

**MOOLARBEN COAL OPERATIONS - COMMUNITY CONSULTATIVE COMMITTEE
MEETING No. 49**

Date: Tuesday 4th June 2019
Time: 4:00pm
Location: Moolarben Coal Open Cut Administration Board Room, Ulan
Attendance: Independent Chairperson
Lisa Andrews (LA)

Community Members

Andrew Palmer (AP) (*arrived at 4.26pm*)
Bev Smiles (BS)
Helen Ungaro (HU)
Julia Imrie (JI)
David Stokes (DS)
Cr Des Kennedy (DK) Mid Western Regional Council
Cr John O’Neil (JO) (Mid Western Regional Council)

Moolarben Coal Operations

Steve Archinal (SA)
Graham Chase (GC)
Trent Cini (TC)
Stacey Preston (SP) Minute Taker

Apologies

Michelle Frankham (MF)
Aleisha Lonsdale (AL)

A hard copy of the Agenda and Meeting 49 Presentation and 2018 Annual Review Presentation was provided to all meeting attendees.

1. Introduction and Welcome

Lisa Andrews (LA) opened the meeting at 4pm and welcomed all attendees to the Moolarben Coal Operations (MCO) CCC.

2. Apologies

Michelle Frankham (MCO) and Aleisha Lonsdale (AL).

3. Business Arising from Previous Finalised Minutes

Meeting 48 Action 1 - *Provide groundwater level results in the 2018 Annual Review presentation at the June CCC.*

Results presented in Annual Review 2018 and summarised in presentation on 04/06/2019.

Meeting 48 Action 2 – *Provide current employee numbers at MCO (including apprentices) –*

GC confirmed current employee numbers of around 730.

Correspondence

Correspondence as emailed to the CCC on 26/5/19 with 2 additional items:

- 14/3/19 – Email from JI requesting water data information, including water quality results for M11 (PZ194) & M12 (PZ195) and TB179.
- 19/3/19 – Response email from GC providing available information.
- 22/3/19 – Draft minutes from Meeting 48 sent to CCC members for review/comment.
- 30/3/19 – Finalised minutes from Meeting 48 sent to CCC members.
- 26/5/19 – Email to members with the Meeting Notice for this meeting, with the Agenda and Correspondence Report.
- 31/06/19 – Email to members with a reminder for this meeting.
- 1/6/19 – Email from JI requesting further water data.

CCC Update Presentation

GC provided an update on the Community Support Program (CSP) including upcoming events and initiatives.

TC provided an operational update.

TC provided a drilling and exploration update. BS asked where in EL6288 the drilling was? GC informed BS that the drilling was generally in the south of EL6288.

TC provided an update on environmental monitoring including water quality. JI advised that she noticed the low EC in SW17 in a reading in 2018? GC advised it will depend on how much flow there is. TC stated there had not been in SW17 for the last 12months, and the results may reflect rainfall.

TC provided an update on air quality. BS asked if MCO are going to be monitoring for PM2.5. TC advised it is not in our current Project Approval. JI asked if MCO do still monitor for PM2.5? GC advised that MCO have just installed a PM2.5 monitor.

TC provided an update on noise monitoring and community complaints. BS asked is the complaints have gone up. TC advised that in comparison to June 2018 they have not. BS asked if they were mainly from the Cooks Gap area. GC confirmed they are.

TC provided an update on rehabilitation and biodiversity offsets area (BOA) management. BS asked how it is trending with the dry weather? TC advised it is coping reasonably well.

Jl asked where the aerial baits are being distributed? TC advised the program was undertaken last month in a number of areas not accessible by car. General discussion of baiting and applicable Pest Control Orders and LLS baiting programs. Jl asked about plantings in the Bobadeen offsets and whether it is the 'old Bobadeen'? TC confirmed it was. Jl asked if any will be on her boundary? TC confirmed that plantings will occur in close proximity to her boundary but not necessarily this time around. Jl asked if there are any plans to rehabilitate as a mine offset, for the severely eroded creek bed on Old Bobadeen, visible from the Ulan Rd. GC advised there are no current plans.

GC provided an employment and recruitment update. JO asked rough salary cost for current 730 employees. GC advised he does not have that information on hand. DK stated that the information is available in the Councils Economic Development hand out.

GC provided an update on the Open Cut Optimisation Modification.

2018 Annual Review Presentation

GC provided two hard copies of annual review and will send additional copies as requested.

Jl asked how the volume of surface water runoff (mine inflows) was calculated in the Site Water Balance and what footprint area it was based on? GC advised that there is a site water balance based on AWBM modelling for the relevant portions of the site.

BS asked what our total area of Biodiversity Offsets are? GC advised around 7000ha?

BS asked if there is somewhere in the report that mentions total area of disturbance in relation to rehabilitation. GC advised that it is in the Annual Review and totals around 1300ha.

BS asked about the noise complaints and how MCO are dealing with them? GC explained the complaints management process and confirmed that noise monitoring at locations within the community have been undertaken. BS enquired when MCO will move into OC3. GC advised MCO is waiting on approval of MOD 14.

Jl asked about UG1 and if it has been mined faster than first assessed. SA advised it is on par with budget & forecast.

4. General Business

Jl asked what are the water make from UG1 currently was. GC advised that it is approximately 65lps and reiterated that included all water from UG1 including water supply for operations and recirculation.

DS thanked MCO for being flexible with drilling to accommodate his requests.

GC advised of prosecution for blast incident.

5. Next Meeting: 10th September 2019 – 4:00pm.

Meeting Closed at 4:53pm.

Action Items:

Item	Action	Responsibility
1	Hard copy of 2018 Annual Review to be provided to DS & Jl	GC

Community Consultative Committee Update

June 2019



Community Support Program

Recent Community Support Events & Initiatives

- Lue School Bus
- Balloon Aloft
- Survivor Lifeskills Program
- Mudgee Men's Bowling Club Easter Tournament
- Mudgee Valley Writers Competition
- Try a Trade
- PCYC Time 4 Kids



Upcoming Events and Initiatives

June

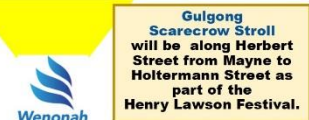
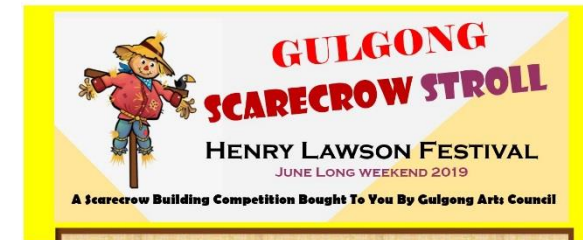
- Henry Lawson Festival Scarecrow Stroll
- Mudgee Masters Football Tournament

August

- Mudgee Readers Festival
- Mudgee Running Festival

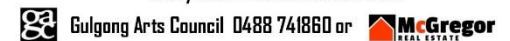
Other

- Turill Community Centre Kitchen Upgrade
- Mudgee Women's Rugby League Equipment
- Mudgee Softball



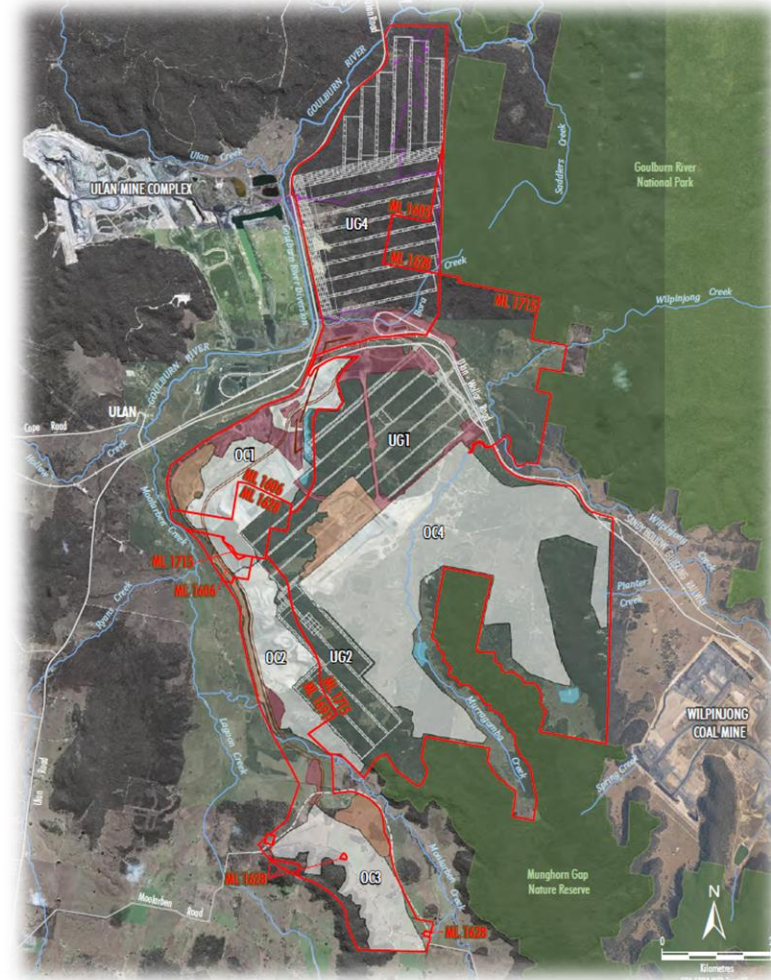
*Supporting Wenonah Lodge Gulgong
Come on help this community event build your own or sponsor someone to build a scarecrow*

Entry forms and information from



Operational Update

- Open cut operations in OC2 & OC4.
- Longwall 102 Continues.
- UG development continues.



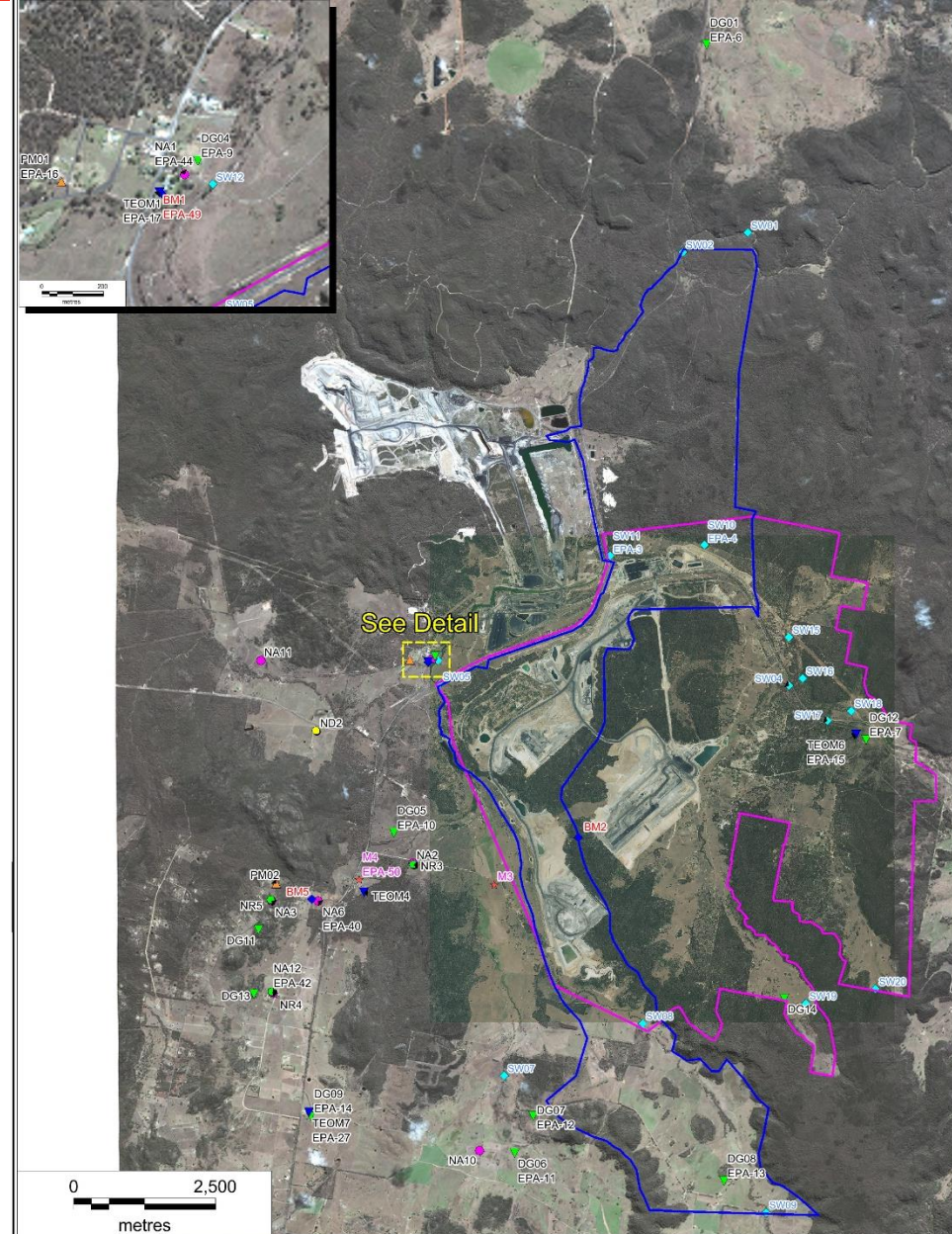
Exploration Update

- Resource definition commenced in EL7073 and EL6288.
- Resource delineation continued in OC4 and UG1
- Rehabilitation and monitoring activities have continued during the period.

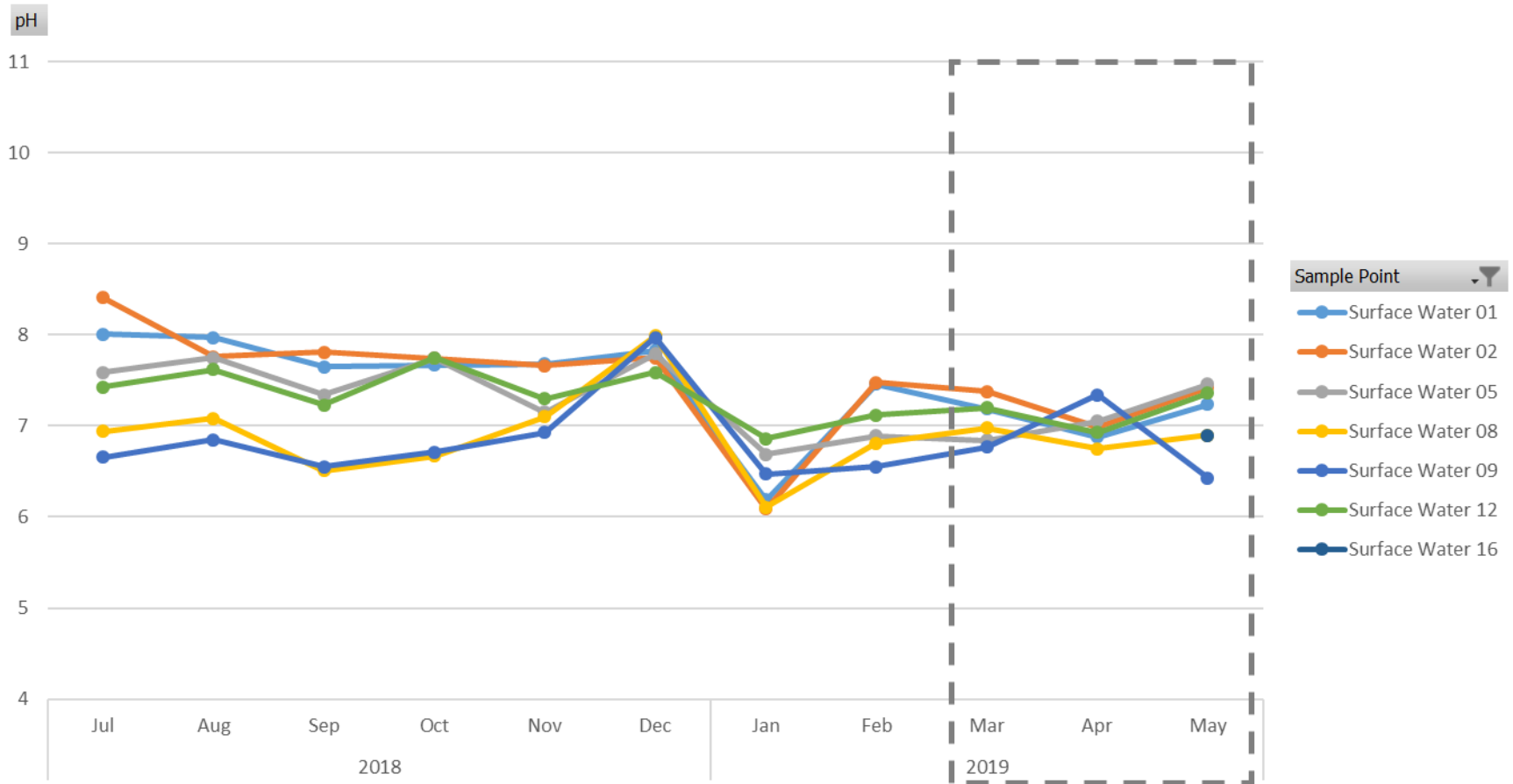


Environmental Monitoring

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

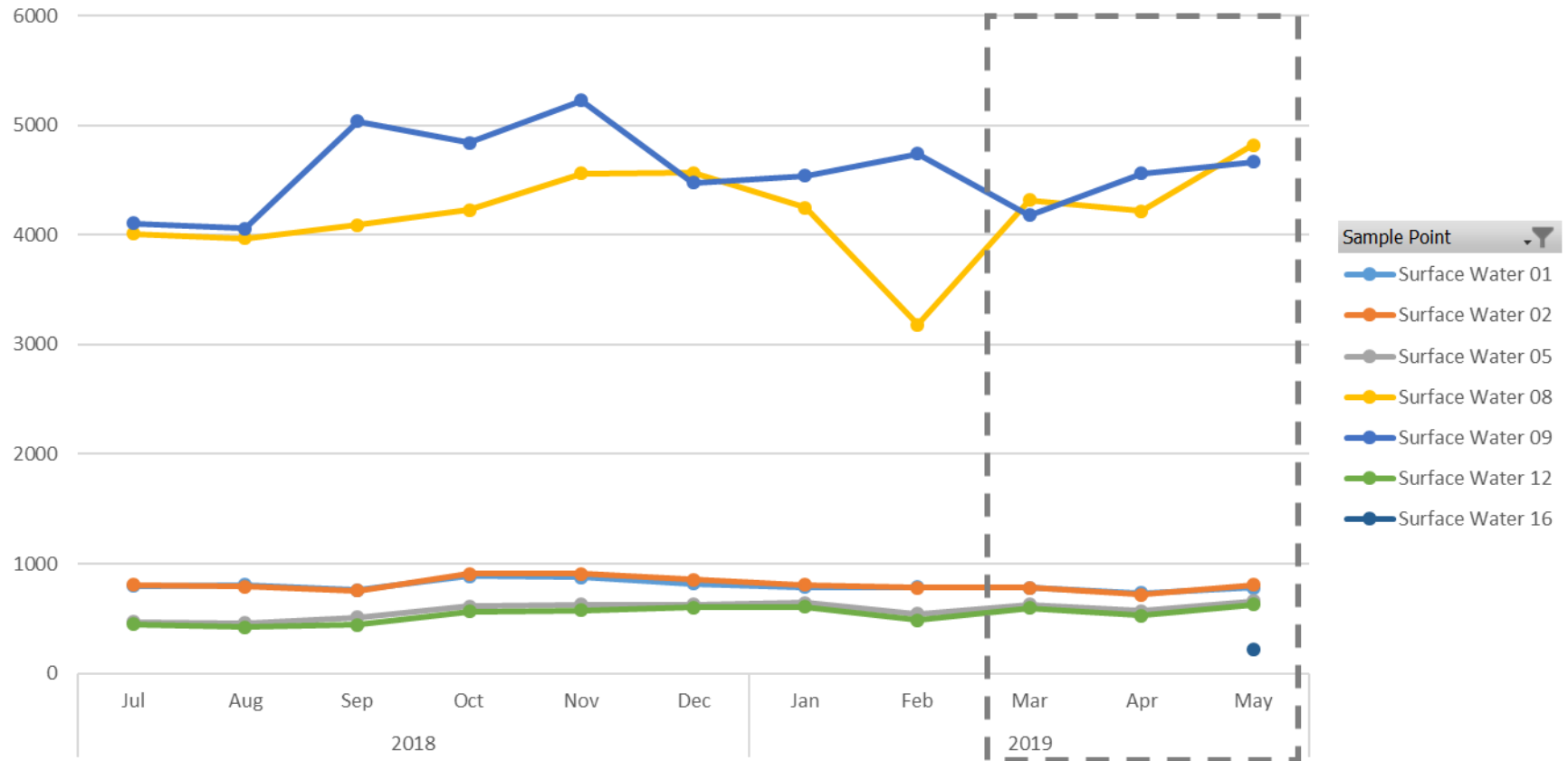


Water Quality - pH



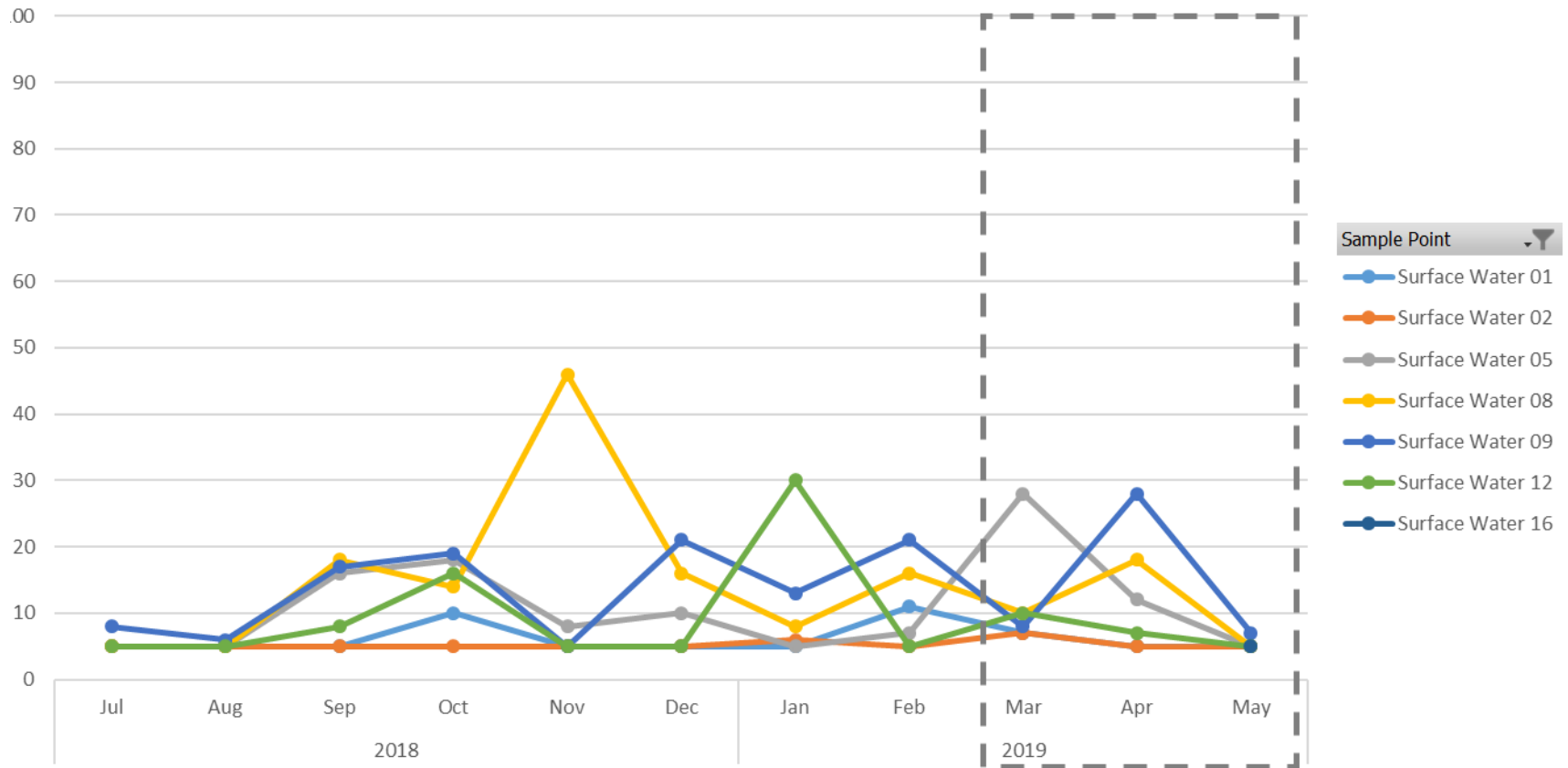
Water Quality - EC

Electrical Conductivity (uS/cm)



Water Quality - TSS

Total Suspended Solids (mg/L)



Air Quality

Site	May 2018 PM10 Annual Average ($\mu\text{g}/\text{m}^3$)	May 2019 PM10 Annual Average ($\mu\text{g}/\text{m}^3$)	Air Quality PM10 Annual Average Criteria ($\mu\text{g}/\text{m}^3$)
Ulan School	14.31	15.17	30.0
Ulan Road	-*	15.88	30.0
Ulan-Wollar Rd	14.69	15.80	30.0

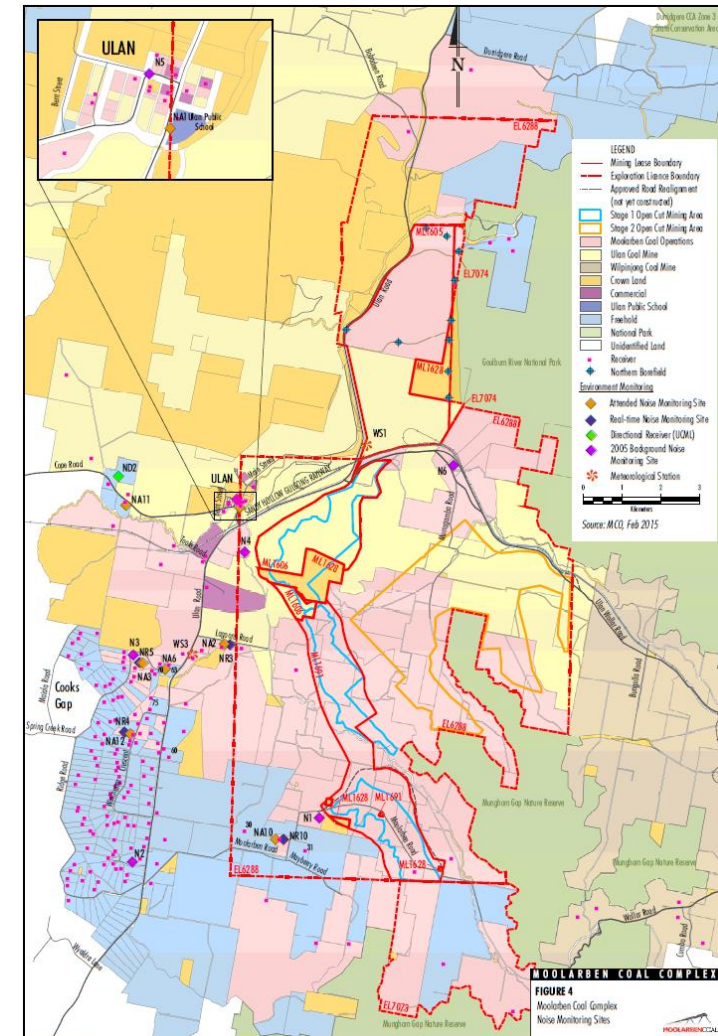
*Insufficient data available to calculate previous rolling annual average. Unit installed August 2017

Monthly monitoring reports are available on our website:

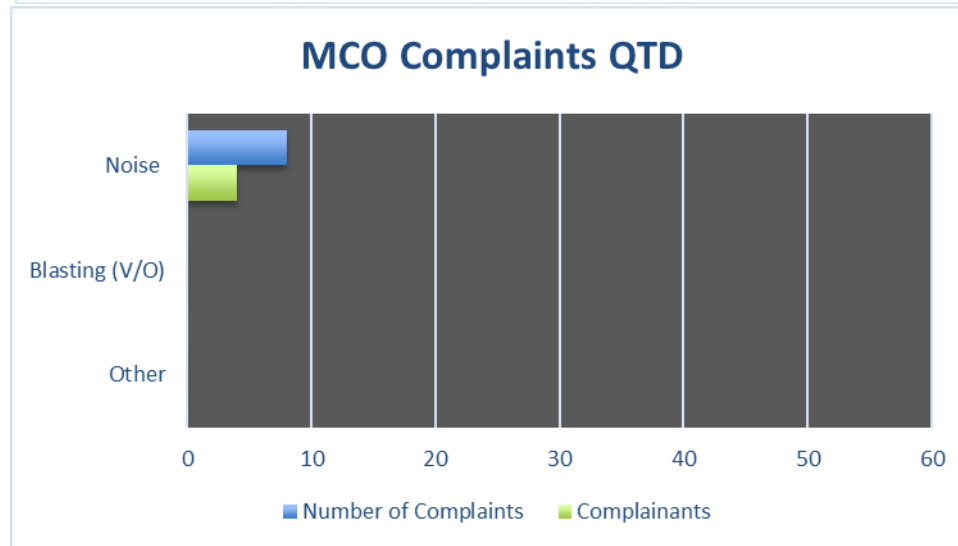
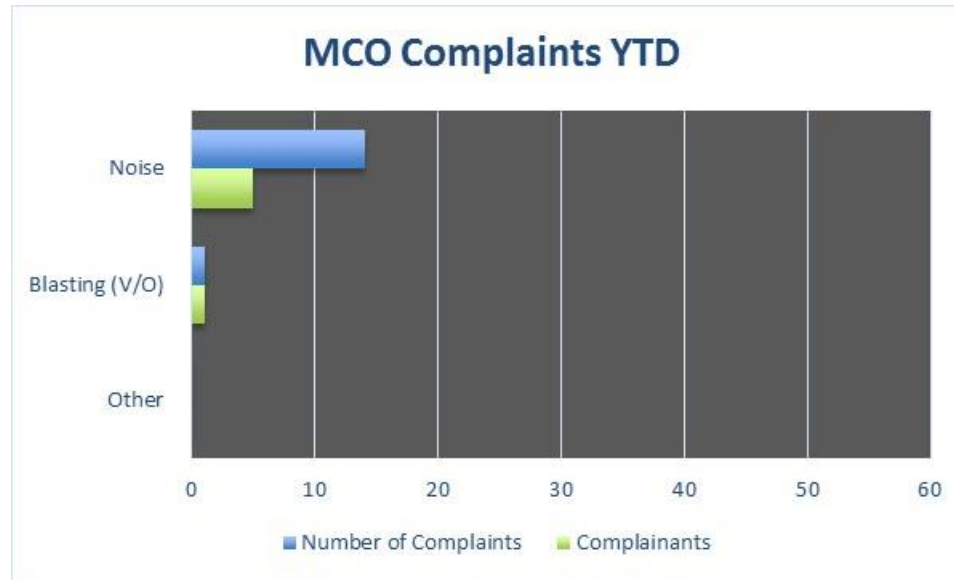
www.moolarbencoal.com.au/environment-and-community/monitoring-results/

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.
- Seeding of 35ha in OC2 completed, further 25ha ready to seed in OC4



Biodiversity Offset Management

- Targeted weed control programs continued across BOA's.
- Scrape steel and general waste removed from BOA's
- Aerial and ground baiting program in conjunction with the LLS and wild dog groups
- Preparations for plantings on Ulan 18 and Bobadeen offsets underway



Employment Update

Traineeships

- Currently 14 OC and 18 UG

Apprentices

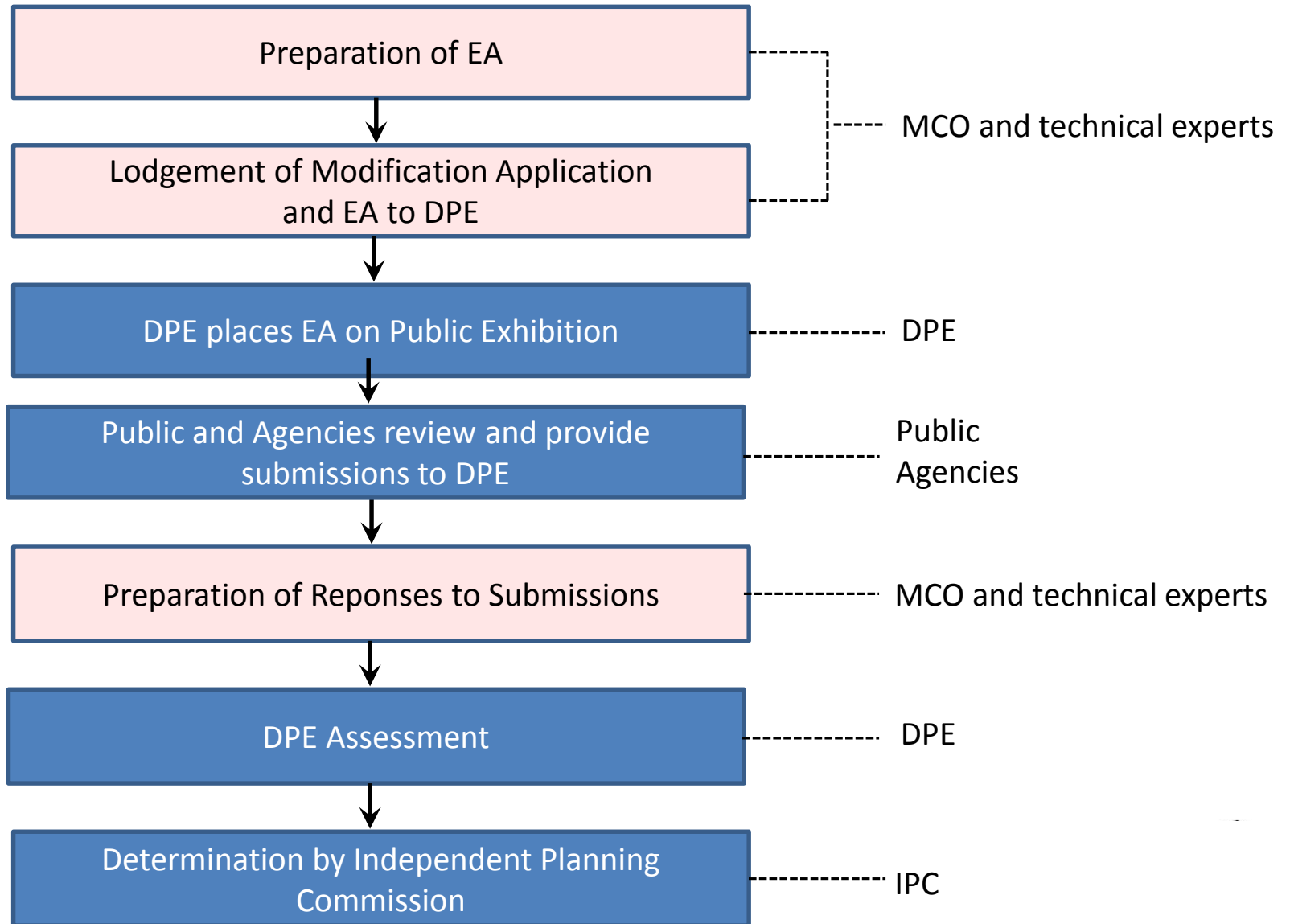
- Currently 5 Underground & 18 Open Cut
- 2 Apprentices to permanent and 1 cadetship

General

- Clontarf Wellington Academy visited site and meet with employees.
- School mine tours planned for June



Open Cut Optimisation Modification Update



Current Status

Thank you

June 2019



2018 Annual Review

June 2019

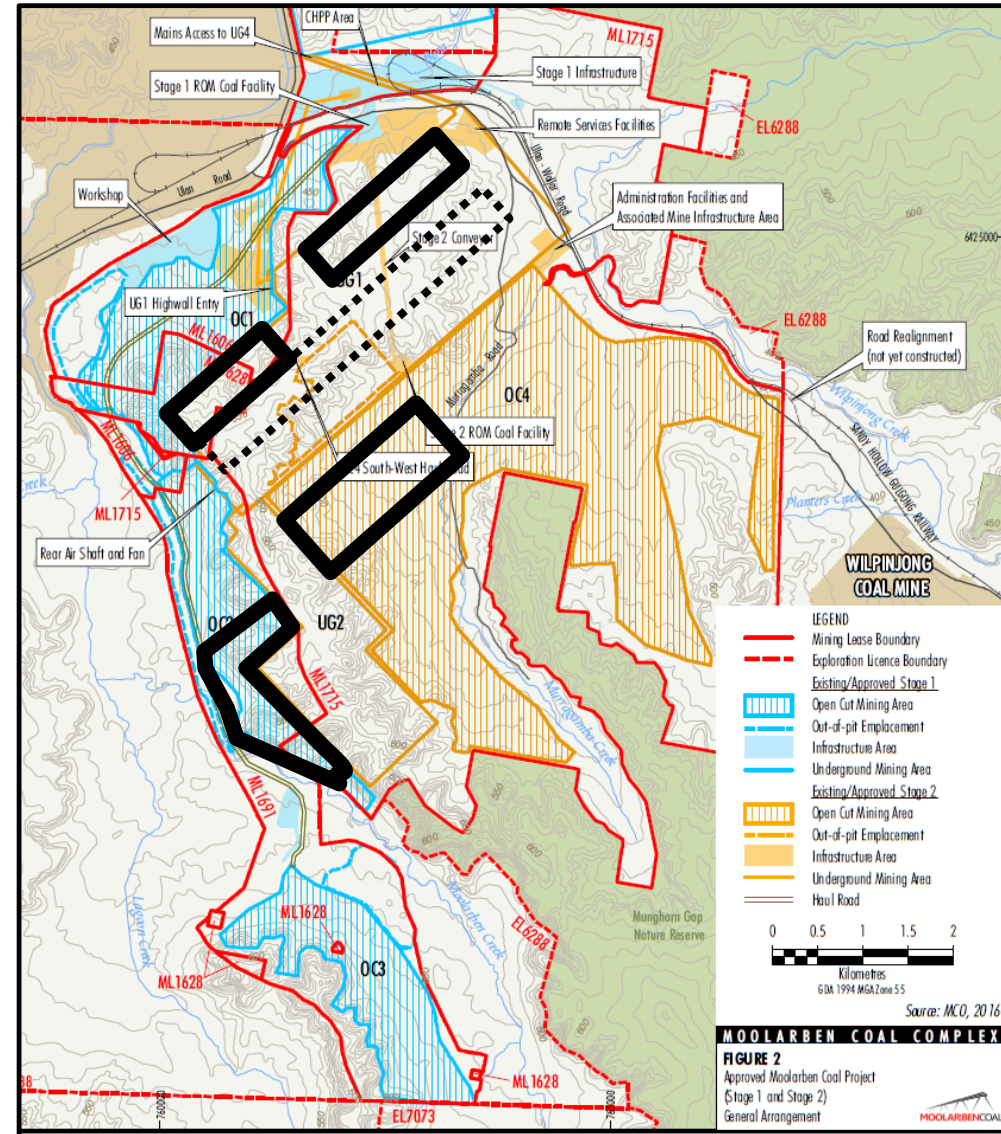


Agenda

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

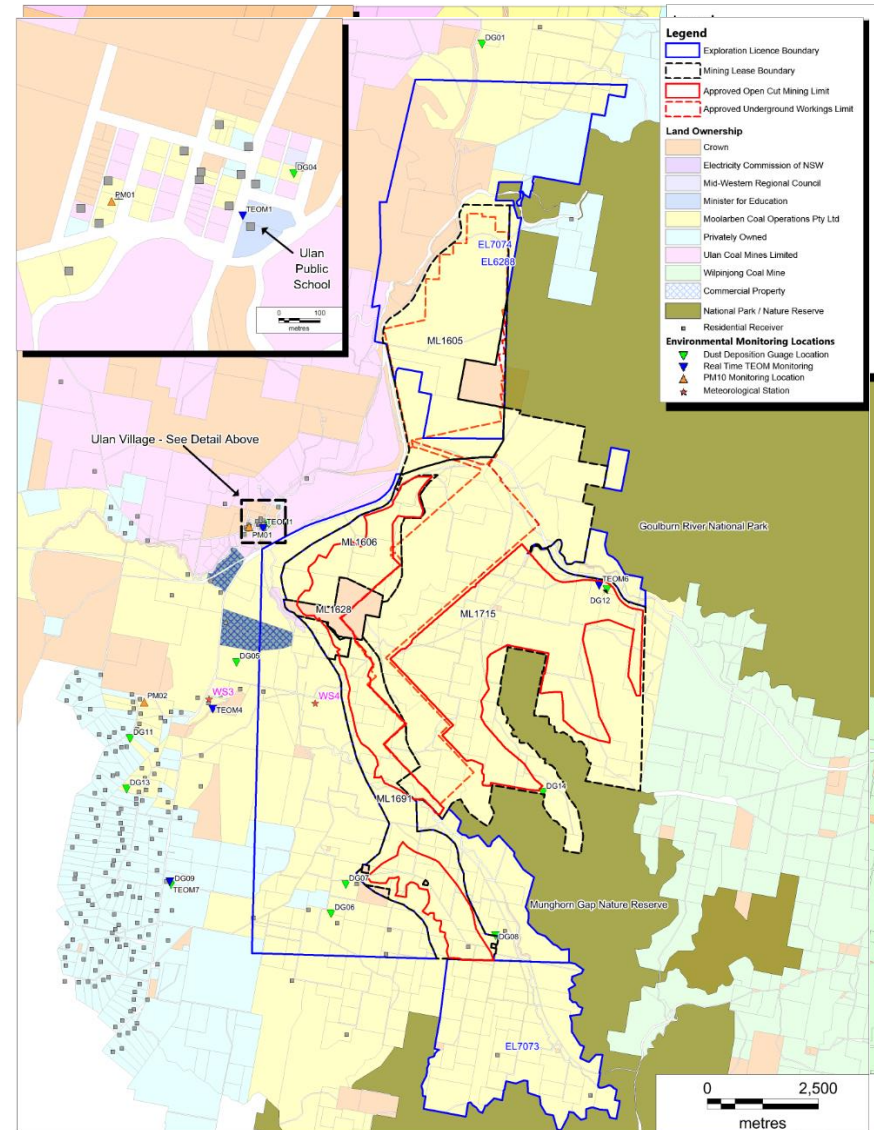
Activities During the Reporting Period

- Preparation for mining in OC2 and OC4
- Mining operations in OC2, OC4 and UG1
- Progressive rehabilitation in OC2 and OC4
- 12.6Mt washed and 16.5Mt railed
- Underground Project completed
- Exploration in EL6288 and EL7073
- Open Cut Optimisation Modification under assessment.
- Mining Operations Plan amendments to reflect mine progression and exploration in MLs



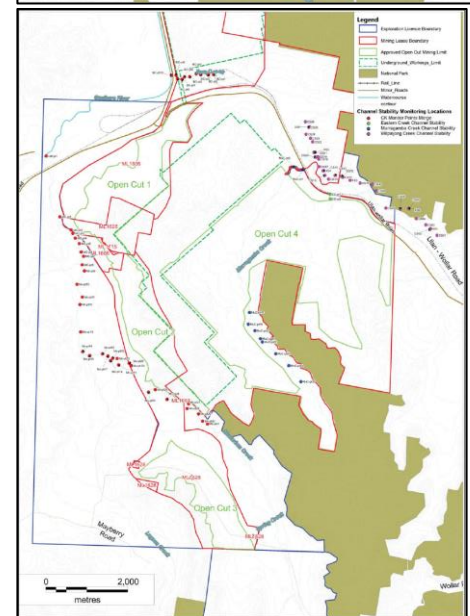
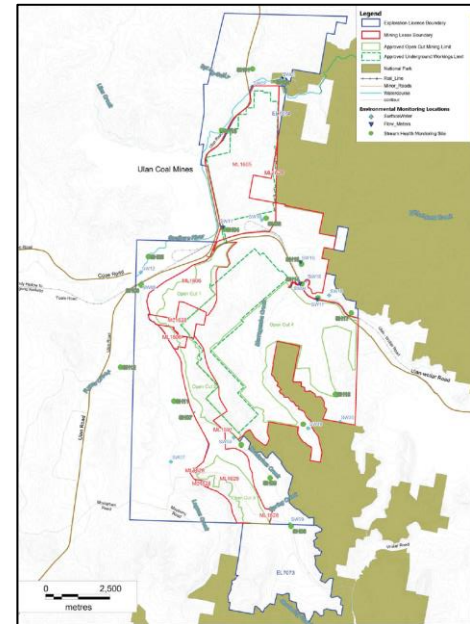
Noise, Blasting and Air Quality

- **Noise**
 - No attended noise monitoring non-compliances.
- **Blasting**
 - No reportable fume events.
 - No vibration or overpressure exceedances.
- **Air Quality**
 - Annual average PM10 below $30\mu\text{g}/\text{m}^3$ criteria.
 - 6 daily results above $50\mu\text{g}/\text{m}^3$ criteria due to regional events.
 - All dust deposition results below criteria.



Water

- **Water**
 - Below average rainfall (492 vs Avg of 652mm).
 - No discharges occurred.
 - Surface water generally consistent with historical range.
 - Decreased rainfall run-off, increased Ulan supply and similar groundwater inflow.
- **Stream Health**
 - Aquatic habitat condition indicate little change with sites stable.
 - Climatic factors and flow regimes are the dominant influence on aquatic ecological.
- **Channel Stability**
 - Stability variable within each creek. Active erosion predominantly the result of natural influences exacerbated by past land use.



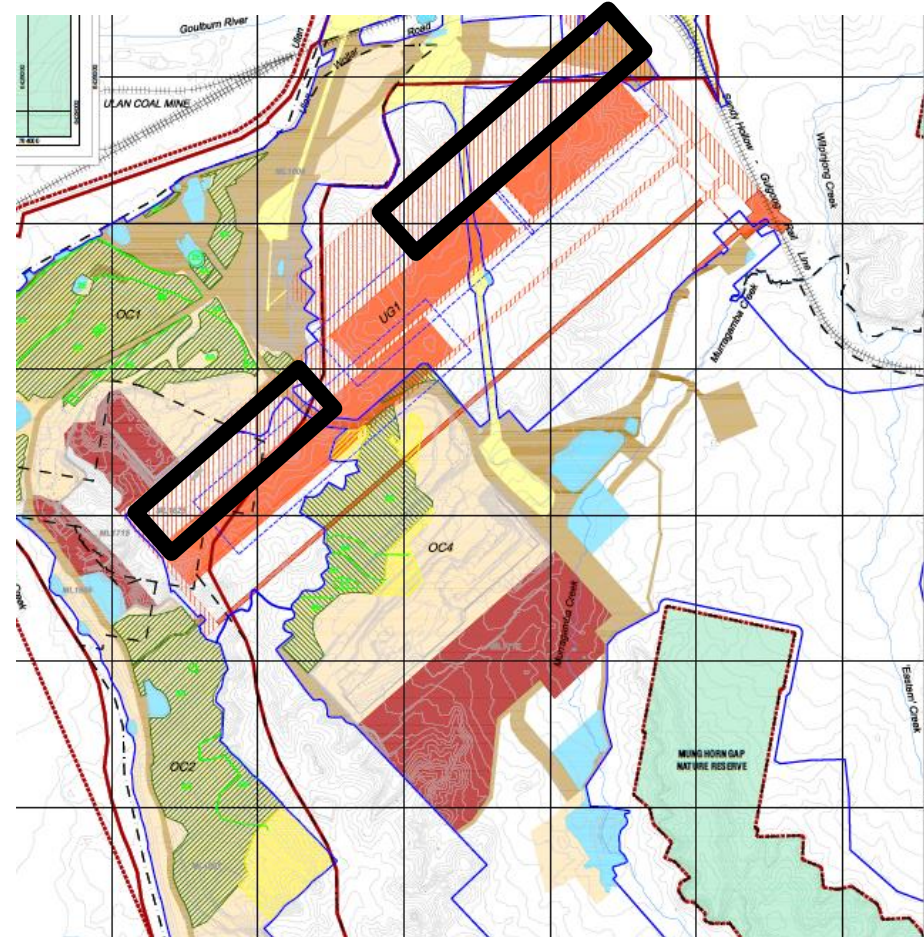
Groundwater

- Groundwater level trends were influenced by the Rainfall Cumulative Deviation (RCD), UG1 mining, open cut operations and regional depressurisation.
- Continued below average rainfall contributed to level reductions.
- Alluvium bores generally exhibit lowering trend.
- Triassic bore levels stable or lowering trend.
- Two groundwater level investigations triggered. PZ105C with localised effect and PZ184 located within OC4 pit.
- Groundwater quality triggered for;
 - PZ058A - Reflects quality in replacement bores.
 - PZ102B and PZ103A – Consistent with historical results.
 - PZ055 which has stabilised.



Mine Subsidence

- Secondary extraction undertaken in Longwall 101 and 102A.
- Subsidence impacts during the period were consistent with predictions.
- No performance measures exceeded.
- No built features impacted by subsidence.



■ Monitoring

- Results influenced by seasonal conditions.
- Monitoring results were variable, Native species diversity and Native Grass species were generally above the benchmark or improved from previous year's results.
- Fauna monitoring results were similar to previous years with fauna sites located within MZ1 recording higher numbers of woodland/remnant indicator bird species than DNG sites.
- Vulnerable and threatened species continue to utilise offsets.



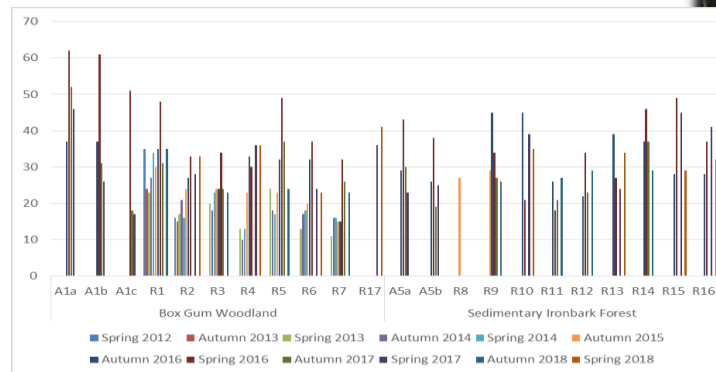
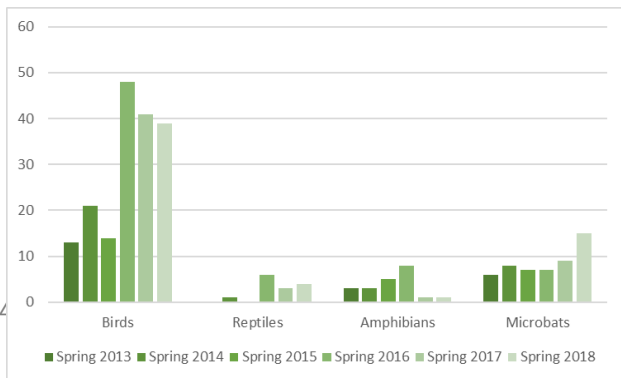
■ Activities

- Over 18 Kilometres of new fencing installed.
- Over 10 Kilometres of redundant fencing removed.
- Over 25 kilometres of track maintenance was completed.
- Feral animal control works undertaken with the surrounding landholders and the LLS. Focused on wild dogs, foxes and pigs.
- Weed control works were undertaken on a variety of noxious weeds including Serrated Tussock, Blackberries, Blue Heliotrope, Tree of Heaven, St Johns Wort, Spiny Rush and Prickly Pear.



Rehabilitation Monitoring

- Landscape organisation (LO) across all sites averaged 0.8 compared to 0.834 to 0.996 for analogue sites.
- Box Gum Woodland and Sedimentary Ironbark Forest site upper strata height continues to be less than respective analogue sites consistent with the maturity.
- Box Gum Woodland rehabilitation continued to exhibited a higher number of native species than exotic.
- 58 native fauna species were recorded during spring 2018, including 4 threatened species.
- Record numbers of microbat species and bird species richness well above the historical average recorded.
- Sections of the rehabilitation are maturing toward functioning woodland ecosystems.



Incidents, Compliance and Complaints

■ Incidents and non-compliances

- Surplus construction material stockpiled contrary to project approval. Included in current Modification.
- Non-continuous PM10 Monitoring – Power supply loss and routine maintenance
- Water Supply/take – Change on model predictions increased modelled passive take resulted in deficit in water entitlements – Additional entitlements purchased.
- Bore notification/forms not provide within 2 months timeframe.
- Oil leak in OC1 fuel farm – Spill contained and disposed.

■ Complaints

- 65 direct complaints from 16 complainants.
- Decrease from the previous reporting period.
- 45% of complaints were received from 2 complainants.
- Noise the primary issue of concern.

Community

■ Engagement

- Moolarben Spirit Awards Program promoting positive contributions in schools.
- Mine tour/career talks with each of the local High Schools and University students.
- Mudgee District High Schools 'Try-A-Trade'.
- Wollongong University vocational student placements.
- Active participation in Wild Dog Groups and the LLS.
- Direct engagement.

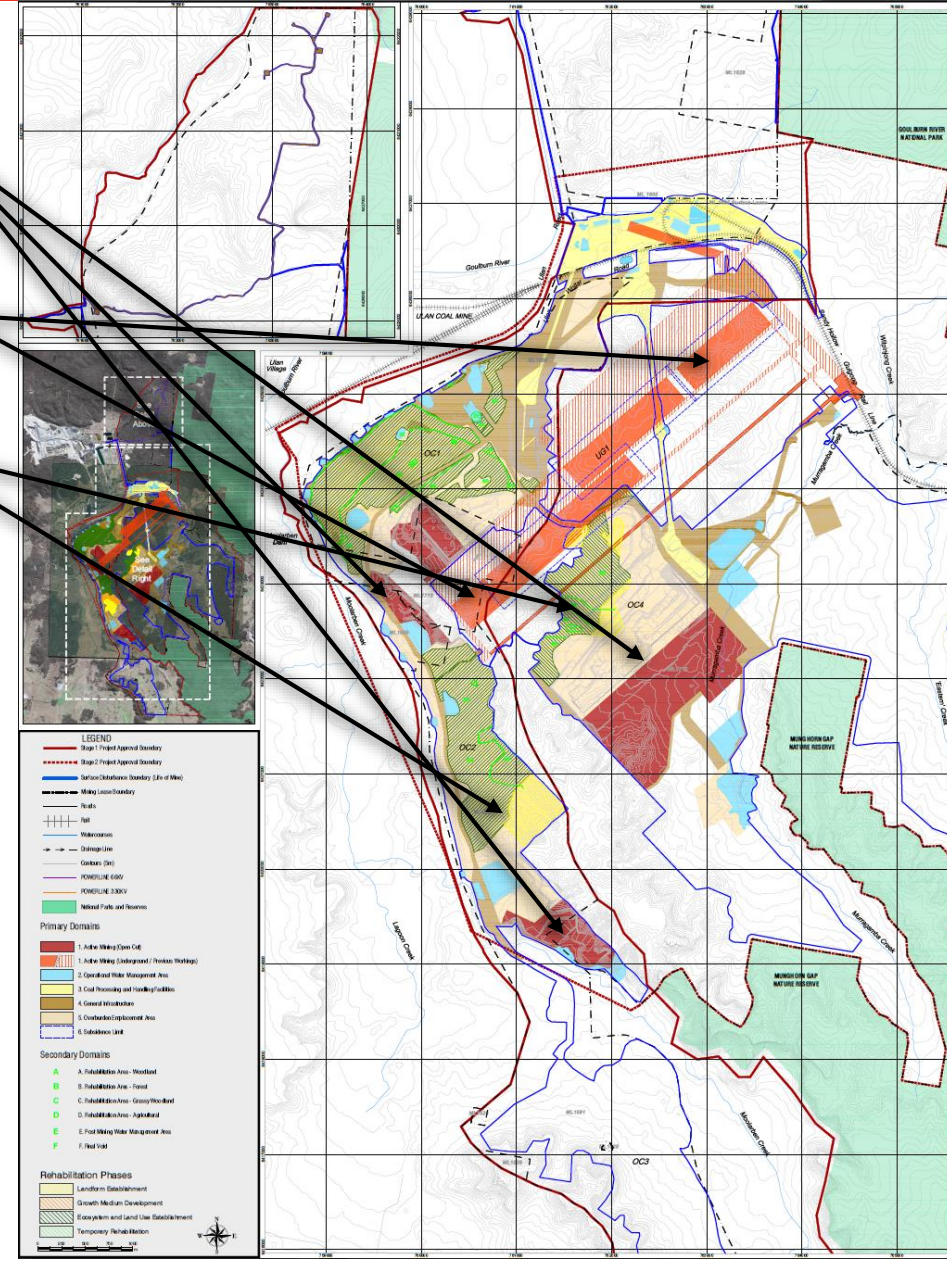
■ Community Support

- Donations and sponsorships provided across 40 local groups and organisations.



Activities Proposed

- Overburden and coal extraction OC2 and OC4.
- UG1 longwall operations in LW102 and 103.
- Progressive rehabilitation
 - OC2; and
 - OC4.
- Resource definition
- Water management works.
- Coal processing and railing
- OC optimisation project works



Thank You



4 June 2019

