



NSW DEPARTMENT OF  
PRIMARY INDUSTRIES

File N°: 04/1907  
INT06/17472

Mr Charlie Allan  
Mine Manager  
Ulan Colliery  
Private Mail Bag  
Mudgee NSW 2850

1 AUG 2006

Dear Mr Allan

**Re: Ulan Colliery SMP Longwalls 23 to 26, W1**

As delegate of the Director-General of the Department of Primary Industries, I approve the Subsidence Management Plan as set out in your Subsidence Management Plan application for Longwalls 23 to 26 and W1 in your application dated August 2005 (including the "SMP Approved Plan" (Plan No. MP05096 (Sheet 1 and 2)), and supporting supplementary information provided to the Department, subject to the exclusions and conditions set out in Appendix A, attached.

Should you be uncertain about any aspect of this approval, please contact Michael Lloyd, Subsidence Executive Officer, on (02) 4931 6603.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Alan Coutts'.

Alan Coutts  
Deputy Director-General (Mineral Resources), acting as delegate of the  
Director-General  
Department of Primary Industries

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## APPENDIX A

### Approval Conditions and Exclusions, Subsidence Management Plan for Longwalls 23 to 26, W1. ULAN COAL MINE

#### Extent of Approval

##### 1. Definitions

In this document:

"longwall mining" means the extraction of the longwall panels covered by the SMP.

"SMP" means the Subsidence Management Plan for the workings shown on the SMP Approved Plan as set out in the *Ulan Colliery Subsidence Management Plan Application Longwalls LW23-26, W1* dated August 2005 and supplementary supporting information provided to the Department.

"SMP Approved Plan" means Plan No. MP05096 (Sheet 1 and 2) titled 'Ulan No2 Underground Mine SMP Approved Plan', signed by the Mine Manager on 1/9/2005 and approved by the Director General, NSW Department of Primary Industries.

2. The SMP is approved subject to the conditions set out in this document. The SMP, as modified by these conditions, must be implemented by the leaseholder.
3. **Statutory Requirements** –This approval is granted pursuant to the requirements of the applicant's mining lease. The conditions of this approval are taken to be conditions of the mining lease and are enforceable as such.

Any other necessary approvals, consents, licenses or permits by any Government Authorities under relevant legislation in relation to subsidence due to the extraction of the subject panels must be obtained and kept up-to-date before any surface or sub-surface features and/or areas, which are regulated under such legislation, are affected by any subsidence arising from the extraction of the subject panels.

This approval does not constitute an approval under Section 138 *Coal Mines Regulation Act 1982*.

4. Longwall mining as set out in the SMP may be carried out until 1/8/2013 or the expiry of Mining Lease 1468, whichever occurs earlier. The Director-General may, at his or her discretion, extend this term upon request. The obligations set out in the SMP, as modified by this approval and any subsequent written notice of the Director-General, continue until the Director-General notifies the leaseholder that no further action is required.
5. The Director-General may vary the conditions of this approval by notice in writing at any time.

6. The Director-General may, at his or her discretion, suspend or revoke this approval if:
  - a. the leaseholder fails to adhere to any condition of the approval; or
  - b. the head of any other government agency requests suspension or revocation on the basis of the leaseholder's non-compliance, or potential non-compliance, with legislation administered by that agency due to activities relating to this approval.
7. These approval conditions relate to the proposed extraction by longwall methods in the Ulan Seam only.
8. **Notification** –The leaseholder shall give notice of this SMP approval to the Department of Planning, Department of Natural Resources, Department of Environment and Conservation, Mid Western Regional Council, Mine Subsidence Board, NSW Heritage Office, local Aboriginal Land Council, the owners/operators of any infrastructure and landowners in the application area and any other relevant government agencies or stakeholders as listed in the *Guideline for Application for Subsidence Management Approvals*, that Director General's approval of the proposed Subsidence Management Plan has been granted. This notification and its distribution list shall be provided to the Director, Environmental Sustainability, within one month from the date of this approval.

#### **Subsidence Management Conditions**

9. The Leaseholder shall develop and implement a program to ensure on-going baseline data collection, investigation, assessment and regular reviews with the relevant stakeholders. A review schedule shall be developed in consultation with these stakeholders. The review schedule shall be submitted to the Director Environmental Sustainability within four months of this approval. The Leaseholder shall undertake further reviews if such reviews are requested by the Director Environmental Sustainability or the Principal Subsidence Engineer.
10. The required on-going baseline data collection, investigation, assessment and reviews shall aim to identify appropriate management measures to mitigate and/or remediate subsidence impacts. The Leaseholder shall ensure that management reviews are conducted in consultation with the relevant stakeholders, prior to subsidence of any important surface features or as otherwise determined in the said review schedule as per Condition 9.
11. The Leaseholder shall regularly seek advice and/or feedback from the relevant stakeholders, with regard to the adequacy, quality and effectiveness of the implemented management processes and the need for any appropriate management measures, early response actions or emergency procedures to ensure adequate management of any potential subsidence impacts due to longwall mining.

**12. Subsidence Monitoring** - The Leaseholder shall undertake a subsidence monitoring/reporting program for the subject panels. This program shall include but not be limited to any proposed inspection regimes, layout of monitoring points, parameters to be measured, monitoring methods and accuracy, timing and frequencies of surveys and inspections. It shall be agreed to by the Principal Subsidence Engineer prior to the commencement of longwall mining. The Leaseholder must implement any changes to the monitoring/reporting program, if required by the Principal Subsidence Engineer during the development of subsidence arising from longwall mining.

### ***Subsidence Reporting***

**13. End of Panel Report** - The Leaseholder shall prepare an end of panel report to encompass all environmental and subsidence monitoring, including a comparison of actual impacts with predicted subsidence impacts. This report shall be submitted to the Director, Environmental Sustainability, within three months of extraction being completed for each longwall panel.

**14.** The Leaseholder shall provide to the Mine Subsidence Board, the owners/operators of any infrastructure and the Director Environmental Sustainability and Principal Subsidence Engineer of the Department of Primary Industries, notification within 24 hours of occurrence or identification of the following during the development of subsidence caused by longwall mining. The same information shall also be made available to other relevant stakeholders if requested.

- a) Any observed subsidence impacts adverse to the groundwater and/or the natural environment that may be affected by longwall mining;
- b) Any observed subsidence impacts adverse to the serviceability and/or safety of infrastructure and other built structures that may be affected by longwall mining;
- c) Any significant unpredicted and/or higher-than-predicted subsidence and/or abnormalities in subsidence development in any surface areas that may be affected by longwall mining;
- d) Any adverse subsidence impacts reported by any relevant stakeholder, and
- e) Any other relevant information requiring prompt notification.

Note: Pursuant to paragraph (e) of the subsidence management condition in the leaseholder's Coal Lease, the SMP is also subject to the requirements for subsidence monitoring and reporting set out in the document '*New Approval Process for Management of Coal Mining Subsidence – Policy (2003)*'. The monitoring and reporting requirements set out in that document apply, as modified by these conditions.

### ***Subsidence Community Consultation Process***

15. The Leaseholder shall establish a Subsidence Community Consultation Process (SCCP). The SCCP shall be established in accordance with the 'Guideline for Application for Subsidence Management Approvals'. The proposed SCCP shall be submitted within six months of this approval to the Department of Primary Industries for Director Environmental Sustainability's approval.

### ***Implementation of Approved SMP***

16. The Leaseholder shall prepare and regularly up-date a Subsidence Management Status Report until the completion of subsidence in the application area. This Status Report shall be provided to the Mine Subsidence Board, the Director of Environmental Sustainability and Principal Subsidence Engineer of the Department of Primary Industries. This Report shall also be made available to other relevant stakeholders if requested. It shall be submitted at a minimum four monthly interval from the date of this approval, or at any other interval as required in writing by the Director Environmental Sustainability or the Principal Subsidence Engineer, and shall include but not be limited to:

- a) Face position of the longwall panel being extracted;
- b) A summary of any management actions undertaken by the Leaseholder;
- c) A summary of the results of consultation with the stakeholders as per Condition 11 and 15;
- d) A summary of the observed and/or reported subsidence impacts, incidents, service difficulties, community complaints, and any other relevant information reported as per Condition 14;
- e) A summary of subsidence development based on monitoring information from the subsidence monitoring programs, including a statement with regard to any identified trend in the development of ground deformations/subsidence movements in the application area, as compared with any defined triggers and/or the predicted subsidence to facilitate early detection of potential subsidence impacts;
- f) A summary with regard to the adequacy, quality and effectiveness of the implemented management processes based on the monitoring and consultation information summarised above, and
- g) A statement regarding any management actions to be undertaken or the need for early responses or emergency procedures to ensure adequate management of any potential subsidence impacts due to longwall mining.

### **Water Management**

17. **Watercourses and Groundwater** - The Leaseholder shall ensure full compliance with any statutory requirements of the Department of Natural Resources and the Department of Environment and Conservation, with regard to management of watercourses, and groundwater resources that may be affected by subsidence arising from the extraction of the subject longwall panels.
18. **Water Supply** - In the event of interruptions to water supplies due to impacts on water pipelines/mains, groundwater bores, water tanks, farm dams and/or any other water supply sources caused by subsidence arising from longwall mining, the Leaseholder shall be responsible for providing water supplies of equivalent quality and quantity, to locations convenient to the residents, landowners or businesses affected by subsidence arising from longwall mining until such time that the water pipelines/mains, groundwater bores, water tanks, farm dams and/or any other water supply sources are restored.
19. Within three months of this approval, the Leaseholder must supply a Verification Report detailing the water source and balance against licence authorisation volume limits, and the quality of intercepted groundwaters through the active mine workings against the incidental volume reporting from up-dip. The report is to be developed to the satisfaction of the Department of Natural Resources and the Department of Primary Industries and must include:
- a) A water balance recalculation for the entire site, along with detailed assessment of groundwater make through the active mining area;
  - b) Details of the monitoring programme for groundwater migration and quality, including depressurisation impacts on Jurassic and Triassic sandstone strata, groundwater migration along identified geological structure and watercourses overlying the extraction area;
  - c) Potential (predicted) and actual surface and ground water interaction, and review of groundwater conditions and drawdown impacts in all identified bores, including any owned by Ulan Coal Mines Limited and Department of Natural Resources;
  - d) Threshold values over which remediation initiatives are to be implemented;
  - e) Response mechanisms to remediate any groundwater impacts that exceed the predicted impacts or nominated remediation thresholds;
  - f) Details of a review/audit of the report, including any uncertainties in projections, covering Longwalls 23-26 and W1 and all future longwall extraction areas.
20. Within three months of this approval, the Leaseholder must submit a strategy to identify inflows from Ulan Creek to the underground workings, using volume and quality to trace the inflow pathway from the creek. The Leaseholder must develop and submit a strategy to repair damage to Ulan Creek occasioned by mine workings. These strategies shall be to the satisfaction of the Department of Primary Industries and Department of Natural Resources. During the period of trial discharge, and during any visible flow event, monitoring must be undertaken to determine if measurable flow loss from Ulan Creek is occurring.

21. **Water Management Report** - Within six months of this approval, the Leaseholder must submit a comprehensive Water Management Report to the Department of Planning, Department of Natural Resources, Department of Primary Industries, and the Department of Environment and Conservation, which must include:
- a) Water-make assessment, differentiating between differing classes and sources of incidental water make;
  - b) Management and use of incident water, including segregation of differing categories of water quality, and identifying priority uses of higher quality waters to remediate environmental impacts caused by mining operations;
  - c) Review and reporting on all licensed extractions or interceptions of groundwaters;
  - d) A five-yearly discharge or other water disposal options (beyond the trial discharge strategy approved by Department of Environment and Conservation); and
  - e) Review/audit of the report, including any uncertainties in projections, and cover LWP 23-26 and W1 and all future longwall extraction areas.
22. **Regional Groundwater Modelling and Monitoring Program** – The Leaseholder shall undertake a Regional Groundwater Monitoring and Reporting Program for the subject panels. The Program shall be undertaken to the Department of Natural Resources and Murray Darling Basin Commission standards and shall be submitted to the Director Environmental Sustainability, the Department of Planning, Department of Natural Resources and Department of Environment and Conservation for review within six months. The Leaseholder shall submit additional reports on the program every 6 months thereafter for a total period of two years or until the new project approval is granted by the Minister for Planning, which will address water management across the entire site.
23. The Leaseholder shall undertake a baseline assessment of impacts to the Goulburn River that addresses:
- a) Base flow assessment, including gauging and monitoring requirements to the satisfaction of the Department of Natural Resources;
  - b) Potential interactions with East Pit (suspected paleo-channel outbreak to abandoned channel), including seepage losses and water quality changes to the river;
  - c) Baseline 'health' assessment of the channel – survey, geomorphic assessment, sediment transfer budget, vegetation assessment, aquatic health study;
  - d) Extension of study area to Bora Creek inflow to diversion cut; and
  - e) Assessment of any detectable variation in flow regime.

This assessment shall be provided prior to December 2006 to the Director Environmental Sustainability, Department of Natural Resources, Department of Primary Industries – Fisheries and the Department of Environment and Conservation.

24. Notwithstanding Condition 12, the Leaseholder must develop and report on subsidence monitoring along Bobadeen and Ulan Creeks, and identified aquifers, integrated with subsidence chainage monitoring, to develop an integrated approach between subsidence and groundwater impact assessment. This report shall be submitted to the Principal Subsidence Engineer, Director Environmental Sustainability and the Department of Natural Resources.
25. **Water Management Plan** – The Leaseholder shall ensure that the Water Management Plan, as stated in the Development Consent (DA 103-5-2005), must be reviewed and incorporate the process results and reporting of the Water Management Report as outlined in Condition 21. The Water Management Plan must provide for the management of all groundwater expected to be intercepted by mining in Longwalls 23-26 and W1 (and future longwalls as required), to the satisfaction of the Department of Primary Industries, Department of Planning and the Department of Natural Resources.

#### ***Miscellaneous Conditions***

26. **Infrastructure** – The Leaseholder shall develop a management plan to ensure the safety and serviceability of any infrastructure that may be affected by subsidence arising from longwall mining. The management plan shall be implemented to the satisfaction of the owners/operators of the said infrastructure.
27. **Country Energy Powerline** – Notwithstanding Condition 26 above, the Leaseholder shall develop a management plan to ensure the safety and serviceability of the Country Energy powerline. The management plan shall be implemented to the satisfaction of the infrastructure owner/operator.
28. **Public Safety** – The Leaseholder shall implement a public safety management plan to ensure public safety in any surface areas that may be affected by subsidence arising from longwall mining. This plan shall include, but not be limited to, regular monitoring of areas or infrastructure/structures posing safety risks, erection of warning signs, entry restrictions, backfilling of dangerous surface cracks and securing of unstable built structures or rockmass where required and appropriate, and the provision of timely notification of mining progress to the community and any other relevant stakeholders where management of public safety is required. The plan shall be developed and implemented to the satisfaction of the District Inspector of Coal Mines.
29. **Archaeological and Heritage Sites** - The Leaseholder shall ensure full compliance with any statutory requirements of the Department of Environment and Conservation and the Heritage Office, with regard to any archaeological and heritage sites that may be affected by subsidence arising from longwall mining or during the remediation of impacted areas.
30. **Survey Marks** – At the completion of subsidence or otherwise as required by the Department of Lands, the Leaseholder shall ensure that the functionalities of any survey marks affected by subsidence are fully restored to the satisfaction of the Department of Lands.