

# Appendix H Built Features Management Plan



# **DONALDSON COAL PTY LIMITED**

# **ABEL MINE**

# **Appendix H**

# **Built Features Management Plan**

EP / SMP Area 4

# May 2014

Prepared by	Daniel Lee	Document No		EP / SMP - Area 4 Built Features Management Plan	
Approved by	David Gibson	Version No	1		
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## **Document Control**

# Description

Document No.	Abel EP / SMP Area 4
Title	Built Features Management Plan
General Description	To manage all Built Features that may be affected by subsidence from mining in Area 4 at Abel Mine
Key Support Documents	Abel Mine EP / SMP Area 4

# **Approvals**

ORIGINATOR	Daniel Lee	Position Registered Surveyor	Signed	Date
REVIEWED	Tony Sutherland	Position Technical Services Manager	Signed	Date
APPROVED	David Gibson	Position Operations Manager	Signed	Date

## Revisions

						Approved
Version #	Date	Description	Ву	Checked	Name	Signed
1	May 2014					

The nominated Coordinator for this document is	Technical Services Manager

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#### 1 INTRODUCTION

Donaldson Coal Pty Ltd (Donaldson) a subsidiary of Yancoal Australia Pty Limited (Yancoal), operates Abel Mine, an underground coal mine located approximately 23 kilometres north-west of Newcastle in the Newcastle Coalfield of New South Wales. Abel Mine has successfully undertaken pillar extraction mining using the Bord and Pillar system within the Upper Donaldson seam since 2010 in Abel's SMP Areas 1, 2 and 3.

Project Approval 05\_0136 (Development Consent) for the mine was granted by the Department of Planning on 7 June 2007. Mining (first workings and pillar extraction, subject to an SMP approval) is presently approved under the Project Approval, Mining Operations Plan and lease conditions to take place within Mining Lease ML 1618. Project Approval 05-0136 was modified (MOD 3) under delegated authority of the Minister for Planning and Infrastructure on 4 December 2013 to allow the method of extraction to include shortwall and longwall as well as bord and pillar extraction methods in the Upper and Lower Donaldson Seams and an increase in ROM coal extraction at Abel Mine.

Abel Mine commenced coal production in May 2008. The Mine currently employs approximately 360 personnel (including contractors) and current produces approximately 2.5 million ROM tonnes per annum (tpa), with a proposed maximum production of 6.1 million tonnes of thermal / soft coking coal from the Upper and Lower Donaldson coal seams. Abel's production is railed to Newcastle for the export market.

Abel Mine is currently developing the first panel in Area 4. This Built Features Management Plan (BFMP) has been prepared in accordance with the requirements of Schedule 3, Condition 4 of PA05\_0136 (MOD 3) as a key component plan to the Extraction Plan.

#### 1.1 Scope & Objective

The objective of this BFMP is to identify the management framework for management of subsidence induced impacts on Built Features from secondary extraction of Panels 27 to 35 within the Upper Donaldson Seam at Abel Mine using bord and pillar techniques. See **Figure 1**.

The objective of the BFMP will be achieved by:

- Identifying the Built Features within the Extraction Plan Area and their owner;
- Identifying the predicted subsidence impacts and/or consequences for the Built Features within the extraction plan in general terms (specific information for each Built Feature to be included in individual BFMP's;
- Identifying the management activities (including consultation, monitoring and remediation method) prepared to address the predicted subsidence impacts for Built Features; and
- Identifying the review and reporting activities to allow for assessment of the performance of Built Features management measures by Abel Mine, and identification of areas where either continual improvement may be achieved, or management of unpredicted subsidence impacts can be managed.

The BFMP has been prepared to address conditions of PA05\_0136 (MOD 3), and structured in general accordance with draft *Guidelines for the Preparation of Extraction Plans* provided to Abel Mine by NSW Planning and Environment (P&E) in 2013.

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The document will focus on the predicted consequences of subsidence and how these consequences may be managed. Impact assessment information will largely not be presented, though is available within the relevant Subsidence Predictions and Impact Assessment report prepared by MSEC for the Extraction Plan / Subsidence Management Plan Area 4 application (MSEC676).

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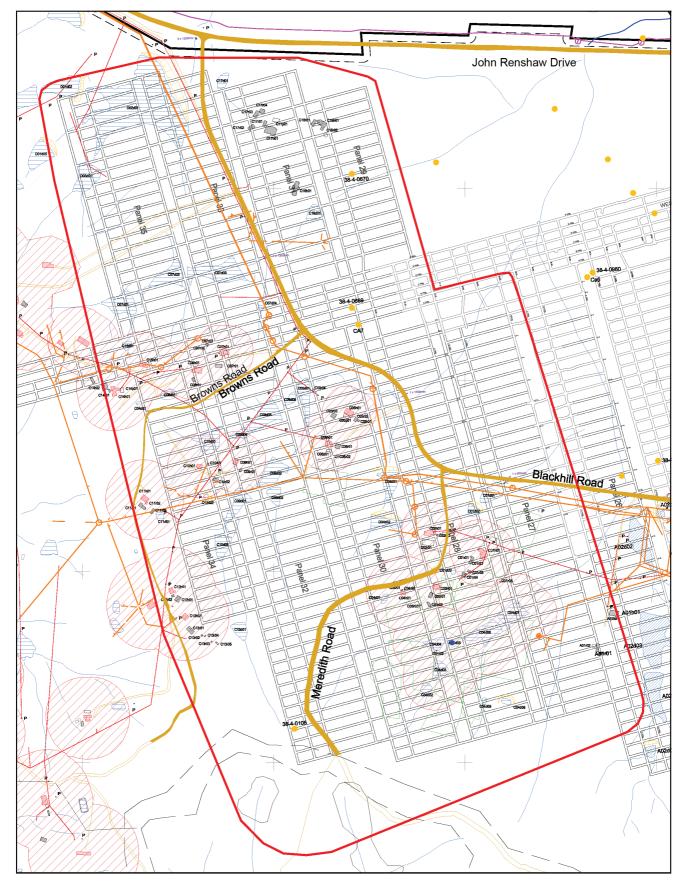


Figure 1. EP / SMP Area 4

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#### 2 PERFORMANCE OBJECTIVES

Performance objectives in relation to subsidence impacts at Abel Mine area presented in **Table 1** (Table 3; PA05\_0136 (MOD 3).

Table 1. Performance Objectives from PA05\_0136 (MOD 3).

Built Features	
Other Public Infrastructure:	
-Timber power poles;	-Always safe and serviceable.
-Roads; and	-No greater subsidence impact or environmental
-Telecommunications cables	consequences than predicted in the EA and EA
	(MOD 3).
	-Damage that does not affect safety or
	serviceability must be fully repairable, and must be
	fully repaired.
Key Privately-Owned Built Features:	
-Principal residences;	-First workings only within a 26.5° angle of draw of
-The 4 largest dams at the commercial orchard on	the structure, except with the prior written
Lots 11 and 12 DP877937 and Lots 610 and 611	agreement of the relevant landowner.
DP1035588, while this land is used for this	-Always safe.
purpose.	-Serviceability should be maintained wherever practicable.
	1 '
	-Damage must be fully repairable, and must be fully
Other British Owned Built Features	repaired, or else replaced or fully compensated.
Other Privately-Owned Built Features: -Rural buildings;	-Always safe.
-Farm dams;	
-Furm dums; -Tracks and Fences.	-Serviceability should be maintained wherever
- Trucks und Fences.	practicable. Loss of serviceability must be fully compensated.
	,
Public Safety	repaired of else replaced of july compensated.
	Nealigible additional risk
Public Safety Public safety.	-Damage must be fully repairable, and must be fully repaired or else replaced or fully compensated.  Negligible additional risk.

Donaldson has made the subsidence specific commitments in **Table 2** in relation to subsidence impacts to Built Features from Abel Mine.

Table 2. Performance Objectives from PA05\_0136 (MOD 3) – Statement of Commitments

# Subsidence Specific Commitments by the Company

## Principal Residences

Commitment

The Company commits to producing and implementing a plan of management for each Principal Residence existing at the date of approval of this project. A Principal Residence is defined as an existing building capable of being occupied as a separate domicile and used for such purpose. The plan of management will be produced and implemented as follows:

A1. Each Principal Residence will be individually assessed by the Mine Subsidence Board (MSB) /structural engineer who will determine tolerable levels for individual subsidence parameters. Tolerable limits are those limits which will result in no mitigation works being required to the Principal Residence due to subsidence impacts from the Abel Underground Mine.

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#### Commitment

- A2. Each Principal Residence will have a pre-mining survey to identify and record pre-existing imperfections that will not be covered by the MSB.
- A3. Such assessments will be done as and when the progression of the mining process dictates i.e. mining may have commenced in other areas prior to the individual Principal Residence assessment being undertaken.
- A4. Tolerable levels will be set according to such factors as dwelling construction (e.g. brick veneer, clad), type (single, double storey), size (length and width), footings (slab, strip footings, piers), surface conditions (sand, rock, clay, steep slope) etc, with reference to the MSB Graduated Guidelines (compatible with AS 2870 and the Building Code of Australia).
- A5. The mine plan in proximity to each Principal Residence will be modified by the Company to maintain subsidence parameters within the tolerable levels determined above for each Principal Residence.
- A6. The mine plan will be reviewed by the MSB and the DRE prior to any Subsidence Management Plan being approved under the relevant lease.
- A7. Each Principal Residence will have a specific subsidence monitoring plan to monitor subsidence impacts before and after mining at the Principal Residence and to ensure that tolerable limits are achieved in practice.
- A8. The MSB has the responsibility to rectify any impacts to structures that may occur as a result of mining.

In cases where the owner of the Principal Residence and the Company can agree to terms which permit second workings under the Principal Residence greater than those permitted above, the Company agrees to negotiate a plan of management similar to that proposed in the section of this Statement of Commitments titled "All Other Surface Structures".

#### **Future Principal Residences**

If there is no existing residence on a landholding and a residence is planned to be built, the site for this Future Principal Residence will be protected in the same way as that proposed above for Principal Residences. This commitment applies to a maximum of one Future Principal Residence per landholding.

NOTE: Once the Mine Subsidence District is declared for the area all Future Principal Residences will require approval from the Mine Subsidence Board and must comply with the Mine Subsidence Compensation Act 1961.

#### **All other Surface Structures**

"All Other Surface Structures" is defined as any building or structure impacted by mining-induced subsidence from the Abel Underground Mine Project which is not categorised as a Principal Residence, Future Principal Residence, Black Hill Church and Cemetery or Black Hill School.

The Company shall prepare and implement plans of management for the mitigation and remediation of any damage to All Other Surface Structures prior to any mining occurring that would impact on them.

The plan of management will include:

- (a) pre-mining audit of the structure;
- (b) the provision of a plan of management as part of the SMP approval process which requires the Company to mitigate/remediate any damage to improvements associated with the structure in conjunction with the Mines Subsidence Board;

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#### Commitment

(c) post-mining monitoring of the improvements associated with the Structure.

The mitigation/remediation measures to be undertaken will be related to the extent of damage experienced – see Schedule 1 for details.

#### **Dams**

A Dam Monitoring and Management Strategy (DMMS) will be formulated for all dams prior to any mining occurring which will impact on the dams. The DMMS will provide for:

- F1. The individual inspection of each dam by a qualified engineer for:
  - current water storage level;
  - current water quality (EC and pH);
  - wall orientation relative to the potential cracking;
  - wall size (length, width and thickness);
  - construction method and soil/fill materials;
  - wall status (presence of rilling/piping/erosion/vegetation cover);
  - potential for safety risk to people or animals;
  - downstream receptors, such as minor or major streams, roads, tracks or other farm infrastructure; and
  - potential outwash effects.
- F2. Photographs of each dam will be taken prior to and after undermining, when the majority of predicted subsidence has occurred.
- F3. Dam water levels, pH and EC will be monitored prior to and after undermining to assess the baseline and post mining dam water level and water quality in order to determine whether rehabilitation is required.
- F4. In the event that subsidence/crack development monitoring indicates a significant potential for dam wall failure, dam water will be managed in one of the following manners:
  - pumped to an adjacent dam to lower the water level to a manageable height that reduces the risk of dam wall failure,
  - discharged to a lower dam via existing channels if the water cannot be transferred, or
  - not transferred if the dam water level is sufficiently low to pose a minor risk.

An alternate water supply will be provided to the dam owner until the dam can be reinstated. F5. In the event of subsidence damage to any dams the Company shall remediate the damage and reinstate the dam in conjunction with the Mine Subsidence Board.

#### **Public Roads**

The Company shall prepare and implement a plan of management as part of the SMP process implemented under the mining lease for the Abel Underground Mine. This plan of management will ensure the safety and serviceability of public roads and 4WD tracks and existing fire fighting access tracks.

#### **Powerlines**

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#### Commitment

The Company shall prepare and implement a plan of management as part of the SMP process which will ensure the safety and serviceability of powerlines.

#### **Survey Marks**

At the completion of subsidence or otherwise as required by Government Authorities, the functionalities of any survey marks affected by subsidence will be fully restored to the satisfaction of the Government Authorities.

#### **Water Supply**

In the event of interruptions to water supplies due to subsidence impacts on farm dams, water tank pipelines, water mains and irrigation systems within the application area, the Company commits to providing water supplies of equivalent quality and quantity to locations convenient to those affected until such time that the affected farm dams, water tanks, pipelines, water mains and irrigation systems are restored.

#### 3 BUILT FEATURES MANAGEMENT

#### 3.1 Land Ownership

The Extraction Plan Area extends underneath Cessnock City Council roads as well as private rural residential land holdings and privately owned access roads. The northern eastern portion of the Extraction Plan area is primarily located beneath Donaldson Coal owned land. Land ownership is shown in **Figure 2** and **Table 3**.

#### 3.2 Identification of Built Features and Management

Built features within the Extraction Plan Area and the relevant owners are presented in **Table 3** and are shown in **Figure 2**. The proposed manner of specific management for each Built Feature is also provided. Stakeholder contact details are provided in **Appendix A**.

#### 3.2.1 Individual Built Feature Management Plans

As described in **Table 3**, Abel Mine proposes to manage individual owners of Built Features using an owner specific BFMP. The individual BFMPs will be developed progressively during extraction within the Extraction Plan Area in consultation with the relevant infrastructure owner prior to subsidence effects occurring on the particular Built Feature and will be submitted to the Director-General P&E. **Table 3** also provides the proposed timing for development of the individual BFMPs in relation to pillar extraction.

The individual BFMPs will incorporate subsidence management measures from Abel Mine's Statement of commitments that form part of PA05\_0136 (MOD 3) (refer to **Table 2**).

#### 3.2.2 Management of Public Safety Relating to Built Features

Public safety matters relating to Built Features will be identified in individual BFMPs. Any specific public safety management controls, recommended during the development of individual BFMP (including from structural engineer inspections) shall be incorporated into the Extraction Plan – Public Safety Management Plan Panels 27 to 35 EP / SMP Area 4.

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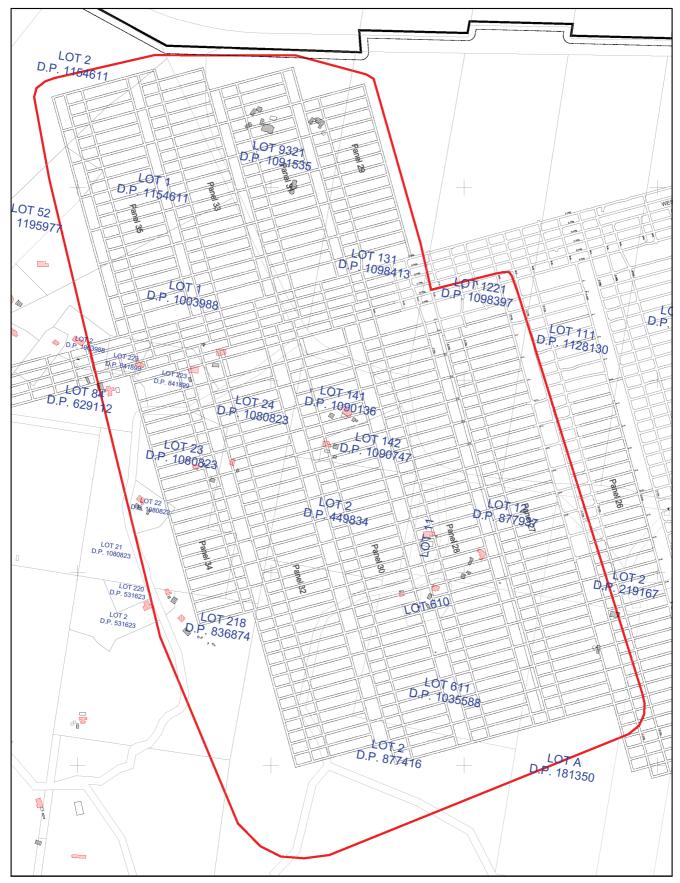


Figure 2. Land Titles within EP / SMP Area

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Table 3. Built Features Associated with the Extraction Plan Area and Timing for Preparation of Individual BFMP's

Asset	Description	Ownership	Specific Management Plan	Timing for Preparation of BFMP
Public Roads	Blackhill Road (sealed)	Cessnock City Council	BFMP – Public Roads and PuSMP	Prior to Panel 27 impacting
	Meredith Road (sealed & unsealed)	Cessnock City Council	BFMP – Public Roads and PuSMP	Prior to Panel 28 impacting
	Browns Road (sealed)	Cessnock City Council	BFMP – Public Roads and PuSMP	Prior to Panel 30 impacting
Electricity Power Lines	11kV Powerlines Local Distribution lines	Ausgrid	BFMP – Ausgrid and PuSMP	Prior to Panel 27 impacting
Telecommunications Lines	Local Copper Cables	Telstra	BFMP – Telstra and PuSMP	Prior to Panel 27 impacting
	Lot 202 DP 1188784	Donaldson Coal	PuSMP	NA
	Lot 201 DP 1188784	Donaldson Coal	PuSMP	NA
	Lot 111 DP 1128130	Donaldson Coal	PuSMP	NA
Private Properties	Lot 1221 DP 1098397	Donaldson Coal	PuSMP	NA
Features may include: House	Lot 131 DP 1098413	Donaldson Coal	PuSMP	NA
Water tanks Rural Sheds	Lot 9321 DP 1091535	Donaldson Coal	PuSMP	NA
Dams Private access roads /	Lot 2 DP 877416	Coal & Allied Operations	Individual BFMP - PSMP	Prior to Panel 28 impacting
driveways Swimming pools	Lot 611 DP 1035588	Osborn, H.D.	Individual BFMP – PSMP inc DMMS	Prior to Panel 27 impacting
Fences	Lot 610 DP 1035588	Osborn, N.I.	Individual BFMP - PSMP	Prior to Panel 27 impacting
	Lot 12 DP 877937	Osborn, H.D.	Individual BFMP – PSMP inc DMMS	Prior to Panel 27 impacting
	Lot 11 DP 877937	Beach, D.S.	Individual BFMP - PSMP	Prior to Panel 28 impacting

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Description		Specific Management Plan	Timing for Preparation of BFMP
	Osborn, J.M.	Individual BFMP – PSMP inc DMMS	Prior to Panel 28 impacting
	Frances, A. L.	Individual BFMP - PSMP	Prior to Panel 28 impacting
	Jennings, A.J.	Individual BFMP – PSMP inc DMMS	Prior to Panel 28 impacting
1	East, C.P.	Individual BFMP - PSMP	Prior to Panel 32 impacting
	Perkins, G.J.	Individual BFMP – PSMP inc DMMS	Prior to Panel 32 impacting
	Latham, K.M.	Individual BFMP - PSMP	Prior to Panel 34 impacting
	Williams, K.R	Individual BFMP - PSMP	Prior to Panel 34 impacting
	Shirley, D.A.	Individual BFMP - PSMP	Prior to Panel 34 impacting
	Osborn, J.M.	Individual BFMP - PSMP inc DMMS	Prior to Panel 32 impacting
	Osborn, J.M.	Individual BFMP - PSMP inc DMMS	Prior to Panel 30 impacting
	Osborn, J.M.	Individual BFMP - PSMP	Prior to Panel 34 impacting
	Osborn, J.M.	Individual BFMP - PSMP inc DMMS	Prior to Panel 34 impacting
	Steel, G.P.	Individual BFMP - PSMP inc DMMS	Prior to Panel 34 impacting
	Brown, PJ	Individual BFMP - PSMP	Prior to Panel 35 impacting
	Morgan, R.T.	Individual BFMP - PSMP inc DMMS	Prior to Panel 35 impacting
	Brown, L.J.	Individual BFMP - PSMP inc DMMS	Prior to Panel 34 impacting
	Brown, R.A.	Individual BFMP - PSMP inc DMMS	Prior to Panel 31 impacting

	Prior to Panel 31 impacting					
	Prior to P	ement Plan				
	Individual BFMP - PSMP inc DMMS	EP / SMP - Area 4 Built Features Management Plan		Page 14 of 24	This document is uncontrolled unless viewed on the intranet.	
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	Brown, R.A.	Document No	Version No	Revision date	document is uncor	
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_	Lot 1 DP 1003988	Prepared by	Approved by David Gibson	Issue date		

Asset	Description	Ownership	Specific Management Plan	Timing for Preparation of BFMP
	Lot 1 DP 1154611	Talley, N.J.	Individual BFMP - PSMP inc DMMS	Prior to Panel 33 impacting
	Lot 52 DP 1195977	Fraser, D&C	Individual BFMP - PSMP inc DMMS	Prior to Panel 35 impacting
	Lot 2 DP 1154611	Kranz, P&C	Individual BFMP - PSMP inc DMMS	Prior to Panel 33 impacting

KeyPuSMP - Public Safety Management PlanPSMP - Property Subsidence Management PlanDMMS - Dam Monitoring Management Strategy

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#### 4 DEVELOPMENT OF BFMP

#### 4.1 Agency Consultation

This BFMP forms part of Abel Mine's Extraction Plan to also dress the Subsidence Management Plan approval process. The following agencies of relevance to this plan are included in the Interagency Committee involved in assessing subsidence management plans:

- Division of Resources and Energy;
- NSW Planning and Environment; and
- Mine Subsidence Board.

Additionally, Abel Mine, infrastructure owners and land owners have consulted informally with Mine Subsidence Board (MSB) personnel in relation to the role of the MSB to subsidence impact management to Built Features at the stakeholder meeting on the 27 March 2014. These informal discussions have been used to frame the management plan and individual infrastructure owners BFMPs.

#### 4.2 Private Property Owner Consultation

Community consultation during the preparation of the EP / SMP was undertaken in accordance with the Department of Primary Industries — Mineral Resources Guideline for Applications for Subsidence Management Approvals dated December 2003 (SMP Guideline 2003) and the New South Wales Minerals Council Community Engagement Handbook Towards Stronger Community Relationships. The definition of "Community" adopted for the purpose of developing the SMP community consultation strategy is anyone with an interest in subsidence issues for the proposed EP / SMP application.

Property inspection were undertaken on 5 March 2014 by Donaldson together with Mine Subsidence Engineering Consultants (MSEC) and Evans and Peck water engineering consultants to identify Built Features within EP / SMP Area 4 for analysis of potential subsidence impacts.

All private property owners were then invited to the Stakeholder meeting held on 27 March 2014. A presentation followed by a site inspection was made outlining the EP / SMP process and progress to date, mine design, environmental considerations, results of mining in SMP Areas 1, 2 and 3 to date, subsidence predictions and potential impacts. Private property owners were also presented with a flowchart outlining the process of the individual Property Subsidence Management Plan's (PSMP's) which will become sub plans for the BFMP. This flowchart is shown in **Figure 3**.

#### 4.3 Infrastructure Owner Consultation

Abel Mine is in consultation with infrastructure owners to develop individual BFMP's to manage potential subsidence effects. Owners include:

- Public Roads (Cessnock City Council)
- Telstra; and
- Ausgrid

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Specific predicted subsidence impacts have been discussed in meeting Telstra's representative in relation to potential subsidence management (Mr Colin Dove). Abel Mine will engage Mr Dove to prepare a BFMP – Telstra to manage potential impacts on serviceability to Telstra's communications infrastructure. This plan will be completed prior to subsidence impacts occurring.

A BFMP – Ausgrid will be prepared in consultation with Ausgrid's Manager of Customer Supply and Planning and Reliability, Lower Hunter Patrick Boyle to assist the management of serviceability of Ausgrid's assets during subsidence. This plan will be completed prior to subsidence impacts occurring.

A BFMP – Pubic Roads will be prepared in consultation with Cessnock City Council Asset Engineer Les Morgan to assist in the management and repair of any public safety issue. This plan will be completed prior to subsidence impacts occurring.

Land and Property Information Senior Surveyor Peter O'Kane will be notified as per the Surveyor General's Direction No. 11 *Preservation of Survey Infrastructure* of potential impacts to permanent survey marks within Area 4 prior to subsidence impacts. Once subsidence impacts have completed, Abel Mine will liaise with Peter O'Kane and the Mine Subsidence Board regarding re-establishment of disturbed survey marks. Survey within EP / SMP Area 4 are shown on the **SMP Plan 2**.

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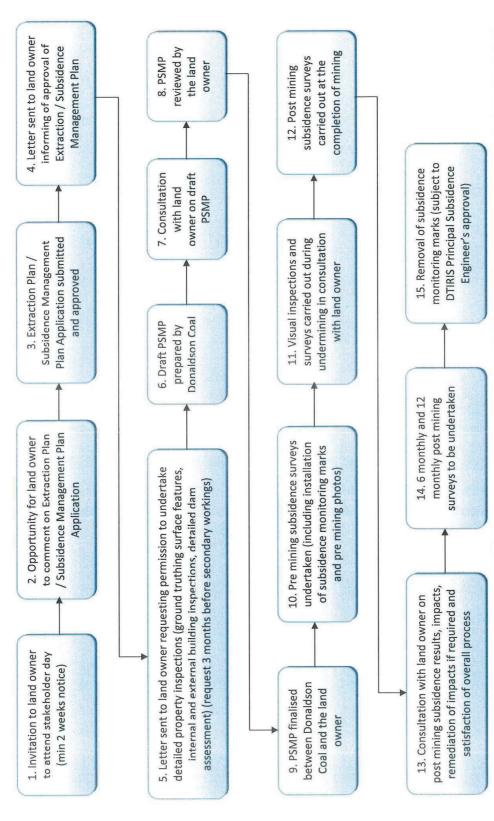


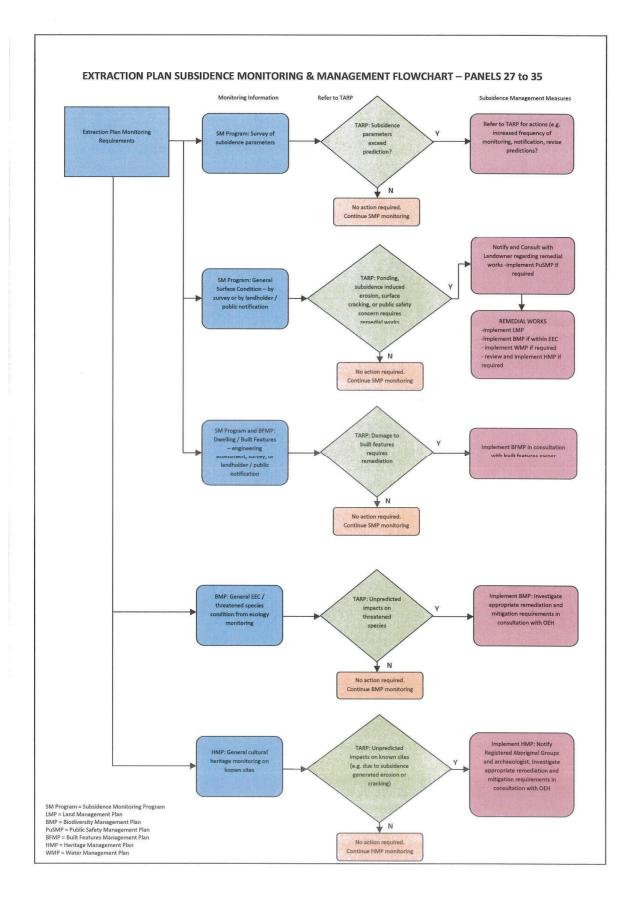
Figure 3. BFMP - Property Subsidence Management Plan (PSMP) Flowchart

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# 5 SUBSIDENCE MONITORING AND MANAGEMENT

The overall framework of subsidence monitoring and management for Built Features and other environmental consequences is described simply by a flowchart which follows (as taken from the **Extraction Plan**).

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#### 6 PLAN IMPLEMENTATION

#### 6.1 Reporting Framework

#### 6.1.1 Annual Review / Annual Environmental Management Report (AEMR)

The Annual Review / AEMR is prepared to summarise Abel Mine's environmental performance for the reporting year and is prepared in accordance with Schedule 6 Condition 4 of Project Approval 05\_0136 MOD 3 and to satisfy Mining Lease conditions.

Performance in accordance with this BFMP, as a key component plan of the Extraction Plan, will be reported using timings and protocols as the main Extraction Plan.

#### 6.1.2 Regular

The results of the monitoring undertaken in accordance with individual BFMPs will be provided to the relevant Built Feature owner at a frequency agreed in the individual BFMP.

#### 6.2 Reporting Framework

Regular review of the BFMP (as part of the Extraction Plan) is required by Project Approval 05\_0136 MOD 3. In particular, Abel Mine is required to review, and if necessary revise, the strategies, plan and programs of this Extraction Plan within 3 months of submission of an:

- Annual review under condition 4 of schedule 6;
- Incident report under condition 7 of schedule 6;
- Audit report under condition 9 of schedule 6; and
- Any modification to the conditions of PA05 0136 MOD 3

Any revision to the BFMP must be completed to the satisfaction of the Director-General.

#### 6.3 Extraction Plan Roles and Accountabilities

Detailed below are key personnel involved with implementing this Extraction Plan to manage subsidence, their roles and responsibilities.

Role	Responsibilities
Operations Manager (OM)	<ul> <li>Make appropriate resources available for the implementation of this Extraction Plan</li> <li>Conduct underground mining activities in accordance with the Extraction Plan Coal Resource Recovery Plan.</li> <li>Notify and liaise with DRE Inspectors (if required)</li> </ul>

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Role	Responsibilities
Technical Services	Owner of the Extraction Plan
Manager (TSM)	<ul> <li>Liaise with Government Agencies and Community members in relation to subsidence matters and the Extraction Plan subsidence predictions and monitoring program</li> <li>Manage / implement subsidence management actions required by the Extraction Plan in relation to Built Features and general landform</li> <li>Coordinate Registered Mine Surveyor to ensure subsidence monitoring is undertaken in accordance with the Extraction</li> </ul>
	<ul> <li>Plan</li> <li>Review subsidence monitoring data against predictions and TARPs in order to trigger any actions required on the basis of subsidence results</li> </ul>
	<ul> <li>Manage / implement subsidence management actions required by the Extraction Plan in relation to Infrastructure</li> <li>Review subsidence predictions based on monitoring information and the TARPs</li> </ul>
	<ul> <li>Liaise with Mine Subsidence Board in relation to Built Features impacts</li> <li>Review and update the Extraction Plan and sub plans as</li> </ul>
	required  • Provide support and guidance in relation to subsidence effects to Environment & Community Manager
Environment and Community Relations Manager (ECM)	<ul> <li>Ensure that all environmental monitoring and reporting is undertaken in accordance with the Extraction Plan and sub environmental management plans</li> <li>Train remediation contractors on mitigation measures for</li> </ul>
	remedial works  • Liaise with Government Agencies in relation to environmental consequences of subsidence and proposed management strategies
	<ul> <li>Liaise with Landholders in relation to environmental consequences of subsidence and in relation to access for the Extraction Plan monitoring program</li> <li>Notify and liaise with neighbours and community in relation to</li> </ul>
	mining timing and monitoring performance
Registered Mine Surveyor (RMS)	<ul> <li>Ensure that all subsidence monitoring is completed to the requirements of the Subsidence Monitoring Program and provided to the TSM for review</li> </ul>
	<ul> <li>Liaise with the Environment &amp; Community Relations Manager to gain required access for subsidence monitoring</li> <li>Provide training for subsidence impact measurements and observations in accordance with SM program</li> </ul>

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#### 7 REFERENCES

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MSEC, 2014, Abel Underground Mine: EP / SMP Area 4 – Proposed Panels 27 to 35, Subsidence Predictions and Impact Assessments for the Natural and Built Features in Support of the EP / SMP Application, Report No. MSEC676, Revision A

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# APPENDIX A – ABEL MINE EP / SMP AREA 4 STAKEHOLDER LIST

Position	Name	Phone
DONALDSON COAL		
Operations Manager	David Gibson	4015 1102
Technical Services Manager	Tony Sutherland	4015 1105
Environment and Community Relations Manager	Phillip Brown	4015 2502
Registered Mine Surveyor	Matthew Wright	4015 1118
Abel Mine After Hours	Control Room	4015 1140
GOVERNMENT		
DRE Mine Safety – Coal Inspectors	Maitland Office	4931 6666
DRE – Principal Subsidence Engineer	Maitland Office	4931 6666
MSB District Manager	Richard Pickles	4908 4300
Cessnock City Council After Hours Contact Number (emergency)	-	4940 7816
Cessnock City Council Operations – Works Delivery Manager	Geoff Bent	4993 4284
Cessnock City Council Asset Engineer	Les Morgan	0413 314 434
Ausgrid – Manager of Customer Supply, Planning and Reliability, Lower Hunter	Pat Boyle	4910 1701
Telstra – Senior Technical Specialist	Mark Schneider	8851 2297
Land and Property Information – Senior Surveyor, Hunter Survey Infrastructure & Geodesy	Peter O'Kane	4925 9984
Planning and Environment	Paul Freeman	9228 6111
LANDHOLDERS	Refer to Abel Mine internal contact register	

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