MOOLARBEN COAL OPERATIONS - COMMUNITY CONSULTATIVE COMMITTEE
MEETING No. 45

Date: Tuesday 12th June 2018
Time: 4:05pm
Location: Moolarben Coal Open Cut Administration Board Room, Ulan
Attendance: Independent Chairperson
Lisa Andrews (LA)

Community Members
Aleisha Lonsdale (AL)
Cr Des Kennedy – Mayor (Mid Western Regional Council)
Cr John O’Neil (Mid Western Regional Council)
David Stokes (DS)
Helen Ungaro (HU)
Julia Imrie (JI)

Moolarben Coal Operations
Steve Archinal (SA)
Graham Chase (GC)
Trent Cini (TC)
Michelle Frankham (MF)
Mathew Croake (MC)

Apologies
Andrew Palmer and Bev Smiles

A hard copy of the Agenda, Meeting 45 Presentation and 2017 Annual Review Presentation was 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.

2. **Apologies**

Andrew Palmer & Bev Smiles.

3. **Business Arising from Finalised Minutes**

**Meeting 44 Action 1** - *MCO to provide employee numbers.* Approximately 700 full time personnel at MCO with approximately 75% residing in the district. The remainder spend their work time within the district. Approximately 400 contractors from the local area are engaged by MCO on site, with additional contractors providing services offsite.

**Meeting 44 Action 2** - *MCO to notify CCC when RTS submitted.* Email sent to CCC from LA on 29/05/18.

**Meeting 44 Action 3** - *LA to provide link to DPE appointed Chairpersons with the draft CCC minutes.* Email sent to CCC from LA on 26/03/18.

**Meeting 44 Action 4** – *Copy of Annual Review report to be provided to CCC members.* Email sent to CCC from LA on 06/04/18.

**Meeting 44 Action 5** - *Write to DP&E seeking update on the WMP approval.* DPE approved the MCO WMP and CCC was advised on 5/04/18.

4. **Correspondence**

Correspondence to the CCC since meeting 44 included the following:

- 26/3/18 – Draft minutes sent to CCC members for review/comment
- 26/3/18 - Comments on the minutes received back from JI
- 5/4/18 – Email to members advising that the Water Management Plan had been approved and providing a link to the project website
- 6/4/18 – Email to members advising that the AER was now available on the Moolarben Coal website.
- 12/4/18 – Email to members with the finalised minutes and asking if there were any specific issues in the AER that they wish to be presented on.
- 8/5/18 – Email from MWRC advising that the Council resolved to nominate an additional alternate delegate on this CCC, being The Mayor – Cr Des Kennedy.
- 29/5/18 – Email to members with the advice that the Moolarben Open Cut Optimisation Modification Response to Submissions has been submitted to the Department of Planning and Environment.
- 2/6/18 – Email to members with the Meeting Notice & Agenda for this meeting.
- 6/6/18 – Email from Julia Imrie requesting that MCO provide the following information:
  1. Most recent (2018) Triassic and Permian groundwater levels for UG4 monitoring bores PZ105C & B; PZ103C & B; PZ179 (28, 33, 82m); and VWs PZ128 (20, 36, 55m) & PZ129 (35, 53m)
3. Groundwater inflows (water make) for UG1 (e.g. daily median for months January to June 2018)
4. UG4 groundwater extraction (dewatering bores) if commenced.

LA moved the Correspondence be received. DK seconded the Correspondence.

LA advised that in future the Correspondence Report will be included with the Meeting Notice & Agenda for the following meeting.

**CCC Update Presentation**
GC provided an update on the Community Support Program, an operational, drilling and exploration update. JI questioned the water take from the Northern Borefields. GC advised that 6 megalitres had been extracted in 2018. JI expressed disappointment that the CCC was not advised of the application lodgement for the closure of Moolarben Road from MCO to Mid Western Regional Council.

JI asked whether there had been any discussions regarding open cut mining of the common boundary between MCO and Wilpinjong Coal, as the latter appears to be working in that area now. GC advised that both parties will work together regarding boundary agreements and have had preliminary discussions. SA advised that MCO will not be mining the area until after 2030, therefore further discussions will be required closer to the time.

TC provided an update on environmental monitoring as well as an update on water and air quality, noise monitoring, complaints, rehabilitation and offset works. JI questioned whether noise levels had been elevated recently. GC advised that noise can be more audible during winter months due to temperature inversions. SA added that no changes had been made to the operation or to the fleet size or composition. JI noted there had been some particularly loud explosions from blast events and asked whether MCO was responsible for any of the blasts. GC advised that all blast monitoring results have been within compliance limits. SA advised that blast sizes have recently been reduced, (meaning that less volume has been moved per blast). GC added that blast compliance limits are set as ‘nuisance’ levels rather than structural limits. GC added for context that a strong wind has the ability to exceed overpressure limits.

GC provided an employment and recruitment update.

GC provided an update on the Open Cut Optimisation Modification. JI asked what the additional information was that the DPE requested on Modification 14. GC confirmed DPE had requested additional information including contextual queries. JI questioned whether the IPC had set a date for the Public Hearing. GC advised no date had been set as yet.

**2017 Annual Review Presentation**

GC advised that the Annual Review (AR) document which was provided to the CCC is the same document that was provided to the Government Departments, which had not undergone Departmental review or endorsement. GC advised that minor changes have been requested by the Departments, the document would be updated accordingly, and the revised copy uploaded onto the MCO website, a notification will be sent to the CCC when this is completed.

**Meeting 45 Action 1** - Send link to revised 2017 AR to CCC once completed.

GC provided an overview of the 2017 AR, activities completed during the reporting period, environmental performance, water management, rehabilitation, community and activities in the next reporting period.

JI asked how MCO distinguishes between climatic and mining impacts to groundwater monitoring bores. GC advised that this work is conducted by consultants and includes reviews of residual rainfall and seasonal trends. JI
commented that time lags can occur. GC agreed and noted that variable responses have been observed in monitoring results.

LA questioned the location of the Mines Rescue Station at MCO. GC advised the Station is located approximately 4km along Ulan-Wollar Road, from the Ulan Road turnoff. LA suggested a tour of the Station may be relevant for the CCC members.

GC advised that dewatering from UG1, is currently 65 - 70 litres per second including mine-water recirculation and supply. DS questioned the quality of the water from UG1. GC advised that the quality is location dependent. JI asked whether MCO is undertaking advanced dewatering in UG1. GC advised no advanced dewatering is currently being undertaken for UG1. JI asked where produced water is coming from and how much is from groundwater in the Triassic and upper Permian strata. GC discussed the observations of water inflow including from the strata above the coal extraction horizon, the occurrence of Open Cut 1 and 4 adjacent to UG1 and the observation that the initial stages of UG1 were dry. JI commented that the initial groundwater modelling had predicted significantly less volume of water make in the underground and the source of this additional water inflow is still unclear.

5. General Business

DK questioned why MCO CCC meetings are held at 4pm. LA advised the time was to accommodate community members’ working commitments.

General discussion regarding JI’s request for groundwater related information. GC noted that the additional information that had not already been presented, would be provided to the CCC after the meeting.

JI asked whether MCO had any involvement in flagging erected near Ulan School, near the gauging station. GC advised MCO was not aware of the flagging.

JI requested a hardcopy of the MCO 2017 AR.

Meeting 45 Action 2 – MCO to provide hardcopy of revised Annual Review to JI.

Graham advised he will provide answers to JI questions on specific groundwater monitoring bores following the meeting.

JI made reference to the number of roadkill appearing to be more frequent between the mines giving a poor impression for the area. Discussion regarding roadkill numbers being elevated in other areas at present ensued. DK indicated that MWRC is responsible for roads and roadside maintenance.

6. Next Meeting: 11th September 2018 – 4:00pm.

Meeting Closed at 4:56pm

Action Items:

<table>
<thead>
<tr>
<th>Item</th>
<th>Action</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>1</td>
<td>Send link to revised 2017 AR to CCC once completed.</td>
<td>GC/LA</td>
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<tr>
<td>2</td>
<td>MCO to provide hardcopy of revised Annual Review to JI.</td>
<td>GC</td>
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Community Support Program

Round 1  Complete  Applicants to be notified

Round 2  Now Open  Applications close Friday 17th August

New tennis courts for Goolma

GOOLMA Tennis players are welcoming their new grand slam tennis courts after they were recently renovated.

Funding for the repairs and resurfacing was provided by Yancoal Australia's Moolarben operation.

"After more than seven decades of tennis matches at Goolma, the courts have never looked so good," Goolma Tennis Club amenities president Lesley Tink said.

"Tennis is a big part of the Goolma community, every Friday night in summer the courts come alive with our annual competition and during winter, we play on a Sunday."

"Up to 150 members use the courts and we are excited and confident the newly resurfaced courts will provide for many future tournaments."

Moolarben Coal general manager Steve Archinal, said, "we are proud to be helping build stronger and better communities through the support of such a diverse range of organisations."

"This is fantastic for local tennis in Goolma. Tennis can unite a community, bringing people together to compete, exercise and socialise," Mr Archinal said.
Operational Update

- Open cut operations in OC2 & OC4.
- Landform shaping OC2 and OC4.
- Longwall LW101 nearing completion.
- Longwall move planned for June/July.
- UG development continues.
- Northern borefields operational.
- Moolarben Road closure application submitted.
Exploration Update

- Resource delineation continued in OC4 & OC3.
- Exploration program commenced in EL7073 and continues in EL6288.
- Rehabilitation and monitoring activities have continued during the period.
Environmental Monitoring

- Monitoring network
  - Water;
  - Air Quality;
  - Blasting;
  - Noise;
  - Meteorology.
Water Quality - pH
Water Quality - TSS
## Air Quality

<table>
<thead>
<tr>
<th>Site</th>
<th>April 2017 PM10 Annual Average (µg/m³)</th>
<th>April 2018 PM10 Annual Average (µg/m³)</th>
<th>Air Quality Criteria (µg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ulan School</td>
<td>11.1</td>
<td>13.86</td>
<td>30.0</td>
</tr>
<tr>
<td>Ulan Road</td>
<td>-</td>
<td>14.7*</td>
<td>30.0</td>
</tr>
<tr>
<td>Ulan-Wollar Rd</td>
<td>10.2</td>
<td>14.2</td>
<td>30.0</td>
</tr>
</tbody>
</table>

*Relocated site. Average since establishment

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
Rehabilitation Update

- Autumn Monitoring has been completed for 2018
- White Box occurrence has increased since 2017, a key canopy species for Box Gum Woodland
- Total number of species recorded within the rehab remained consistent with previous years
- Total species richness within each site during autumn 2018 ranged from 23 to 35 species
Biodiversity Offset Management

- Targeted weed control programs across all BOA’s, including specific program for Serrated Tussock (*Nassella trichotoma*) on the Dun and Nori BOA’s.
- Continued Wild Dog management programs across all BOA’s in conjunction with LLS and neighbours.
- Over 4km of fencing completed thus far for 2018 across BOA’s
Employment Update

Traineeships
- Currently 4 Underground and 8 Open Cut

Apprentices
- Currently 6 Underground & 15 Open Cut

General
- Operations recruitment on-going.
- 5 “New to Industry” operators.
- “Try a Trade” at Mudgee High School - 26/27th June
- Moolarben Spirit Awards winners – Gabrielle Lane and Ned Dixon
Responses to Submissions

- RTS lodged with Department of Planning and Environment (DPE) in May 2018

- RTS provides:
  - Summary of actions undertaken since lodgement of the EA.
    - Proposed staged increase to controlled release volume limits.
    - Additional assessment by RGS Environmental, Advisian and MPR to justify salinity limits.
    - EPL variation to confirm final controlled release limits.
    - Additional groundwater monitoring bores in the vicinity of OC3.
  - Responses to all submissions from government agencies and council.
  - Responses to all submissions from non-government organisations and the public.

- DPE is currently assessing RTS.
Open Cut Optimisation Modification Update

1. Preparation of EA
2. Lodgement of Modification Application and EA to DPE
3. DPE places EA on Public Exhibition
4. Public and Agencies review and provide submissions to DPE
5. Preparation of Responses to Submissions
6. DPE Assessment
7. Determination by Independent Planning Commission (formerly the “PAC”)

Key:
- MCO and technical experts
- DPE
- Public Agencies
- IPC
Community Consultative Committee Update

THANK YOU

June 2018
Agenda

• Overview
• Activities During the Reporting Period
• Environmental Performance
• Water Management
• Rehabilitation
• Community
• Activities in the Next Reporting Period
Activities During the Reporting Period

- Preparation for mining in OC2 and OC4
- Reshaping, topsoiling and seeding in OC2 and OC4.
- Mining Operation in Open Cut 1, 2 & 4 and Underground 1.
- 13.5 Mt washed and 12.4Mt railed.
- Underground Project
- Exploration in EL 6288 and mine areas
- Temporary CHPP wash limit increase approved.
- Open Cut Optimisation Modification submitted.
- LW101-103 Extraction plan approved.
Noise, Blasting and Air Quality

- **Noise**
  - No attended noise monitoring non-compliances.

- **Blasting**
  - No reportable fume events
  - No vibration exceedances.
  - One blast overpressure exceedance recorded at BM5 due to wavefront reinforcement.

- **Air Quality**
  - Annual average PM10 below 30µg/m$^3$ criteria.
  - 2 daily results above 50µg/m$^3$ criteria. Both due to bushfires
  - All dust deposition results below criteria
Water

- **Surface Water**
  - No discharges occurred
  - Generally consistent with historical range

- **Stream Health**
  - Aquatic habitat condition trends indicate sites stable.
  - Climatic factors and flow regimes are the dominant influence.

- **Channel stability**
  - Variable within each creek. Active erosion due to natural influences exacerbated by past land use.
  - Negligible impact due to mining operations
Groundwater levels were influenced by the rainfall, mining operations and regional depressurisation due to neighbouring operations.

- Draw-down due to mining operations observed in the Ulan seam and Permian measures.
- Groundwater quality triggered for PZ184 – Consistent with historical, and PZ55 which has stabilised.
- Additional piezometers installed east of UG1.
Mine Subsidence

- Longwall LW101 commenced and retreated 709m.
- Subsidence consistent with predictions.
- No performance measures exceeded.
- No built features impacted by subsidence.
Environmental Performance – Land and Offsets

Offset Monitoring

- The majority of sites recorded a minor decrease in native species richness since 2016. Results influenced by seasonal conditions.
- Vulnerable and threatened species continue to use offsets.
- Winter bird monitoring targeted but did not identify any Swift Parrots and Regent Honeyeaters however identified five threatened species listed under the NSW BC Act.

Activities

- Planting undertaken in Bobadeen offset.
- Fencing replacement and maintenance activities completed.
- Track maintenance undertaken.
- Feral animal control works undertaken across MCO lands in consultation with the surrounding landholders and the LLS.
- Weed control works were undertaken
- Avisford 1 offset area gifted to the National Parks Estate.
Rehabilitation

- 49ha shaped, topsoiled and seeded.
- 57ha reshaped and/or topsoiled.
- Temporary rehabilitation of UG project areas

Monitoring

- Sections progressing to functioning woodland ecosystems as shown by:
  - Record numbers of microbat species observed
  - Bird species richness was well above historical average.
Community

- **Complaints**
  - 115 direct complaints from 17 residents.
  - Noise the primary issue of concern.

- **Ulan Road Strategy**
  - The Council continues Ulan Road capital and maintenance works.
  - 18 Ulan road properties considered for traffic noise works. 2 property agreements to be finalised.

- **Community Support**
  - $146,799 of donations and sponsorships across 45 local groups and organisations.
  - Numerous community events with schools, universities.
  - Coal Services Mines Rescue Station officially opened.
Activities Proposed

- Overburden and coal extraction OC2 and OC4.
- UG1 longwall operations in LW101 and 102.
- Resource definition
- Rehabilitation in OC2 and 4
- Coal processing and railing
- Underground Project Completion
THANK YOU