MOOLARBEN COAL OPERATIONS - COMMUNITY CONSULTATIVE COMMITTEE
MEETING No. 43

Date: Tuesday 5th December 2017
Time: 4:06pm
Location: Moolarben Coal Open Cut Administration Board Room, Ulan
Attendance:
Independent Chairperson
Lisa Andrews (LA)

Community Members
Aleisha Lonsdale (AL)
Andrew Palmer (AP)
Bev Smiles (BS)
David Stokes (DS)
Cr (Mayor) Des Kennedy (DK)
Helen Ungaro (HU)
Julia Imrie (JI)

Moolarben Coal Operations
Steve Archinal (SA)
Graham Chase (GC)
Mathew Croake (MCr)
Michelle Cavanagh (MCa)
Trent Cini (TC)

Apologies
Councillor O’Neil (Mid-Western Regional Council)
Councillor Cavalier (Mid-Western Regional Council)

A hard copy of the Agenda and Meeting 43 Presentation was provided to all meeting attendees.

1. Introduction and Welcome

Lisa Andrews (LA) confirmed she is engaged by Moolarben Coal Operations (MCO) to chair the CCC meeting.

2. Apologies

Councillor O’Neil and Councillor Cavalier (Mid-Western Regional Council).

3. Business Arising from Finalised Minutes

There was no business arising from the minutes of Meeting 42.
4. Correspondence

Correspondence to the CCC since meeting 42 included the following:

20/9/17 – Draft minutes sent to CCC members from LA for review/comment, however, resent on 30/9/17 with an extended time frame due to a technical difficulty. Comments received back from BS & JI.

17/10/17 – Finalised minutes sent from LA to CCC members.

18/10/17 – Email from Mid-Western Regional Council advising that on 20th September 2017 it resolved to appoint Cr Paul Cavalier and Cr John O’Neill as Council’s representatives on the CCC until the end of August 2018. Both Councillors are on the CCC email distribution list.

18/10/17 – Acknowledgement email back to MWRC from LA.

9/11/17 – Email/Letter from Subsidence Advisory NSW, advising of the changes to the mine subsidence compensation system.

10/11/17 – Mine Subsidence Compensation information forwarded from LA to CCC members.

11/11/17 – Email from BS to LA advising that MOD 14 was on exhibition & requesting a hard copy of the EA for the Mudgee District Environment Group.

11/11/17 – Email to CCC members from LA with Modification information and advising that the closing date for submissions is 7/12/17.

13/11/17 – Email from JI to LA regarding water issues associated with the MOD.

29/11/17 – Email form DS to LA with his completed Declaration of Interest forms.

5/12/17 - Email from MWRC to LA advising that Mayor Des Kennedy would be representing the Council at Meeting 43.

LA moved the Correspondence. AP seconded the Correspondence.

5. CCC Update Presentation

GC provided an update on community, the opening of the Coal Services Moolarben Mines Rescue Station and Moolarben Underground, an operational update, exploration, environmental monitoring, complaints, rehabilitation, an Underground Project update and an employment update.

JI questioned the nature of works being carried out between Bobadeen Creek and the Ulan Road. TC advised trees were being planted on the offset property.

BS questioned where the noise complaints were coming from. GC advised the complaints were primarily coming from the Cooks Gap region.

BS requested a copy of the area of disturbance compared to the areas of rehabilitation. GC confirmed that the disturbance and rehabilitation areas would be provided in the Annual Review.

Meeting 43 Action – Include a slide in the Annual Review presentation on rehabilitation.

BS questioned when the Underground operation would start extraction. GC confirmed that extraction commenced with the start of the longwall with ongoing commissioning.

BS questioned when the Underground would be fully operational. GC confirmed early 2018.

BS questioned whether additional trains associated with the proposed Modification would occur immediately following approval. GC advised the ramp up in train numbers would be progressive.

JI asked what was the current water make and take in Underground One and what month groundwater increased to 65L/s advised in the June CCC meeting. GC advised the increase was experienced progressively and the volumes would be reported in the Annual Review.
JI questioned the groundwater model inputs. GC advised that MCO completes a groundwater model, monitors groundwater levels, reviews the model, and re-validates the model.

BS questioned the connection between Open Cut 1 void and the Underground 1 water. GC confirmed that the water from Open Cut 1 void moves through to the Underground operation; and that water transfer to and from the location.

JI expressed her concerns regarding the MCO Groundwater Model including assumptions made and differences with Ulan’s model.

An update was provided on the Open Cut Optimisation Modification.

BS noted that the CCC was not advised of the Modification lodgement and request that the CCC be advised in future. GC explained that DP&E provided a list of stakeholders which the Modification must be provided to, which did not include the CCC and apologised for the oversight. GC committed to notifying the CCC of Modification lodgement dates in future.

**Meeting 43 Action 2** – Advise CCC Chairperson once MCO receives notification from DP&E that a Modification has been referred to the independent Planning Assessment Commission (PAC).

BS questioned how the haul road between Open Cut 2 and 3 would interact with Moolarben Creek. GC advised that the Creek would run under the haul road through culverts.

BS questioned whether MCO water is currently treated. GC advised that it is not and that MCO has not released water offsite in recent years.

GC advised that rehabilitation in OC2 is proposed to change from a final land use of agriculture, to a final land use of native forest/woodland with the Modification. BS questioned whether MCO intends to use the rehabilitation as offsets. GC advised that the majority of offset requirements are met by the Gilgal property and residual offsets requirements may be met alternative offset mechanisms which may include rehabilitation. BS questioned why the final land use had changed. GC advised that the change had come about following discussions with the Department of Resources and Geosciences in order to improve the final land use outcome.

JI questioned whether a void would remain in Open Cut 3. GC advised that the modification did not include any change to the final void.

6. **General Business**

BS noted that the CCC would appreciate a copy of the Spring Newsletter and would appreciate a copy of future Newsletters.

A hardcopy of the Spring 2017 Newsletter was subsequently provided to all members of the CCC.

DS raised a community concern that trees were being planted in proximity to Ulan-Cassillis Road on the Bobadeen property and whether the trees could be planted greater than 500m from the road to discourage Kangaroos from crossing the Ulan Road. GC advised that the majority of the property includes regeneration for biodiversity offset purposes and that this would be consistent with Ulan road immediately to the south which has vegetation adjacent to road on both sides.

**Meeting 43 Action 3** – GC to provide map of offset areas to LA.

JI inquired about the Spring and Seeps survey referred to in the 2016 Annual Review and for CCC to be provided with the report. GC confirmed the Springs and Seeps report would be provided in the 2017 Annual Review. JI noted she believed that the original Springs and Seeps studies did not identify all springs and seeps and GDEs in the area, including in Munghorn Gap near Open Cut 3.
JI referred to her surface water complaint lodged to MCO and UCML and the source of surface water turbidity flowing under Ulan road following recent rainfall, and commented there was a significant delay of up to 20 hours between the rain event and turbidity in the Goulburn River. GC noted that some exposed area were present near the old airstrip and that the paddocks had been heavily grazed by kangaroos recently during the dry winter.

JI asked whether MCO tested mine water for organic pollutants such as TPH, BTEX and phenols which are reported to be present in Permian Coal Measures.

JI advised that Google Maps directs visitors to Goulburn River Stone Cottages through Moolarben Coal private property and requested the MCO also contact Google Maps to rectify the map error which places the public at risk.

7. Proposed 2018 CCC Meetings

The following dates were proposed for the 2018 CCC meetings, commencing at 4pm.

- Tuesday 13 March;
- Tuesday 12 June;
- Tuesday 11 September; and
- Tuesday 27 November

8. Next Meeting: 13th March 2017 – 4:00pm.

*Meeting closed at 5:05pm with LA thanking all CCC members for their contribution and commitment throughout 2017. She wished all members a happy festive season and safe new year.*

**Action Items**

<table>
<thead>
<tr>
<th>Item</th>
<th>Action</th>
<th>By Whom</th>
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<tbody>
<tr>
<td>1</td>
<td>Include a slide in the Annual Review presentation on rehabilitation</td>
<td>GC</td>
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<tr>
<td>2</td>
<td>Advise CCC Chairperson when modification is referred to PAC</td>
<td>GC</td>
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<tr>
<td>3</td>
<td>Map of offset area to be distributed to CCC members</td>
<td>GC/LA</td>
</tr>
<tr>
<td>4</td>
<td>Moolarben Coal to contact Google Maps to support JI’s representations regarding incorrect road directions (passing through Moolarben mine site)</td>
<td>GC/JI</td>
</tr>
</tbody>
</table>
Community Consultative Committee Update

December 2017
Community Support Program

- $1 Million Milestone Reached!
- Donations spanning 7 years and over 200 local organisations to support local sporting, educational, cultural and environmental projects in the Mid-Western region.
- 31 community organisations have been granted over $80,000 for local initiatives and projects in 2017 alone.
Community Support Update

Mid-Western Dance Festival

Hargraves-Triamble Pony Club

M3 Maths Challenge
Welcome to the Spring 2017 edition of the Moolarben Community Newsletter.

As a reminder, our Community Support Program has declined over the $1 million mark, since in 2016 we have helped fund over 100 local initiatives to a range of areas including environment, sport, education and safety. Investing the $1 million is significant towards demonstrating beneficial ongoing value to the local community.

The Moolarben Underground Operation is contributing to the commencement of the Longwall, with numerous pieces of equipment active on site for the past few months. It is exciting to see the ramp up of training and learning of our permanent underground workforce and it's great to see so many new faces on site.

All the best,
Steve Archbold

Moolarben brings home the Coal Miners Cup

On Tuesday 27th August, over 690 people participated in the annual Blue Diamond Coal Cup, which is the premier mining industry sporting event in South-East Queensland.

The Mine Manager, Ben Cargill, said that the Coal Miners Cup is a great chance for the mining community to come together and have some fun.

Moosanbar Mine and CQ Coal won the Coal Miners Cup in the Men’s Division, with Moosanbar Mine taking out both the Mine Team and Mine Worker of the Year awards.

Planning and Approvals Update

Moolarben Coal continues to work in improving the approval of the Longwall mining project. To date, the project has received approval for the construction and operation of the Longwall mining project. This includes the approval of the underground mining proposal, the community consultation program, and the environmental assessment.

The approvals include conditions for the project to be conducted in accordance with the relevant environmental and safety legislation, and the requirements of the consent conditions. The project will be subject to ongoing consultation and monitoring throughout its operation.

Dyst and approvals can be found on our website at www.moolarbencoal.com.au

Underground Longwall update

The construction of the new underground Longwall has well exceeded expectations. Over the past few months various components of the Longwall have been delivered to site and installed underground and ongoing commissioning of this equipment is now progressing. The Longwall has been built and testing and training the workforce is now ready to begin production.

The use of the highly experienced and industry leading teams of Moolarben is ensuring the continued success of the Longwall.

Try A Trade

In partnership with the Queensland Government’s Try A Trade program, Moolarben’s Mine Manager, Ben Cargill, said that the program is a great opportunity for young people to explore the mining industry.

Try A Trade is designed to provide young people with the opportunity to experience the mining industry and consider it as a potential career path.

Moolarben is a leading employer in the mining industry and is proud to support this program to ensure that young people are able to explore the mining industry and see the potential it offers.

More information on the Try A Trade program can be found on the Queensland Government’s website.
Moolarben Mine Rescue Station Update

- Moolarben Mines Rescue Station officially opened on 1st December

- Coal Services Western Region First Aid competition
  - 9 teams from 5 operations.
  - Congratulations to the winning Ulan Underground Team
Underground Opening

- Opening
  - Delegation attended from Caterpillar, Downer, Yankuang, Yanzhou and Yancoal
Operational Update

- Open Cut operations in OC2 and OC4.
- Landform shaping OC2 and OC4.
- UG1 development continues
- Longwall commenced in October
- Northern Borefield – Drilling complete. Pipe/electrical works in progress.
Drilling Update

- Drilling program undertaken in UG4 and OC4.
- Exploration program in progress in EL6288 south areas.
- 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

![Graph showing TSS levels for different water sources from November 2016 to December 2017. The graph displays peaks and trends for various locations, indicating variations in water quality.]
## Air Quality

<table>
<thead>
<tr>
<th>Site</th>
<th>November 2016 PM10 Annual Average (µg/m³)</th>
<th>November 2017 PM10 Annual Average (µg/m³)</th>
<th>Air Quality PM10 Annual Average Criteria (µg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ulan School</td>
<td>13.5</td>
<td>12.5</td>
<td>30.0</td>
</tr>
<tr>
<td>Ulan Road</td>
<td>-</td>
<td>11.3*</td>
<td>30.0</td>
</tr>
<tr>
<td>Ulan-Wollar Rd</td>
<td>11.1</td>
<td>12.7</td>
<td>30.0</td>
</tr>
</tbody>
</table>

*Relocated site. Average since establishment

Monthly monitoring reports are available on our website:  
Noise Monitoring

- All monthly & quarterly attended noise monitoring within criteria.
- NR10 Real-time noise unit installed (Moolarben Road).
- Continued implementation of:
  - Planning controls - scheduling
  - Engineering controls - attenuation
  - Operational controls - bunds/screens
  - Real-time monitoring triggers
  - Real-time response protocols
Community Complaints

Number of Complaints 2017

Complaints by Type - 2017 YTD
Rehabilitation Update

- Approximately 70ha of rehabilitation has been undertaken at the MCC during 2017
- 30 ha is currently being topsoiled for seeding
- A further 20ha is being shaped to final landform for topsoiling and seeding in the first half of 2018
UG Project Update

- Longwall commenced in October. Commissioning continues.
- Fan commissioning complete.
- Material handling system commissioning from Oct to Dec 17.
- Progressive demobilisation of people and equipment and close out of areas.
- Rehabilitation close out continues.
Employment Update

Traineeships
- Currently 10 Underground and 7 Open Cut
- Next round January
  - Underground x 5
  - Open Cut x 8

Apprentices
- Currently 4 Underground and 15 Open Cut
- Next round January 2018
  - Underground x 2
  - Open Cut x 4

- Underground and Open Cut recruitment on-going.
Open Cut Optimisation Modification Update Assessment Process Overview

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 DPE or Independent Planning Commission (formerly the “PAC”)

Current Status

- MCO and technical experts
- DPE
- Public
- Agencies
- MCO and technical experts
- DPE
- Minister for Planning or Delegate
Proposed modifications:

- Open cut production limits
- OC3 infrastructure and OC3/OC2 pit limits
- OC2 to OC4 internal road
- Bypass conveyor
- Water treatment facilities and relocated EPL release point
- Final landuse in OC2 and OC3 (proposed change to native vegetation from agricultural grazing land)
- Other minor infrastructure changes within extent of approved disturbance
Increased Open Cut Product Limits

**OPEN CUT OPERATIONS**

- **Stage 1 Open Cut (OC1 - OC2 - OC3)**
  - 9 Mtpa ROM
  - 10 Mtpa
  - Total OC = 13 Mtpa ROM

- **Stage 2 Open Cut (OC4)**
  - 12 Mtpa ROM
  - 16 Mtpa
  - Total OC = 16 Mtpa ROM

**UNDERGROUND OPERATIONS**

- **Stage 1 Underground (UG4)**
  - 8 Mtpa ROM
  - Total UG = 8 Mtpa ROM

- **Stage 2 Underground (UG1 - UG2)**
  - 8 Mtpa ROM

- **CPP**
  - 16 Mtpa
  - Total ROM 24 Mtpa

- **Bypass**
  - 18 Mtpa
  - Product

- **Rail Off-site**
  - 22 Mtpa
  - Product

Average of 7 trains/day
Max 9 trains/day

Average of 8 trains/day
Max 11 trains/day
OC3 Infrastructure and OC2/OC3 Pit Limits

- Realigned OC2 to OC3 haul road
- Relinquishment of approved disturbance and OC3 out of pit emplacement
- Relocated OC3 MIA
- OC3 revised pit limits
- OC2 revised pit limit
OC2 to OC4 Internal Road

- Movement of mining equipment
- Alignment follows existing track
- No haulage of waste rock or coal
Bypass Conveyor

- Open cut ROM coal currently washed at CHPP
- Bypass conveyor allows open cut ROM coal of suitable quality to bypass CHPP
- Increased yield and reduced reject material

Other infrastructure within Approved Disturbance

- CHPP upgrades
- Stockpiles
- Rail loadout infrastructure
Water Treatment Facilities and Relocated EPL Release Point

- EPL 12932 authorises 10 ML/day release
- Proposed increase to 20 ML/day
- Water treatment facility to be located at CHPP (pre-treatment, RO plant, dams)
- Treatment to EPL release water quality criteria
- Relocated EPL release point at confluence of Bora Creek and Goulburn River Diversion
- Piping to relocated release point to avoid Bora Creek
Final Landuse in OC2/OC3

- Rehabilitation of OC2 and portions of OC3 to native vegetation / woodland (rather than agricultural grazing land)
- OC3 out of pit emplacement no longer required in final landform

OC2 – rehabilitated to native vegetation / woodland

OC3 – rehabilitated to combination of agricultural land and native vegetation / woodland
Environmental Assessment

- Appendix A – Noise Assessment
  (SLR Consulting)
- Appendix B – Air Quality Assessment
  (Todoroski Air Sciences)
- Appendix C – BARBOS
  (EcoLogical Australia)
- Appendix D – ACHA
  (Niche Environment and Heritage)
- Appendix E – SWB and Surface Water Assessment
  (WRM Water & Environment)
- Appendix F – Controlled Water Release Impact Assessment
  (Advisian)
- Appendix G – Aquatic Ecology Assessment
  (Marine Pollution Research)
- Appendix H – Geochemistry Review
  (RGS Environmental)
- Appendix I – Groundwater Assessment
  (HydroSimulations)
Merry Christmas

THANK YOU FOR YOUR INVOLVEMENT IN THE CCC FOR 2017.

ON BEHALF OF MOOLARBEN WE WISH YOU AND YOUR FAMILIES A MERRY CHRISTMAS AND HAPPY NEW YEAR