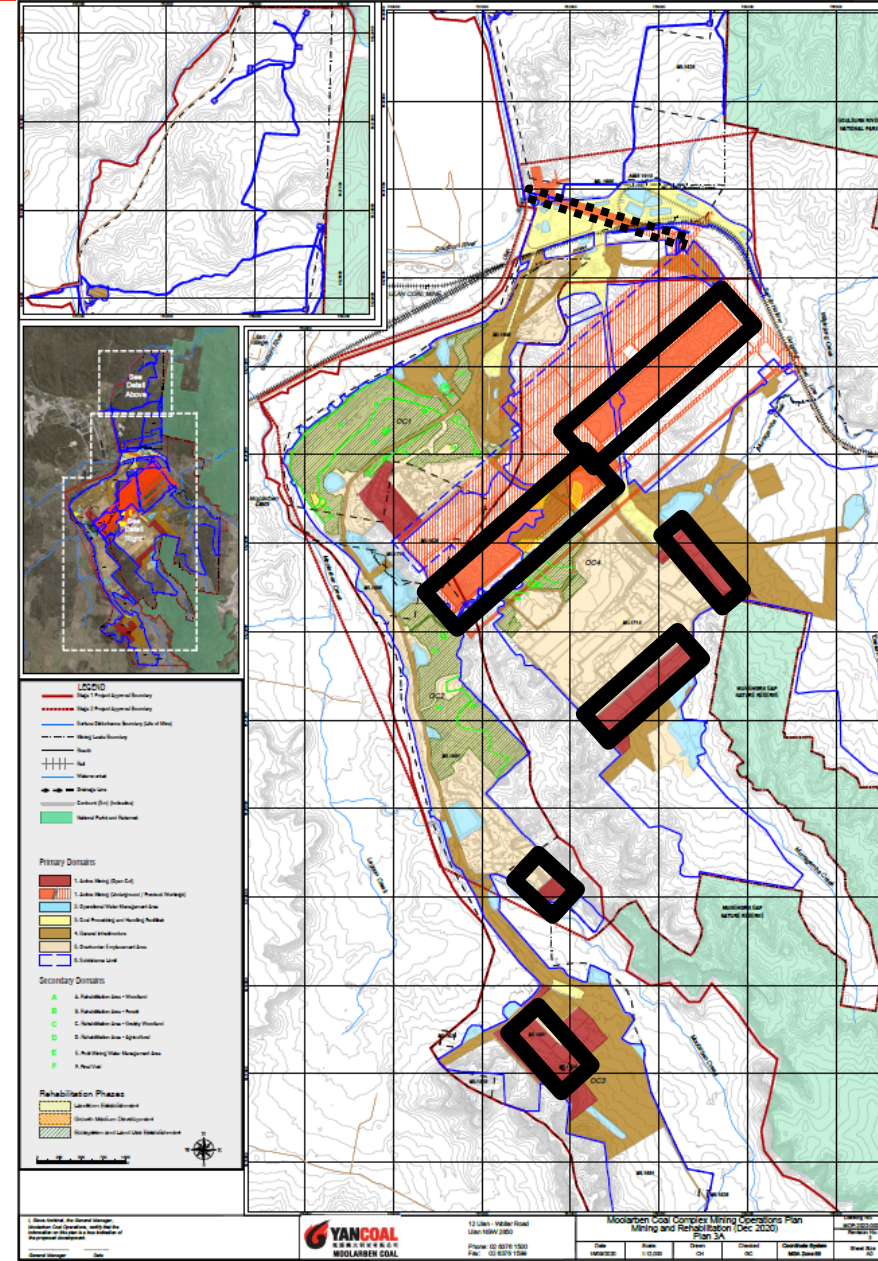


Annual Review Summary

- Activities During the Reporting Period
- Environmental Performance
- Water Management
- Rehabilitation
- Community
- Activities to be Completed in the Next Reporting Period

Activities During the Reporting Period

- Mining operations in OC2, OC3, OC4 and UG1
- Progressive rehabilitation in OC2 and OC4
- Commissioning of the Water Treatment Plant
- Completion of Moolarben Creek Crossing
- 14.1Mt washed and 19.8Mt railed
- Exploration in EL6288 and EL7073
- Mining Operations Plan amendments to reflect mine progression and exploration in MLs



Noise, Blasting and Air Quality

■ Noise

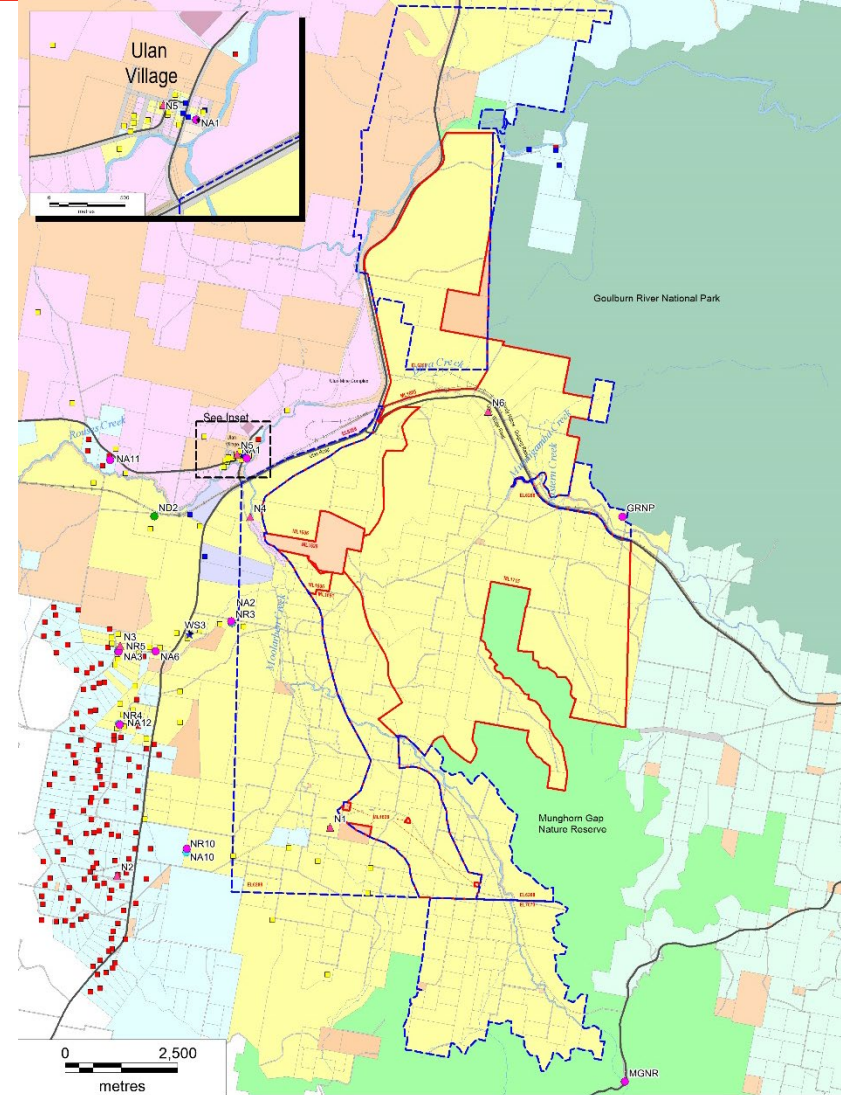
- All attended noise monitoring within criteria.

■ Blasting

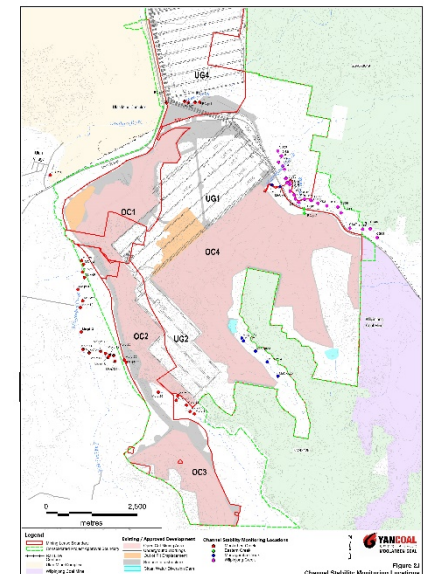
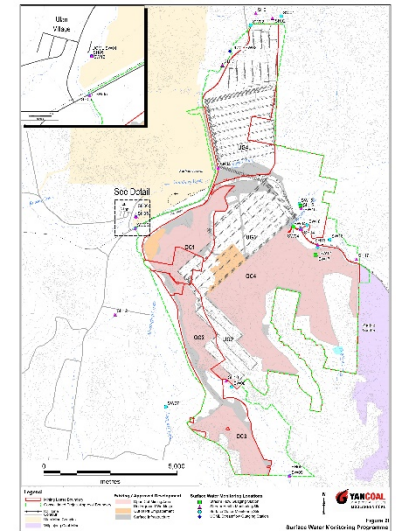
- No reportable fume events.
- All vibration or overpressure results within criteria.

■ Air Quality

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



- Water
 - Above average rainfall (939mm vs Avg of 650mm).
 - 1,425ML 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 variable within each creek. Active erosion predominantly the result of natural influences exacerbated by past land use.



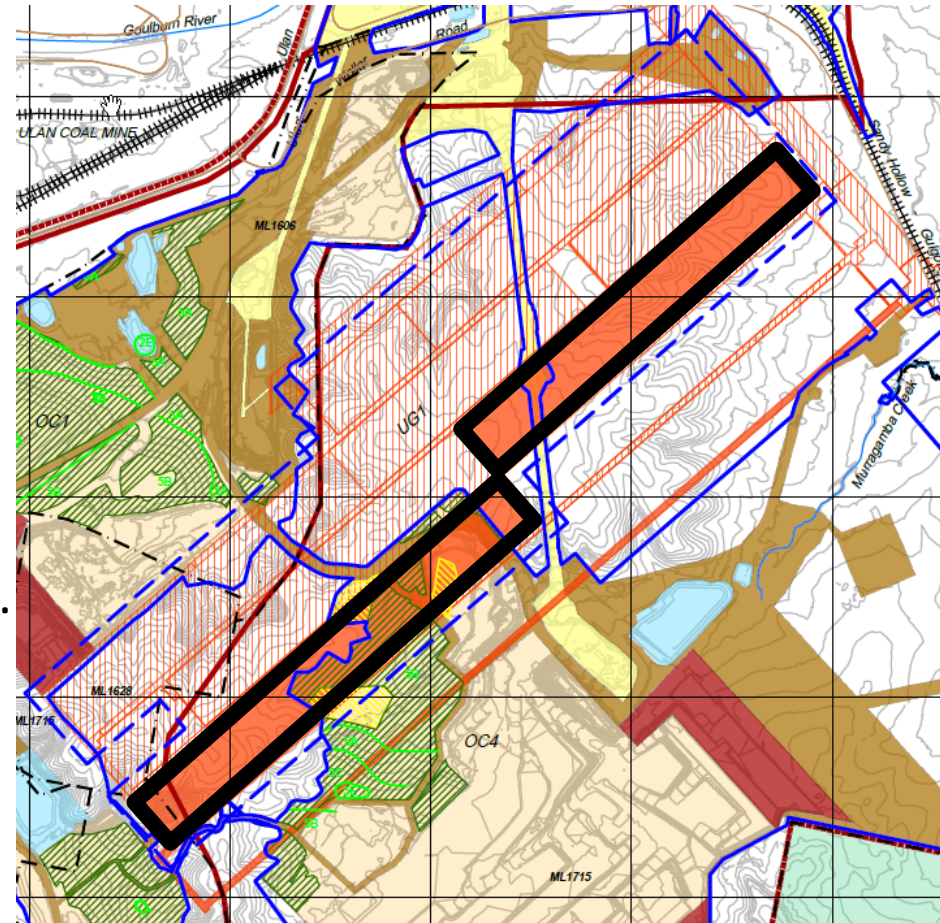
Groundwater

- Groundwater level trends during 2020 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 1m or less, trends were consistent with some drawdown above model predictions observed.
- Triassic bores were generally stable or declined by 1m or less, trends were consistent with model predictions.



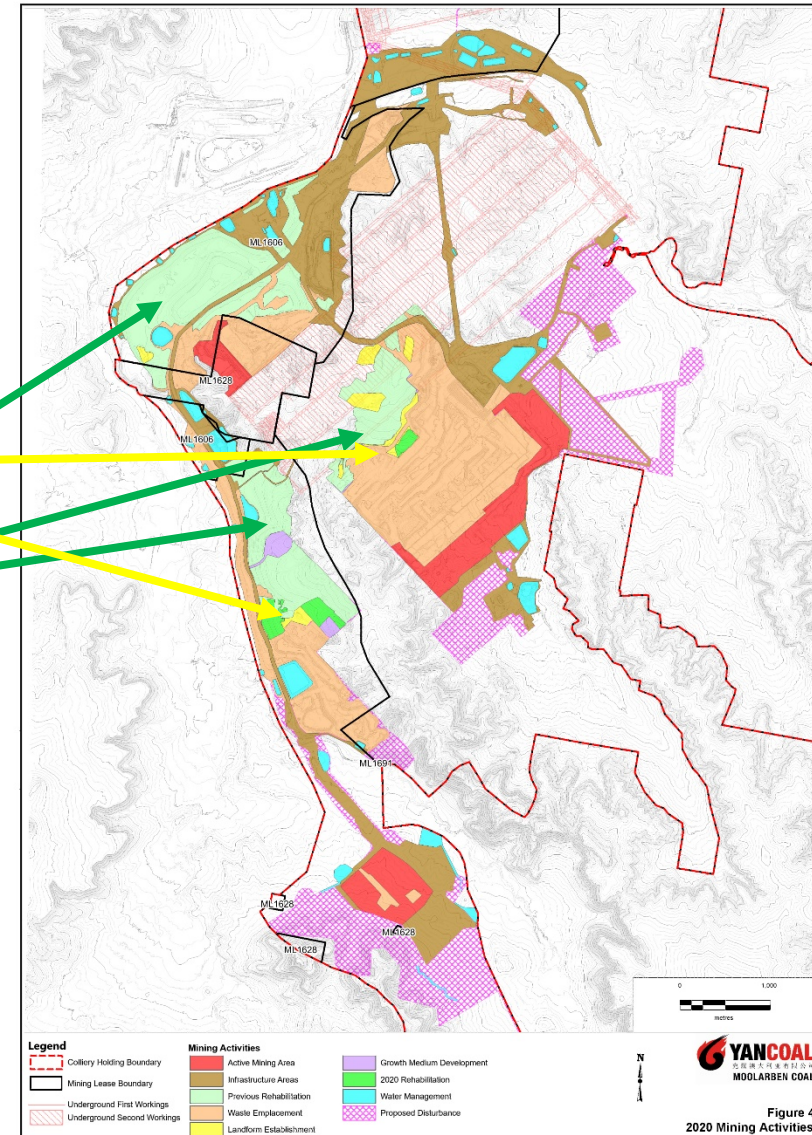
Mine Subsidence

- Secondary extraction undertaken in Longwall LW103 and LW104.
- 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 OC1, OC2 and OC4
 - Maintenance of existing rehabilitation
- **Status**
 - 24ha Landform Establishment.
 - 11ha Growth Medium development.
 - 350ha Ecosystem and Landuse Establishment.



Incidents, Compliance and Complaints

■ Incidents and non-compliances

- Non-continuous PM10 Monitoring – Power supply loss and routine maintenance
- A single Oil & Grease sample was not collected on one occasion during discharge.
- Quarter 1 Effluent monitoring was not completed at EPL ID 22 due to unscheduled maintenance.
- During the construction of the Moolarben Creek crossing, a localised storm event resulted in Moolarben Creek entering the downstream culvert construction works then flowing back into Moolarben Creek.
- A sediment water release occurred from a sediment drain associated with Sediment Dam 304 (EPL Identification Point 51) in the vicinity of the Open Cut 3 pre-strip area.

■ Complaints

- 16 direct complaints from 10 complainants.
- Decrease from the previous reporting period.
- 31% of complaints were received from 1 complainant.
- 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.

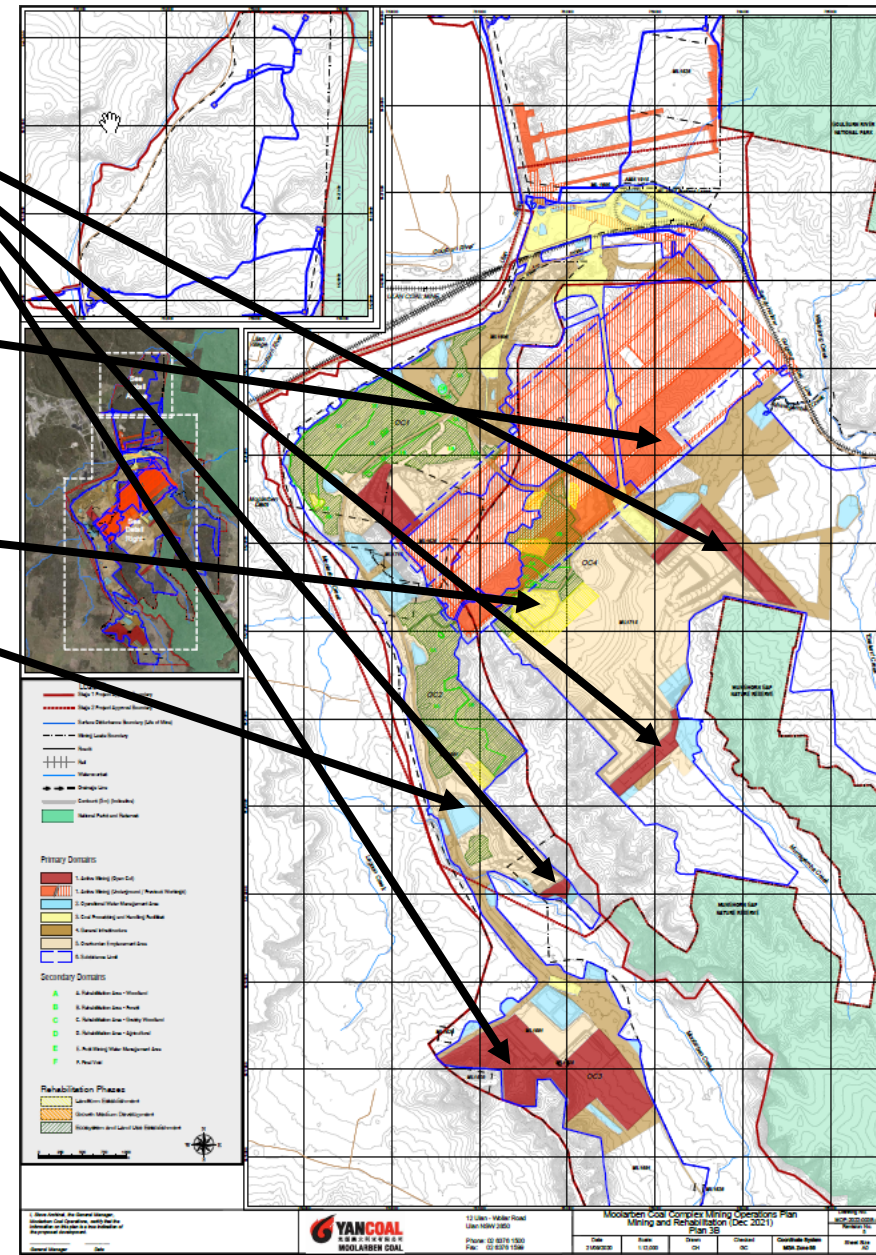
■ Community Support

- Donations and sponsorships provided across 35 local groups and organisations.



Activities Proposed

- Overburden and coal extraction OC2, OC3 and OC4.
- UG1 longwall operations in LW104 and 105.
- Progressive rehabilitation
 - OC2; and
 - OC4.
- Resource definition
- Water management works.
- Coal processing and railing
- Construction of UG4 Infrastructure





5 July 2021

