
Subsidence Management Plan Approval

I, the Deputy Director-General, Department of Primary Industries, having considered the likely environmental impacts of the mining operations identified in the Project Description specified in Schedule 1 and having had regard to the principles of ecologically sustainable development as defined in the *Protection of the Environment Administration Act 1991*, hereby approve the Subsidence Management Plan identified in Schedule 1 for the purposes of the SMP Condition that became effective on 18/3/2004 in Mining Lease No. ML1533, subject to the conditions set out in Schedule 2.

This Approval only authorises the underground mining operations identified in the Project Description for the Period identified in Schedule 1. Obligations under this Approval regarding rehabilitation, monitoring and impact management continue to apply after the expiry of this period unless otherwise notified in writing by the Director-General.

These conditions are required to:

- ensure optimal mineral resource recovery;
- prevent, minimise, manage and/or offset adverse impacts;
- provide for the ongoing environmental management of the project;
- ensure the area disturbed by mining is appropriately rehabilitated.

The rights and duties of a Leaseholder are those prescribed by the *Mining Act 1992*, subject to the terms and conditions of the Lease which include a requirement to carry out operations in accordance with the Subsidence Management Plan conditionally approved by this Approval. This Subsidence Management Plan Approval does not override any obligation on the Leaseholder to comply with the requirements of other legislation and regulatory instruments unless specifically provided in the Mining Act or other legislation or regulatory instruments.

Note: This Approval does not constitute an approval under Section 138 Coal Mines Regulation Act 1982 or clause 88 of the Coal Mines Health and Safety Regulation 2006.

SIGNED



Alan Coumts
Deputy Director-General
NSW Department of Primary Industries

8/3/07

Date of Approval:

File No: 05/1688

SCHEDULE 1 Description of Approved Activity

Project Description: Ashton Coal Longwall Panels 1 to 4

Subsidence Management Plan: Subsidence Management Plan Ashton Coal Operations Limited October 2006

Seam: Pikes Gully

Approved Period of Mining: Date of Approval to 1 March 2014 or the expiry/cancellation of ML1533 whichever occurs first.

SCHEDULE 2

Definitions

Activity	The proposed longwall mining described in the EIS and SMP
AEMR	Annual Environmental Management Report
Application Area	The area identified within the SMP
Bore	Any bore or well connected or proposed to be connected with sources of sub-surface water, and used or proposed to be used or capable of being used to obtain supplies of such water
Council	Singleton Shire Council
DEC	Department of Environment and Conservation
Department	Department of Primary Industries
Director General	Director General of the Department of Primary Industries, or delegate
District Inspector of Coal Mines	District Inspector of Coal Mines with DPI
DNR	Department of Natural Resources
DoP	Department of Planning
Environment	includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings
IRMP	Infrastructure Risk Management Plan
Leaseholder	The leaseholder of Mining Lease 1533
Longwall mining	The extraction of the longwall panels covered by the SMP
MSB	Mine Subsidence Board
Principal Subsidence Engineer	Principal Subsidence Engineer with DPI
SMP	Subsidence Management Plan, titled Ashton Coal Longwall Panels 1 to 4 – Subsidence Management Plan, dated October 2006 and supplementary supporting information provided to the Department
SMP Approved Plan	Plan No. A-4010, Revision No. v1, titled 'Ashton Underground Mine, Pikes Gully Seam-Longwall 1-4, SMP Approved Plan-Variation 1, signed by the Mine Manager on 08/12/2006 and approved by the Director General, NSW Department of Primary Industries
Subsidence Impacts	Direct or indirect impacts resulting from subsidence from longwall mining
Subsidence	Movement and/or deformation of the ground surface or subsurface strata as a direct and/or indirect result of longwall mining

Conditions

Limits on Approval

- 1 The Leaseholder must carry out the activity strictly in accordance with SMP Approved Plan.
- 2 The Leaseholder must carry out the activity generally in accordance with the SMP subject to the conditions of this Approval.

In the event of any inconsistency between the conditions of this Approval and the SMP, the conditions of this Approval prevail to the extent of any inconsistency.
- 3 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.
- 4 The Director General may vary the conditions of this Approval by notice in writing.

- 5 The Director General may, at his or her discretion, suspend or revoke this Approval if:
- the Leaseholder fails to adhere to any condition of the Approval; or
 - the head of any other government authority requests suspension or revocation on the basis of the Leaseholder's non-compliance, or potential non-compliance, with legislation administered by that agency related to this Approval.

General Obligation to Minimise Harm to the Environment

- 6 The Leaseholder must implement the SMP (as amended by the conditions of this Approval) and carry out any additional practicable measures (including those identified in the EIS) necessary to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the activity.

Implementation of Approval

- 7 Any plans, programmes, reports or strategies required as a condition of this Approval must be developed having regard to:
- any guidelines adopted by the Director General for the purpose of subsidence management and mine rehabilitation; and
 - the requirements set out in Appendix A to this Approval.
- 8 The Leaseholder must implement any plan, programme or strategy required and approved pursuant to this Approval.

***Note:** The Leaseholder may, at any time, submit an amended plan, programme or strategy for approval. Once approved, the amended plan, programme or strategy must be implemented, however, up until the date of approval, the Leaseholder must continue to implement the previously approved plan, programme or strategy.*

- 9 Any modifications to plans, programs or strategies already approved for the purposes of the conditions of this Approval must have regard to the matters set out in condition 7. Amended plans, programmes or strategies submitted for approval must be accompanied by all relevant supporting documentation to assist in the assessment of the amendment or modification.

***Note:** This condition relates to plans, programmes and strategies required by the conditions of this Approval – it does not apply to variations to the SMP or the SMP Approved Plan which must be done in accordance with the requirements of the Mining Act, the conditions of title and the variation procedures identified in the SMP guidelines.*

- 10 Where this Approval requires actions to be undertaken by the Leaseholder, including remediation of subsidence impacts, the obligation continues until the Director General notifies the Leaseholder that the action has been completed to his or her satisfaction.

Directions

- 11 The Leaseholder must comply with any written direction given by the Director-General, Director Environmental Sustainability, Director Mine Safety Operations or Principal Subsidence Engineer relating to:
- the implementation of any aspect of the SMP or an approved plan, programme or strategy;
 - assessing or reviewing the adequacy, effectiveness, or coverage of any approved plan, programme or strategy or any aspect of the SMP;
 - the type, timing and/or location of monitoring of baseline conditions, subsidence or subsidence impacts;
 - any reporting requirement under this Approval;
 - the carrying out of works to address subsidence impacts; and/or
 - the carrying out of any studies or investigations related to subsidence or subsidence impacts and the reporting of any findings or conclusions.

The obligations under this condition prevail over any other obligation under this Approval.

***Note:** Compliance with a written direction will not operate as a defence to a breach of any obligation under this Approval that occurred prior to the Direction being given.*

Subsidence Monitoring

- 12 The Leaseholder must submit to the Principal Subsidence Engineer for approval a subsidence monitoring programme for the longwall panels which are the subject of this Approval. This programme must include:
- a) inspection regimes;
 - b) layout of monitoring points;
 - c) parameters to be measured;
 - d) monitoring methods and accuracy;
 - e) timing and frequencies of surveys and inspections;
 - f) recording and reporting of monitoring results.

The Leaseholder must not commence longwall mining prior to the subsidence monitoring programme being approved.

Note: *The programme should be submitted to the Principal Subsidence Engineer at least 30 days prior to the expected commencement of operations to enable sufficient time for the assessment of the programme. The Principal Subsidence Engineer may require the provision of further information to assist in the assessment of the programme or a resubmission of the programme if it is considered inadequate. Complex issues or the need for additional information or a resubmission of the programme may require a longer assessment period.*

Environmental Monitoring

- 13 The Leaseholder must submit to the Director Environmental Sustainability for approval an environmental monitoring programme for the longwall panels which are the subject of this Approval. This programme must address subsidence impacts on:
- a) surface and groundwater (quality and quantity);

Note: *The programme should be submitted to the Director Environmental Sustainability at least 30 days prior to the expected commencement of operations to enable sufficient time for the assessment of the programme. The Director Environmental Sustainability may require the provision of further information to assist in the assessment of the programme or a resubmission of the programme if it is considered inadequate. Complex issues or the need for additional information or a resubmission of the programme may require a longer assessment period.*

Infrastructure and Property Management

- 14 The Leaseholder must submit to the Director Mine Safety Operations for approval management plans for any infrastructure that may be affected by subsidence. These plans must be developed in consultation with:
- a) the owners/operators of the infrastructure; and
 - b) any Government Agency with a regulatory role for the infrastructure.

The Leaseholder must not undertake any longwall mining that is likely to cause subsidence of the following infrastructure items prior to management plans for the said infrastructure being approved:

- i) electricity transmission lines.
- ii) telecommunication infrastructure.
- iii) New England Highway and associated road reserve.
- iv) any other infrastructure if required by the Director Mine Safety Operations.

- 15 The Leaseholder must submit to the Director Mine Safety Operations for approval management plans to address the safety and serviceability of buildings and man-made structures potentially affected by subsidence. These plans must be developed in consultation with the:
- a) owner of the property; and
 - b) Mine Subsidence Board.

The Leaseholder must not undertake any longwall mining that is likely to cause subsidence that may impact upon buildings or structures not owned by the Leaseholder prior to a management plan for the relevant building or structure being approved.

Water Management

- 16 The Leaseholder must, prior to the longwall reaching cut-through 14 in Longwall Panel 1, prevent the seepage inflow of water from the Glennies Creek alluvial aquifer system unless otherwise approved by the Director Environmental Sustainability.

Management measures to prevent the seepage inflow of water from the Glennies Creek alluvial aquifer system are to be developed and implemented to the satisfaction of the Director Environmental Sustainability in consultation with the Department of Natural Resources.

The Groundwater Management Plan is to be revised prior to the end of Longwall Panel 1 to incorporate the approved management measures and monitoring procedures to the satisfaction of the Director Environmental Sustainability in consultation with the Department of Natural Resources.

Land Management

- 17 The Leaseholder must, within 3 months of the date of this approval, undertake a review of the Land Management Plan in consultation with the relevant Government agencies with respect to managing the predicted cracking and/or ground deformations in areas with a shallow depth of cover or with Class II Land Capability. Mining must cease if a satisfactory management plan has not been approved by the Director Environmental Sustainability within 6 months of the date of this approval.

Public Safety

- 18 The Leaseholder must, within 3 month of the date of this approval, undertake a review the Public Safety Management Plan and submit the reviewed management plan to the Director Mine Safety Operations for approval. Mining must cease if a satisfactory management plan has not been approved by the Director Mine Safety Operations within 6 months of the date of this approval.

Incident and Ongoing Management Reporting

- 19 The Leaseholder must, within 24 hours of becoming aware of the occurrence, notify:
- a) the Principal Subsidence Engineer;
 - b) the operators of all infrastructure covered by condition 14; and
 - c) other relevant stakeholders,

of the following:

- a) Any significant unpredicted and/or higher-than-predicted subsidence and/or abnormalities in the development of subsidence;
- b) Any exceedance of predicted impacts on groundwater resources and/or the natural environment that may have been caused (whether partly or wholly) by subsidence;
- c) Any observed subsidence impacts adverse to the serviceability and/or safety of infrastructure and other built structures that may be affected by longwall mining;
- d) Any instability of steep slopes in any areas affected by longwall mining.

Note: Under Condition 11, the Leaseholder can be directed to, among other things, prepare a report on an incident reported under this condition. A report on the details of the incident, including likely or known causes, response action and proposed response measures will generally be required for incidents that involve material property or environmental damage or have the potential to cause such damage.

- 20 The Leaseholder must prepare and maintain a Subsidence Management Status Report which must include but not be limited to:
- a) the current face position of the longwall panel being extracted;
 - b) a summary of any subsidence management actions undertaken by the Leaseholder in the period subsequent to the last regular submission of the Status Report;
 - c) a summary of any comments, advice and feedback from consultation with stakeholders in relation to the implementation of this Approval (including the preparation, implementation and review of plans, programmes, reports or strategies required by this approval) undertaken or received in the period subsequent to the last regular submission of the Status Report and a summary of the Leaseholder's response to the comments, advice and feedback given by the stakeholders;
 - d) a summary of the observed and/or reported subsidence impacts, incidents, service difficulties, community complaints, and any other relevant information reported to the Leaseholder in the period subsequent to the last regular submission of the Status Report and a summary of the Leaseholder's response to these impacts, incidents, service difficulties and complaints;
 - e) a summary of subsidence development based on monitoring information compared with any defined triggers and/or the predicted subsidence to facilitate early detection of potential subsidence impacts;
 - f) a summary of 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 additional and/or outstanding 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.

The Subsidence Management Status Report must be updated at least every 14 days to reflect any changes in the information required to be included in the Report. The Status Report must be regularly submitted to the Principal Subsidence Engineer and each operator of infrastructure referred to in condition 14 every four (4) months from the date of this Approval. The Status Report (as updated from time to time) must be provided, upon request, to the Mine Subsidence Board, the Director of Environmental Sustainability, the Principal Subsidence Engineer of the Department of Primary Industries, owners/operators of any infrastructure within the application area and any other stakeholders.

End of Panel Report

- 21 Within 6 months of the completion of each longwall panel, an end of panel report must be prepared to the satisfaction of the Director Environmental Sustainability. The end of panel report must:
- a) include a summary of the subsidence and environmental monitoring results for the applicable longwall panel;
 - b) include an analysis of these monitoring results against the relevant:
 - impact assessment criteria;
 - monitoring results from previous panels; and
 - predictions in the SMP and EIS;
 - c) identify any trends in the monitoring results over the life of the activity; and
 - d) describe what actions were taken to ensure adequate management of any potential subsidence impacts due to longwall mining.

Access to Information

- 22 Within 3 months of the submission of an End of Panel Report (as required by Condition 21) or the approval of a plan, programme or strategy required under this Approval or the SMP (or any subsequent revision of these documents), the Leaseholder must, to the satisfaction of the Director General:
- a) provide a copy of these document/s to all relevant agencies;
 - b) ensure that a copy of the relevant documents is made publicly available at the Leaseholder's regional office; and
 - c) put a copy of the relevant document/s on the Leaseholder's website.

Survey Marks

- 23 At the completion of subsidence, or otherwise as required by the Department of Lands, the functionality of any survey marks affected by subsidence must be fully restored to the satisfaction of the Department of Lands.

APPENDIX A

Additional Requirements for plans, programmes and strategies

Note: *These requirements are additional to those identified in the guidelines and specific conditions of Approval which require the preparation of the plans*

Condition 14 Infrastructure and Property Management

Condition 16 Water Management

Ongoing Consultation with government agencies.

Details of the monitoring programme.

Details with respect to prevent the seepage inflow of water from the Glennies Creek alluvial aquifer system.

Condition 17 Land Management

Ongoing Consultation with owners/operators and government agencies.

Details of the review programme.

Details with respect to managing the expected cracking in shallow depth of cover areas.