COMMUNITY CONSULTATIVE COMMITTEE

MEETING No. 29

Date: 10 December 2013
Time: 4.00 PM
Location: Mudgee Golf Club – Burrundulla Room
Attendance: Independent Chairperson – Garry West

Community Members – David Stokes, Malcolm Swords, John Webb, Julia Imrie, Ken Mayberry, Annette Riley, Aleshia Lonsdale

Moolarben Coal Operations – Luke Bowden, Julie Thomas, Trent Cini, Scott Fittler (minute taker), Donna Whillock

1. Apologies:

Klay Marchant, Helen Swords, John Blanning

Luke Bowden introduced Donna Whillock, recently appointed Cultural Heritage Officer.

2. New declarations of pecuniary or other interests

No new pecuniary interests were declared.

3. Confirmation of Previous Meeting Minutes:

The previous minutes were accepted by John Webb (JW) and seconded by Ken Mayberry (KM).

4. Business Arising from Previous Minutes

Julia Imrie (JI) asked about the timing of sample collection after rainfall from sediment dam overflow. Julie Thomas (JT) advised the internal procedures are still under development although the sampling would as per the Environmental Protection Licence.

5. Operational/Environmental Update

JT presented the Committee with a summary of the Annual Environment Management Report. A copy of the presentation is attached to these minutes.

JI asked why trigger levels for many MCO bores was set to a default value of 2200 EC well above the background measured rather than actual site data as recommended by ANZECC guidelines. JT advised that the trigger levels are calculated using background data (up to March 2009) as advised by Department of Planning and Infrastructure.
Scott Fittler, Luke Bowden and Trent Cini presented the Committee with Community, Operational and Environment update. A copy of the presentation is attached to the minutes.

JI asked about the proposed improvements and plans for The Drip. Garry West commented that the Government Agencies need to come together before a Management Plan will be prepared. JI suggested a draft management plan would have been more beneficial than the advertising brochure produced and that consulting with the community by calling a public meeting should be a priority as there were a number of aspects proposed in the MCO brochure that were insensitive to the area. She also enquired if the area retained as ‘Moolarben Coal Land’ above The Drip could be subdivided when it has no legal access?

JI requested some preceding months monitoring results are included in the water quality graphs at the beginning of a new reporting period for the Environment update.

6. General Business

Luke Bowden (LB) provided JI with a copy of MCO’s written response to her emailed questions for the CCC meeting on the WMP & AEMR reporting (see attached).

LB advised JI that MCO was willing to discuss any of these matters further with JI if required. JI asked whether collected data is reviewed or validated for accuracy as some of the site data appears anomalous.

John Webb (JW) asked if fire trails could be included in the rehabilitation for Open Cut 2 to allow for access over Carrs Gap at the end of mining. MCO took this on notice and JT advised that as the land would be returned to agriculture land after mining access would need to be maintained.

Garry West (GW) advised that the positions for a revised CCC are currently being advertised in the Mudgee Guardian calling for interested community members to apply and that applications close on the 20th December 2013.

GW advised that he has resigned from his position as CCC Chairperson and thanked members and MCO for his time in the role.

David Stokes (DS) thanked GW on behalf of the CCC members.

Luke Bowden thanked GW on behalf of MCO.

Meeting Closed 5.25pm

Next meeting Tuesday 11th March 2014

Following the meeting MCO staff and CCC members enjoyed a Christmas dinner together.
Information | Question | Response
---|---|---
TRIGGER LEVELS – refer WMP p 58-61 s5.3 & S6.3 Table 26 & AEMR p.79. Trigger levels on water quality are set by MCO to initiate further investigation into surface and groundwater variation. It is stated that ANZEEC (2000) default criteria is only to be used where there is insufficient monitoring site-specific data (baseline).

However groundwater triggers set to ANZECC defaults for EC of 2200 \( \mu S/cm \) has been extensively applied to EC in groundwater bores with > 2 years of available monitoring data. See Table 26 p.60 WMP & Table 35 AEMR. For example PZ105a,b & c all have substantial background EC data indicating a range 240 (min)– 810 (max) but MCO has used the 2200 \( \mu S/cm \) default to trigger an investigation. It appears all groundwater bores with lower EC than 2200 have been set to this higher default.

Why has MCO used these higher default levels when there is adequate site-specific data available and will they be adjusted accordingly to correctly reflect the monitoring data?

DP&I has advised that baseline data is only acceptable pre MCO construction activities (pre March 2009). All data post construction is deemed “operational”. There is insufficient baseline data prior to MCO mining activities to set trigger levels.

MCO use the higher of ANZECC trigger levels or site specific triggers in accordance with the ANZECC guidelines and the approved Water Management Plan.

WMP p. 30. MCO states in 5.3.2 Adopted Surface Water impact Assessment Criteria that ‘Where 80\textsuperscript{th} percentile is lower than ANZECC (2000) guidelines the ANZECC default values have been selected for that

What is the justification for using the higher ANZECC default level when there is adequate monitoring data available for >2 years?

DP&I has advised that baseline data is only acceptable pre MCO construction activities (pre March 2009). All data post construction is deemed “operational”. There is insufficient baseline data prior to MCO mining activities to set trigger levels.
**specific parameter**

e.g. WMP p.30 - Sites SW10,11,12 have more than 2 years of data if set up in 2008. Table 23 – max. TSS for SW01/02/05/10/12 = 3 – 28 mg/L.

to set trigger levels.

MCO use the higher of ANZEC trigger levels or site specific triggers in accordance with the ANZEC guidelines and the approved Water Management Plan.

<table>
<thead>
<tr>
<th>Table 21 WMP still includes spurious EC salinity results for Goulburn River @The Drip - SW01 &amp; Picnic Area -SW02 (1500 &amp; 1560 respectively). SW01 &amp; SW02 list EC Trigger value based on the 80th percentile as 922 &amp; 1162 µS/cm respectively as levels set to instigate an investigation into surface water quality. Elevated EC levels for the Goulburn River were acknowledged as ‘unverified’ field results or due to a temporary UCML discharge (see p.15 RTS 2013). They are not representative of baseline conditions or subsequent monitoring of salinity levels in the Goulburn River at SW01 or SW02. Note: UCML releases into Ulan Creek are restricted to maintaining 900 EC at the downstream Gauging station. Will MCO remove anomalous and unverified data from use in setting Trigger response levels? Table 21 is a reference from the Environmental Protection Licence. Trigger response levels will not be altered.</th>
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the groundwater and dewatering UG4 during mining.

PZ128 & PZ129 are Vibrating Wire Piezometers installed for monitoring groundwater levels adjacent to the Drip GDE (not for water extraction).

Section 3.1.3 WMP table refers to nil groundwater inflow to the open cut pits. Could MCO confirm there has been no groundwater inflows or interception into Open Cut pits 1 or predicted for OC pits 2, 3 & 4 including surficial groundwater seepage?

Effluent discharge point EDP 23, 22 & 5 are not indicated on Figure 10 p.42 WMP – however LDP23 in Fig 10 is shown as a discharge points into Bora Creek & Goulburn River. Please advise where the effluent discharge points are located and whether any EPL limits apply?

BASEFLOW IMPACTs – The 2013 RTS p. 100 states ‘The baseflow data in Table 5.12 of the GIA for current and past years is consistent with estimates of baseflow derived from stream flow monitoring data by baseflow separation approaches.’ Note: There is currently no water extraction

- MCO can extract water from any of the boreholes as per Appendix 2 of the Project Approval.

Confirmed as per the approved Water Management Plan for OC 1 or predicted for OC pits 2, 3.
MCO holds the appropriate water extraction licensing for OC 4 as per the Water Management Act 2000.

Shown as LDP 5, 23 & 23 in the Environmental Protection Licence. The treated effluent is irrigated onto landscaped gardens and has no quality limits.

The discharge doesn’t go to any watercourse.

What specific stream flow data was used by MCO to verify their modelling for determining baseflow impacts on the Goulburn River?
operational flow gauges on the Goulburn River upstream or immediately downstream of MCO (above UCML Ulan Creek discharge point).
Community Consultative Committee Update

December 2013

Scott Fittler
Environment and Community Relations Coordinator
Finalist

Community & Environment Excellence Awards

HIGHLY COMMENDED

Woo Hoo!
Community Support Program - Donations

- Final round for 2013 closed 7th October
- $40,121.00 donated
- 2013 total $103,717.00
- 42 donations for the year
Community Support Program 2014

- Dates for 2014
  - 3rd March
  - 2nd June
  - 6th October

Applications & guidelines are available from


Environment & Community
Moolarben Spirit Award

- Positive attitude
- Consistent effort
- Positive impact on community
- Junior $125.00
- Senior $250.00
Community Complaints

Volume of Complaints 2013

<table>
<thead>
<tr>
<th>Month</th>
<th>Total Number of Monthly Complaints (Direct &amp; EPA)</th>
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<tbody>
<tr>
<td>Jan-13</td>
<td>29</td>
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<tr>
<td>Feb-13</td>
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<td>Mar-13</td>
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<td>Dec-13</td>
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Approval Update

- Draft conditions for Stage 2, MOD3 & MOD9 were received at the end of November 2013
- PAC public hearing & meeting Feb 2014.
- Approval
- Post approval work
- Start digging July 2014
Approval Process Timeline

**July 2008** – Submission of Stage 2 Application

**Dec 2011** – Submission of Stage 2 PPR

**Nov 2013** – Draft Conditions Stage 2, Mod3 & Mod9

**Feb 2009** – Submission of Mod3 application

**June 2013** – Submission of Mod9 Application

**Feb 2014** – PAC public hearing and public meeting for Stage 2 and Mod9 & Mod3

**April 2014** – PAC Determination of projects

**Aug 2014** – All post approvals work complete

START DIGGING
July 2014
Sharing the Drip with the whole community

The Drip – a truly iconic and naturally spectacular attraction enjoyed by tourists and locals alike.

At Moolarben Coal, we are working closely with government agencies to create three significant conservation areas covering more than 700 hectares surrounding The Drip.

We are also looking to enhance The Drip’s tourism and education potential for the benefit of the whole community. New toilets, improved access, more car parking and better signage. It would be our contribution towards infrastructure that would improve everyone’s experience of this popular landmark.

Find out more at moolarbencoal.com.au/thedrip
The Offer

Three Key Conservation Areas

- Conservation Agreement
- State Conservation Area
- National Park

Post-mining – revert all land to National Park
The Project

**Walking Trail**

The Dip Walking Trail

The walk to The Dip starts at the car park area. Walkers may choose to complete the first section which leads to a small rock area on the river or continue along the entire trail to the great swimming hole at The Dip Gorge. The walk through the forest has been designed to provide walkers with the opportunity to view examples of the local flora and fauna. The Dip is a popular swimming hole and is located close to the Car Park.

**Facilities**

**Entry**

New signage will be provided at the entry to the trail area from Tilba Road. A new zipline station, viewing platform and power point will be provided. A range of signs will be provided for car parks and access to the trail area.

**Picnic Area**

A new picnic shelter will be provided near the Dip, with additional picnic tables and benches along the walking trail providing a range of viewing options.

Art impression of entry to walking trail
Operational Update

- Mining operations continued in Open Cut 1

- Exploration
  - Drilling program in OC2 is nearing completion
  - Initial Preparations for drilling in UG1 land has begun
  - Planning for further drilling in UG1 & drilling in EL6288NTH is still being undertaken
  - All management plans approved
Open Cut 2

- Open Cut mining is now progressing to the OC2 area
- Security fence is currently being installed.
- The initial clearing and the construction of the haul road has commenced.
- First coal from the OC2 area is expected in June 2014.
Moolarben Surface Water pH
September 2013 to August 2014
Water Quality

Moolarben Surface Water Electrical Conductivity
September 2013 to August 2014

Electrical Conductivity (µS/cm)

Sep-13 Oct-13 Nov-13 Dec-13 Jan-14 Feb-14 Mar-14 Apr-14 May-14 Jun-14 Jul-14 Aug-14

SW01 SW02 SW04 SW05 SW07 SW08 SW09 SW10 SW11 SW12
Water Quality

Moolarben Surface Water Total Suspended Solids
September 2013 to August 2014

Total Suspended Solids (mg/L)

Sep-13 Oct-13 Nov-13 Dec-13 Jan-14 Feb-14 Mar-14 Apr-14 May-14 Jun-14 Jul-14 Aug-14

SW01 SW02 SW04 SW05 SW07 SW08 SW09 SW10 SW11 SW12
## Air Quality


<table>
<thead>
<tr>
<th>Site</th>
<th>November 2012 Average</th>
<th>November 2013 Average</th>
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<tbody>
<tr>
<td>Ulan School</td>
<td>10.6</td>
<td>12.6</td>
</tr>
<tr>
<td>Ulan Road</td>
<td>8.5</td>
<td>10.8</td>
</tr>
<tr>
<td>Murragamba</td>
<td>9.7</td>
<td>12.5</td>
</tr>
</tbody>
</table>
Attended noise monitoring is now undertaken monthly in accordance with updated Noise Management Plan

Key Changes:

- New monitoring location (NA9) – Ulan Road/Winchester Cres
- Night time only measurements instead of day and evening measurements
- Monthly monitoring instead of quarterly monitoring
Noise Monitoring

- Monitoring consists of 2 x 15 min consecutive measurement on one night only, instead of 2 x 15 min measurements over 2 consecutive days

- If exceedances are recorded, consultant is to immediately notify MCO, who will make operational changes and another measurement is immediately taken.
Rehabilitation Update

- Approx 20 ha have been rehabilitated this spring including:
  - Drop structures and contours.
  - Spreading of topsoiling.
  - Green organic compost is being trialed.
  - Predominantly Box Gum Woodland species with temporary grasses have been sown.
Rehabilitation Update
Merry Christmas

On behalf of MCO we wish you a Merry Christmas & Happy New Year

Thank you for your involvement in the CCC for 2013
Licences and Approvals

- Project Approvals
  - Mod 9 – previously discussed at other CCC meetings

- Mining Operations Plan
  - December 2012 – MOP approved to cover remaining mining in OC1
  - A modification to the MOP was submitted to cover mining in OC2 – approved in October 2013
Licences and Approvals

- Environmental Protection Licence
  - Increase in daily discharge limits and allowance for “spill and fill” dams

- Exploration
  - Approval granted for 270 exploration holes in EL6288 – all approvals were supported by a Surface Disturbance Notice or Review of Environmental Factors

- Water Licences
  - 6 new water licences relating to exploration activities
Activities During the Reporting Period

- **Land Preparation**
  - 44.0 ha of land was disturbed
  - 31.5 ha of land was rehabilitated

- **Mining**
  - 24 hours a day, 7 days a week in Open Cut 1

- **Coal Transport**
  - 5,839,352 tonnes of coal were transported by rail

- **Waste Management**
  - Approx. 82.52% of all waste was recycled or reused
Rainfall

Weather Monitoring - Rainfall
September 2012 - August 2013

[Graph showing cumulative rainfall for September 2012 to August 2013 with bars for monthly rainfall and lines for cumulative rainfall.]

5 February 2014
Air Quality

- Air Quality Pollution Reduction Program
  - A monitoring program has been developed to
    - Demonstrate compliance with an 80% level of haul road dust control
    - Monitor adverse weather conditions causing excessive dust during hauling and handling of overburden
    - Investigate means to reduce emissions during overburden handling
Air Quality

- Particulate Matter (PM10)
  - Continuous real-time monitoring is undertaken using three TEOM units
  - Two HVAS units are sampling every 6 days
  - Average PM10 monitoring results were below the Project Approval criteria.
Particulate Matter (PM10) (cont...)

- One result recorded above the 24 hour average required further analysis – general smoke haze on the day with the result recorded at the upwind monitor (blowing towards the site)

- Two occasions with missing HVAS runs
  - December 2012 – sampling error
  - April 2013 – mechanical error

Dust Deposition

- Monitored at nine locations around the operation
- Results were below criteria
Air Quality

Murragamba Real Time PM$_{10}$
September 2012 - August 2013

PM$_{10}$, $\mu$g/m$^3$

01/09/11 06/09/11 15/09/11 29/09/11 10/10/11 13/10/11 20/10/11 27/10/11 03/11/11 10/11/11 17/11/11 24/11/11 01/12/11 08/12/11 15/12/11 22/12/11 29/12/11 05/01/12 12/01/12 19/01/12 26/01/12 02/02/12 09/02/12 16/02/12 23/02/12 02/03/12 09/03/12 16/03/12 23/03/12 30/03/12 06/04/12 13/04/12 20/04/12 27/04/12 04/05/12 11/05/12 18/05/12 25/05/12 01/06/12 08/06/12 15/06/12 22/06/12 29/06/12 06/07/12 13/07/12 20/07/12 27/07/12
Air Quality

Ulan School Real Time PM₁₀
September 2012 - August 2013

PM₁₀, µg/m³

01/09/11 08/09/11 15/09/11 22/09/11 29/09/11 06/10/11 13/10/11 20/10/11 27/10/11 03/11/11 10/11/11 17/11/11 24/11/11 01/12/11 08/12/11 15/12/11 22/12/11 29/12/11 05/01/12 12/01/12 19/01/12 26/01/12 02/02/12 09/02/12 16/02/12 01/03/12 08/03/12 15/03/12 22/03/12 29/03/12 05/04/12 12/04/12 19/04/12 26/04/12 03/05/12 10/05/12 17/05/12 24/05/12 31/05/12 07/06/12 14/06/12 21/06/12 28/06/12 05/07/12 12/07/12 19/07/12 26/07/12 02/08/12 09/08/12 16/08/12 23/08/12 30/08/12

Ulan School  Daily Limit  Rolling Average  Annual Limit
Depositional Dust Incremental Increase
Background to 2012-2013 Results

Insoluble Solids Average (g/m²/month)

- Background Average
- 2012-2013 Average
Surface Water

- There are 10 surface water monitoring locations
  - Surface water quality results were generally consistent with the background results
  - There were no licensed discharges

- Channel Stability monitoring was undertaken in February 2013
  - Some areas are actively eroding due to natural influences and some areas are very stable
  - Compared to the previous 12 months the changes are minimal
Groundwater

- Piezometers have been installed to monitor water level and water quality
- No impact on any groundwater user is assessed to have occurred
Flora and Fauna Monitoring

- Monitoring undertaken during Spring 2012 & Autumn 2013
  - Flora – floristic and Landscape Function Analysis
  - Fauna – amphibians, diurnal birds, nocturnal birds, mammals, microbats and reptiles
- Detailed interpretation of the results won’t be possible for a few years
- Preliminary results
  - Higher diversity of flora in Spring compared to Autumn
  - Vulnerable and threatened species are utilising the areas
Stream Health

- Monitoring completed in Spring 2012 and Autumn 2013
- Results were consistent with previous monitoring
Weeds and Feral Animals

- Annual weed survey completed in October 2012
- Treatment for Spiny Burr Grass, Blackberry, St Johns Wort, Tree-of-Heaven and Blue Heliotrope was undertaken
- Feral animal programs targeted dogs and pigs
Blasting

- Monitoring results were within Project Approval and EPL criteria
- There were 2 reportable incidents for blast related fume
  - 24/04/13 – root cause was the product
  - 09/08/13 – root cause was the product and water being present in the hole
- Changes have been made to blasting practices, which has resulted in a reduction of the amount of fume being generated
Noise

- Alarms systems are installed on real-time noise monitoring units
- Noise attenuation program continued
- Introduction of 4 DuraTray bodies to reduce first load related noise
  - 8-10 decibel noise reduction while being loaded
- Use of Production Assistants to assess noise levels on night shift
Noise

- Attended noise monitoring
  - No exceedance of criteria
- Traffic noise monitoring
  - No exceedance of criteria
Heritage

- Continued Engagement of a Native Title Cultural Heritage Officer
- Ongoing meetings between MCO and Aboriginal groups
- Workforce training programs
- Maintenance of European Heritage Site 20
Independent Compliance Audits

- Two independent compliance audits
  - SEWPAC compliance audit
  - DP&I compliance audit
- Results from both audits have been presented to the CCC previously
Community Relations

- 120 complaints (117 noise)
  - Reduction from 359 for the last reporting period
  - Over 55% of the noise complaints came from 1 resident
  - Additional noise monitoring was conducted near this property with the results showing that MCO are in compliance at this location

- Four CCC meetings were held
Community Relations

- **Community Liaison**
  - Tours of the site by CCC, schools, general community
  - School Partnerships with DET
  - Career talks and job expo
  - Emergency Response Training assistance to the RFS including use of training facilities
  - Mentoring through the Max Potential Program

- **$65,000 of donations and sponsorships**
Rehabilitation and Revegetation

- 31.5ha of land disturbed by open cut mining was rehabilitated using native vegetation
- Revegetation works continued in the Offset area of “Red Hills” off the Ulan – Wollar Road
- Two rehabilitation trials were undertaken during the reporting period
  - 1. Compost trial – trialling different application rates of compost
  - 2. Trialling a different application method
Rehabilitation Monitoring

- Monitoring was undertaken in Spring 2012 and Autumn 2013
  - First round of monitoring
  - Results indicate that 80% of species present were not in the species mix – either in the topsoil or introduced by other means
  - No noxious weeds are present
Activities Proposed

- Ongoing exploration works
- Implement updated water management strategy
- Open Cut mining operations will continue in OC1 and move into OC2
- Continuous improvement of the Environment Management System