

13. RISK ASSESSMENT

In May 2008, AXYS Consulting was engaged to facilitate a qualitative risk assessment to critically examine Appin Colliery's Longwalls 705 to 710 mining plan to identify and assess mine subsidence-related risk issues. The Risk Assessment is attached as **Appendix G**.

The assessment considers potential loss impacts including effects on Appin Colliery's strategic, business and operational objectives as well as third party and environmental aspects. Risk ranking was undertaken in accordance with the BHP Billiton Enterprise Wide Risk Management (EWRM) Standard Risk which is consistent with Australian Standard AS4360:2004.

The objectives of the risk assessment were to:

- Assist Appin Colliery in identification and control of subsidence risks associated with mining of Longwalls 705 to 710 in accordance with requirements from:
 - BHP Billiton Policy and Standards;
 - State and Commonwealth Legislation; and
 - NSW Department of Primary Industries Mineral Resources Guideline for application for Subsidence Management Approvals.
- Provide a report detailing the outcomes of the risk assessment, including:
 - Risk issues, causes and impacts:
 - Identification of existing risk mitigation controls;
 - EWRM risk ranking; and
 - Risk reduction strategy/actions.

In accordance with the scope, high level risk issues were considered and recorded by the risk assessment team. The reader should refer to the sections regarding the Objectives, Scope and Assumptions of this risk assessment.

Attachment 2 (Analysis Worksheets) of **Appendix G** identifies all of the hazards, existing controls, risk rankings and any new treatment options and the people responsible for their implementation.

Attachment 5 (Risk Treatment Schedule) of **Appendix G** provides a format of all the new treatment options and the people responsible for their implementation. In addition a required date and sign off is also provided.

Attachments 3 and 4 (Risk Rank Order and Consequence Order) of **Appendix G** provides all of the identified hazards and treatment options in order of highest risk to lowest risk and from highest consequence to lowest consequence. The BHPB EWRM standard does not require these reports, however to provide compliance to the Department of Primary Industries MDG1010 and MDG1014 standards they are included.



14. COMMUNITY AND STAKEHOLDER CONSULTATION

(SMP GUIDELINES SECTION 6.8)

The SMP Guidelines outlines a process of community consultation regarding persons or organisations that may be impacted by predicted subsidence following extraction of Longwalls 705 to 710.

14.1. IDENTIFICATION OF RELEVANT STAKEHOLDERS

Stakeholders who have an interest in or concern about subsidence issues related to the mining project include:

- Private Landowners;
- The Appin Area Community Working Group;
- The Wider Community;
- SCA:
- DECC:
- DPIM;
- Telstra;
- Optus;
- Powertel:
- ARTC:
- RTA;
- Transgrid;
- Integral Energy;
- Wollondilly Shire Council;
- NSW Heritage Council;
- Mine Subsidence Board;
- The Cubbitch Barta Native Title Claimants Group;
- Tharawal Local Aboriginal Land Council; and
- Northern Illawarra Aboriginal Collective (NIAC).

14.2. CONSULTATION PROCESS

Consultation undertaken has involved:

- Advertising in Local and State newspapers;
- Meetings with individual landowners;
- Specific meetings with infrastructure owners;



- A Risk Assessment process involving infrastructure owners and relevant agencies;
- Community consultation via the Appin Area Community Working Group; and
- Aboriginal consultation during the baseline archaeological survey.

14.3. ADVERTISING THE SMP

Pre-lodgement advertisements have been placed in both state and local newspapers advising that a Subsidence Management Plan covering the extraction of Longwalls 705 to 710 at Appin Colliery will be submitted. The advertisements included a map which clearly showed the planned extraction area in relation to existing workings and information about where submissions could be sent. The dates for the advertisements were:

- Wollondilly Advertiser (13 May 2008);
- MacArthur Chronicle (13 May 2008); and
- The Land (15 May 2008).

Post-lodgement advertisements will also be placed in both state and local newspapers advising that a Subsidence Management Plan covering the extraction of Longwalls 705 to 710 at Appin Colliery has been submitted. This advertisement will detail a month long exhibition period including where the SMP can be viewed and details of where submissions can be sent.

A copy of the pre-lodgement advertisement is included in **Appendix F**.

14.4. INFRASTRUCTURE OWNERS CONSULTATION

Due to the previous and current mining of Longwalls 701 to 704 in the area there have been consultation meetings with the various infrastructure owners over the past few years. As a result of this there are monitoring and management measures currently in place for infrastructure within the SMP area including:

- RTA;
- ARTC;
- SCA;
- Telstra;
- Optus;
- · Powertel; and
- Electrical infrastructure (Integral Energy and Transgrid).



14.5. COMMUNITY CONSULTATION

A presentation covering the SMP application for Longwalls 705 to 710 was provided to the Appin Area Community Working Group on the 20 May 2008. Attendees at the AACWG meeting included representatives from:

- Private landowners;
- Illawarra Coal;
- Appin Colliery;
- Department Primary Industries; and
- Specialist subconsultants.

14.5.1. Responses from the Community

The Appin Area Community Working Group has requested that digital copies of the SMP Application be made available to each member as soon as they are available, to maximise the time for review.

14.6. LAND OWNER CONSULTATION

All landowners and occupiers within the SMP Area have been personally contacted by Illawarra Coal to discuss plans for the proposed Longwalls 705 to 710 and an inspection of the rural properties and dams has been conducted. Property Subsidence Management Plans are being prepared with the latest subsidence predictions and relevant structural observations from the recent consultation. The plans will be finalised and provided to the landowners/occupiers prior to mining. Copies will be provided to the DPI and the Mine Subsidence Board.

14.7. ABORIGINAL COMMUNITIES CONSULTATION

In accordance with the DECC's *National Parks and Wildlife Act 1974: Part 6 Approvals – Interim Community Consultation Requirements for Applicants* Biosis Research notified the following bodies regarding the proposed Appin Area 7 Longwalls 705 to 710:

- Tharawal Local Aboriginal Land Council;
- The Registrar of Aboriginal Owners;
- Native Title Services;
- The Wollondilly Shire Council; and
- The NSW Department of Environment and Climate Change.



Public notifications following the DECC *Interim Community Consultation Requirements for Applicants* were made in February 2008 via the following local newspapers:

- The Macarthur Chronicle; and
- Wollondilly Advertiser.

A register for interested parties was opened on 19 February 2008 and registrations were received by Biosis Research until 4 March 2008. Written responses to the notification were received from the following parties:

- Tharawal Local Aboriginal Land Council (Donna Whillock);
- Northern Illawarra Aboriginal Collective (NIAC Chris Illert);
- Cubbitch Barta Native Title Claimants Aboriginal Corporation (Glenda Chalker); and
- Office of the Registrar of Aboriginal Owners (Maurice Stewart).

Additional responses to the project were received from:

- Ngunawal Heritage Aboriginal Corporation (Melinda Tubolec);
- Campbelltown City Council; and
- DECC (Lou Ewins).

In accordance with the DECC's National Parks and Wildlife Act 1974: Part 6 Approvals – Interim Community Consultation Requirements for Applicants stakeholders were provided with a methodology for the proposed cultural assessment and given 21 days to review the methodology and provide feedback. No responses to the methodology were received. Representatives from the following organisations participated in the fieldwork:

- Cubbitch Barta Native Title Claimants Aboriginal Corporation; and
- Tharawal Local Aboriginal Land Council.

14.8. AGENCY CONSULTATION

During the Risk Assessment both the environment and infrastructure agency stakeholders provided input into discussions to determine risks and appropriate controls for each natural and man made item discussed.

Discussions have been undertaken with the Principal Subsidence Engineer DPIM over an extended period in respect of infrastructure management at Appin Area 7.

14.9. SUMMARY OF STAKEHOLDER CONSULTATION RESULTS

14.9.1. Summary of Issues and Concerns Raised

In general, potential impacts to natural features were not identified as a major concern to local stakeholders. Concern has been expressed by the wider community in respect of



potential impacts associated with directly mining beneath rivers. Concerns expressed by most stakeholders focused on the risk of structural damage to houses or public

infrastructure, although most stakeholders recognised that processes of mitigation, planning, management and (compensation by the MSB) were in place if required.

14.9.2. Management Priorities Identified

Management priorities identified were to continue the development of monitoring, mitigation and management actions with infrastructure owners. Management and monitoring programs for natural features have also been developed.

14.9.3. Areas where Subsidence Management is to be Undertaken Jointly

Subsidence management is to be undertaken jointly with the relevant infrastructure owners via meetings, updating management plans, deciding on mitigation options and monitoring programs.