

## Ulan Coal Mines CCC Meeting

### Minutes

Thursday 1 March 2007

**Attendees:** Julia Imrie, Bev Smiles, Scott Lillis, Craig Bagnell

**UCML Representatives:** Jamie Lees Phil English, Val Istomin (part)

**Chair:** Phil English

Meeting Opened: 2.30 pm

#### Review of Previous Minutes

- JI clarified previous minutes that back ground water levels in Goulburn River were between 700 – 800 EC whilst the EC during the discharge was 1050 EC.
- BS enquired about progress of Environmental Assessment (EA) (Open Cut Extension). PE indicated that geological constraints indicated uneconomic reserves to progress the coal mining aspect at this stage.
- PE also indicated other aspects to the EA still being considered include:
  - i. RO and potential usage across the site
  - ii. Western Discharge
  - iii. Relocation of Underground crushing facilities
  - iv. Amalgamation of coal stockpiling across the site
- JI questioned why UCML was persisting to review the Western discharge option when it was clear there were water losses within the Goulburn River Catchment.
- PE advised that further water make is expected because make is production aligned, so as the operation progresses it is likely that the water make will continue to increase. Looking ahead, UCML will require alternatives and given that the site straddles the Great Dividing Range it is likely that water sharing will be required.
- BS questioned this as a sign that you are impacting the upper aquifers and that water is being discharged to replace net losses to catchments.
- PE stated that this was not what he was implying and that make was incidental water from Permian, well below the recharge levels for local receiving waters, however catchment boundaries should be considered in the distribution of the water encountered for simple things such as bank stability on receiving catchments etc.
- JI suggested closer discharge point to GR using existing pipeline (nr junction of Ulan creek)

- BS enquired if the Open Cut is coming to the end of its life due to EA not progressing.
- PE said that UCML will continue to investigate all reserves but at this stage the available resources (Barrier Pit) gives UCML Open cut a life into mid 2008.
- Was noted that minutes were accepted at previous meeting (JI)

### **Subsidence Management Plan (Long Walls W2 & W3)**

- PE provided an overview of the proposed SMP application area within ML 1468.
- Subsidence predictions have been overstated within last SMP and current data suggest from LW 23 (i.e. the first fat face block) that subsidence level is around 1.1 to 1.2m from the fat face.
- BS questioned whether the long wall operation is consistent with the Development approval in relation to extraction of the coal seam given the change in width.
- PE indicated the mining operation has changed from a 300 meter longwall to a 400m longwall, however the depth of extraction and the mining method were as approved under the consent. In this instance the change in panel width was undertaken under approval from DPI which is consistent with the DA requirements.
- Questions were raised relating to the expected Moolarben subsidence profile and variance from Ulan's monitoring - PE stated that Moolarben are expecting a difference subsidence profile given the depth of extraction and project has been reviewed by UCML and that UCML has not supplied subsidence data for the Moolarben EA.
- PE advised Proposed SMP area of Longwalls W2 & W3 adjacent to Longwalls 23 – 26, W1.
- BS raised concerns that there appears to be different processes on site that do not necessarily seem to have an overall global perspective on water management i.e. SMP does not consider western discharge issues in the EA.
- PE indicated that the proposed western discharge was conceptual and that UCML would not be banking on this as a discharge strategy within the SMP.
- JL advised that all documents released by UCML contained provisions whereby future works were detailed and this would remain the case with proposed SMP.
- BS raised the issue that they did not get given the documents of the last SMP. PE and VI indicated that there should be no problem providing this data, however PE did indicate that the cost of printing the reports were significant previously and that may have been a contributing factor in the SMP not being distributed.
- BS was satisfied that the CD be provided to CCC members.

➤ ***ACTION CCC to be provided a CD copy of the SMP documentation.***

- JI asked if there were any Aboriginal sites located within the SMP area. PE showed power point slide identifying the Absite locations from the field survey and that management plan was to be developed in consultation with the groups to address site locations and any potential subsidence impacts.
- Detailed discussion was held relating to the nature of the sites, i.e. potential subsidence affects and the nature of the artefacts, i.e. whether the overhangs were free floating or otherwise. PE indicated that from the preliminary assessment undertaken by SCT, there was only one structure that was of concern of impact and this was being further investigated.
- PE stated that UCML were using recently developed Steps in Community engagement published by the NSW Minerals Council Consultation Guidelines for undertaking the SMP.
- PE indicated that to date, UCML has undertaken its own BBRA. From this BBRA the main core risks identified included: subsidence impacts, groundwater impacts, Aboriginal & Archaeological areas of significance and impacts on Flora & Fauna.
- BS & JI stated that surface water issues should be addressed in regards to the catchment draining to the river i.e. Surface water loss due to surface subsidence cracking intercepting surface water flow.
- PE advised that it was important that these issues be addressed and indicated that as per the last SMP, Ken Mills has been engaged as the subsidence expert.
- JI raised the issue about Ken Mill's advice supplied to Moolarben IHAP that the Triassic aquifers have been drawn down due to mining activity
- PE advised Subsidence impacts in W2 & W3 will be similar to LW 13 given the similar geological formations that appear within the areas and that modelling to be undertaken by KM will be supported by the impacts observed within this area.
- PE indicated that UCML has been supercritical in relation to Width to Depth ratio and that this is unlikely to change.
- UCML will be looking to submit the SMP early 2<sup>nd</sup> Quarter 2007.
- BS questioned that the previous SMP sought approval for 5 years of mining and that this approval was very close to the last and why was this case given the significant amount of approved areas already obtained.
- PE advised that the mining sequence has changed and operationally Ulan will be requesting to undertake mining using an east / west flip-flop pattern rather than mining the eastern panels and then the western panels. It was outlined that this was primarily a scheduling issue and that UCML were optimising the mine plan as a business.

- JI questioned the wisdom of the western extension considering the cumulative water issues from down dip mining
- PE indicated that the new blocks were being sort as a result of a change in mining sequence, and that this was something that was subject to DPI approval given that the area had already received mining consent and the SMP process was there to review the impacts of subsidence only, therefore sequencing issues were irrelevant.

### **Water Management Strategy**

- Development of Water Management Strategy (4 steps)
  1. Main North Pump station in Q1
  2. Remove O/C infrastructure
  3. Install RO plant and discharge
  4. Relocate Tailings – This action is still pending
- BS asked about East Pit and connection to river. What monitoring is occurring? Concern was expressed that the new tailings storage would be attached to East Pit. PE outlined that the Hydraulic head between the East Pit and the Goulburn River made the ability for water to move from East Pit to Goulburn River difficult given that there was a difference of 20m from the top East Pit to the base of the Goulburn River.
- JL advised that the difference between make and surplus was crucial to understanding UCML's water behaviour and that clear differentiation was required.
- SL indicated that much of this presentation had been seen before therefore it was agreed that the presentation would be skimmed over.
- Site Water Balance is showing current water surplus is 8.2ML/day before Bobadeen Irrigation Scheme and has been predicted to increase to 11.4 ML/day by 2011.
- JI noted that water used in daily operations of 5.6ML/day .
- Groundwater make from the seam from the Mass Balance indicated site water make = 8.9ML/day
- Advised that UCML was predicted by Coffey's to have a site make of 13ML per day by 2011

### **Aquatic Ecosystems Study for Mine Discharge – Ulan Creek (MKES)**

- JL outlined study method and findings and study found aquatic ecosystem and channel stability within Ulan Ck was not compromised at the current discharge criterion of 12ML/day at 1200uS/cm EC

- Results from the Ulan Creek impact assessment indicate approx 0.5ML/day loss out of the system (original survey estimated a loss of around 2.5ML/day).
- Ongoing discharge from the site is to occur and downstream water users are likely to enjoy the benefits from the discharge i.e. The Drip, NPWS, landholders with riparian rights etc. This is to be at maximum of 900 EC, 50% percentile not to exceed 800EC
- SL asked about future release locations. JL advised UCML will be a water surplus site into the future and an s58 variation to EPL will be developed for long term discharge into UCML. Consultation with DEC has resulted in an agreed position from both parties on the proposed salinity criteria.

### **Strategic Direction for Water Management**

- Under the revised UCML Water Management Plan UCML is to undertake a 6-monthly water balance, annual water model will give strategic forward approach for water management
- Water coming out of northern areas currently is good (800-900uS/cm EC) whereas southern areas of mine much higher EC (upward of 1200uS/cm EC). Need for separating 'cleaner' water and recycled 'dirty' water.
- PE & JL outlined measures to minimise distance for goaf water flows (distance of flow through goaf influences water quality). Over time there will be a recovery phase.
- BS raised issue of long term mine closure aspects for the groundwater system wrt? water reporting to old workings areas.
- JL outlined proposed future western discharge
- PE outlined that based on previous discussions with Coffey's that it was his understanding that water levels within the underground would reach equilibrium point with sealing, however significant further work will be required to address this.
- JI raised query of western versus eastern discharge and rationale for requiring western discharge in addition to eastern.
- JL outlined monitoring network. Data from northern network will be incorporated into SMP.
- BS asked if new information will be compared to the previous predictions for SMP. PE indicated that predictions will be updated for all aspects where possible.
- Piezo monitoring results over recent LW panels monitoring Triassic aquifers to be considered further potentially increasing or decreasing heads (eg as discussed for DDH242, R855).

## MOPs

- PE & JL outlined Open Cut MOP and new underground MOP.
- BS raised query regarding approval for east Vs west panel mining. JL outlined DPI's MOP & SMP approval processes are key processes governing this. MOP is updated to reflect SMP approvals and mine sequencing. PE emphasised that Development Consent for longwall mining already granted within these areas (1468). Essentially sequencing is an operational issue.
- JI raised issue of recent storm flows into the Goulburn River increasing bank erosion near overburden spillway to river. JL mentioned upcoming investigations looking at erosion control in ongoing program to understand interactions and the GR diversion.

## GENERAL BUSINESS

- JI noted that HLA Dec 2002 report hydraulic testing program for private water bores for ML1468 lists their (Imrie) bore as inactive. JI clarified that they are now totally reliant on the bore for water (domestic & farm). A copy of the report was given to JI.
- All noted general substantial improvement in water management in last 18 months as a positive 'work in progress'. JI congratulated UCML for getting on top of the issue.
- JI provided example photos of surface flows observed this afternoon during rainfall alongside Ulan-Mudgee Rd adjacent quarry. Observed discoloured flows from east (quarry) in various drainage lines flowing into Goulburn River diversion area.
- JI asked about Coolatai Grass (weed). JL advised only control solution at the moment is Roundup and when applied requires replacement with revegetation.
- BS raised query about the EMS and updating. PE invited comment for the revision and requested points to be made in an email. JL committed to them be considered in the next review. Review had been delayed to date due to intense activities on priorities (water management etc) in recent months. BS asked about environmental performance measurements against Consent. PE confirmed this is undertaken. BS asked if the EMS will attempt to address the entire site beyond consent conditions eg pre-existing environmental conditions. PE advised that XCN and UCML policy is to go beyond compliance. BS asked if this could be reflected in the EMS, and where this applies where possible.
- BS raised local government person is supposed to chair the meeting and requested further involvement in deciding on dates for meetings. BS asked if periodically Aboriginal consultation committee and other stakeholder groups could be involved in some way with CCC to overlap.
- JI mentioned request for additional member to CCC from Aboriginal group at Gulgong– will provide details via email to PE.

- PE raised issue of transparency of issues raised externally to the CCC to be undertaken if possible, especially wrt the accuracy of any information provided externally and all parties provided opportunity for input. Example of Goulburn River meeting in Denman.

**MEETING CLOSED 6.50 pm**

**NEXT MEETING:**

*Action - PE to supply 3 potential dates for further CCC meetings.*

***Note: Actions highlighted in bold italics***

***Meeting Closed 7.20 pm***