PLAN OF OPERATIONS

Baralaba Central and Baralaba North

ML5580, ML5581, ML5590, ML5605, ML80157, ML80169, and ML80200

Cockatoo Coal

1st November 2013 – 31st August 2014 (Amendment 4th March 2014)

Table of Contents

FIGURES

TABLES

APPENDICES

1 INTRODUCTION

The Baralaba Coal Mine is an opencut coal mine located in the Bowen Basin, Central Queensland, approximately 3 kilometres from the township of Baralaba. Approval has been granted to commence an expansion of the project to the north of the existing operations.

An Environmental Management Plan (EM Plan) was submitted on 5th October 2012 which outlined the management of the mining operations by Baralaba Coal Pty Ltd for the combined operation of Baralaba Central (ML5605, ML80157) and Baralaba North (ML80169). The Notice of Decision and Environmental Authority (EPML00223213) was issued on 17th May 2013.

A separate EM Plan and Environmental Authority (EA) application was lodged for Wonbindi North as ML80170 is held by Wonbindi Coal Pty Ltd. Although mining approval has been granted through separate EA's, the open cut mining operations on ML80169 and ML80170 will be operated as a single open cut coal mine operation by Baralaba Coal Pty Ltd and Wonbindi Coal Pty Ltd, and will be jointly referred to as the Baralaba North / Wonbindi North Mine.

Through a Deed of Agreement, Baralaba Coal Pty Ltd and Wonbindi Coal Pty Ltd will operate a contiguous operation across the mining lease boundary of ML80169 and ML80170. The deed sets out the terms and conditions of the cooperation between Wonbindi and Baralaba Coal in connection with the Project.

1.1 Term of Plan

The term of the previously submitted Plan of Operations (PoO) is from 01 November 2013 to 31 August 2014.

The Plan is in accordance with Environmental Authority Permit Number EPML00223213 and Section 233 of the Environmental Protection Act 1994. The Plan of Operations complies with the EM Plan submitted to the department dated 5th October 2012.

This Plan of Operations is an amendment to the Plan of Operations which was submitted on the 7th November 2013. This plan still ends on 31st August 2014. The purpose of the amendment is to include the activities on the newly granted ML80200.

This PoO covers mining on pre-existing tenure (ML5605, ML80157, ML5581, ML5590, ML80169) and the new tenement (ML80200).

1.2 Holders of Environmental Authority

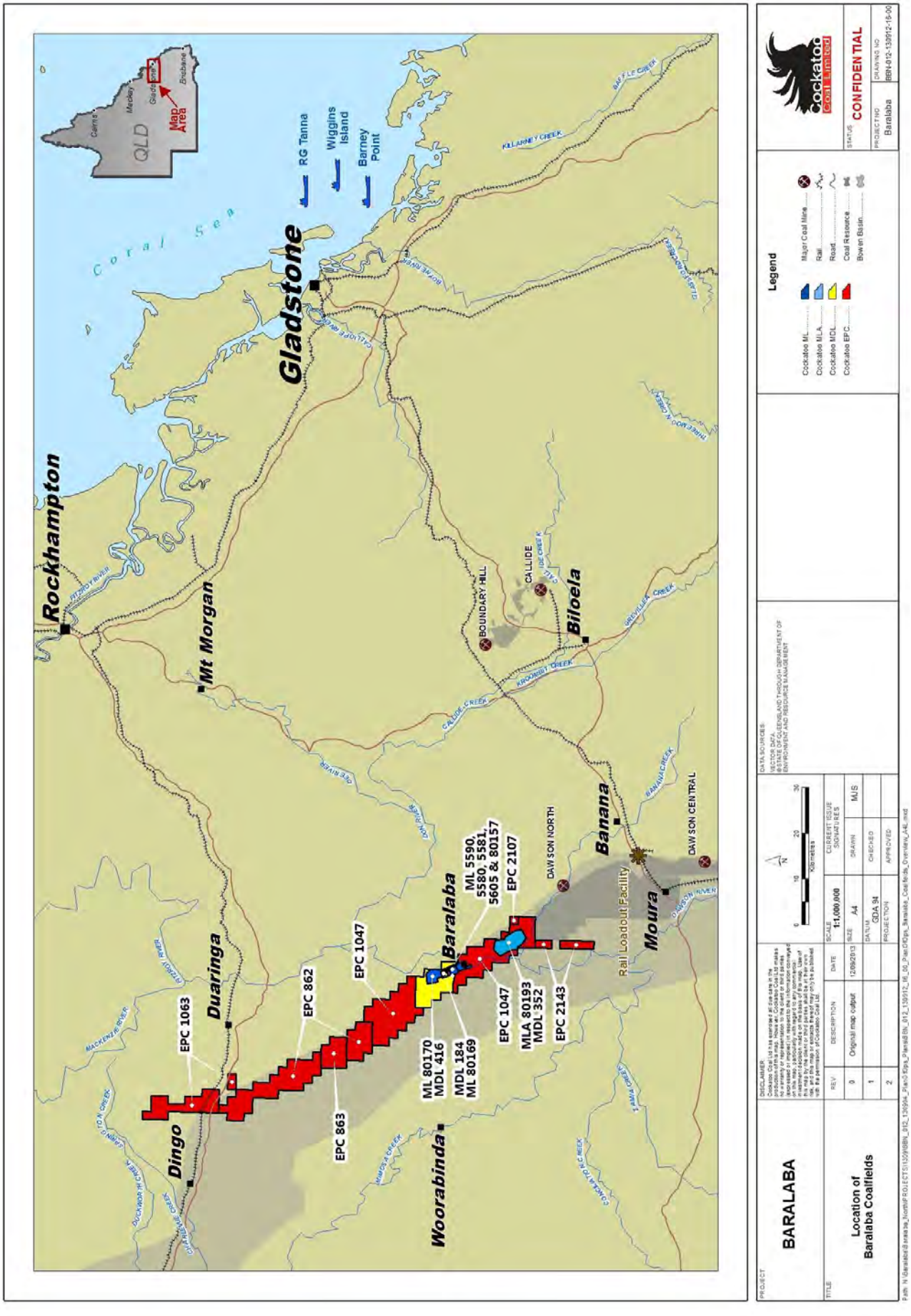
Baralaba Coal Mine is owned and operated by Baralaba Coal Pty Ltd (62.5% Cockatiel Coal Pty Ltd, and 37.5% JS Baralaba Wonbindi Pty Ltd). Cockatiel Coal Pty Ltd is a subsidiary company of Cockatoo Coal Limited. Mining operations on ML5605, ML80157, and ML80169 (Baralaba North) will be operated by Baralaba Coal Pty Ltd.

1.3 Project Location and Surroundings

The Baralaba Coal Mine is located within the Bowen Basin, Central Queensland, approximately 150km west of Rockhampton and 210km west of the Port of Gladstone. A site location plan is provided in Figure 1.

The mine is located 3km north of the township of Baralaba, which has a population of approximately 300 people and is supported predominantly by the mining and farming industries in the area. Baralaba North is located directly north of the Baralaba Central Mine, separated from the site by an Anabranch of the Dawson River. The leases straddle the Banana / Central Highlands Shire boundary.

Figure 1. Site Location Plan



1.4 Mining Tenements

1.4.1 Baralaba Central and Baralaba North (ML5605, ML80157 and ML80169 and ML80200)

This Plan of Operations includes all activities carried out on the mining tenements listed in Table 1 and presented in Figure 2. Baralaba Central consists of ML5605 and ML80157. Surface Rights for ML5605 are only over the properties owned by Baralaba Coal Pty Ltd and the Hoadley's Road Reserve. Baralaba North is ML80169. ML80200 (Anabranch Crossing) was granted on 1st March 2014 for the purpose of "Transport – Vehicular – Haul Road". The Plan of Operations is being amended to include operations on this lease.

Table 1. Mining Tenements

Mining Tenement	Property Description	Shire Name	Tenure	Area (Ha) Within ML
ML5605	1 SP235019	Central Highlands Regional	Freehold	93.5
	1 RP618842	Central Highlands Regional	Freehold	103
	54 KM75	Banana Shire	Freehold	13.6
	28 KM64	Banana Shire	Reserve	14.7
	B AP13999	Central Highlands Regional	Land Lease	5.3
	Hoadleys Road - Temporarily Closed Road	Central Highlands Regional	Road Reserve	5.3
	Baralaba Woorabinda Road	Banana Shire	Road Reserve	29.1
ML80157	1 SP235019	Central Highlands Regional	Freehold	63.7
	2 RP618842	Central Highlands Regional	Freehold	87.5
	Hoadleys Road - Temporarily Closed Road	Central Highlands Regional	Road Reserve	2
ML80169	8 KM44	Central Highlands Regional	Freehold	122.2
ML80200	8 SP256221	Central Highlands Regional	Freehold	4.445
	2 SP235019	Central Highlands Regional	Freehold	0.4086
	Anabranch Dawson River	Central Highlands Regional	River Reserve	0.1503
	Hoadleys Road	Central Highlands Regional	Road Reserve	2.786

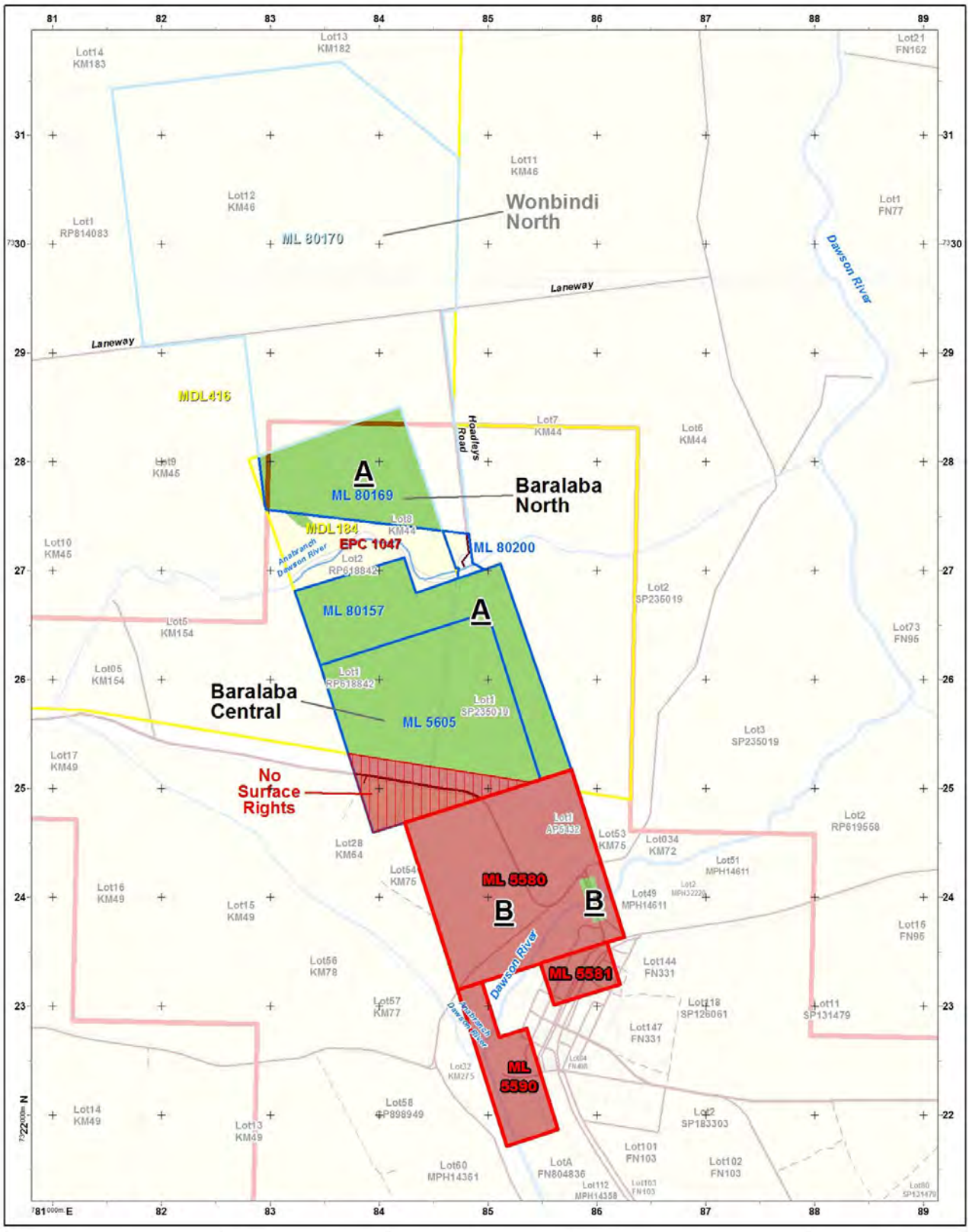
1.4.2 Other Mining Leases (ML5580, ML5581 and ML5590)

The tenements that are included on Environmental Authority EPML00223213 that do not include the current mining operations are listed in the following table and presented in Figure 2.

Table 2. Leases held by Baralaba Coal Pty Ltd but not part of current operations

Tenement	Status	Granted	Expiry	Area (Ha)	
				Total	Surface
ML5580	Granted	01/12/62	30/11/28	258.63	18.97
ML5581	Granted	01/11/53	31/10/16	25.62	0.98
ML5590	Granted	07/08/75	31/08/29	72.43	0

Figure 2. Mining Tenements and Property Boundaries



PROJECT: BARALABA

TITLE: Baralaba Coal Leases

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1.5 History

The original Baralaba Coal mining leases were granted during the period from 1915 to 1962. An estimated 1.2 Mt of coal was extracted by underground mining methods between 1922 and 1969 when the mine closed. The underground mine workings were confined to leases ML5580, ML5581 and ML5582 (lease since expired). Although ML's 5580, 5581, and 5590 form part of the Baralaba Project, mining activities are restricted to the area covered by ML5605, ML80157 and ML80169 (refer Figure 2).

Cockatoo Coal Limited (CCL) acquired the majority share of Baralaba Coal Pty Ltd from Peabody Pacific Pty Ltd on 12 December 2008, and took over the Baralaba Coal Mine which operated on ML5605. ML80157 was subsequently granted in April 2010, and the Baralaba Coal Mine expanded to include this lease.

1.6 Amendment to Plan of Operations

This Plan of Operations is an amendment to the Plan of Operations which was submitted on the 7th November 2013. This plan is for the same term and ends on 31st August 2014.

It must be noted that operations completed under this Plan of Operations will be wholly integrated with activities being undertaken on ML80170 (Wonbindi North). Hence activities to be undertaken on ML80170 are also described within this document where relevant.

1.7 Summary of Activities

The activities to be included in this Plan of Operations for Baralaba Central are:

- Bulk removal of overburden resulting in the exposure of the coal seams;
- Drill & Blast Activities;
- Extraction of coal at a rate of up to 0.75Mt per year until final pit shell completed (projected to be towards the end of 2014);
- Both in and out of pit dumping of overburden and interburden;
- The operation of crushing and truck loading facilities on the lease;
- Infrastructure establishment (eg. North Access Road);
- Associated activities eg. equipment maintenance and repair, environmental management, water management, and progressive rehabilitation primarily through void backfill.

The activities to be included in this Plan of Operations for Baralaba North are:

- Infrastructure establishment (eg. building flood levee, access roads, etc);
- Associated activities such as equipment maintenance and repair, environmental management, and water management.

The activities to be included in this Plan of Operations for the Anabranch Crossing (ML80200) include:

- Haul Road culvert crossing across the Anabranch
- Water Pipeline from Baralaba Central to Baralaba North/Wonbindi North.

2 PLANNED ACTIVITIES

2.1 Overview

During the term of the plan it is intended that mineable reserves within the Baralaba Central leases will continue to be extracted in much the same manner as they have been previously. The mine is in the process of investigating methods to optimize coal recovery and therefore extend mine life post 2014. Some of these methods include pit extensions and/or auger mining.

To enable the continuation of mining beyond 2014, the development of the Baralaba/Wonbindi North leases will be a key activity. All activities to be carried out on Wonbindi North Lease (ML80170) will be described in the Wonbindi North Plan of Operations. Works on all leases (including ML80170) will include:

- Construction of supporting infrastructure (access roads, haul roads, ROM pads, amenities, laydown areas etc);
- Water management and sediment control;
- Construction of the 1:1000 AEP flood protection levee;
- Early pit development works including topsoil stripping for pit and dumps, borrow pits for construction materials, etc;
- Initial box-cut in Wonbindi North pit including waste extraction, drill & blast and coal mining activities;
- Processing of the coal by screening / crushing via a mobile sizing plant, followed by blending of the raw product;
- Road-train haulage of product coal to the train load-out facility located 10km east of Moura, and then transported to the Port of Gladstone for export;
- Light and Heavy Vehicle servicing and repair; and
- Auger mining of remnant Baralaba Central reserves outside final pit shell.

2.1.1 Baralaba Central (ML5605 and ML80157)

The mining activities during the term of this plan will include:

- Production of PCI and thermal coal at a rate of approximately 750,000tpa product coal;
- Operation of Environmentally Relevant Activities as detailed in Figure 7;
- Waste extraction including drill & blast;
- Processing of the coal by screening / crushing via a mobile sizing plant, followed by blending of the raw product;
- Road-train haulage of product coal to the train load-out facility located 10km east of Moura, and then transported to the Port of Gladstone for export;
- Auger mining of remnant Baralaba Central reserves outside final pit shell;
- Light and Heavy Vehicle servicing and repair; and
- Exploration.

Figures 3 & 4 provide the planned progression of mining activities at the commencement of this plan and August 2014 respectively.

Figure 3. Baralaba Central Mine and Anabranch - Disturbance at commencement of plan.

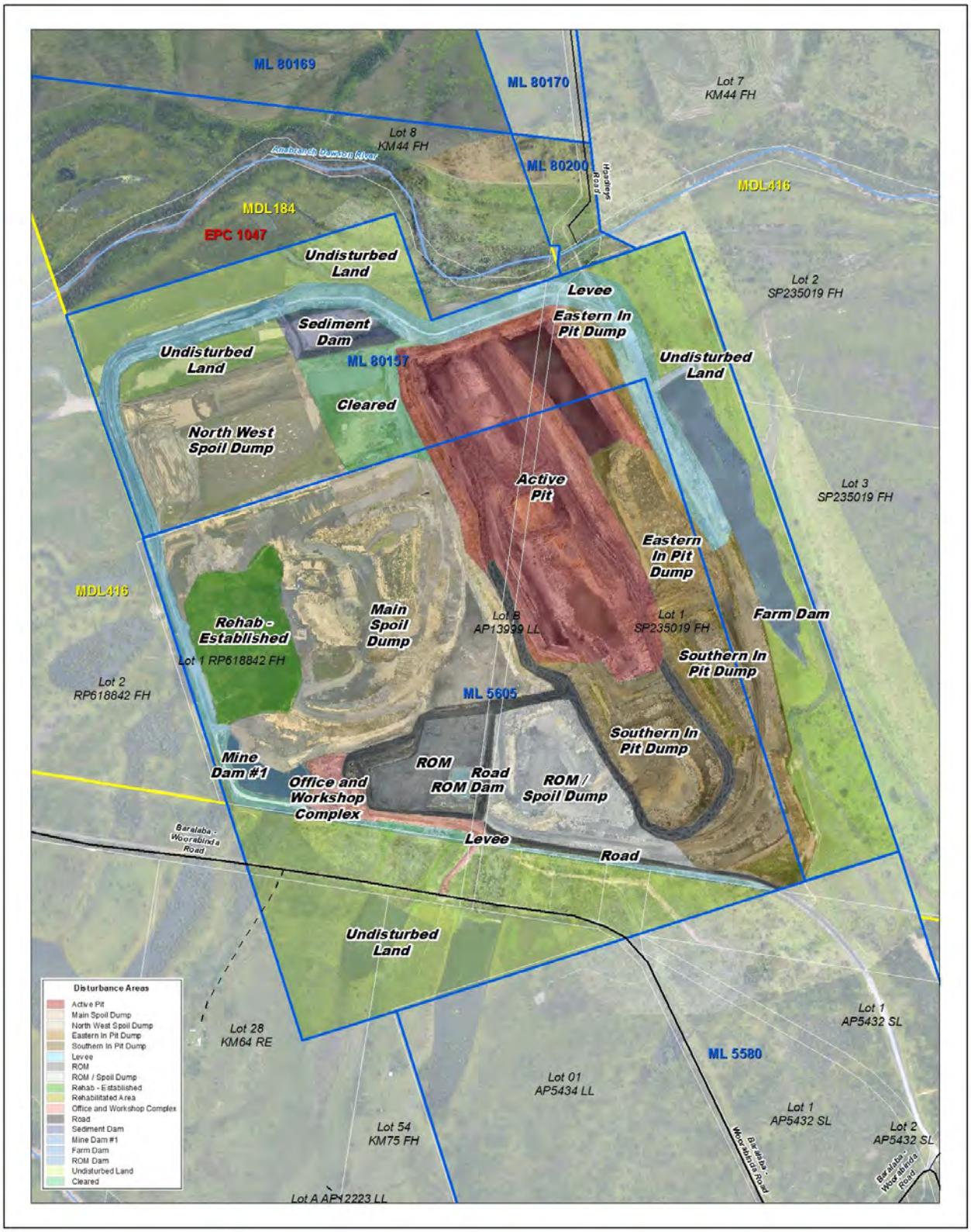
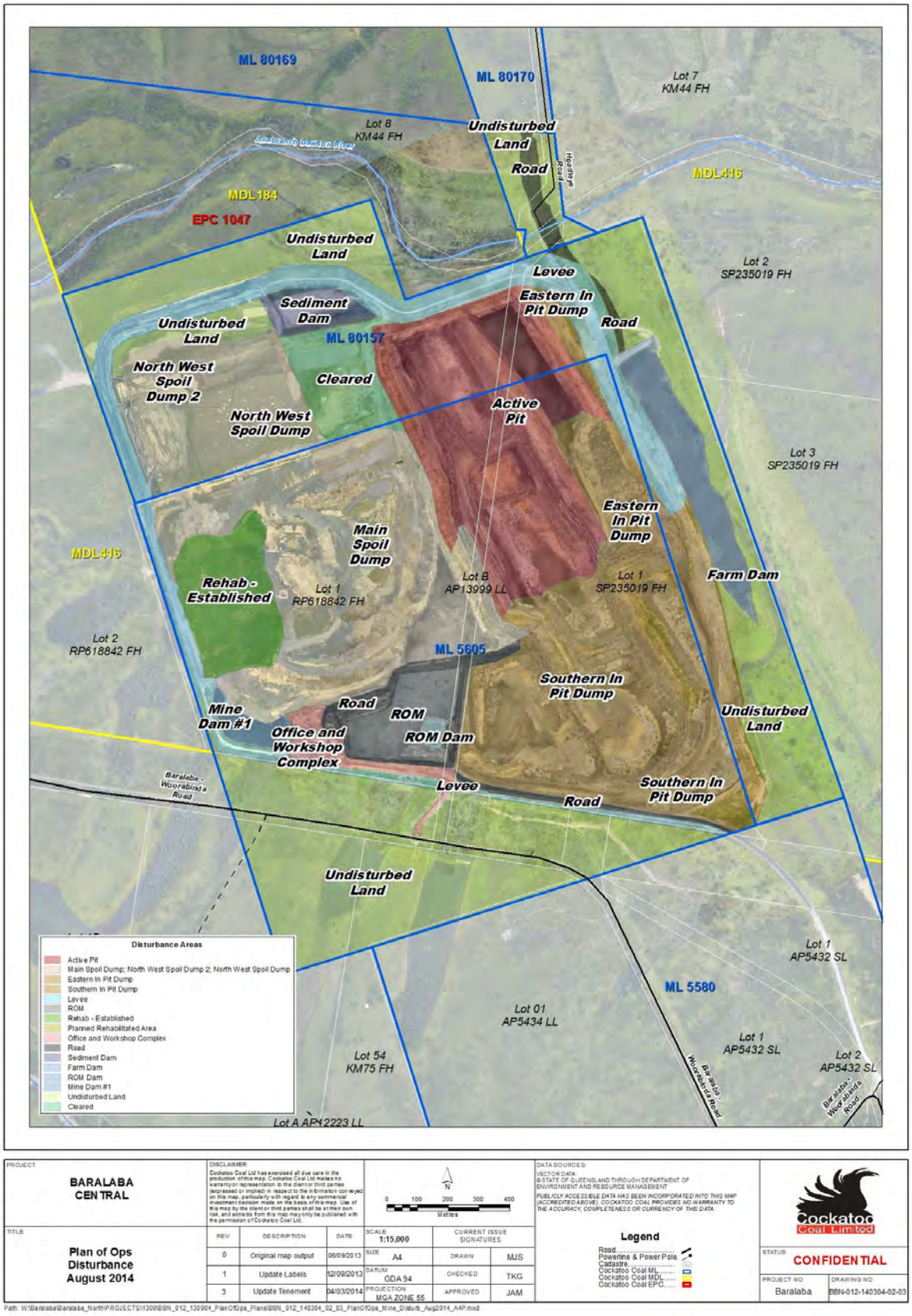


Figure 4. Baralaba Central Mine and Anabranch- Disturbance at end of Plan.



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2.1.2 Baralaba North (ML80169)

The mining activities during the term of this plan will include:

- Excavation of Borrow Material for construction activities (Access roads, mine roads, etc);
- Early pit development works (eg. Topsoil stripping);
- Sediment and erosion control;
- Construction of Flood Protection Levee (contiguous with the levee crossing ML80170);
- Exploration;

Figures 5 & 6 provide the planned progression of mining activities at the commencement of this plan and August 2014 respectively.

2.1.3 Other Mining Leases (ML5580, ML5581 and ML5590)

The mining activities during the term of this plan will include:

- Exploration activities;
- Activities associated with the Conservation Management Plan.

2.1.4 Anabranch Crossing (ML80200)

The activities during the term of this plan may include:

- Construct a two-way haul road culvert crossing across the Anabranch;
- Upgrade existing Anabranch Crossing;
- Distribution of process water via a pipeline from Baralaba Central to Baralaba /Wonbindi North.

Figures 3 & 4 provide the planned progression of activities at the commencement of this plan (Nov 2013) and August 2014 respectively.

Figure 5. Baralaba North Mine (ML80169) - Disturbance at commencement of Plan

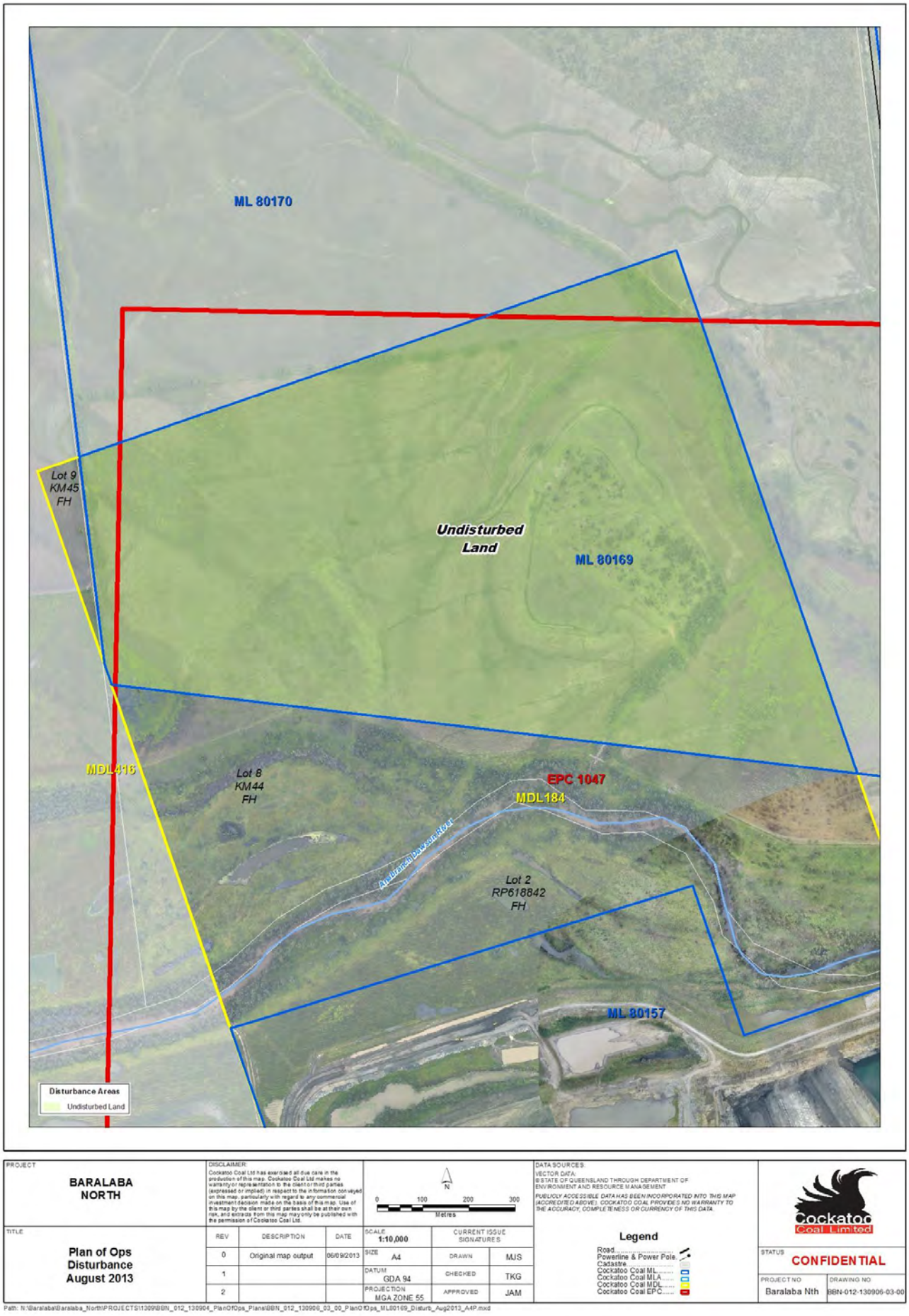

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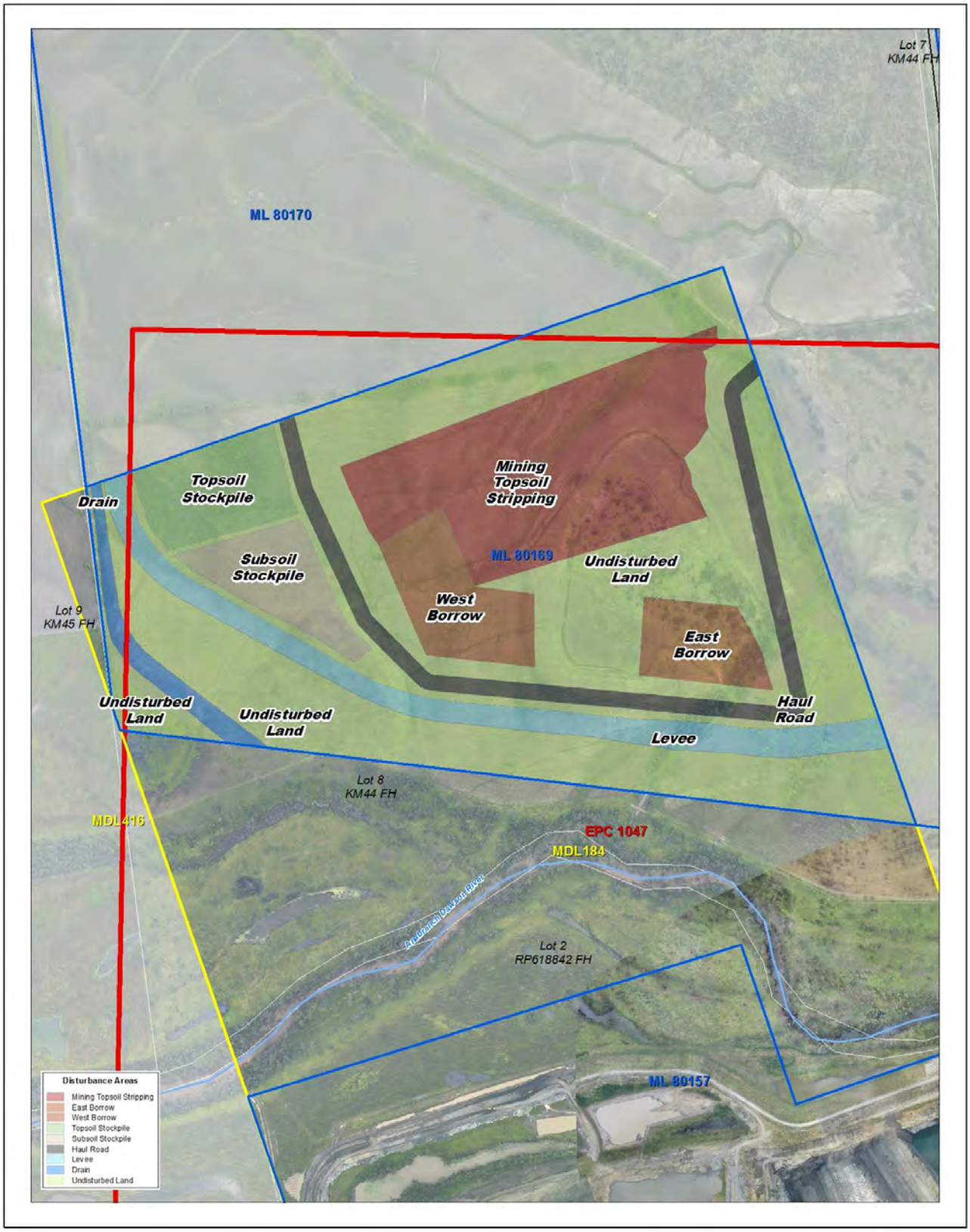
Figure 6. Baralaba North Mine (ML80169) - Disturbance at end of Plan



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2.2 Environmentally Relevant Activities

2.2.1 Baralaba Central (ML5605 and ML80157)

The Environmentally Relevant Activities (ERA) for the Project are listed in Schedule 2 of the Environmental Protection Regulation 2008. Specifically the ERA's are:

Table 3. Environmentally Relevant Activities

ERA	Description
ERA 8 (3) (a) – Chemical Storage	**Location:** Baralaba Central MIA (ML5605) • Diesel & Lube (oil, waste oil and grease) – up to 500,000L
ERA 63 – Sewage Treatment	**Location:** Baralaba Central MIA (ML5605) A sewage treatment facility is installed and operating. Sewerage will be run through a septic system and effluent will be treated and will either be discharged as trickle irrigation or stored in a wet weather tank for later discharge.
ERA 16 (2) Extractive and Screening Activities – extracting, other than by dredging, in a year, the following material – (a) 5000t to 100000t	**Location:** Baralaba Central (ML5605 and ML80157) Extracting sandstone material from the pit for road construction off lease.
ERA 33 Crushing, milling, grinding or screening	**Location:** Baralaba Central (ML5605 and ML80157) Crushing of sandstone material extracted from the pit for road construction

During the term of this plan an ERA16 will be applied for to screen and transport sandstone from Baralaba Central to be used in road construction and other construction activities.

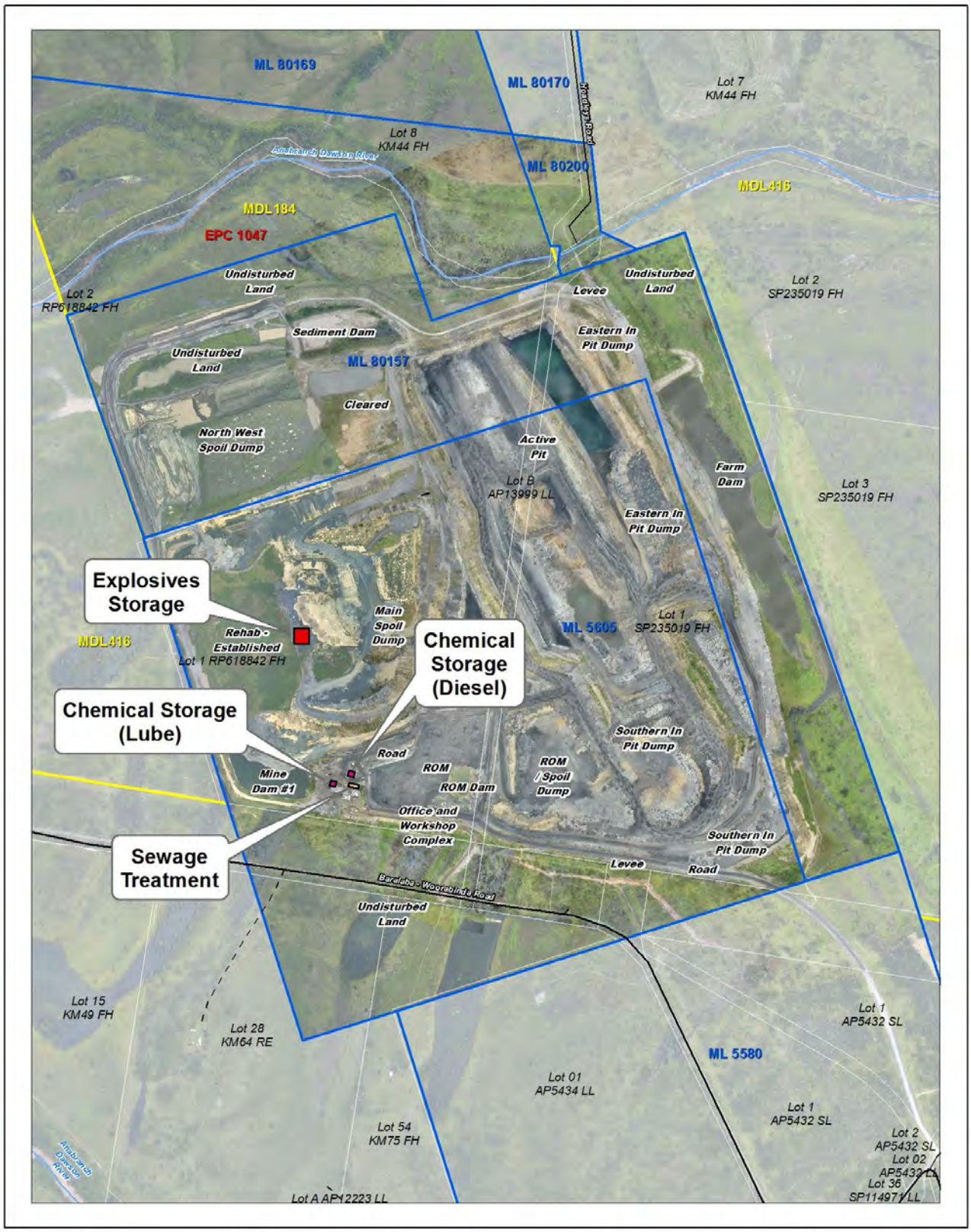
2.2.2 Baralaba North (ML80169)

No Environmentally Relevant Activities on ML80169.

2.2.3 Anabranch Crossing (ML80200)

No Environmentally Relevant Activities on ML80200.

Figure 7. Environmentally Relevant Activities



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2.3 Mining Operations

2.3.1 Baralaba Central (ML5605 and ML80157)

2.3.1.1 Flood Protection

Due to the location of the Baralaba Central Mine on the Dawson River Floodplain, a 1:1000 AEP flood protection levee is constructed around the mine to the 1:1000 year flood level (see Section 2.10.1 for additional details).

2.3.1.2 Coal Resources and Mine Life

The pit has been divided into four main areas (see Figure 8 - Baralaba Central Pit Zones):

- Central Pit 1 (CP1) - Main Pit Void (including Inpit Dump)
- Central Pit 2 (CP2) - Eastern Pit (the "Dog Bowl")
- Central Pit 3 (CP3) - Northern Extension
- Central Pit 4 (CP4) - Western Cutback.

The life-of-mine pit void is designed to progress to approximately RL-55m in CP1 and CP4, and approximately RL-40m in CP3. The coal resource in ML5605 and ML80157 will be nearing full depletion by the end of CY2014. Auger mining of reserves outside final pit shell is currently being investigated and may occur during the term of this plan.

Coal is currently being mined from the CP1, CP3 and CP4 zones. Pit backfilling operations will progress from South to North in both CP1 and CP2 during the plan of operations period. Due to space limitations resulting from ongoing effects of 2010/2011 flooding not all waste material will be placed into pit void and approximately 30% will be dump above ground level. Where possible excess waste will be placed in areas that allow commencement of final landform works. Coal production from the Baralaba Central Mine will be up to 750,000 tonnes per annum.

2.3.1.3 Legacy Water in Pit

Approximately 700ML of water remained in the pit (CP1) after the 2010/2011 floods (that occurred prior to the completion of construction of the 1:1000 year flood levee). The water quality has declined over time, due to groundwater and the evaporative concentration of salts. The water is stored in the mined out CP2 pit void and its volume has increased as a result of ongoing removal of the remnant water from the CP1 mud/sand zone. As part of continued mine operations in CP1 it will be necessary to transfer the remaining water to the CP2 pit void. The mud, sand and silt sediment that washed into the pit and settled at the base of CP1 is being removed progressively using truck and excavator. The material is being used in the backfilling of the pit.

The management of the remaining water in the pit void is discussed in Section 2.7.1.5.

2.3.1.4 Mining Method

Coal from Baralaba Central will continue to be extracted using conventional mining equipment and methodologies (i.e. drilling, blasting, dozing and excavator-truck operations). Operations will be conducted 24 hours per day, seven days per week. Auger mining of reserves outside final pit shell is currently being investigated and may occur during the term of this plan.

Overburden is removed in horizontal slices in a West to East direction exposing various seams dependant on position and depth of the slice. Coal mining of the various exposed seams progresses immediately behind the waste extraction in order to release the next drill and blast blocks in the

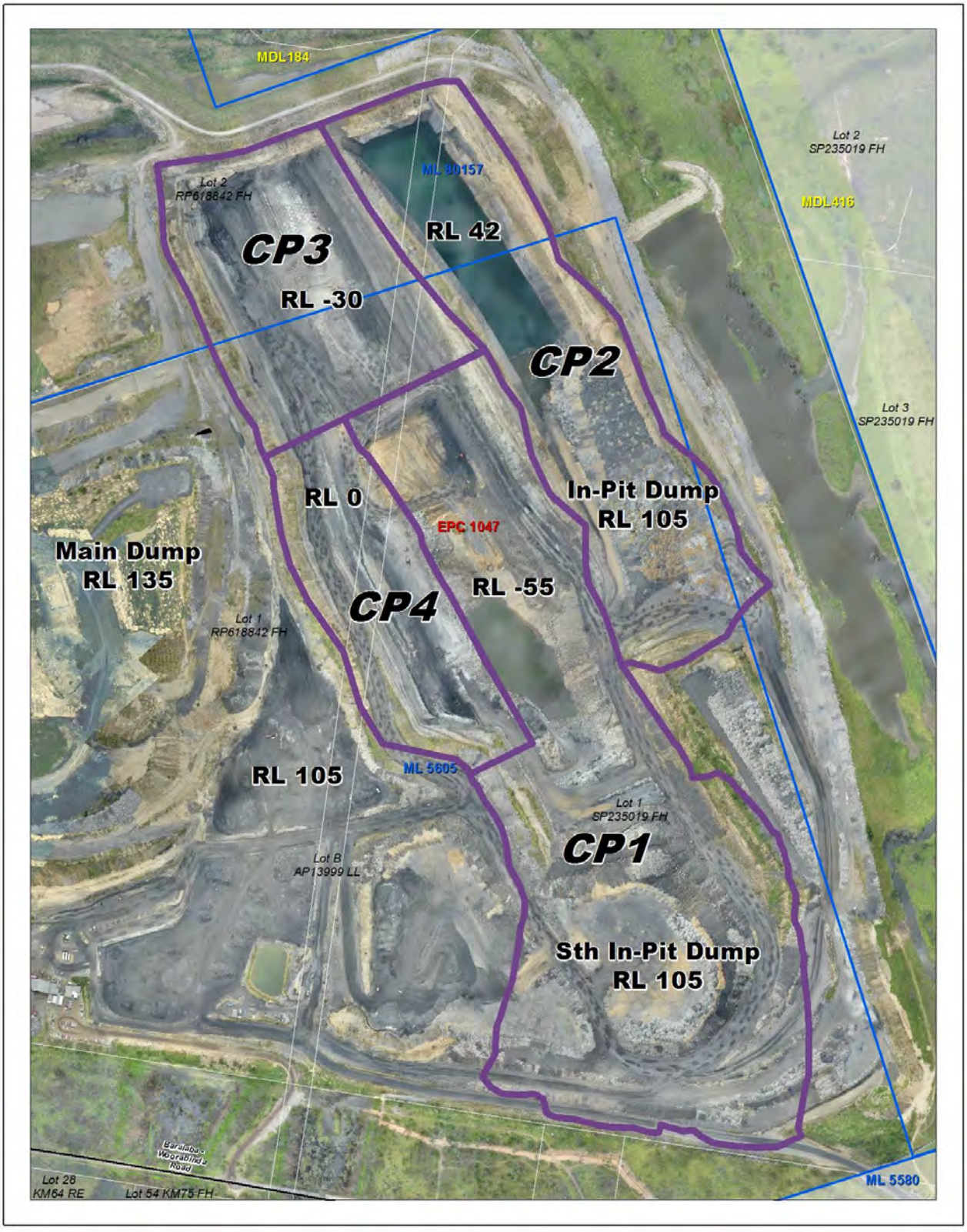
sequence. The coal is mined in layers parallel to the seam dip to reduce contamination between high ash and low ash zones.

Drill & blasting activities will continue to be carried out according to current site practices ahead of the waste extraction sequence.

Progressive backfilling of the mined out portion of CP1 (southern end of the main pit) and CP2 will continue during the term of the plan. Surcharge dumps will also be built on these backfilled pit areas.

Waste dumps will be constructed in accordance with the Rehabilitation Management Plan.

Figure 8. Baralaba Central Pit Zones



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PROJECT NO: Baralaba | DRAWING NO: BBN-012-130909-12-00

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2.3.2 Baralaba North (ML80169)

2.3.2.1 Flood Protection

Due to the location of the Baralaba North/Wonbindi North Mine on the Dawson River Floodplain, a 1:1000 AEP flood protection levee will be constructed around the mine (see Section 2.10.2 for additional details).

During the term of this plan, operations on this lease will consist of topsoil stripping for and construction of; the flood protection levee, borrow pits, access roads, drains, dams and topsoil stripping of the initial pit shell. Construction materials for the aforementioned will be sourced from borrow pits located within ML80169 and the existing Baralaba Central mine. Material from both these sources will be either stockpiled in strategic locations or won on an as required basis. Topsoil stockpiles will be located on this lease within the flood protection levee.

2.3.2.2 Commencement of Mining

Bulk waste mining for the purpose of winning coal will not commence within the term of this plan of operations. Waste movement will be limited to borrow pits for the purpose of providing levee and infrastructure construction materials.

2.3.2.3 Coal Resources and Mine Life

The area encompassed by ML80169 is adjacent to and contiguous with ML80170 (Wonbindi North). As such, the open cut mine proposed for ML80169 will continue north into ML80170 as a single operation despite being subject to two different environmental authorities and plans of operations.

The life of the combined Baralaba North / Wonbindi North mines is expected to be at least 15 years, however further exploration is likely to extend the mine life. Coal will be extracted at a maximum rate of 1Mt ROM coal per annum.

2.3.3 Anabranch Crossing (ML80200)

No mining activities on ML80200.

2.4 Infrastructure

2.4.1 Baralaba Central (ML5605 and ML80157)

2.4.1.1 Mine Industrial Area (MIA)

The existing Mine Industrial Area (MIA) will remain at the existing location, and includes:

- The existing office complex, including first aid room;
- Workshop and Laydown yard;
- Fuel and oil storage;
- Car parks, walkways crib room and ablution facilities will remain in their current form;
- Potable water will be supplied and delivered by a contractor or via a pipeline;
- Wash-down and waste water handling facilities;

Facilities that will be upgraded during the term of the plan include:

- Improved traffic management and vehicle separation;
- Upgraded power supply to increasing the overall supply capacity and the installation of a supply extension to service the Northern Leases;
- Fuel and oil storage capacity may be increased to 500kl combined is required for BN ramp up works;
- Extension of communication and IT facilities to the northern operations.

Figure 9. View of Mine Industrial Area

2.4.1.2 Hydrocarbon Management

The existing fuel farm capacity will likely be increased from current levels to support the completion of Baralaba Central and the ramp up in Baralaba North. The revised capacities will reflect those planned for the temporary MIA in Wonbindi North and will not exceed 500kL in total. Table 4 indicates current vs likely revised capacity.

Table 4. Baralaba Central Hydrocarbon Storage

Hydrocarbon Type	Current Storage	Projected Maximum Capacity
Diesel	3 * 55,000L Self-bunded Transtank®	Up to 500kL in total
Oils	3 * 10,500L tanks	
Waste Oils	1 * 10,500L tank	
Grease	4,000kg	

The existing light vehicle wash-down facility and the associated oil-water separator will be retained. A new 12m x 15m long, heavy vehicle wash down facility has been constructed adjacent to the light vehicle facility with the existing oil-water separator to service both wash-down bays. All wash-down water and silt will report to the oil-water separator, with oil pumped into a tank for off-site disposal by a licenced contractor. Water will drain into Mine Dam 1 as per current operations.

Figure 10. Baralaba Central Upgraded Washdown Facility

2.4.1.3 Explosives Storage

The existing magazine, will be retained for storage and preparation of explosive products used at Baralaba Central and Wonbindi North. The magazine is fenced, signed and maintained in accordance with AS 2187.1 – Explosives Storage and Use - Storage.

2.4.2 Baralaba North (ML80169)

2.4.2.1 Mine Industrial Area (MIA)

No support infrastructure is proposed to be constructed within ML80169.

2.4.2.2 Hydrocarbon Management

During the term of the plan no support infrastructure will be installed on this lease. Any vehicle re-fuelling carried out on this lease will be from a service truck.

2.4.2.3 Explosives Storage

No storage of explosives on this lease during the term of this plan.

2.4.3 Anabranch Crossing (ML80200)

2.4.3.1 Water Pipeline

A water pipeline is buried under the Anabranch in the Anabranch Crossing lease. The pipeline carries mine affected water from the Baralaba Central Pit (CP02) for re-use in dust suppression for the construction and planned mining activities at Baralaba North/Wonbindi North.

2.5 Site Access Roads

2.5.1 Central Mine Access

Access to the Baralaba Central Mine for all light vehicles and delivery vehicles will continue to be via Woorabinda Road, however road may be relocated approximately 200m east to improve power lines clearances if required.

Access to the mine for road trains hauling coal is via a separate haul road running parallel to Woorabinda Road.

2.5.2 Mining Access – Central to North

Anabranch Crossing (ML80200) is a S316 primary infrastructure lease for the construction of a haul road with culvert crossing that will:

- Facilitate the transportation of processed coal from the mining activities of ML80169 and ML80170 through ML80157, ML5580 and ML5560 to connect with the existing coal transport corridor to the Train Load-Out Facility;
- Facilitate the haulage of pre-strip waste material from ML80169 and ML80170 for use in backfilling and rehabilitation of ML80157 and ML5060;
- Allow sharing of mining equipment and resources between Baralaba North/Wonbindi North and Baralaba Central.

Initially, mining fleet, haul trucks and controlled / limited additional mine vehicle access to the Baralaba North mining area will be principally from the Baralaba Central Mine using the existing anabranch crossing (locally called Hoadley's Road). The anabranch crossing is currently a low level rock crossing with small reinforced concrete pipes. A new two-way haul road culvert crossing will be constructed alongside the existing crossing. The original anabranch crossing will be upgraded to facilitate coal haulage.

From the Anabranch the road is designed to rise alongside the eastern side of the Wonbindi North levee at a gradient suitable for truck access and then cross the top of the levee before entering the site on the inside of the levee. On the Baralaba Central side, the road will be built alongside the existing levee on the eastern side at a gradient suitable for truck access and then run along the top of the levee before either entering the minesite or continuing along the levee to the South to join up with the existing road train coal haulage route.

2.5.3 General Access to North

To minimise interactions between heavy and light vehicles, a separate access route will be developed to the Baralaba North/Wonbindi North operations. The access will come in from the east, off the Baralaba-Duaringa Road. This access will travel west along a local road, known as the "Laneway". This road is not covered by a mining lease and is not part of the Environmental Authority. The appropriate approvals for constructing this access are to be obtained through Council. It will:

- Provide a connection between the Duaringa Baralaba Rd and the North Pit MIA / Satellite office.
- Enable multiple trailer fuel and explosives deliveries
- Provide adequate lateral clearances for occasional wide loads carrying plant / equipment spares.
- Road formation based on use of site won sandstone pavement, and low traffic volumes.
- Cattle grids, stock crossings and gates provided as required.

2.6 Coal Handling

2.6.1 Baralaba Central (ML5605 and ML80157)

There are currently 3 coal stockpile pads at Baralaba Central with a nominal ROM/Product capacity up to 400kt.

Coal processing operations are limited to crushing and screening Run of Mine (ROM) coal and loading of the road haul trucks that transfer product coal to the train load-out facility. Crushing, screening and loading activities are performed 24 hours a day, 7 days a week. Figure 11 depicts typical coal pad set up and activities.

Coal is hauled to the Rail Load-Out Facility at Moura in road going trucks 24 hours a day, 7 days a week.

Figure 11. Baralaba Central typical coal pad set up.

2.6.2 Baralaba North (ML80169)

No coal will be mined on this lease during the term of this plan. It is not intended to construct coal stockpile pads or carry out coal processing activities on this lease during the term of this plan.

2.6.3 Coal Haulage Route

Coal haulage is conducted off lease and hence outside of the scope of the Environmental Authority. The following is provided for information only.

From the ROM stockpile, product coal is loaded by front end loader on to road trains and transported 62km along the "Middle Road" (a network of public roads) to the train load out facility located 10km east of the Township of Moura.

To address community concerns with regards to nuisance dust produced along a 12 km section of the unsealed road, Baralaba Coal Pty and Banana Shire Council are negotiating an agreement for sealing the road with bitumen. Water trucks are permanently employed watering the gravel sections of the route when haulage is occurring and when required.

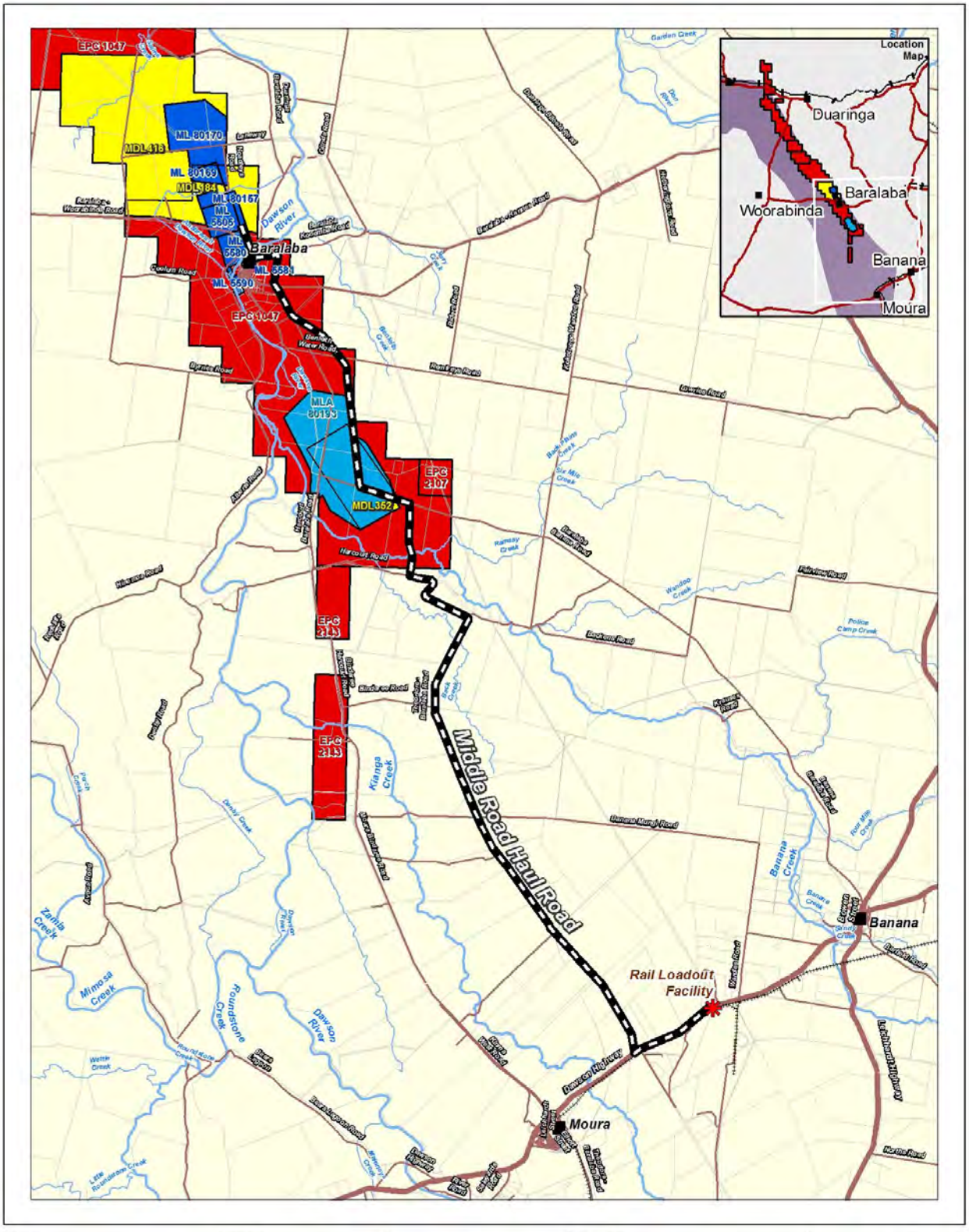
2.6.4 Train Load-Out Facility

The train load-out facility is located off lease and hence outside of the scope of the Environmental Authority. The facility is located within the existing QR rail corridor on state owned land, adjacent to the Dawson Mine. The facility consists of a laydown pad, sufficient room for the trucks to manoeuvre, runoff collection ponds and a spray system to reduce dust generation. A site office with ablution facilities is also located outside the fenced area. The trains transport the coal to the RG Tanna Terminal in Gladstone. A new coal veneering system has been installed to manage coal dust from the trains.

Figure 12. Rail Loadout coal veneering system.

Figure 13. Train Load Out Facility – Moura

Figure 14. Middle Road Haul Road



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	1			DATUM: GDA 94	CHECKED	PCH
	2			PROJECTION: MGA ZONE 55	APPROVED	PCH
				0 2 4 6 8 Kilometres	Legend: Middle Rd Haul Rd; Road; Watercourse; Cockatoo Coal ML; Cockatoo Coal MLA; Cockatoo Coal MDL; Cockatoo Coal EPC	Cockatoo Coal Limited; STATUS: CONFIDENTIAL; PROJECT NO: Baralaba; DRAWING NO: BBN-012-130912-17-00

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2.7 Water Storage Facilities and Structures

2.7.1 Baralaba Central (ML5605 and ML80157)

2.7.1.1 Water Management

Water will be managed on the site as per the Water Management Plan. The plan is reviewed annually. A summary of the basic principles is as follows:

- Water collected in water storages will be captured and retained for use on-site and/or controlled off-site discharge;
- Surface runoff from the rehabilitated waste dumps will be directed to sediment dams;
- Water use is limited to dust suppression activities;
- If required, raw water can be sourced from the old underground mining workings associated with the inactive mine leases; and
- Discharge of excess water-off site will be in accordance with EA and/or TEP conditions.

2.7.1.2 ROM Dam

The ROM Dam is a small non-regulated dam located on the eastern side of the ROM pad. This dam is designed to capture run-off from the ROM area which is later used for dust suppression. It is topped up with water from the pit for use in dust suppression. It is clay-lined and has a capacity of 24ML. In the unlikely event of an overflow, excess water will be directed to the Baralaba Central pit.

2.7.1.3 Mine Dam 1

Mine Dam 1 is a regulated dam. The dam is located on the western side of the mine lease and captures runoff from the workshop and laydown area, the mine vehicle wash down bay, and discharges from the oil/water separator.

The dam has a total capacity of 110ML (at spillway height) and a catchment area of approximately 19.9ha. The mandatory reporting level (MRL) for this dam, based on a 1 in 20 AEP 72 hour design storm, is 49ML, and corresponds to an RL of 87m.

The calculated design storage allowance (DSA) for a 1 in 10 AEP 3 month wet season rainfall for Mine Dam 1 is calculated as 110ML. Consequently, the dam is maintained dry leading up to and at the commencement of the wet season (1st November).

2.7.1.4 Farm Dam

Farm Dam does not meet the requirements of a regulated dam, so is used to capture surface run-off only. The water in this dam may be used for activities on the mine site as required, e.g. for dust suppression and during construction activities.

2.7.1.5 Baralaba Central Pit

The Baralaba Central pit contains water associated with the flood events of 2010 / 2011. This water currently has electrical conductivity levels over 7000µS/cm.

Water from the pit is utilised for dust suppression at the rate of 0.6ML/day on non-rainfall days. Given the low water usage requirement on-site, this surplus water needs to be removed to allow backfilling of the void. Therefore it will be necessary to release saline mine waters from the Baralaba Pit to the

Dawson River. To minimise environmental harm this is proposed to be carried out over the next two years and will be discharged under controlled release rules under variable flow conditions under Transitional Environment Program No. MAN16520. The intention is to discharge as much water as possible during any favourable flows in the current wet season. During construction activities for Baralaba North/Wonbindi North this water will be used for dust suppression and construction purposes. A pipeline will be constructed from Baralaba Central to Wonbindi North to supply the water to the site.

A discharge pipeline will be constructed to release water into a channel that will have scour protection to protect the bed and banks of the Anabranch from erosion.

2.7.1.6 Sediment Dams

Sediment dams will be built as required to manage water runoff from the final landform. The dams will be sized appropriately to accommodate runoff from a 1:10 ARI of 24 hours duration.

2.7.2 Baralaba North/Wonbindi North (ML80169 and ML80170)

During development of the Baralaba North / Wonbindi North pit, groundwater inflows are expected. Water balance modelling has included predicted groundwater inflows and surface water collection from rainfall events for a range of operating years. An excess of water is predicted under various rainfall events. A mine water dam will be built to contain this water prior to discharge. Discharge in accordance with EA conditions will be required to ensure excess water is not held on-site.

The mine will require less water storage during the initial pit development phases that are applicable to this plan than will be required as the mine progresses. Details of the water balance are included in the Water Management Plan.

2.7.2.1 Water Management

The Water Management Plan details all aspects of site water management. The plan will be reviewed annually. Water will be managed on the site as follows:

- Existing surface water drainage patterns will be maintained where practical to do so;
- Water from different sources will be managed separately:
    - Unaffected surface water will be diverted around disturbed areas wherever practical;
    - Runoff from the waste rock dumps will be captured in dedicated sediment dams, prior to off-site release or re-use (eg. pumped to mine water dam);
    - Water collected in-pit (groundwater inflow, surface runoff) will be captured and retained for use across sites and / or controlled off-site discharge (pumped to mine dam);
- Haul road dust suppression and process water requirements are taken from the mine dam when the dam has sufficient volume to allow. Cockatoo Coal Ltd have an abstraction permit to take water from the river, therefore when there is insufficient stored volume these demands could be met by using raw water from the river, if conditions allow.
- Overburden dumps will be rehabilitated as soon as practical to minimise potential for release of sediment-laden surface runoff. Surface runoff from the dumps will be directed to dedicated sediment dams;
- Infrastructure to manage contaminated water will be designed and operated to achieve zero uncontrolled discharge of contaminated water; and

- Discharge of excess water off-site will be in accordance with EA conditions which were developed in accordance with DEHP's "Final Model Water Conditions for Coal Mine in the Fitzroy Basin".

2.7.2.2 Mine Dam

No Mine Water dam is proposed to be built on ML80169 – the mine water dam for the Baralaba North/Wonbindi North operations is proposed to be built on ML80170. The dam will be the main point of water supply for dust suppression demands.

2.7.2.3 Sediment Dams

A number of proposed sediment dams will be constructed in accordance with the Best Practice Erosion and Sediment Control (BPESC) guideline (IECA, 2008) to manage runoff from waste dumps.

The sediment dams will be constructed as needed, after disturbance is created in the relevant catchment. Not all will be built in the term of this plan.

2.7.3 Anabranch Crossing (ML80200)

2.7.3.1 Water Pipeline

A water pipeline is buried under the Anabranch in the Anabranch Crossing lease. The pipeline carries mine affected water from the Baralaba Central Pit (CP02) for re-use in dust suppression for the construction and planned mining activities at Baralaba North/Wonbindi North.

2.8 Rehabilitation

The Post Mine Land Use Plan outlines the broad rehabilitation objectives and is attached as Appendix F.

2.8.1 Baralaba Central (ML5605 and ML80157)

A Rehabilitation and Spoil Management Plan was submitted to DEHP in June 2011 for the Baralaba Central Mine. This plan outlined a number of goals for rehabilitation. These goals have been modified and expanded to include Baralaba North/Wonbindi North operations and are detailed in the Rehabilitation Management Plan (September 2013).

2.8.1.1 Topsoil

An assessment of salvaged topsoil stockpiles has been conducted and an inventory of topsoil is listed (refer Appendix A).

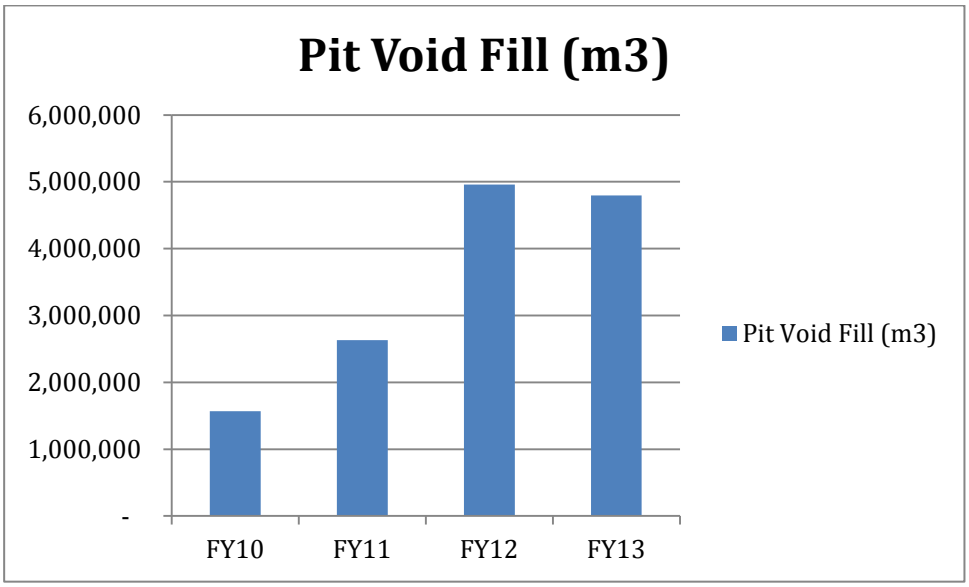
2.8.1.2 Elevated Waste Dumps

Once mining in Baralaba Central is completed mid to late 2014 it is planned to commence haulage of expansion waste back to the remnant final void. Waste dumping in Baralaba central will be focused initially on void backfill and then surcharge on previously backfilled pit if space in the pit is not available. The final landform design for Baralaba Central allows for surcharge waste dumps which are unable to be created to final design during the term of this plan (as all expansion and Central waste will be focussed on void backfill). The environmental focus of this plan will be entirely on void reduction with limited scope for landform reprofiling and rehabilitation due to the limited availability of waste.

2.8.1.3 Void Backfilling

The pit has been progressively backfilled during the term of the previous Plan of Operations. CCL has progressively backfilled historic voids as it recognises that void backfill is by far the highest cost with regard to minesite rehabilitation and this strategy remains unchanged during the term of this plan. It is planned to backfill an additional 1.5M cubic metres of Baralaba Central pit void (on top of the 3.0M cubic metres CY13 YTD) over the term of this plan. Future mine planning still has high focus on void filling and strategic spoil placement to manage void liability.

Figure 15. Baralaba Central progressive void backfill



A conceptual plan for backfilling of the final void for the Baralaba Central pit was submitted to DEHP in September 2011. This will be reviewed and re-submitted in August 2014.

2.8.1.4 Monitoring

Monitoring of rehabilitation outcomes will be a core component of the Rehabilitation Management Plan. The Rehabilitation Monitoring Plan is attached as Appendix C.

Monitoring of the existing rehabilitation on Baralaba Central was carried out during April 2013, and is conducted annually. The monitoring report is attached as Appendix D.

2.8.1.5 Erosion Control

The site Erosion and Sediment Control Plan details all erosion management methods (refer Appendix B). Surface water runoff will be controlled on-site to prevent uncontrolled sediment laden water from flowing onto surrounding land or into natural water courses. Surface water will be diverted into sediment ponds.

2.8.1.6 Weed Management

The Weed Management Plan has been implemented to prevent the spread of weeds off-site and the introduction of new weeds onto the site. Weed control will be implemented in key areas as required and any weeds present will be controlled (e.g. if a Declared Weed was found on-site, or if the weeds were likely to impact on revegetation success).

2.8.2 Baralaba North (ML80169)

The goals and completion criteria for rehabilitation are detailed in the Rehabilitation Management Plan (September 2013).

2.8.2.1 Topsoil

All land clearing activities will be conducted on a progressive basis, with clearing only carried out in areas required for mining and mining related activities. Clearing and grubbing will be undertaken under a Ground Disturbance Permit system. Topsoil will be stripped from areas to be disturbed by mining or associated infrastructure using dozers or scrapers, and will be stockpiled for later use in rehabilitation.

An assessment of topsoil on all ML's has been conducted and an inventory of topsoil to be salvaged has been identified (refer Appendix A). Each soil sub-type has stripping depth recommendations for both topsoil and subsoil. It is intended to recover soils in planned disturbance areas in line with this thickness plan and/or subsequent updates.

A Topsoil Management Plan has been developed and outlines control strategies to ensure that the topsoil resource is appropriately managed.

2.8.2.2 Elevated Waste Dumps

There will be no elevated landform created on the lease in the term of this plan.

2.8.2.3 Final Void

There will be no mining of pits (other than borrow pits), or backfilling on the lease during the term of this plan. A backfilling the void report will be submitted by 30th June 2014.

2.8.2.4 Weed Management

The Weed Management Plan has been implemented to prevent the spread of weeds off-site and the introduction of new weeds onto the site. Weed control will be implemented in key areas as required and any weeds present will be controlled (e.g. if a Declared Weed was found on-site, or if the weeds were likely to impact on revegetation success).

2.8.2.5 Erosion Control

The site Erosion and Sediment Control Plan details all erosion management methods (refer Appendix B). Construction activities, especially the building of the levee will have sediment and erosion control plans implemented for managing runoff.

2.8.3 Anabranch Crossing (ML80200)

The earthworks and steel culvert pipes will be removed at the end of mining. No rehabilitation will be carried out during the term of the plan.

2.9 Hydrogeology

2.9.1 Baralaba Central (ML5605 and ML80157)

A groundwater monitoring network was established around Baralaba Central Mine in 2005 and expanded in 2011. Six of the original bore network were destroyed as a result of mine expansion and floods. The current groundwater monitoring network comprises 4 bores in the Baralaba Central area which are screened within the alluvial aquifer. These bores have been monitored routinely as part of the site monitoring program.

2.9.2 Baralaba North (ML80169) and Wonbindi North (ML80170)

The groundwater monitoring network for the Baralaba North/Wonbindi North mining operations has been established to monitor the entire area and has not been designed to monitor on a per lease basis.

A groundwater monitoring network is established in the Baralaba/Wonbindi North Project area and comprises seven bores; four of which are screened within the alluvial aquifer, two within the Permian Coal Measures, and one within a fault zone. These bores have been monitored routinely as part of the site monitoring program.

An additional network of bores has been installed in the Baralaba North/Wonbindi North Project area to gain additional understanding of the groundwater regime. This program of work was carried out in late 2012 by Sinclair Knight Merz (SKM). This included:

- drilling and installation of six monitoring bores in the Quaternary aged alluvium and six monitoring bores and one production bore in the Permian aged formations including installation of automatic data loggers in monitoring bores;
- drilling and installation of 9 vibrating wire piezometers (VWPs) with data loggers;
- hydraulic testing on all bores which contained groundwater to determine estimates of the hydraulic conductivity of the aquifer material; and
- purge and sampling on all bores which contained groundwater and measurement of acidity (pH) and (EC).

A groundwater monitoring and management plan for Baralaba North/Wonbindi North is being developed to address the EA permit conditions. To ensure the groundwater monitoring and management plan adequately monitors the potential impacts of the proposed mining activities, Cockatoo Coal Limited is engaging the services of a hydrogeologist to review the current monitoring regime and propose any necessary improvements.

The groundwater monitoring and management plan will include:

- description of groundwater monitoring bores;
- monitoring locations (co-ordinates); and
- monitoring frequency and parameters.

2.10 Flood Protection

2.10.1 Baralaba Central (ML5605 and ML80157)

The Baralaba Central Mine is located on the Dawson River Floodplain with a 1:1000 AEP flood protection levee protecting the mine. The levee is constructed in accordance with DEHP Guideline "Structures which are dams or levees constructed as part of environmentally relevant activities". It is inspected for structural integrity on an annual basis by a RPEQ.

The 1:1000 year flood level for the levee design corresponded to a height of 90m AHD and included a 0.5m freeboard. The most recent flood modelling has revised the 1:1000 AEP flood height to RL89.2 including the influence of the proposed Baralaba North levee, which means the constructed levee has a calculated freeboard of 0.8m.

2.10.2 Baralaba North (ML80169) and Wonbindi North (ML80170)

The Northern operations are also located on the Dawson River floodplain, and consequently a similar flood protection levee (AEP 1:1000) will be required. This levee is one of the major construction activities to be undertaken during the term of the plan. The levee protects the mining operations on both tenements and seamlessly crosses the boundaries of the leases.

The levee height is designed to be the AEP 1:1000 plus freeboard. The flood modelling has identified the 1:1000 AEP flood height as RL89.2 (upstream) and therefore the levee height is RL89.7 at its highest point around the proposed flood levee. The flood height gets lower downstream and therefore the levee height grades down to be RL89 at its lowest point downstream.

The materials required for construction of the levee will be sourced from clay borrow pits (for the clay core of the levee) and the pre-strip for the box cut of the proposed mine. During construction of the levee, sediment and erosion control plans will be implemented to protect the surrounding environment, particularly the Anabranch.

The full geotechnical and design report and recommendations will be submitted to DEHP prior to construction.

2.10.3 Anabranch Crossing (ML80200)

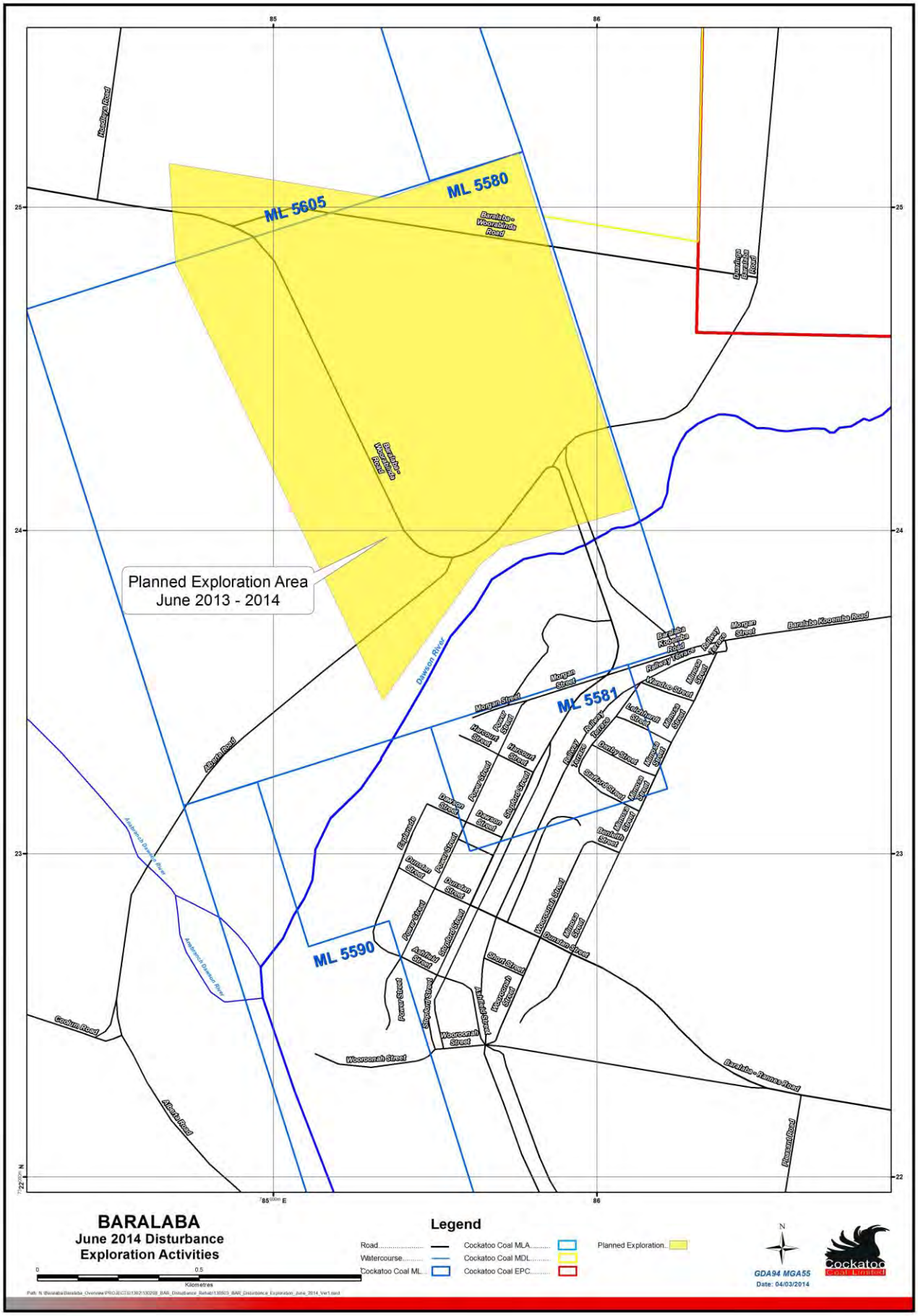
The design of the Anabranch Crossing has taken into account the risk of flooding. The design height and the size of the culverts have been assessed to ensure that there will be no significant changes to stream hydrology during high flow events.

2.11 Exploration Program

Planned exploration activities remains ongoing in areas to the north and south of existing mining areas with a view to extending mine life and increasing production. Exploration for the period June 2013 to June 2014 will extend south of the existing mine into ML5580 (see Figure 16).

Access to the planned exploration activities will be along pre-existing roads and tracks, where possible. Drill pads will be cleared in accordance with Cockatoo Coal's clearance and preparation procedures. Rehabilitation will conform to the relevant tenures EA and Cockatoo Coal's site rehabilitation procedure.

Figure 16. Planned Exploration Area



3 PROGRESSIVE REHABILITATION AND FINANCIAL ASSURANCE

3.1 Rehabilitation Activities (Previous Term)

3.1.1 Elevated Waste Dumps

There are 10.8 hectares of completed rehabilitation on the western side. Approximately 6 hectares were completed in the last Plan of Operations (PoO) period.

Due to space limitations and current void backfill criteria on-site, most final slopes of the landform cannot be created until mining has ceased. On the eastern side, the pit is too close to the edge of the spoil to allow battering down of the slope to 1:7 until after the pit is backfilled. On the southern side, the mine water dam and Mine Infrastructure Area are located within the final waste dump footprint. Additionally a large portion of the existing waste dumps needs to be retained as suitable fill for the final void should Financial Assurance be invoked. It is therefore considered that rehabilitation of waste dumps has been completed to the extent practical. Additional areas were identified for rehabilitation in the previous PoO, however due to high focus on void backfilling and final landform design these works were deferred.

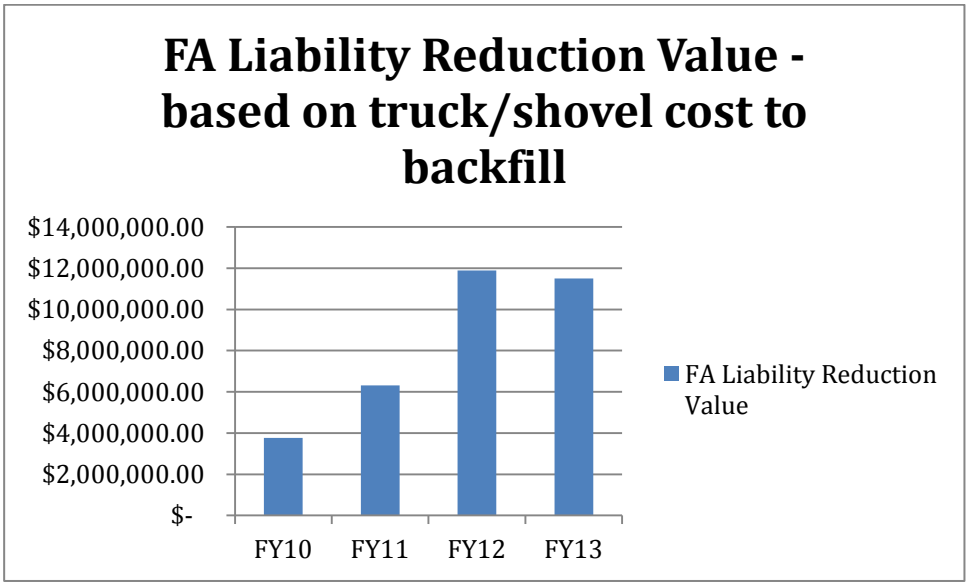
3.1.2 Void Backfilling

The pit has been progressively backfilled during the term of the previous Plan of Operations. CCL has progressively backfilled historic voids as it recognises that void backfill is by far the highest cost with regard to minesite rehabilitation. Even dealing with the ongoing effects of the November 2010 flooding good progress has been made with regard to managing financial liability in FY12 & FY13 through void removal. All waste from FY12 and FY13 has been placed in either void or on void areas (within lower cost dozer push backfill range) as part of site environmental management of void liability. Future mine planning still has high focus on void filling and strategic spoil placement to managed void liability (refer Figure 15, section 2.8.1.3). Table 5 and Figure 17 show the value of financial liability reduction due to the progressive backfilling strategy in place.

Table 5. Financial Liability Reduction table – Baralaba Central

Year	Total Fill	Fill above orig topo	Pit Void Fill (m3)	Comments
FY10	1,573,853	3,890	1,569,963	Fill above topo is placed in dozer push rehabilitation zone
FY11	2,833,952	202,642	2,631,310	Fill above topo is placed in dozer push rehabilitation zone
FY12	6,215,406	1,257,478	4,957,928	Fill above topo is placed in dozer push rehabilitation zone
FY13	7,129,343	2,333,777	4,795,566	Backfilling of the void has been restricted in FY13 due to effects of the pit flooding event. A good result has been achieved regardless. Surplus waste is planned for dozer push rehabilitation zone.
TOTAL			**13,954,767**	

Figure 17. Financial Liability Reduction graph – Baralaba Central



3.2 Rehabilitation Cost Estimate/ Financial Assurance

Rehabilitation costs have been calculated in accordance with *Guideline Mining – Calculating Financial Assurance for Mining Projects Version 2* (EHP, Aug 2012). Calculations have considered (as per section 3.2.1 of the guideline):

- the cost to:
    - i) rehabilitate all areas which have been, or are proposed to be, significantly disturbed;
    - *ii)* remove all infrastructure constructed by or for the environmental authority holder, except where agreed in writing by the post mining land owner / holder that it will be used and maintained for a lawful activity (leaving infrastructure also needs the written permission of the Minister for Natural Resources and Mines under ss. 141, 194 and 276 of the *Mineral Resources Act 1989);*
    - iii) remediate any contaminated land and site investigations;
- the full extent of work necessary to meet the conditions of the environmental authority;
- project specific issues;
- cost estimates for the work to be completed by third party;

Rates used within the calculation have been sourced from:

- third party contracting rates;
- plant manufacturers handbook production rates;
- third party mining engineering consultants; and
- actual rates from current operations.

It is believed that these rates are representative of industry rates.

A summary of the rehabilitation cost estimate based on the above criteria and the maximum area of disturbance August 2014 is detailed in Tables 7 and 8.

3.3 Performance Category

The Financial Assurance has been recalculated (3rd of March 2014) to support the amendment to the Plan of Operations to include the works proposed on the Anabranch Crossing ML80200. Although the rehabilitation costs for removal of the proposed Anabranch Crossing have been included, the overall Financial Assurance required has reduced. This is because the Baralaba Central pit has been redesigned on coal pricing vs strip ratio and therefore the updated "void remaining" calculation has reduced by 3.7Mbcm at August 2014. The maximum gross financial liability still occurs at August 2014.

The maximum gross financial liability for Baralaba Central and Baralaba North combined, has been estimated to be $19,865,662 as at 31 August 2014 (see Table 6).

The financial assurance discount applies as per EHP *Guideline: Financial assurance under the Environmental Protection Act 1994*. The operation meets the environmental performance criteria for Category 2 (i.e. 20% discount) which is defined as:

"All requirements in Category 3 are met and:
progressive rehabilitation has been undertaken on the site to the extent that is feasible"

It is noted that Baralaba currently has in place a TEP for disposal of in pit water from past flooding. While an active TEP would normally require application of discount category 4, advice from EHP to QRC dated 31 October 2012 indicates that TEPs issued under these circumstances should not be considered when assessing performance category.

Accordingly the discounted financial assurance liability for Baralaba Central and Baralaba North is $15,892,530 (rounded to nearest thousand). Financial Assurance to the amount of $18,848,000 is already held by the DEHP. Therefore the department holds an excess of $2,955,471 (rounded to nearest thousand).

Table 6. Summary of Financial Assurance to be paid

	GROSS FINANCIAL ASSURANCE LIABILITY	Discount Rate (Category 2)	TOTAL POST DISCOUNT	ASSURANCE HELD	FINANCIAL ASSURANCE TO BE PAID
ML5605 ML80157 ML80169	$19,865,662	20%	$15,892,530	$18,848,000	-$2,955,471

Table 7. Financial Assurance Calculation – Baralaba Central

Baralaba Central Rehab Plan (ML5605 & ML80157)					
		Area Category	Unit Rehab Cost	Total Predicted as at 31-Aug-14	
				Area (ha)/ Vol (bcm) [A]	Rehab Cost ($) [R]
A		Total Lease Area	n/a	410.74	
		ML5605	n/a	259.38	
		ML80157	n/a	151.36	
B		Undisturbed Area	n/a	106.33	
C		Cleared Area	n/a	9.68	
D		Total Area of Significant Disturbance	n/a	304.44	
	D1	**Disturbance Category (ha) -> Total Area YTD**			
		Pit Void - rehabilitate Post backfill	$ 8,200.10	49.02	$ 401,960.40
		Surcharge dump reprofile & rehabilitate	$ 12,988.82	59.43	$ 771,971.81
		Levee - rehabilitate (bulk fill trucked to void)	$ 6,426.06	32.52	$ 208,985.87
		Roads - reprofile & Rehabilitate	$ 8,726.97	7.30	$ 63,712.53
		Water Dam - reprofile & rehabilitate	$ 8,726.97	14.49	$ 126,445.18
		Sediment Dam - reprofile & rehabilitate	$ 8,726.97	4.04	$ 35,252.58
		ROM & Other Pad - reprofile & rehabilitate	$ 8,726.97	114.38	$ 998,215.68
		Other (topsoil dumps) - spread, rip and seed	$ 3,903.44	-	$ -
		Structural for surcharge dumps - works, banks, rock lined waterways	$ 1,774.04	-	$ 105,437.52
		Facilities Demolition	$ 1,935,642.16	0.19	$ 359,448.75
		Total D1		**281.37**	**$ 3,071,430.32**
	D2	**Rehabilitation Category (ha) -> Total Area YTD**			
		Trees cleared / topsoil stripped	$ 6,426.06	9.68	$ 62,225.82
		Established :			
			$ 1,141.56	-	$ -
		- Year to 1 Nov 2013	$ 1,141.56	13.39	$ 15,282.05
		- Year to 31 Aug 2014	$ 1,141.56	-	$ -
			$ 1,141.56	-	$ -
			$ 1,141.56	-	$ -
			$ 1,141.56	-	$ -
			$ 1,141.56	-	$ -
		Total D2		**23.07**	**$ 77,507.87**
	D3	**Successfully Rehabilitated**			
		Total D3		-	$ -
		Total D		**304.44**	**$ 3,148,938.19**
E		Volume of Pit (bcm)			
	E1	Truck/excavator waste to backfill void to 1:1000	$ 0.80	8,705,720	$ 7,000,313.20
		Dozer Push to void 0-50m (25m ave)	$ 0.12	1,828,404	$ 216,191.34
		Dozer Push to void 50-100m (75m ave)	$ 0.30	3,100,380	$ 931,516.39
		Dozer Push to void 100-150m (125m ave)	$ 0.47	3,183,231	$ 1,489,687.88
		Dozer Push to void 150-200m (175m ave)	$ 0.61	3,096,743	$ 1,889,816.53
		Total E		**19,914,478**	**$ 11,527,525.34**
T		Total Cost to Complete Rehabilitation of D and E			$ 14,676,463.53
M		Maintenance and Monitoring (5% of costs excluding backfill cost) & contract management (10% total cost)			$ 1,625,093.26
		SUBTOTAL			**$ 16,301,556.79**
G		GST (10% of costs if not included above)	10%		$ 1,630,155.68
AR		Annual Rehabilitation Cost in current $s (T+M+G)			$ 17,931,712.47
CPI		Calculated as 3% of Annual Rehabilitation Cost by number of years covered by schedule i.e. x 1	3%		$ 537,951.37
		GROSS FINANCIAL ASSURANCE LIABILITY (Corrected for predicted CPI)			$ 18,469,663.84
		FINANCIAL ASSURANCE TO BE PAID for Category 2 Performance	0.8		$ 14,775,731.08

Table 8. Financial Assurance Calculation – Baralaba North

Baralaba North Rehab Plan (ML80169)					
		Area Category	Unit Rehab Cost	Total Predicted as at 31-Aug-14	
				Area (ha)/ Vol (bcm) [A]	Rehab Cost ($) [R]
A		Total Lease Area	n/a	122.23	
		ML80169	n/a	122.23	
B		Undisturbed Area	n/a	41.00	
C		Cleared Area	n/a	21.68	
D		Total Area of Significant Disturbance	n/a	59.55	
	D1	**Disturbance Category (ha) -> Total Area YTD**			
		Pit Void - rehabilitate Post backfill	$ 8,200.10	9.54	$ 78,265.92
		Surcharge dump reprofile & rehabilitate	$ 12,988.82	-	$ -
		Levee - rehabilitate (bulk fill trucked to void)	$ 6,426.06	8.66	$ 55,664.37
		Roads - reprofile & Rehabilitate	$ 8,726.97	7.19	$ 62,777.03
		Water Dam - reprofile & rehabilitate	$ 8,726.97	2.29	$ 19,941.25
		Sediment Dam - reprofile & rehabilitate	$ 8,726.97	-	$ -
		ROM & Other Pad - reprofile & rehabilitate	$ 8,726.97	4.69	$ 40,972.23
		Other (topsoil dumps) - spread, rip and seed	$ 3,903.44	5.49	$ 21,416.42
		Structural for surcharge dumps - works, banks, rock lined waterways	$ 1,774.04	-	$ -
		Facilities Demolition	$ 1,935,642.16		
		Total D1		**37.87**	**$ 279,037.22**
	D2	**Rehabilitation Category (ha) -> Total Area YTD**			
		Trees cleared / topsoil stripped	$ 6,426.06	21.68	$ 139,314.32
		Established :			
		- Prior 31 Dec 2009	$ 1,141.56	-	$ -
		- Year to 31 Dec 2010	$ 1,141.56	-	$ -
		- Year to 31 Dec 2011	$ 1,141.56	-	$ -
		- Year to 31 Dec 2012	$ 1,141.56	-	$ -
		- Year to 31 Dec 2013	$ 1,141.56	-	$ -
		- Year to 31 Aug 2014	$ 1,141.56	-	$ -
		Total D2		**21.68**	**$ 139,314.32**
	D3	**Successfully Rehabilitated**			
		Total D3		-	$ -
		Total D		**59.55**	**$ 418,351.54**
E		Volume of Pit (bcm)			
	E1	Truck/excavator waste to backfill borrow pits (600kbcm)	$ 0.80	762,712	$ 613,300.45
		Total E		**762,712**	**$ 613,300.45**
T		Total Cost to Complete Rehabilitation of D and E			$ 1,031,651.98
M		Maintenance and Monitoring (5% of costs excluding backfill cost) & contract management (10% total cost)			$ 124,082.78
		SUBTOTAL			**$ 1,155,734.76**
G		GST (10% of costs if not included above)	10%		$ 115,573.48
AR		Annual Rehabilitation Cost in current $s (T+M+G)			$ 1,271,308.23
CPI		Calculated as 3% of Annual Rehabilitation Cost by number of years covered by schedule i.e. x 1	3%		$ 38,139.25
		GROSS FINANCIAL ASSURANCE LIABILITY (Corrected for predicted CPI)			$ 1,309,447.48
		FINANCIAL ASSURANCE TO BE PAID for Category 2 Performance	0.8		$ 1,047,557.98

Table 9. Financial Assurance Calculation – Anabranch Crossing

Anabranch Crossing (ML80200)					
		Area Category	Unit Rehab Cost	Total Predicted as at 31-Aug-14	
				Area (ha)/ Vol (bcm) [A]	Rehab Cost ($) [R]
A		Total Lease Area	n/a	7.80	
		ML80200	n/a	7.80	
B		Undisturbed Area	n/a	4.87	
C		Cleared Area	n/a	0.00	
D		Total Area of Significant Disturbance	n/a	2.94	
	D1	**Disturbance Category (ha) -> Total Area YTD**			
		Pit Void - rehabilitate Post backfill	$ 8,200.10	-	$ -
		Surcharge dump reprofile & rehabilitate	$ 12,988.82	-	$ -
		Levee - rehabilitate (bulk fill trucked to void)	$ 6,426.06	-	$ -
		Roads - reprofile & Rehabilitate	$ 8,726.97	2.94	$ 25,626.72
		Roads - Remove bulk fill from crossing (using small plant @ $2.40/bcm cost)	$ 2.40	-	$ 40,800.00
		Sediment Dam - reprofile & rehabilitate	$ 8,726.97	-	$ -
		ROM & Other Pad - reprofile & rehabilitate	$ 8,726.97	-	$ -
		Other (topsoil dumps) - spread, rip and seed	$ 3,903.44	-	$ -
		Structural for surcharge dumps - works, banks, rock lined waterways	$ 1,774.04	-	$ -
		Facilities Demolition	$ 1,935,642.16	-	$ -
		Total D1		**2.94**	**$ 66,426.72**
	D2	**Rehabilitation Category (ha) -> Total Area YTD**			
		Trees cleared / topsoil stripped	$ 6,426.06	-	$ -
		Established :			
		- Prior 31 Dec 2009	$ 1,141.56	-	$ -
		- Year to 31 Dec 2010	$ 1,141.56	-	$ -
		- Year to 31 Dec 2011	$ 1,141.56	-	$ -
		- Year to 31 Dec 2012	$ 1,141.56	-	$ -
		- Year to 31 Dec 2013	$ 1,141.56	-	$ -
		- Year to 31 Aug 2014	$ 1,141.56	-	$ -
		Total D2		-	$ -
	D3	**Successfully Rehabilitated**			
		Total D3		-	$ -
		Total D		**2.94**	**$ 66,426.72**
E		Volume of Pit (bcm)			
	E1	Truck/excavator waste to backfill borrow pits (600kbcm)	$ 0.80	-	$ -
		Total E		-	$ -
T		Total Cost to Complete Rehabilitation of D and E			$ 66,426.72
M		Maintenance and Monitoring (5% of costs excluding backfill cost) & contract management (10% total cost)			$ 9,964.01
		SUBTOTAL			**$ 76,390.73**
G		GST (10% of costs if not included above)	10%		$ 7,639.07
AR		Annual Rehabilitation Cost in current $s (T+M+G)			$ 84,029.80
CPI		Calculated as 3% of Annual Rehabilitation Cost by number of years covered by schedule i.e. x 1	3%		$ 2,520.89
		GROSS FINANCIAL ASSURANCE LIABILITY (Corrected for predicted CPI)			$ 86,550.70
		FINANCIAL ASSURANCE TO BE PAID for Category 2 Performance	0.8		$ 69,240.56

4 ENVIRONMENTAL ACTION PROGRAM

The environmental action program provides the control strategies and the action programs required to comply with the Environmental Authority conditions relevant to the mining activities during the period of the Plan of Operations.

4.1 Schedule A - General

EA Condition	Control Strategy	Action Program
General **A1** This environmental authority authorises environmental harm referred to in the conditions. Where there is no condition or this environmental authority is silent on a matter, the lack of a condition or silence does not authorise environmental harm.	Not applicable	Not applicable
A2 In carrying out the mining activity authorised by this environmental authority, disturbance of land: a) may occur in the areas marked 'A'; and, b) must not occur in the areas marked 'B', without consultation first occurring with the administering authority, on the map that is Figure 1, attached to this environmental authority.	Clearing will only be allowed in authorised areas. Managed by the Ground Disturbance Permit.	Prior to disturbance, a Ground Disturbance Permit must be issued to ensure that clearing is not conducted in unauthorised areas. Ground Disturbance Permit must be validated by site environmental representative. SSE to ensure compliance by enforcing use of Ground Disturbance Permit system.
Deed of Cooperation **A3** It is acknowledged that the open cut mining operations on ML80169 (Baralaba Coal Pty Ltd) and ML80170 (Wonbindi Coal Pty Ltd) will be operated as a single open cut coal mine operation by way of the 'Baralaba North Mine Project Cooperation Deed', and will be jointly referred to as the Baralaba North / Wonbindi North Mine.	Not applicable	Not applicable
Maintenance of measures, plant and equipment **A4** The holder of this environmental authority must:	Appropriate plant will be installed, maintained and competently operated	Appropriately qualified and competent persons will be employed to ensure appropriate

EA Condition	Control Strategy	Action Program
a) install all measures, plant and equipment		equipment is procured and maintained in

EA Condition	Control Strategy	Action Program
necessary to ensure compliance with the conditions of this environmental authority; b) maintain such measures, plant and equipment in a proper and efficient condition; c) operate such measures, plant and equipment in a proper and efficient manner; and d) ensure all instruments and devices used for the measurement or monitoring of any parameter under any condition of this environmental authority are properly calibrated.		accordance with manufacturers requirements. Appropriate procedures will be implemented to ensure all equipment is fit for purpose, appropriately maintained and operated.
A5 No change, replacement or alteration of any plant or equipment is permitted if the change, replacement or alteration increases, or is likely to substantially increase, the risk of unlawful environmental harm caused by the mining activities.	Any proposal to changes in plant (with the potential to increase environmental risk) will be discussed with the administering authority and appropriate action taken.	Appropriately qualified and competent persons will be employed to ensure appropriate equipment is procured and maintained in accordance with manufacturers requirements.
Coal Extraction **A6** The environmental authority holder is approved for a coal extraction rate of up to one (1) million tonnes per annum (Mtpa) of run-of-mine (ROM) ore from the Baralaba North / Wonbindi North Coal Mine (ML80169 and ML80170 - combined) in accordance with this environmental authority (EA) EPML00223213 and EA EPML00617113.	Mine planning will be based on 1Mtpa	SSE to ensure production does not exceed limit by ensuring suitable measurement systems and process are in place.
A7 The environmental authority holder is approved for a coal extraction rate of up to seven hundred and fifty thousand (750,000) tonnes per annum (tpa) of run-of-mine (ROM) ore from the Baralaba Central Mine (ML5605 and ML80157).	Mine planning will be based on 0.75 Mtpa	SSE to ensure production does not exceed limit by ensuring suitable measurement systems and process are in place.
Monitoring **A8** Except where specified otherwise in another condition of this authority, all monitoring records or reports required by this environmental authority must be kept for a period of not less than five (5) years.	Monitoring records will be maintained for 5 years	Appropriate IT and document management systems will be implemented to ensure records are maintained
A9 The environmental authority holder must, where monitoring is a requirement of this environmental authority, ensure that a competent person(s)	An appropriately qualified and competent person will be employed at the operation.	The SSE shall ensure an appropriately qualified and competent person is engaged to carry out monitoring.

EA Condition	Control Strategy	Action Program
conducts all monitoring.		

EA Condition	Control Strategy	Action Program
A10 Upon request from the administering authority, copies of monitoring records and reports must be made available and/or provided to the administering authority's nominated office within ten (10) business days or by an alternative timeframe agreed between the administering authority and the holder.	Records will be produced as required	Appropriate IT and document management systems will be implemented to ensure records are maintained and accessible
A11 Any management or monitoring plans, systems or programs required to be developed and implemented by a condition of this environmental authority must be reviewed for effectiveness in minimising the likelihood of environmental harm on an annual basis, and amended promptly if required, unless a particular review date and amendment program is specified in the plan, system or program.	An annual review of relevant plans will be undertaken	An annual EA compliance audit shall be completed. This shall include management plans and procedures required by the EA.
Financial assurance **A12** Provide to the administering authority financial assurance for the amount and in the form acceptable to the administering authority in accordance with the most recent edition of the administering authority's Guideline – Calculating financial assurance for mining projects, before the proposed mining activities can commence.	Financial assurance will be lodged	Third party review of rehabilitation cost estimates on each revision of Plan of Operations
A13 The amount of financial assurance must be reviewed by the holder of this environmental authority when a plan of operations is amended or replaced or the authority is amended.	Financial assurance will be reviewed as required	Third party review of rehabilitation cost estimates on each revision of Plan of Operations
A14 The financial assurance is to remain in force until the administering authority is satisfied no claim is likely to be made on the assurance.	Financial assurance to remain in place until released by administering authority	N/A
Risk management **A15** The holder of this environmental authority must develop and implement a risk management system for mining activities which mirrors the content requirement of the Standard for Risk Management (ISO31000:2009), or the latest edition of an Australian Standard for risk management, to the	CCL Risk Management Standard; Broad Brush Risk Assessment; Sitewide Risk Register	Existing Risk Management Standard will be reviewed and updated to ensure compliance and adequacy with respect to management of environmental risks.

EA Condition	Control Strategy	Action Program
extent relevant to environmental management, by 30		

EA Condition	Control Strategy	Action Program
March 2014.		
Emergency Response and Contingency Planning **A16** An emergency response/contingency plan must be developed and implemented within the current Plan of Operations to manage unacceptable risks identified in the risk management system or the associated monitoring.	Emergency and Contingency Response Plan (Appendix E)	The Baralaba Central Emergency and Contingency Response Plan (Appendix E) will be reviewed to ensure compliance and adequacy with respect to management of environmental risks. A Broad Brush Risk Assessment will be carried out for Baralaba North activities. The updated Emergency Response Plan will be implemented to cover both sites prior to the commencement of construction.
A17 The emergency response/contingency plan must address the following matters: a) response procedures to be implemented to reduce the likelihood of environmental harm arising from incidents of unacceptable risk; b) response procedures to minimise the extent and duration of environmental harm by an incident; c) the practices and procedures to be employed to restore the environment or mitigate any environmental impact caused; d) a description of the resources to be used in response to an incident; e) the training of staff that will be called upon to respond to incidents; f) procedures to investigate the cause of any incidents, including releases, and where necessary, implement remedial actions to reduce the likelihood of recurrence of similar events; g) the provision and availability of documented procedures to staff attending any incident to enable them to effectively respond; and h) timely and accurate reporting of the circumstance and nature of incidents to the administering authority.	Emergency and Contingency Response Plan (Appendix E) to address all requirements.	Existing Baralaba Central Emergency and Contingency Response Plan (Appendix E) will be reviewed and updated to ensure compliance and adequacy with respect to management of environmental risks. Baralaba North Emergency Response Plan to be developed prior to the commencement of construction.

EA Condition	Control Strategy	Action Program
Notification of emergencies, incidents and exceptions	Incident Reporting Procedure	Emergency response plan to be reviewed to

EA Condition		Control Strategy	Action Program
A18	The holder of this environmental authority must notify the administering authority by written notification within twenty-four (24) hours after becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with, the conditions of this environmental authority.	Emergency response plan to include notification requirements. Induction program to make workers aware of obligations	ensure notifications are included. Induction to be reviewed to ensure obligation to report is included. Toolbox talk prepared to cover existing workers (contractors and staff).
A19	The holder of this environmental authority must notify the administering authority by written notification within twenty-four (24) hours, after becoming aware of any emergency, incident or information about circumstances which results, or may result in, environmental harm not in accordance with the conditions of this environmental authority, or a contravention of the conditions of this environmental authority.	Emergency response plan to include notification requirements. Incident Reporting Procedure	Emergency response plan to be reviewed to ensure notifications are included. Incident investigation procedures to include relevant requirements
A20	The notification in conditions A18 and A19 must include, but not be limited to, the following: a) the environmental authority number and name of the holder; b) the name and telephone number of the designated contact person; c) the location of the emergency or incident; d) the date and time of the emergency or incident; e) the time the holder of the environmental authority became aware of the emergency or incident; f) where known: g) the estimated quantity and type of substances involved in the emergency or incident; h) the actual or potential cause of the emergency or incident; i) a description of the nature and effects of the emergency or incident including environmental risks, and any risks to public health or livestock; j) any sampling conducted or proposed, relevant to	Emergency response plan to include notification requirements. Incident Reporting Procedure	Incident investigation procedures to include relevant requirements

EA Condition	Control Strategy	Action Program
the emergency or incident;		

EA Condition	Control Strategy	Action Program
k) immediate actions taken to prevent or mitigate any further environmental harm caused by the emergency or incident; and, l) what notification of stakeholders who may be affected by the emergency or incident has occurred, or is being undertaken.		
A21 Within ten (10) business days following the initial notification of an emergency or incident, or receipt of monitoring results, whichever is the latter, further written advice must be provided to the administering authority, including the following: a) Results and interpretation of any samples taken and analysed; b) Outcomes of actions taken at the time to prevent or minimise unlawful environmental harm; and c) Proposed actions to prevent a recurrence of the emergency or incident.	Incident Reporting Procedure	Incident investigation procedures to be reviewed to ensure requirements are met. Procedure to also include position responsible for notification. To be completed by prior to the commencement of construction
A22 All reasonable actions are to be taken to minimise environmental harm, or potential environmental harm, resulting from any emergency, incident or circumstances not in accordance with the Conditions of this environmental authority.	Emergency Response Plan	Implementation of Emergency Response Plan
Complaints **A23** In the event of a complaint about any mining activity that, after investigation, is in the opinion of an authorised person causing a nuisance at a sensitive place, the holder of this environmental authority must take appropriate action to mitigate the nuisance. The holder of this environmental authority must take the action within the reasonable time set by the administering authority.	Respond to direction of authorised person	Respond to direction of authorised person
A24 The holder of this environmental authority must record all environmental complaints received about the mining activities including the following details: a) Name, address and contact number for of the complainant;	Complaints will be recorded on the Complaint Form as per the Complaints Management Procedure	Complaints shall be recorded and managed in accordance with the Complaints Management Procedure. This will include completion of the approved Complaint Form. The software package Consultation Manager (or

EA Condition	Control Strategy	Action Program
b) Time and date of complaint;		similar) will be used to record complaint

EA Condition	Control Strategy	Action Program
c) Reasons for the complaint; d) Investigations undertaken; e) Conclusions formed; f) Actions taken to resolve the complaint; g) Any abatement measures implemented; and h) Person responsible for resolving the complaint. i) This information must be made available for inspection by the administering authority on request.		information.
A25 The holder of this environmental authority must, when requested by the administering authority, undertake relevant specified monitoring within a reasonable timeframe nominated or agreed to by the administering authority to investigate any complaint of environmental harm. The results of the investigation (including an analysis and interpretation of the monitoring results) and abatement measures, where implemented, must be provided to the administering authority within ten (10) business days of completion of the investigation, or no later than ten (10) business days after the end of the timeframe nominated by the administering authority to undertake the investigation.	Respond to direction of administering authority	The SSE will ensure that competent resources are available to implement any investigations required.
Third party reporting **A26** The holder of this environmental authority must: a) within one (1) year of the commencement of this authority, obtain from a suitably qualified and experienced third party a report on compliance with the conditions of this environmental authority, b) obtain further such reports at regular intervals not exceeding three years from the completion of the report referred to in condition A26 (a) **c)** provide each report to the administering authority within 90 days of its completion.	Compliance Audit reports will be commissioned as required	Audit requirements will be incorporated into the project Legal and Other Obligations Register. SSE will ensure resources are available for compliance reports to be prepared as per the schedule.
A27 Where a condition of this environmental authority requires compliance with a standard, policy or	Appropriate standards will be used for compliance purposes	The existing Legal and Other Obligations Register will be updated as relevant legislative

EA Condition	Control Strategy	Action Program
guideline published externally to this environmental		and/or approval changes are made. The

EA Condition	Control Strategy	Action Program
authority and the standard is amended or changed subsequent to the issue of this environmental authority the holder of this environmental authority must: a) Comply with the amended or changed standard, policy or guideline within 2 years of the amendment or change being made, unless a different period is specified in the amended standard or relevant legislation, or where the amendment or change relates specifically to regulated structures referred to in condition G37, the time specified in that condition; and b) Until compliance with the amended or changed standard, policy or guideline is achieved, continue to remain in compliance with the corresponding provision that was current immediately prior to the relevant amendment or change.		Register shall be reviewed at least annually to ensure currency.
A28 Words and phrases used throughout this environmental authority are defined in the Definitions section of this authority. Where a definition for a term used in this environmental authority is sought and the term is not defined within this environmental authority, the definitions in the Environmental Protection Act 1994, its regulations and policies must be used.	Not applicable	Not applicable

4.2 Schedule B - Air

EA Condition	Control Strategy	Action Program
Dust **B1** The release of dust or particulate matter, or both, resulting from the mining activity, must not cause an environmental nuisance at any sensitive or commercial place.	Dust control methods will be employed	An Air Quality Management Environmental Control Plan will be implemented; The ECP shall as a minimum include provisions detailed in Section 3.2.3 of the project EMP.
B2 Dust and particulate monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place, and the results must be notified within fourteen (14) days to the administering authority following completion of monitoring.	Dust monitoring will be undertaken as required	An Environmental Monitoring Plan shall be developed and implemented
B3 Dust and particulate matter must not exceed the following levels when measured at any sensitive or commercial place: a) Dust deposition of 120 milligrams per square metre per day, averaged over one month, when monitored in accordance with the most recent version of Australian Standard AS3580.10.1 Methods for sampling and analysis of ambient air – Determination of particulate matter – Deposited matter – Gravimetric method. b) A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometres (PM10) suspended in the atmosphere of 50 micrograms per cubic metre over a 24 hour averaging time, when monitored in accordance with the most recent version of either c) Australian Standard AS3580.9.6 Methods for sampling and analysis of ambient air - Determination of suspended particulate	Dust control methods will be employed.	An Environmental Monitoring Plan shall be developed and implemented to monitor as per conditions.

EA Condition	Control Strategy	Action Program
matter – PM10 high volume sampler with		

EA Condition		Control Strategy	Action Program
	size-selective inlet – Gravimetric method or d) Australian Standard AS3580.9.9 Methods for sampling and analysis of ambient air - Determination of suspended particulate matter – PM10 low volume sampler– Gravimetric method. **e)** A concentration of particulate matter suspended in the atmosphere of 90 micrograms per cubic metre over a one (1) year averaging time, when monitored in accordance with the most recent version of AS/NZS3580.9.3:2003 Methods for sampling and analysis of ambient air - Determination of suspended particulate matter – Total suspended particulate matter (TSP) – High volume sampler gravimetric method.		
B4	If monitoring indicates exceedence of the relevant limits in condition B3, resulting from mining activities, then the environmental authority holder must: a) address any complaints including the use of appropriate dispute resolution if required; and **b)** immediately implement dust abatement measures so that emissions of dust from the activity do not result in further exceedences of the relevant limits in condition B3 and/or cause environmental nuisance.	Address as required	The SSE will ensure appropriate resources are available to properly address any issues that arise.
B5	The holder of this environmental authority must undertake real-time PM10 monitoring at a minimum of three locations specified in Table B1: Air Quality Monitoring, at any given time.	Monitoring will be undertaken	An Environmental Monitoring Plan shall be developed and implemented. Air Quality Monitoring aspects of the plan shall be implemented prior to the commencement of construction.
B6	The holder of this environmental authority must undertake dust deposition monitoring at all of the locations specified in Table B1: Air Quality Monitoring, at any given time.	Monitoring will be undertaken	An Environmental Monitoring Plan shall be developed and implemented. Air Quality Monitoring aspects of the plan shall be implemented prior to the commencement of construction.

EA Condition	Control Strategy	Action Program
B7 Where monitoring at locations identified in Table	Address as required	An Air Quality Management Environmental

EA Condition	Control Strategy	Action Program
B1: Air Quality Monitoring indicates that the air quality objectives detailed in condition B3 have been exceeded, the holder of this environmental authority must investigate the matter and report to the administering authority within fourteen (14) days: a) the concentration of PM10 particulates or dust deposition rate recorded; b) a description of meteorological conditions occurring at the time; and **c)** the measures taken to reduce dust generated by the mining activities		Control Plan will be implemented; The ECP shall as a minimum include provisions detailed in Section 3.2.3 of the project EMP. The SSE will ensure appropriate resources are available to properly address any issues that arise
Odour nuisance **B8** The release of noxious or offensive odour(s) or any other noxious or offensive airborne contaminant(s) resulting from the mining activity must not cause an environmental nuisance at any nuisance sensitive or commercial place.	Odour control methods will be employed as required	Odour is seen as a low risk issue for the site, but odour control methods will be employed as required.
B9 When requested by the administering authority odour monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any sensitive or commercial place and the results must be notified within fourteen (14) days to the administering authority following completion of monitoring.	Odour monitoring shall be undertaken if required	Odour monitoring shall be undertaken if required
B10 If the administering authority determines the odour released to constitute an environmental nuisance the environmental authority holder must: a) address the complaint including the use of appropriate dispute resolution if required; and **b)** immediately implement odour abatement measures so that emissions of odour from	Odour mitigation actions will be determined in consultation with the administering authority	Odour mitigation actions will be determined in consultation with the administering authority

EA Condition	Control Strategy	Action Program
the activity do not result in further		

EA Condition	Control Strategy	Action Program
environmental nuisance.		

4.3 Schedule C - Water

EA Condition	Control Strategy	Action Program
Contaminant Release **C1** Contaminants that will, or have the potential to cause environmental harm, must not be released, directly or indirectly, to any waters except as permitted under the conditions of the environmental authority.	Mine Water Discharge Procedure - Releases will be in accordance with environmental authority conditions.	The Water Management Plan will address Contaminant Release Criteria. Water containment infrastructure will be designed, maintained and operated in accordance with relevant engineering standards.
C2 Unless otherwise permitted under the conditions of this environmental authority, the release of mine affected water to waters must only occur from the release points specified in Table C1: Mine affected water release points, sources and receiving waters and depicted in Figure 4 attached to this environmental authority.	Mine Water Discharge Procedure - Releases will only be made from locations specified in Table C1	As per C1
C3 The release of mine affected water to internal water management infrastructure installed and operated in accordance with a water management plan that complies with conditions C32–C37 inclusive is permitted.	NA	As per C1
C4 The release of mine affected water to waters must not exceed the release limits stated in Table C2: Mine affected water release limits when measured at the monitoring points specified in Table C1: Mine affected water release points, sources and receiving waters for each quality characteristic.	Release are not to exceed relevant limits	As per C1
C5 The release of mine affected water to waters from the release points must be monitored at the locations specified in Table C1: Mine affected water release points, sources and receiving waters for each quality characteristics and at the frequency specified in Table C2: Mine affected water release limits and Table C3: Release Contaminant Trigger Investigation Levels *Note: The administering authority will take into consideration any extenuating circumstances prior to determining an appropriate enforcement response, in the event condition C5 is contravened due to a temporary lack of safe or practical access. The administering authority*	Monitoring will be undertaken for the required parameters and in the required locations	An Environmental Monitoring Plan shall be developed and implemented. Appropriate resources (equipment and personnel) will be available to ensure all necessary monitoring is completed as per licence requirements

EA Condition	Control Strategy	Action Program
expects the environmental authority holder to take all reasonable and practicable measures to maintain safe and practical access to		

EA Condition	Control Strategy	Action Program
designated monitoring locations.		
C6 If quality characteristics of the release exceed any of the trigger levels specified in Table C3: Release Contaminant Trigger Investigation Levels during a release event, the environmental authority holder must compare the downstream results in the receiving waters to the trigger values specified in Table C3: Release Contaminant Trigger Investigation Levels and: a) Where the trigger values are not exceeded then no action is to be taken; or b) Where downstream results exceed the trigger values specified in Table C3: Release Contaminant Trigger Investigation Levels for any quality characteristics, compare the results of the downstream sites to the data from background monitoring sites and i. If the result is less than the background monitoring site data, then no action is to be taken; or ii. If the result is greater than the background monitoring site data, complete an investigation in accordance with the ANZECC and ARMCANZ 2000 methodology, into the potential for environmental harm and provide a written report to the administering authority in the next annual return, outlining: 1. Details of the investigations carried out; and 2. Actions taken to prevent environmental harm. *Note: Where an exceedance of a trigger level has occurred and is being investigated, in accordance with C5 2(b)(ii) of this condition, no further reporting is required for subsequent trigger events for that quality characteristic.*	Investigations will be undertaken and appropriate action taken	SSE will ensure that a competent person is available to initiate investigation and that an appropriate level of resources are available to ensure investigation can be completed as per licence requirements

EA Condition	Control Strategy	Action Program
C7 If an exceedance in accordance with condition C6	Administering authority will be notified	Administering authority will be notified as per

EA Condition	Control Strategy	Action Program
(b) (ii) is identified, the holder of the environmental authority must notify the administering authority, in writing, within fourteen (14) days of receiving the result.		the method agreed upon with the authority.
Mine Affected Water Release Events **C8** The holder must ensure a stream flow gauging station(s) is installed, operated and maintained to determine and record stream flows at the locations and flow recording frequency specified in Table C4: Mine affected water release during flow events.	Gauging station installed and data uploaded to a website for real time monitoring.	The gauging station will be a component of the Environmental Monitoring Plan.
C9 Notwithstanding any other condition of this environmental authority, the release of mine affected water in accordance with condition C2 must only take place during periods of natural flow events in accordance with the receiving water flow criteria specified in Table C4: Mine affected water release during flow events when measured at the monitoring points specified in Table C1: Contaminant release points, sources and receiving waters.	The Mine Water Discharge Procedure will ensure releases are in accordance with environmental authority conditions	Gauging Station will be used to identify when water releases can be made.
C10 The release of mine affected water to waters in accordance with condition C2 must not exceed the electrical conductivity and sulphate release limits or the maximum release rate (for all combined release point flows) for each receiving water flow criteria for discharge specified in Table C4: Mine affected water release during flow events, when measured at the monitoring points specified in Table C1: Contaminant release points, sources and receiving waters.	Releases will be in accordance with condition	The Mine Water Discharge Procedure will be applied to ensure releases are in accordance with environmental authority conditions
C11 The daily quantity of mine affected water released from each release point must be measured at the monitoring points in Table C1: Mine affected water release points, sources and receiving	Volumetric monitoring equipment will be installed.	An Environmental Monitoring Plan shall be developed and implemented. The plan shall include provision for volumetric monitoring equipment tol be installed.

EA Condition	Control Strategy	Action Program
waters, and recorded.		Equipment will be monitored and maintained

EA Condition	Control Strategy	Action Program
		as required in order to ensure compliance. Release permit will include a function check of monitoring equipment.
C12 Releases to waters must be undertaken so as not to cause erosion of the bed and banks of the receiving waters, or cause a material build-up of sediment in such waters.	Releases found to be causing erosion or sediment build-up will be immediately ceased	The Environmental Monitoring Plan shall incorporate daily checks of bed and banks below the release point during releases.
Notification of Release Event **C13** The authority holder must notify the administering authority within six (6) hours of commencing a release event. Notification must include the submission of written verification of the administering authority of the following information: a) Release commencement date / time; b) Expected release cessation date / time; c) Release point(s); d) Release volume (estimated); e) Receiving water/s including the natural flow rate; and f) Any details (including available data) regarding likely impacts on the receiving water(s). Note: Notification to the administering authority must be addressed to Manager and Project Manager of the local Administering Authority via email or facsimile.	Administering authority will be notified	Notification of releases will be carried out via the administering authority agreed channels only. A backup plan will be agreed upon internally should the need arise. Notification to the administering authority will be addressed to Manager and Project Manager of the local Administering Authority via email or facsimile
C14 The authority holder must notify the administering authority as soon as practicable, (nominally within twenty-four (24) hours after cessation of a release) of the cessation of a release notified under condition C13 and within twenty-eight (28) days provide the following information in writing: a) Release cessation date / time; b) Natural flow volume in receiving water; c) Volume of water released;	Administering authority will be notified	Administrating Authority will be notified on cessation of discharge as per conditions.

EA Condition	Control Strategy	Action Program
d) Details regarding the compliance of the		

EA Condition	Control Strategy	Action Program
release with the conditions of this environmental authority (i.e. contamination limits, natural flow, discharge volume); e) All in-situ water quality monitoring results; and f) Any other matters pertinent to the water release event. Note: Successive or intermittent releases occurring within 24 hours of the cessation of any individual release can be considered part of a single release event and do not require individual notification for the purpose of compliance with conditions C13 and C14, provided the relevant details of the release are included within the notification provided in accordance with conditions C13 and C14.		
Notification of Release Event Exceedence **C15** If the release limits defined in Table C2: Mine affected water release limits are exceeded, the holder of the environmental authority must notify the administering authority, in writing, within twenty-four (24) hours of receiving the results.	Administering authority will be notified	A competent person shall be employed to review data and report any exceedence to the administering authority. Reporting of the mine affected water release results will be carried out in writing via the agreed channels.
C16 The authority holder must, within twenty-eight (28) days of a release that exceeds the conditions of this authority, provide a report to the administering authority detailing: a) The reason for the release; b) The location of the release; c) All water quality monitoring results; d) Any general observations; e) All calculations; and **f)** Any other matters pertinent to the water release event.	Report will be prepared and provided to administering authority	Exceedence of water quality criteria shall be treated as an incident and investigated in line with the mine accident and incident investigation procedures. This report shall be provided to the administering authority and contain the information as per the requirements of this condition
Monitoring of Water Storage Quality **C17** Water storages stated in Table C5: Water Storage Monitoring, which are associated with the	Monitoring will be completed	Water storage monitoring shall be incorporated into the Environmental Monitoring Plan and will be carried out as

EA Condition	Control Strategy	Action Program
release points, must be monitored for the water		per the frequency and specification of this

EA Condition		Control Strategy	Action Program
	quality characteristics specified in Table C6: Onsite Water Storage Contaminant Limits at the monitoring locations and at the monitoring frequency specified in Table C5: Water Storage Monitoring.		condition. SSE shall ensure appropriate budget is in place and competent persons employed to enable monitoring as required.
C18	In the event that waters storages defined in Table C5: Water Storage Monitoring exceed the contaminant limits defined in Table C6: Onsite Water Storage Contaminant Limits, the holder of the environmental authority must implement measures, where practicable, to prevent access to waters by all livestock.	All mining areas will be fenced for safety reasons	Where practicable measures will be implemented to prevent access to waters by all livestock.
Receiving Environment Monitoring and Contaminant Trigger Levels		Monitoring will be undertaken as required	Receiving Environment monitoring shall be incorporated into the Environmental Monitoring Plan and will be carried out as per the frequency and specification of this condition. SSE to ensure appropriate budget is in place and competent persons employed to enable monitoring as required.
C19	The quality of the receiving waters must be monitored at the locations specified in Table C8: Receiving Water Upstream Background Sites and Downstream Monitoring Points for each quality characteristics and at the monitoring frequency stated in Table C7: Receiving Waters Contaminant Trigger Levels.		
C20	If quality characteristics of the receiving water at the downstream monitoring points exceed any of the trigger levels specified in Table C7: Receiving Waters Contaminant Trigger Levels during a release event the environmental authority holder must compare the downstream results to the upstream results in the receiving waters and: a) Where the downstream result is the same or a lower value than the upstream value for the quality characteristics then no action is to be taken; or b) Where the downstream results exceed the upstream results complete an investigation in accordance with ANZECC and ARMCANZ 2000 methodology, into the potential for environmental harm and provide a written	Results comparisons will be made	If exceedences are found as per this condition, investigations will be carried out as per the requirements of condition C20. SSE to ensure appropriate budget is in place and competent persons employed to enable assessment of data as required.

EA Condition	Control Strategy	Action Program
report to the administering authority in the		

EA Condition	Control Strategy	Action Program
next annual return, outlining: 1. Details of the investigations carried out; and 2. Actions taken to prevent environmental harm. *Note: Where an exceedance of a trigger level has occurred and is being investigated, in accordance with C20(b) of this condition, no further reporting is required for subsequent trigger events for that quality characteristic.*		
Receiving Environment Monitoring Program (REMP) **C21** The environmental authority holder must develop and implement a Receiving Environment Monitoring Program (REMP) to monitor, identify and describe any adverse impacts to surface water environmental values, quality and flows due to the authorised mining activity. This must include monitoring the effects of the mine on the receiving environment periodically (under natural flow conditions) and while mine affected water is being discharged from the site. For the purposes of the REMP, the receiving environment is the waters of the Dawson River Anabranch and connected or surrounding waterways within 15km downstream of the release. The REMP should encompass any sensitive receiving waters or environmental values downstream of the authorised mining activity that will potentially be directly affected by an authorised release of mine affected water.	REMP will be implemented	The pre-existing REMP for the Baralaba Central Mine will be reviewed for adequacy and updated as appropriate to suit the needs of the expanded operation.
C22 The REMP must: a) Assess the condition or state of receiving waters, including upstream conditions, spatially within the REMP area, considering background water quality characteristics based on accurate and reliable monitoring data that takes into consideration temporal	REMP will address required items.	The pre-existing REMP for the Baralaba Central Mine will be reviewed for adequacy and updated as appropriate to suit the needs of the expanded operation.

EA Condition	Control Strategy	Action Program
variation (e.g. seasonality); and		

EA Condition	Control Strategy	Action Program
b) Be designed to facilitate assessment against water quality objectives for the relevant environmental values that need to be protected; and c) Include monitoring from background reference sites (e.g. upstream or background) and downstream sites from the release (as a minimum, the locations specified in Table C8: Receiving Water Upstream Background Sites and Downstream Monitoring Points); and d) Specify the frequency and timing of sampling required in order to reliably assess ambient conditions and to provide sufficient data to derive site specific background reference values in accordance with the Queensland Water Quality Guidelines 2009. This should include monitoring during periods of natural flow irrespective of mine or other discharges; and e) Include monitoring and assessment of dissolved oxygen saturation, temperature and all water quality parameters listed in Table C2: Mine affected water release limits and Table C3: Release Contaminant Trigger Investigation Levels; and f) Include, where appropriate, monitoring of metals/metalloids in sediments (in accordance with ANZECC & ARMCANZ 2000, BATLEY and/or the most recent version of AS5667.1 Guidance on Sampling of Bottom Sediments); and g) Include, where appropriate, monitoring of macroinvertebrates in accordance with the AusRivas methodology, and h) Apply procedures and/or guidelines from ANZECC & ARMCANZ 2000 and other		

EA Condition	Control Strategy	Action Program
relevant guideline documents; and		

EA Condition		Control Strategy	Action Program
	i) Describe sampling and analysis methods and quality assurance and control; and **j)** Incorporate stream flow and hydrological information in the interpretations of water quality and biological data.		
C23	A REMP Design Document that addresses each criterion presented in conditions C21 and C22 must be prepared and submitted to the administering authority no later than three (3) months after the date of issue of this environmental authority. Due consideration must be given to any comments made by the administering authority on the REMP Design Document and subsequent implementation of the program.	REMP design document will be completed within three months of commencement of environmental authority	The pre-existing REMP for the Baralaba Central Mine will be reviewed for adequacy and updated as appropriate to suit the needs of the expanded operation. Consequently the design document will take the form of an REMP gap analysis comparing the existing REMP with the requirements for an REMP for the expanded operation.
C24	A report outlining the findings of the REMP, including all monitoring results and interpretations in accordance with conditions C21 and C22 must be prepared annually and made available on request to the administrating authority. This must include an assessment of background reference water quality, the condition of downstream water quality compared against water quality objectives, and the suitability of current discharge limits to protect downstream environmental values.	REMP report will be prepared as required.	All results will be compiled annually to complete the report which will be made available to the administering authority.
Water reuse **C25**	Mine affected water may be piped or trucked or transferred by some other means that does not contravene the conditions of this environmental authority and deposited into artificial water storage structures, such as farm dams or tanks, or used directly at properties owned by the environmental authority holder or a third party for the purpose of: a) supplying stock water subject to compliance with the quality release limits specified in Table C9: Stock Water Release Limits; or	The Water Management Plan addresses the use of mine affected water	The Water Management Plan will outline the procedures to be used when using mine-affected water. Any mine affected water transferred for the use on properties owned by the environmental authority holder or a third party for any of the uses stated in condition C25, will not contravene the conditions of this environmental authority.

EA Condition	Control Strategy	Action Program
b) supplying irrigation water subject to		

EA Condition		Control Strategy	Action Program
	compliance with quality release limits in Table 10: Irrigation Water Release Limits; or **c)** supplying water for construction and/or road maintenance in accordance with the conditions of this environmental authority.		
C26	Mine affected water may be piped or trucked or transferred by some other means that does not contravene the conditions of this environmental authority and deposited into artificial water storage structures, such as dams or tanks, for the purpose of supplying water to Wonbindi North Coal Mine. The volume, pH and electrical conductivity of water transferred to Wonbindi North Coal Mine must be monitored and recorded.	The Water Management Plan addresses the use of mine affected water Noted: Baralaba and Wonbindi mines will be run as a single operation.	All water transferred to Wonbindi North Coal Mine will monitored for volume, pH and EC and records kept.
C27	If the responsibility for mine affected water is given or transferred to another person in accordance with conditions C25 or C26: a) the responsibility for the mine affected water must only be given or transferred in accordance with a written agreement (the third party agreement); and b) the third party agreement must include a commitment from the person utilising the mine affected water to use it in such a way as to prevent environmental harm or public health incidents and specifically make the persons aware of the General Environmental Duty (GED) under section 319 of the Environmental Protection Act 1994, environmental sustainability of the water disposal and protection of environmental values of waters; and **c)** the third party agreement must be signed by both parties to the agreement.	There are no plans to re-use water outside of the operation during the term of this plan.	If any water was transferred to another person, it will be carried out as per condition.
Water general			
C28	All determinations of water quality and biological	A competent person will be engaged to complete all monitoring and only NATA accredited laboratories will be	Water monitoring shall be incorporated into the Environmental Monitoring Plan. The plan

EA Condition	Control Strategy	Action Program
monitoring must be:	used for off-site analysis.	shall conform to the requirements of

EA Condition	Control Strategy	Action Program
a) performed by a person or body possessing appropriate experience and qualifications to perform the required measurements; b) made in accordance with methods prescribed in the latest edition of the administering authority's Monitoring and Sampling Manual; c) collected from the monitoring locations identified within this environmental authority, within 12 hours of each other where possible; d) carried out on representative samples; and e) analysed at a laboratory accredited (e.g. NATA) for the method of analysis being used. *NOTE: Condition C28 requires the Monitoring and Sampling Manual to be followed and where it is not followed because of exceptional circumstances this should be explained and reported with the results.*		Condition C28 A supply agreement shall be maintained with a laboratory with NATA accreditation for the required analysis. The SSE shall ensure that a competent person is available to complete monitoring.
C29 The release of any contaminants as permitted by this environmental authority, directly or indirectly to waters, other than internal water management infrastructure that is installed and operated in accordance with a water management plan that complies with conditions C32 to C37 inclusive: a) must not produce any visible discolouration of receiving waters; and **b)** must not produce any slick or other visible or odorous evidence of oil, grease or petrochemicals nor contain visible floating oil, grease, scum, litter or other objectionable matter.	Releases will comply with the requirements and will be in accordance with the Water Management Plan and the Mine Water Discharge Procedure.	Releases will comply with the requirements and will be in accordance with the Water Management Plan and the Mine Water Discharge Procedure.
Annual Water Monitoring Reporting **C30** The following information must be recorded in relation to all water monitoring required under the conditions of this environmental authority and submitted to the administering authority in the specified format with each annual return: a) the date on which the sample was taken;	Monitoring data will be recorded	SSE will ensure that a competent person supervises monitoring activities and that an appropriate IT resources are available for effective recording and analysis of data The annual return submitted to the administering authority will contain the

EA Condition	Control Strategy	Action Program
b) the time at which the sample was taken;		information stated in condition C30..

EA Condition	Control Strategy	Action Program
c) the monitoring point at which the sample was taken; d) the measured or estimated daily quantity of mine affected water released from all release points; e) the release flow rate at the time of sampling for each release point; f) the results of all monitoring and details of any exceedences of the conditions of this environmental authority; and **g)** water quality monitoring data must be provided to the administering authority in the specified electronic format upon request		
Water Management Plan **C31** A Water Management Plan must be developed by an appropriately qualified person and implemented prior to the commencement of activities.	Water Management Plan	The Baralaba Central Water Management Plan has been developed and is reviewed as required, it will be made available on request. The Baralaba North/Wonbindi North Water Management Plan will be implemented prior to the commencement of activities. An appropriately qualified and experienced person shall be employed to ensure implementation of the plan is managed. The SSE shall ensure appropriate resources are made available for the implementation of the plan.
C32 The Water Management Plan must: a) provide for effective management of actual and potential environmental impacts resulting from water management associated with the mining activity carried out under this environmental authority; and b) be developed in accordance with the administering authority's guideline	Water Management Plan	Water Management Plan shall be reviewed annually to ensure compliance is maintained. SSE to ensure resources are available for Water Management Plan review.

EA Condition	Control Strategy	Action Program
Preparation of water management plans for		

EA Condition		Control Strategy	Action Program
	mining activities (EM324) and include: c) a study of the source of contaminants; d) a water balance model for the site; e) a water management system for the site; f) measures to manage and prevent saline drainage; g) measures to manage and prevent acid rock drainage; h) contingency procedures for emergencies; and **i)** a program for monitoring and review of the effectiveness of the water management plan.		
C33	The Water Management Plan must be reviewed each calendar year and a report prepared by an appropriately qualified person. The report must: a) assess the plan against the requirements under condition C33; b) include recommended actions to ensure actual and potential environmental impacts are effectively managed for the coming year; and **c)** identify any amendments made to the water management plan following the review.	The Water Management Plan will be reviewed annually.	Water Management Plan shall be reviewed annually to ensure compliance with condition C34 is maintained. The plan will include recommended actions and amendments as per this condition. SSE to ensure resources are available for Water Management Plan review.
C34	The holder of this environmental authority must attach to the review report required by condition C34, a written response to the report and recommended actions, detailing the actions taken or to be taken by the environmental authority holder on stated dates: a) to ensure compliance with this environmental authority; and **b)** to prevent a recurrence of any non-compliance issues identified.	The Water Management Plan review report will be completed	Water Management Plan shall be reviewed annually to ensure compliance is maintained. The review report will contain the requirements stated in this condition. SSE to ensure resources are available for Water Management Plan review.
C35	The review report required by condition C34 and the written response to the review report required by condition C35 must be submitted to the administering authority with the subsequent	The Water Management Plan review report will be provided with the annual return	The review report will be submitted to the administering authority with the subsequent annual return as per this condition.

EA Condition	Control Strategy	Action Program
annual return under the signature of the		

EA Condition	Control Strategy	Action Program
appointed signatory for the annual return.		
C36 A copy of the Water Management Plan must be provided to the administering authority on request.	The Water Management Plan will be made available on request.	The plan will be provided at the administering authority on request.
Saline Drainage **C37** The holder of this environmental authority must ensure proper and effective measures are taken to avoid or otherwise minimise the generation and/or release of saline drainage.	Rehabilitation Management Plan - Rehabilitation strategies shall be developed to minimise the risk of saline drainage	The Rehabilitation Management Plan will be developed and will include measures to minimise the risk of saline drainage.
Acid Rock Drainage **C38** The holder of this environmental authority must ensure proper and effective measures are taken to avoid or otherwise minimise the generation and/or release of acid rock drainage.	Rehabilitation Management Plan - Rehabilitation strategies shall be developed to minimise the risk of acid rock drainage	Pre-mining geochemistry studies have not identified any high risk AMD material. It is possible that some rejects will be produced at Baralaba North with low levels of sulphur. While significant acid production is unlikely, this material will be disposed of deep in pit as a precautionary measure.
Stormwater and Water sediment controls **C39** An Erosion and Sediment Control Plan must be developed by an appropriately qualified person and implemented for all stages of the mining activities on the site to minimise erosion and the release of sediment to receiving waters and contamination of stormwater.	Sediment and Erosion Control Plan	The erosion and sediment control plan will be updated by a person holding appropriate qualifications and demonstrated competency.
C40 Stormwater, other than mine affected water, is permitted to be released to waters from: a) erosion and sediment control structures that are installed and operated in accordance with the Erosion and Sediment Control Plan required by condition C40; and **b)** water management infrastructure that is installed and operated, in accordance with a Water Management Plan that complies with conditions C32 to C37 inclusive, for the purpose of ensuring water does not become mine affected water.	Water management systems shall be designed and installed in line with requirements	The operation and installation of water management infrastructures will be included in the water management plan and will comply with conditions C32 to C37. A design review of containment systems will be completed by a competent person. A post construction inspection shall be completed to ensure all structures have been installed as per design.
C41 The maintenance and cleaning of any vehicles, plant or equipment must not be carried out in	Vehicle cleaning and maintenance to be completed at MIA	A vehicle wash-down facility will be made available at the mine industrial area.

EA Condition	Control Strategy	Action Program
areas from which contaminants can be released		

EA Condition	Control Strategy	Action Program
into any receiving waters.		Workshop facilities will be upgraded during the term of the plan to ensure compliance.
C42 Any spillage of wastes, contaminants or other materials must be cleaned up as quickly as practicable to minimise the release of wastes, contaminants or materials to any stormwater drainage system or receiving waters.	Spill kits will be available to facilitate cleanup as needed	Spill kits are to be placed in strategic locations and be made mandatory on service vehicles. Spill kit inventories shall be taken monthly to ensure they are properly equipped. Spill response training shall be included in the site induction and reinforced through toolbox training sessions.
Groundwater **C43** The holder of the environmental authority must develop and implement a Groundwater Monitoring and Management Program prior to the commencement of mining activities. The program must: a) be able to detect a significant change to ground water quality values due to activities that are part of this mining project; b) include measures to minimise the impact of the mining activities on groundwater resources; c) include contingency procedures for emergencies; and **d)** include a program for monitoring and review of the effectiveness of the groundwater monitoring and management program.	Groundwater Monitoring Program and Environmental Monitoring Plan will ensure all monitoring is designed and conducted.	Groundwater monitoring arrangements are to be included in the project Environmental Monitoring Plan. SSE is to ensure that the required resources are available for monitoring to be completed. Monitoring is to be completed by a competent person. All analytical results shall be sourced from laboratories with appropriate NATA certification.
Background groundwater monitoring program **C44** A background groundwater monitoring program must be developed, as part of the groundwater monitoring and management program, to include bore(s) that are located an appropriate distance from potential sources of impact from mining activities to provide the following: a) representative groundwater samples from the	Groundwater monitoring program to be implemented.	Bore locations to be reviewed by a competent person and any new bores that will be required will be installed. Groundwater monitoring arrangements are to be included in the Environmental Monitoring Plan. SSE is to ensure that the required resources

EA Condition	Control Strategy	Action Program
aquifers potentially affected by mining		are available for monitoring to be completed.

EA Condition	Control Strategy	Action Program
activities, b) at least 12 sampling events, no more than 1 month apart, c) background groundwater quality in hydraulically isolated background bore(s) that have not been affected by any mining activities, and d) final groundwater contaminant trigger levels and limits required in condition C46; e) final groundwater monitoring locations required in Table C11: Groundwater monitoring locations and frequencies and Table C13: Groundwater levels; f) groundwater RL's required under condition Table C13: Groundwater levels; and **g)** sufficient information to allow the holder to determine predicted seasonal fluctuations of groundwater levels.		Monitoring is to be completed by a competent person. All analytical results shall be sourced from laboratories with appropriate NATA certification.
C45 Groundwater contaminant trigger levels as per Table C12: Groundwater investigation trigger levels must be finalised based on a background groundwater monitoring program defined in condition C45 and submitted to the administering authority with the groundwater monitoring and management program, within twelve (12) months of grant of this environmental authority.	Trigger levels will be determined	Suitable experts in groundwater will be consulted to ensure appropriate trigger levels are proposed.
Groundwater Monitoring and Management **C46** The groundwater monitoring and management program, including all data, must be reviewed on an annual basis by an appropriately qualified and experienced person. The review must include a) the assessment of groundwater levels and quality data, and the suitability of the monitoring network; b) assess the program against the requirements under condition C44;	Review will be completed	Groundwater monitoring and management program and data will be reviewed on an annual basis by an expert in the field and will include the information required as per condition C47. Groundwater monitoring will be included in the site Environmental Monitoring Plan. The SSE is to ensure appropriate financial

EA Condition	Control Strategy	Action Program
c) include recommended actions to ensure		provision is made to allow for this review to

EA Condition	Control Strategy	Action Program
actual and potential environmental impacts are effectively identified and managed for the coming year; and **d)** identify any amendments to the groundwater monitoring and management program following the review.		be completed.
C47 The assessment under condition C47 must be submitted to the administering authority within twenty-eight (28) days of receiving the report, with a written response to the assessment report and recommended actions, detailing the actions taken or to be taken by the environmental authority holder to ensure compliance with this environmental authority and minimise impacts on groundwater resources by the mining activity.	Review will be provided to the administering authority	Review will be provided to the administering authority within timeframe stated and contain the information shown in condition C48.
Groundwater Monitoring **C48** Groundwater affected by the mining activities must be monitored at the locations and frequencies defined in Table C11: Groundwater monitoring locations and frequencies for the parameters identified in Table C12: Groundwater investigations trigger levels.	Groundwater monitoring program to be implemented.	Ground water monitoring will occur at the locations and frequencies for the parameters identified in Table C12 as condition C49. These requirements shall be integrated into the site Environmental Monitoring Plan. SSE is to ensure that the required resources are available for monitoring to be completed. Monitoring is to be completed by a competent person. All analytical results shall be sourced from laboratories with appropriate NATA certification.
C49 Groundwater levels affected by the mining activities must be monitored at the locations and frequencies defined in Table C13: Groundwater levels.	Groundwater monitoring program to be implemented.	Ground water monitoring will occur at the locations and frequencies for the parameters identified in Table C12 as condition C49. These requirements shall be integrated into the site Environmental Monitoring Plan. SSE is to ensure that the required resources are available for monitoring to be completed.

EA Condition	Control Strategy	Action Program
		Monitoring is to be completed by a

EA Condition	Control Strategy	Action Program
		competent person. All analytical results shall be sourced from laboratories with appropriate NATA certification.
C50 The following information must be recorded in relation to all groundwater water sampling: a) the date on which the sample was taken; b) the time at which the sample was taken; c) the monitoring point at which the sample was taken; and **d)** the results of all monitoring.	Groundwater monitoring program to be implemented.	Ground water sampling information will be recorded as per condition C51. SSE is to ensure that the required resources are available for data to be reliably recorded
C51 The method of groundwater sampling required by this environmental authority must comply with that set out in the latest edition of the administering authority's Water Quality Sampling Manual.	Monitoring program to conform to standard	Monitoring program shall be reviewed for its compliance with Condition C52 and for adequacy by an expert in the field.
Groundwater investigation **C52** Subject to requirements of condition C49, if the groundwater investigation trigger levels defined in Table 12: Groundwater investigation trigger levels are exceeded then the environmental authority holder must complete an investigation into the potential for environmental harm and notify the administering authority within twenty-eight (28) days of receiving the analysis results.	Investigation will be completed if trigger levels are exceeded	Investigation will be completed if trigger levels are exceeded
C53 In the event that groundwater fluctuations in excess of two metres per year beyond predictable seasonal fluctuations as determined by condition C45 are detected at the groundwater monitoring locations nominated in Table C13: Groundwater levels, an investigation must be undertaken within fourteen (14) days of detection to determine if the fluctuations are a result of: a) mining activities; b) pumping from licensed or unlicensed bores; or	Investigation will be completed if trigger levels are exceeded	Investigation will be completed if trigger levels are exceeded

EA Condition	Control Strategy	Action Program
c) seasonal variation.		

EA Condition	Control Strategy	Action Program
C54 If the results of the investigation identify that the groundwater fluctuations are a result of mining activities, the holder of the environmental authority must notify the administering authority and provide a copy of a report detailing the findings and outcomes of the investigation within seven (7) days of receiving the result.	Administering authority will be notified as required.	Administering authority will be notified as required.
Sewage effluent **C55** Treated sewage effluent in compliance with the release limits stated in Table C14: Contaminant release limits to land – treated sewage effluent, may be released to land.	Sewage treatment infrastructure shall be designed to meet criteria and effluent disposed to land.	Sewage treatment infrastructure shall be designed to meet criteria and effluent disposed to land. Requirements for monitoring of effluent will be incorporated into the Environmental Monitoring Plan. The Plan shall conform with condition C56 and with manufacturers recommendation to ensure plant is functioning as intended.
C56 Treated sewage effluent may only be released to land in accordance with the conditions of this approval.	Effluent will only be released to the specific irrigation area	Effluent will only be released to the specific irrigation area
C57 The application of treated effluent to land must be carried out in a manner such that: a) vegetation is not damaged; b) there is no surface ponding of effluent; and **c)** there is no run-off of effluent.	Irrigation area to conform with manufacturers recommendations and condition C58	Irrigation area to conform with manufacturers recommendations and as per condition C58.
C58 If areas irrigated with effluent are accessible to employees or the general public, prominent signage must be provided advising that effluent is present and care should be taken to avoid consuming or otherwise coming into unprotected contact with the effluent.	Irrigation area to be signed	Irrigation area to be signed
C59 All sewage effluent released to land must be monitored at the frequency and for the parameters specified in Table C14: Contaminant release limits to land – treated sewage effluent.	Monitoring will be conducted as required	Monitoring will be conducted: • as per Table C14; or • as per manufacturers specification whichever is the more stringent standard.

EA Condition	Control Strategy	Action Program
		Monitoring will be incorporated into the

EA Condition		Control Strategy	Action Program
			Environmental Monitoring Plan.
C60	The daily volume of effluent release to land must be measured and records kept of the volumes of effluent released.	Volumetric data shall be recorded	Plant shall be specified with appropriate monitoring equipment to gather volumetric data.
C61	When circumstances prevent the irrigation or beneficial reuse of treated sewage effluent such as during or following rain events, waters must be directed to a wet weather storage or alternative measures must be taken to store / lawfully dispose of effluent.	Wet weather storage backup to be installed	Where irrigation or beneficial reuse of treated sewage effluent is not possible, waters will be directed to a wet weather storage or lawfully disposed of off-site through a licenced contractor.

4.4 Schedule D – Waste

EA Condition	Control Strategy	Action Program
Waste Management **D1** The holder of this environmental authority must develop, implement and maintain a waste management program in accordance with the Environmental Protection Act 1994 and subordinate legislation for the site. The waste management program must include: a) a description of the mining activities that may generate waste; i. the waste management control strategies must consider: ii. the types and amounts of wastes generated by the mining activities; iii. segregation of the wastes; iv. storage of the wastes v. transport of the wastes vi. monitoring and reporting matters concerning the waste b) the hazardous characteristics of the wastes generated including disposal procedures for hazardous wastes c) a program for reusing, recycling or disposing of all wastes d) how the waste will be dealt with in accordance with the waste management hierarchy, including a description of the types and amounts of waste that will be dealt with under each of the waste management practices in the waste management hierarchy (i.e. avoidance, reuse, recycling, energy recovery, disposal) e) procedures for identifying and implementing opportunities to minimise the amount of waste generated, promote efficiency in the use of resources and improve the waste management	Waste Management Plan implemented on site	Waste management plan will be developed as per the requirements of condition D1

EA Condition	Control Strategy	Action Program
practices employed		

EA Condition		Control Strategy	Action Program
	f) procedures for dealing with accidents, spills and other incidents g) details of any accredited management system employed, or planned to be employed, to deal with waste h) how often the performance of the waste management program will be assessed i) the indicators or other criteria on which the performance of the waste management program will be assessed; and **j)** staff training and induction to the waste management program		
D2	All general and regulated waste must be removed from the site to a facility that is lawfully able to accept the waste under the Environmental Protection Act 1994.	All waste to be removed lawfully	Waste management plan to be developed and implemented. Induction and toolbox training to cover waste management
D3	Unless otherwise permitted by the conditions of this environmental authority or with prior approval from the administering authority and in accordance with a relevant standard operating procedure, waste must not be burnt.	Burning of waste will be prohibited	Induction to advise that burning of waste is prohibited.
D4	The holder of this environmental authority may burn vegetation cleared in the course of carrying out extraction activities provided the activity does not cause environmental harm at any sensitive place or commercial place.	Burning of waste vegetation shall be undertaken under competent supervision	Any burning of vegetation required will be carried out under approval from the SSE and with a Rural Fires Permit. Relevant supervisors shall receive fire safety training.
D5	All combustible materials, including grass and vegetation, must be removed within a ten (10) metre radius of any waste storage area. *NOTE: Waste storage area include areas for the storage of general wastes, scrap tyres or other regulated wastes.*	Waste stored on hardstand areas only. Grass to be slashed around perimeter as required.	Waste stored on hardstand areas only. Grass to be slashed and chemically treated near all waste storage areas and around perimeter as required.

EA Condition	Control Strategy	Action Program
D6 Regulated waste, other than that authorised to be	Regulated waste to be removed by licenced contractors	Procurement procedures to include

EA Condition		Control Strategy	Action Program
	disposed of on-site under this authority, must only be removed and transported from the site by a person who holds a current authority to transport such wastes to a facility that is lawfully able to accept the waste under the Environmental Protection Act 1994.	only	verification of required licencing. Annual checks of electronic submission of waste tracking records are to be made against records held on site.
D7	Regulated waste generated in the mining activity can be temporarily stored on site awaiting removal provided it is stored to ensure there is minimal risk of causing fire or contamination to land or waters.	Waste to be stored on hardstand areas only that are protected by water management structures.	Waste storage requirements to be included in the Waste Management Plan. Induction and/or toolbox training to advise on appropriate waste storage practices. Monthly site inspections of waste storage facilities will be completed to ensure compliance with conditions D6, D7 and D8.
D8	Each container of regulated waste stored awaiting movement off site must be marked to identify the contents.	All containers to be labelled	All containers to be clearly labelled
D9	Regulated waste must only be removed to a facility licensed under the Environmental Protection Act 1994 to receive such waste.	Regulated waste to be removed by licenced contractors only	Procurement procedures to include verification of required licencing.
D10	Scrap tyres stored awaiting disposal or transport for take-back and recycling, or waste-to-energy options must be stored must be stockpiled in volumes less than three (3) metres in height and 200m2 and at least ten (10) metres from any other tyre storage area.	Scrap tyres to be stored as required	Designated scrap mine storage areas to be constructed as needed
D11	Subject to demonstrating to the administering authority that no other use higher in the waste management hierarchy can be practicably implemented, waste tyres generated from mining activities may be disposed of on site in spoil emplacements.	In spoil disposal of tyres to be managed as required	Tyres will be managed in accordance with the Waste Management Plan. Where no other viable options are available, tyres will be disposed of near the pit floor within spoil disposal areas. Records shall be maintained that include survey locations and description of the disposed tyres. .
D12	Scrap tyres resulting from the mining activities disposed within the operational land must not	Waste tyres to be placed near as practical to pit floor	Hydrogeology investigations have not identified any risk associated with the

EA Condition	Control Strategy	Action Program
impede saturated aquifers, cause contamination		practice. No special provisions considered

EA Condition	Control Strategy	Action Program
or compromise the stability of the consolidated landform.		necessary.

4.5 Schedule E – Noise and Vibration

EA Condition	Control Strategy	Action Program
Noise and vibration nuisance **E1** Noise, airblast overpressure and vibration from activities must not cause an environmental nuisance at any sensitive or commercial place.	Mine planning and blast design to consider noise impacts	Noise studies prior to the commencement of mining indicate that compliance with the required noise levels is achievable. Where considered necessary monitoring shall be undertaken in accordance with the Environmental Monitoring Plan.
E2 All noise, overblast pressure and vibration from activities must not exceed the levels specified in Table E1: Noise Limits, Table E2: Airblast overpressure level, and Table E3: Vibration limits at any sensitive or commercial place.	Mine planning and blast design to consider noise impacts	Blast design shall consider the required noise and vibration limits. . Monitoring shall be undertaken in accordance with the Environmental Monitoring Plan
Noise monitoring **E3** When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within fourteen (14) days to the administering authority. Monitoring must include: a) LA10, adj, 10 mins; b) LA, max adj, T; c) relevant background sound level; d) the level and frequency of occurrence of impulsive or tonal noise; e) atmospheric conditions including temperature, relative humidity and wind speed and direction; and location, date and time of recording; f) effects due to extraneous factors such as traffic noise; and **g)** location, date and time of recording.	Noise monitoring shall be undertaken upon request	Monitoring shall be undertaken in accordance with the Environmental Monitoring Plan Noise monitoring (when undertaken under Administering Authority direction) shall include the required parameters. Monitoring program to be designed by a competent person.
E4 The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority's Noise Measurement Manual.	Monitoring to comply with Noise Measurement Manual	Noise monitoring program is to be included in the site Environmental Monitoring Plan. This plan shall conform to the required standards. The noise monitoring program (when

EA Condition	Control Strategy	Action Program
		undertaken under Administering Authority

EA Condition	Control Strategy	Action Program
		direction) shall include the required parameters. Monitoring program to be designed by a competent person.
Airblast overpressure monitoring **E5** When requested by the administering authority, airblast overpressure monitoring must be undertaken to investigate any complaint of airblast overpressure nuisance, and the results notified within fourteen (14) days to the administering authority. Monitoring must include: a) location of the blast(s) within the mining area; b) atmospheric conditions including temperature, relative humidity and wind speed and direction; and **c)** location, date and time of recording.	monitoring shall be undertaken upon request	Monitoring shall be undertaken under the supervision of a person competent in airblast overpressure monitoring. Air blast overpressure monitoring is to be included in the site Environmental Monitoring Plan.
Vibration monitoring **E6** When requested by the administering authority, vibration monitoring must be undertaken to investigate any complaint of vibration nuisance, and the results notified within fourteen (14) days to the administering authority. Monitoring must include: a) peak particle velocity (mm/s); b) air blast overpressure level (dB linear Peak); c) location of the blast/s within the mining area (including which bench level) ; d) atmospheric conditions including temperature, relative humidity, and wind speed and direction; and, **e)** location, date and time of recording.	monitoring shall be undertaken upon request	Monitoring shall be undertaken under the supervision of a person competent in vibration monitoring. Vibration monitoring is to be included in the site Environmental Monitoring Plan
Noise, airblast overpressure and vibration exceedence **E7** If monitoring indicates exceedence of the limits in Table E1: Noise Limits, Table E2: Airblast overpressure level, and Table E3: Vibration limits	Complaints will be addressed as required	Complaints will be addressed as required

EA Condition	Control Strategy	Action Program
then the environmental authority holder must:		

EA Condition	Control Strategy	Action Program
a) address any complaints including the use of appropriate dispute resolution if required; and, **b)** immediately implement abatement measures so that emissions from the activity do not result in further exceedences of the limits in Table E1, Table E2, and Table E3 and/or cause environmental nuisance.		
Blasting **E8** Every explosive blast for the mining activity shall be designed by a competent person, and be in accordance with a Blast Management Plan, to achieve the criteria specified in Table E1: Noise Limits, Table E2: Airblast overpressure level, and Table E3: Vibration limits.	A competent blast engineer shall design each blast A competent shotfirer shall conduct each blast	A blasting procedure shall be implemented as a component of the site safety management system. The plan shall include environmental requirements to inform designers and shot firers. A competent blast engineer shall design each blast A competent shotfirer shall conduct each blast
E9 All relevant information pertaining to the design of every explosive blast for the mining activity in relation to the criteria specified in Table E1: Noise Limits, Table E2: Airblast overpressure level, and Table E3: Vibration limits shall be kept in written and diagrammatic form.	All blast design and monitoring data shall be recorded	All blast design and monitoring data shall be recorded

4.6 Schedule F – Land

EA Condition	Control Strategy	Action Program
F1 If there is any inconsistency between the Strategic Cropping Land Protection Decision and this Environmental Authority, the Strategic Cropping Land Protection Decision prevails to the extent of the inconsistency.	The SCL protection decision will prevail where there is an inconsistency with the Environmental Authority.	All relevant ground disturbance will comply with SCL Protection Decision SCLRD2013/000161 even when there is an inconsistency with the environmental authority.
Topsoil **F2** Topsoil must be strategically stripped ahead of mining in accordance with a Topsoil Management Plan.	Topsoil management plan to be implemented	Topsoil management plan to be updated and implemented.
F3 A topsoil inventory which identifies the topsoil requirements and availability of suitable topsoil on site, must be detailed in the Plan of Operations.	Topsoil inventory is provided in Appendix A	Topsoil inventory is provided in Appendix A
F4 Topsoil and subsoils must be managed to ensure stability and minimise the release contaminants. Measures must include: a) vegetating stockpiles; b) minimising the height of stockpiles; and **c)** re-using stockpiles as soon as possible.	Control measures to be included in the topsoil management plan	Control measures shall be included in the topsoil management plan
Preventing contaminant release to land **F5** Contaminants must not be released to land in manner which constitutes nuisance, material or serious environmental harm.	Requirement to prevent land contamination to be included in induction and toolbox training	Requirement to prevent land contamination to be included in induction and toolbox training
F6 The environmental authority holder must take all practicable actions necessary to secure loads prior to transporting materials off site to minimise emissions or spillage of any material from vehicles or other transport infrastructure	Appropriate measure will be taken	Rules for securing of loads etc shall be included in the relevant site safety procedures and training.
Chemicals and flammable or combustible liquids **F7** All flammable and combustible liquids must be contained within an on-site containment system and controlled in a manner that prevents environmental harm and maintained in accordance with the current edition of *AS 1940 – Storage and Handling of Flammable and Combustible Liquids*	Storages will comply with AS1940	Procurement procedures to include requirement for flammable and combustible liquid storage to meet as a minimum AS1940. Biennial inspection as per AS1940 and to ensure compliance with condition F8 will be carried out by a licenced inspector.
F8 All chemicals must be contained within an on-site	Storages will comply with relevant standards	Procurement procedures to include

EA Condition	Control Strategy	Action Program
containment system and controlled in a manner		requirement for any chemical storage to

EA Condition		Control Strategy	Action Program
	that prevents environmental harm and maintained in accordance with the current version of the relevant Australian Standard		meet the requirements of the applicable Australian Standard/s. Biennial inspection as per AS1940 and to ensure compliance with condition F8 will be carried out by a licenced inspector.
F9	All explosives, corrosive substances, toxic substances, gases and dangerous goods must be stored and handled in accordance with the relevant Australian Standard	Storages and handling requirements will comply with relevant standards	Procurement procedures to include requirement for any explosive storage to meet the requirements of the applicable Australian Standard/s. Explosive handling requirements shall be manage through the safety management system
F10	All chemicals and flammable or combustible liquids stored on site that have the potential to cause environmental harm must be stored in, or serviced by, an effective containment system that is impervious to the materials stored and managed to prevent the release of liquids to waters or land. Where no relevant Australian Standard is available, the following must be applied: a) storage tanks must be bunded so that the capacity and construction of the bund is sufficient to contain at least 110% of a single storage tank or 100% of the largest storage tank plus 10% of the second largest storage tank in multiple storage areas; and **b)** drum storages must be bunded so that the capacity and construction of the bund is sufficient to contain at least 25% of the maximum design storage volume within the bund	Containment systems to be designed and constructed in accordance with condition	Containment systems to be designed and constructed in accordance with condition F11
Spills **F11**	Any spillage or release of Flammable and combustible liquids; or, Chemicals, must be	Spill response kits and training to be provided	Spill kits are to be placed in strategic locations and be made mandatory on service vehicles.

EA Condition	Control Strategy	Action Program
controlled in a manner that prevents		

EA Condition	Control Strategy	Action Program
environmental harm.		Spill kit inventories shall be taken monthly to ensure they are properly equipped. Spill response training shall be included in the site induction and re-enforced though toolbox training sessions.
F12 An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes, chemicals and flammable and combustible liquids associated with the activity must be kept at the site.	Spill response kits and training to be provided	Spill response training shall be included in the site induction and re-enforced though toolbox training sessions. Waste Management Plan and Emergency Preparedness and response plan developed to include spill response for site.
F13 Anyone operating with wastes, chemicals or flammable and combustible liquids under this approval must be trained in the use of the spill kit.	Spill response kits and training to be provided	Spill response training shall be included in the site induction and re-enforced though toolbox training sessions.
Infrastructure **F14** All infrastructure, constructed by, or for, the environmental authority holder during the licensed activities including water storage structures, must be removed from the site prior to surrender, except where agreed in writing by the post mining land owner / holder. *Note: This is not applicable where the landowner / holder is also the environmental authority holder.*	Rehabilitation planning to include removal of infrastructure	Rehabilitation planning to include removal of infrastructure
F15 Land disturbed by mining be rehabilitated in accordance with Table F1:Rehabilitation Requirements	Rehabilitation Management Plan to be developed	Completion Criteria to be proposed in the Rehabilitation Management Plan and incorporated into Table F1
F16 All areas significantly disturbed by mining activities must be rehabilitated to a stable landform with a self-sustaining vegetation cover in accordance with: a) Table F2 (a): Final Land Use and Rehabilitation Approval Schedule – Baralaba Central; and, b) Table F2 (b): Final Land Use and	Rehabilitation Management Plan to be developed	Rehabilitation Management Plan to be developed. Plan will make provision for all of these requirements. SSE is to ensure that resources are available to meet the objectives of the plan.

EA Condition	Control Strategy	Action Program
Rehabilitation Approval Schedule – Baralaba		

EA Condition	Control Strategy	Action Program
North; and, c) Table F3 (a): Landform Design criteria – Baralaba Central; and, **d)** Table F3 (b): Landform Design criteria – Baralaba North.		
F17 Progressive rehabilitation must commence within twelve (12) months of areas become available within the operational land, and must be in accordance with the current Plan of Operations.	Rehabilitation Management Plan to be developed.	Rehabilitation Management Plan to be developed. Plan will make provision for all of these requirements. SSE is to ensure that resources are available to meet the objectives of the plan.
Post mine landuse plan **F18** The holder must develop and submit to the administering authority a Post Mine Land Use Plan (PMLUP) with the initial Plan of Operations and update and resubmit the plan with each subsequent Plan of Operations. The PMLUP must describe how the rehabilitation objectives in Table F1: Rehabilitation Requirements will be achieved: a) schematic representation of final land form inclusive of drainage features; b) drainage design; c) erosion controls proposed on reformed land; d) geotechnical, geochemical and hydrological studies; e) chemical, physical and biological properties of soil and water; f) proposed revegetation methods inclusive of plant species selection, re-profiling, respreading soil, soil ameliorants/amendments, surface preparation and method of propagation; and **g)** a rehabilitation monitoring program	Post Mine Land Use Plan is attached as Appendix F.	Post Mine Land Use Plan is attached as Appendix F.
Rehabilitation Management Plan **F19** Complete a rehabilitation management plan for disturbed areas and submit a report to the	Rehabilitation Management Plan to be.	Rehabilitation Management Plan to be developed.

EA Condition	Control Strategy	Action Program
administering authority by 30 March 2014		

EA Condition	Control Strategy	Action Program
proposing acceptance criteria prior to the commencement of mining activities. The rehabilitation management plan must, at a minimum: a) develop design criteria for rehabilitation of each domain; b) identify success factors and completion criteria for each domain; c) identify three (3) reference sites to be used to develop rehabilitation success criteria; d) describe the monitoring of reference sites inclusive of statistical design; e) detail rehabilitation methods applied to each domain; f) contain landform design criteria including end of mine design; g) detail how landform design will be consistent with the surrounding topography; h) provide schematic representation of final landform inclusive of: i) drainage design and features; j) slope designs; k) cover design; l) erosion controls proposed on reformed land; m) explain planned native vegetation rehabilitation areas and corridors; n) describe rehabilitation monitoring and maintenance requirements to be applied to all areas of disturbance; o) develop a contingency plan for rehabilitation maintenance or redesign; p) describe end of mine landform design plan and post mining land uses across the mine.		
Rehabilitation Monitoring Program **F20** Once rehabilitation has commenced, the holder of the environmental authority must conduct rehabilitation monitoring as proposed in a	Rehabilitation Monitoring Plan is attached as Appendix C.	Rehabilitation Monitoring Plan is attached as Appendix C.

EA Condition	Control Strategy	Action Program
Rehabilitation Monitoring Program on a yearly		

EA Condition		Control Strategy	Action Program
	basis, which must include sufficient spatial and temporal replication to enable statistically valid conclusions as established under the rehabilitation program.		
F21	The Rehabilitation Monitoring Program must be developed and implemented by a person possessing appropriate qualifications and experience in the field of rehabilitation management, nominated by the environmental authority holder.	The Rehabilitation Monitoring Plan was developed by a person with appropriate skill in rehabilitation including monitoring	The Rehabilitation Monitoring Plan was developed by a person with appropriate skill in rehabilitation including monitoring
F22	Verification of rehabilitation success, determined by the rehabilitation success criteria developed as per condition F19 is to be carried out as follows: a) the minimum sampling intensity must be specified for the monitoring of progressive rehabilitation; b) justification of the suitability of the minimum sampling intensity must be provided; c) monitoring must include sufficient replication to enable statistical analysis of results at an acceptable power; and **d)** undertaken at twelve monthly intervals.	Success verification to include these requirements	Rehabilitation monitoring procedures in Rehabilitation Monitoring Plan to include these requirements
F23	The Rehabilitation Monitoring Program must be included in the Plan of Operations and updated with each subsequent Plan of Operations, describing: a) how the rehabilitation objectives as per the Rehabilitation Management Plan will be achieved; and b) verification of rehabilitation success as per condition F23.	Rehabilitation monitoring plan is provided in Appendix C	Rehabilitation Monitoring Plan will provide an updated monitoring plan – this will be provided to the Administering Authority
Post Closure Management Plan **F24**	A Post Closure Management Plan for the site must be prepared at least 18 months prior to the final coal processing on site and implemented for a nominal period of:	Not relevant during the term of this plan	Not relevant during the term of this plan

EA Condition	Control Strategy	Action Program
a) At least thirty (30) years following final coal		

EA Condition		Control Strategy	Action Program
	processing on site; or **b)** A shorter period if the site is proven to be geotechnically and geochemically stable and it can be demonstrated to the satisfaction of the administering authority that no release of contaminants from the site will result in environmental harm, and revegetation has established and is self-sustaining.		
F25	The Post Closure Management Plan must include the following elements: a) Operation and maintenance of: i. Wastewater collection and reticulation systems. ii. Wastewater treatment systems. iii. The groundwater monitoring network. iv. Final cover systems. v. Vegetative cover. b) Monitoring of: i. Surface water quality. ii. Groundwater quality. iii. Seepage rates. iv. Erosion rates. v. The integrity and effectiveness of final cover systems. **vi.** The health and resilience of native vegetation cover.	Not relevant during the term of this plan	Not relevant during the term of this plan
Voids **F26**	The environmental authority holder must completely backfill all mining voids.	Rehabilitation Management Plan shall be based on all voids being backfilled.	Current Final Void Plan will be updated when mine plans change. Financial assurance calculations shall be based on filling of voids.
F27	Complete an investigation into backfilling of final voids and submit a report to the administering authority by 30 June 2014 for review and comment. The report must propose acceptance criteria to meet the outcomes identified in condition F16. On acceptance of the criteria	Rehabilitation Management Plan shall be based on all voids being backfilled.	Baralaba Central Final Void Plan will be updated as per condition F27 and submitted to administering authority. Baralaba North Final Void Plan will be developed and submitted by 30 June 2014.

EA Condition	Control Strategy	Action Program
proposed in the Void Management Plan, the		

EA Condition	Control Strategy	Action Program
holder must apply to amend the environmental authority so that the criteria are to be specified in the environmental authority. The investigation must at a minimum include the following: a) Design criteria developed for the complete backfilling and rehabilitation of the final void including progressive backfilling of the void during operations. b) A study of the final landform capability to support native flora and fauna. **c)** Proposal/s for end of mine void rehabilitation success criteria and final void backfilling volumes.		The Rehabilitation Management Plan shall be developed to meet the requirements of this condition.

4.7 Schedule G – Regulated Structures

EA Condition	Control Strategy	Action Program
Assessment of hazard category **G1** The hazard category of any structure must be assessed by a suitably qualified and experienced person: a) in accordance with the Man ual for Assessing Hazard Categories and Hydraulic Performance of Dams (EM365); and b) in any of the following situations: i. prior to the design and construction of the structure; or ii. prior to any change in its purpose or the nature of its stored contents; and **iii.** in accordance with the Manual for assessing Hazard Categories and Hydraulic Performance of Dams.	RPEQ to be engaged to complete hazard assessment	RPEQ to be engaged to complete hazard assessment of all dams triggered by the Manual for Assessing Hazard Categories and Hydraulic Performance of Dams EM365 SSE to ensure resources are available for assessment.
G2 A hazard assessment report and certification must be prepared for any structure assessed and the report may include a hazard assessment for more than one structure.	RPEQ to be engaged to complete hazard assessment	RPEQ to be engaged to complete hazard assessment. SSE to ensure resources are available for assessment.
G3 The holder must, on receipt of a hazard assessment report and certification, provide to the administering authority one paper copy and one electronic copy of the hazard assessment report and certification.	Copies will be provided as required	Copies will be provided as required
G4 Certification must be provided by the suitably qualified and experienced person who undertook the assessment, in the form set out in the Manual for Assessing Hazard Categories and Hydraulic Performance of Dams (EM635).	A RPEQ with appropriate competency will be used to complete the assessment	A RPEQ with appropriate competency will be used to complete the assessment and the certification provided to the administering authority.
G5 The holder must take reasonable and practical measures so that each dam associated with the mining activity is designed, constructed, operated and maintained in accordance with accepted engineering standards and is fit for the purpose for which it is intended.	Suitably trained/qualified staff shall be employed on the mine to ensure appropriate operation.	Suitably trained/qualified staff shall be employed on the mine to ensure appropriate operation. The RPEQ report shall provide guidance on operation and maintenance of the structures.
Design and construction of a regulated structure	A RPEQ with appropriate competency will supervise design	A RPEQ with appropriate competency will

EA Condition	Control Strategy	Action Program
G6 All regulated structures, excluding structures	and construction	supervise design and construction

EA Condition		Control Strategy	Action Program
	listed in condition G37, must be designed by, and constructed under the supervision of, a suitably qualified and experienced person in accordance with the requirements of the Manual for Assessing Hazard Categories and Hydraulic Performance of Dams (EM635).		
G7	Construction of a regulated structure, excluding structures listed in condition G37, is prohibited unless the holder has: a) submitted a hazard category assessment report and certification to the administering authority; b) commissioned a suitably qualified and experienced person to prepare a design plan for the structure; and **c)** received the certification from a suitably qualified and experienced person for the design and design plan and the associated operating procedures in compliance with conditions G6 to G13 of this authority.	A RPEQ with appropriate competency will supervise design and construction	A RPEQ with appropriate competency will supervise design and construction. No construction of regulated structures will occur with the requirements of condition G7 being met.
G8	Certification must be provided by the suitably qualified and experienced person who oversees the preparation of the design plan, in the form set out in the Manual for Assessing Hazard Categories and Hydraulic Performance of Dams (EM635).	Certification will be provided	Certification will be provided
G9	Regulated structures, excluding structures listed in condition G37, must: a) be designed and constructed in accordance with and conform to the requirements of the Manual for Assessing Hazard Categories and Hydraulic Performance of Dams; b) be designed and constructed with due consideration given to ensuring that the design integrity would not be compromised on account of: i. floodwaters from entering the regulated	A RPEQ with appropriate competency will supervise design and construction	A RPEQ with appropriate competency will supervise design and construction

EA Condition	Control Strategy	Action Program
dam from any watercourse or drainage		

EA Condition	Control Strategy	Action Program
line; and **ii.** wall failure due to erosion by floodwaters arising from any watercourse or drainage line.		
G10 The design plan for a regulated structure, excluding structures listed in condition G37, must include, but is not limited to: a) certification that the design plan: i) is in accordance with the Manual for Assessing Hazard Categories and Hydraulic Performance of Dams, including subsidiary certifications if necessary; and ii) addresses the requirements in condition G10(b) to (h) b) A design report which provides: i) a description of all the documents which constitute the design plan; ii) a statement of: c) the applicable standards including engineering criteria, industry guidelines, relevant legislation and regulatory documents, relied upon in preparing the design plan; and d) all relevant facts and data used in preparing the design plan, including any efforts made to obtain necessary facts and data, and any limitations or assumptions to facts and data used in preparing the design plan; e) the hazard category of the regulated structure; and f) setting out the reasoning of the suitably qualified and experienced person who has certified the design plan, as to how the design plan provides the necessary required performance; i) documentation of hydrological	Design plan will include the required elements	A RPEQ with appropriate competency will supervise design and development of the design plan. The design plan for all regulated structures excluding those listed in condition G37 will contain the requirements of condition G10.

EA Condition	Control Strategy	Action Program
analyses and estimates required to		

EA Condition		Control Strategy	Action Program
	determine all elements of the design including volumes and flow capacities; ii) detailed criteria for the design, operation, maintenance and decommissioning of the regulated structure, including any assumptions; iii) design, specification and operational rules for any related structures and systems used to prevent failure scenarios; g) Drawings showing the lines and dimensions, and locations of built structures and land forms associated with the regulated structure; h) Consideration of the interaction of the pit design with the levee or regulated dam design; i) An operational plan that includes: i) normal operating procedures and rules (including clear documentation and definition of process inputs in the DSA allowance); ii) contingency and emergency action plans including operating procedures designed to avoid and/or minimise environmental impacts including threats to human life resulting from any overtopping or loss of structural integrity of the regulated structure; j) A plan for the decommissioning and rehabilitation of the regulated structure at the end of its operational life; k) Details of reports on investigations and studies done in support of the design plan; **l)** h) Any other matter required by the suitably qualified and experienced person.		
G11	Certification by the suitably qualified and	Certification will be provided	A RPEQ with appropriate competency will

EA Condition	Control Strategy	Action Program
experienced person who supervises the		supervise design and construction. The

EA Condition	Control Strategy	Action Program
construction must be submitted to the administering authority on the completion of construction of the regulated structure, and state that: a) the 'as constructed' drawings and specifications meet the original intent of the design plan for that regulated structure; and, **b)** b) construction of the regulated structure is in accordance with the design plan.		RPEQ's certification will be submitted to the administering authority as per condition G11.
G12 Where a regulated dam is to be managed as part of an integrated containment system and the Design Storage Allowance (DSA) volume is to be shared across the integrated containment system, the design and operating rules for the system as a whole must be documented in a system design plan that is certified by a suitably qualified and experienced person.	A RPEQ with appropriate competency will develop the operating rules as a component of the design process	A RPEQ with appropriate competency will develop the operating rules as a component of the design process
G13 The system design plan must contain: a) the design plans, and b) the 'as constructed' plans, and c) the operational rules for each individual regulated dam that forms part of the integrated system, and d) the standards of serviceability and accessibility of water transfer equipment or structures, and **e)** the operational rules for the system as a whole.	The plan will contain the required elements	A RPEQ will supervise drafting of the plan and will ensure the requirements are included
Operation of a regulated structure **G14** Operation of a regulated structure is prohibited unless: a) the holder has submitted to the administering authority: i. one paper copy and one electronic copy of the design plan and certification of the 'design plan' in accordance with condition G10, and	Structures shall not be operated until advice is received from RPEQ advising that it is appropriate to do so.	RPEQ shall be engaged to audit site against requirements prior to commencement of use.

EA Condition	Control Strategy	Action Program
ii. a set of 'as constructed' drawings and		

EA Condition	Control Strategy	Action Program
specifications, and iii. certification of those 'as constructed drawings and specifications' in accordance with condition G11, and iv. where the regulated structure is to be managed as part of an integrated containment system for the purpose of sharing the DSA volume across the system, a copy of the certified system design plan. b) the requirements of this authority relating to the construction of the regulated structure have been met; and **c)** Relevant details for the dam have been included in Table G1: Location of regulated structures and Table G2: Basic Details of Regulated Dams of this authority.		
G15 Each regulated structure must be maintained and operated in a manner that is consistent with the current design plan, the current operational plan, and the associated certified 'as constructed' drawings for the duration of its operational life until decommissioned and rehabilitated.	Structures will be operated in accordance with design requirements	RPEQ to provide operations manual for structures RPEQ to audit on compliance with operations manual on annual basis.
G16 The holder must take reasonable and practicable control measures to prevent the causing of harm to persons, livestock or wildlife through the construction and operation of a regulated structure. Reasonable and practicable control measures may include, but are not limited to: a) the secure use of fencing, bunding or screening; and **b)** escape arrangements for trapped livestock and fauna.	All reasonable and practicable control measures will be taken to prevent causing of harm to persons, livestock or wildlife during construction and operations of regulated structures.	All reasonable and practicable control measures will be taken to prevent causing of harm to persons, livestock or wildlife during construction and operations of regulated structures. This will include fencing where appropriate or escape arrangements and regular inspections.
Mandatory reporting level **G17** The Mandatory Reporting Level (the MRL) must be marked on a regulated dam in such a way that during routine inspections of that dam, it is clearly	Gauge board will be installed	Gauge board will be installed and maintained.

EA Condition	Control Strategy	Action Program
observable.		

EA Condition	Control Strategy	Action Program
G18 The holder must, as soon as practical, and within forty-eight (48) hours of becoming aware, notify the administering authority when the level of the contents of a regulated dam reaches the MRL.	Administering authority will be notified	Monitoring of regulated structure capacities will be included in routine monitoring program. SSE shall ensure Administering Authority are notified as required.
G19 The holder must, immediately on becoming aware that the MRL has been reached, act to prevent the occurrence of any unauthorised discharge from the regulated dam.	Competent persons to be employed on site to determine appropriate action.	Competent persons to be employed on site to determine appropriate action. A person or Persons shall be employed on site with clear delegated responsibility for management of structures.
Annual inspection report **G20** Each regulated structure must be inspected each calendar year by a suitably qualified and experienced person.	An RPEQ shall complete an annual audit	An RPEQ shall complete an annual audit
G21 At each annual inspection, the condition and adequacy of all components of the regulated structure must be assessed: a) against the most recent hazard assessment report and design plan (or system design plan); b) against recommendations contained in previous annual inspections reports; c) against recognised dam safety deficiency indicators; d) for changes in circumstances potentially leading to a change in hazard category; e) for conformance with the conditions of this authority; f) for conformance with the 'as constructed' drawings; g) for the adequacy of the available storage in each regulated dam, based on an actual observation or observations taken after 31 May each year but prior to 1 November of that year, of accumulated sediment, state of	An RPEQ shall complete an annual audit and complete a report.	An RPEQ shall complete an annual audit and complete a report as per condition G21.

EA Condition	Control Strategy	Action Program
the containment barrier and the level of		

EA Condition		Control Strategy	Action Program
	liquids in the dam (or network of linked containment systems); **h)** for evidence of conformance with the current operational plan.		
G22	A suitably qualified and experienced person must prepare an annual inspection report containing details of the assessment and including recommended actions to ensure the integrity of the regulated structure.	An RPEQ shall complete an annual audit and complete a report.	An RPEQ shall complete an annual audit and complete a report as per condition G22.
G23	The suitably qualified and experienced person who prepared the annual inspection report must certify the report in accordance with the Manual for Assessing Hazard Categories and Hydraulic Performance of Dams (EM635).	An RPEQ shall complete an annual audit and complete a report.	An RPEQ shall complete an annual audit and complete a report.
G24	The holder must: a) upon receipt of the annual inspection report, consider the report and its recommendations and take action to ensure that the regulated structure will safely perform its intended function; and **b)** within twenty (20) business days of receipt of the annual inspection report, notify the administering authority in writing, of the recommendations of the inspection report and the actions being taken to ensure the integrity of each regulated structure.	SSE or delegate to review RPEQ report	SSE or delegate shall review RPEQ report. SSE to ensure resources are made available to rectify any defects noted in the RPEQ report that present an unacceptable risk.
G25	A copy of the annual inspection report must be provided to the administering authority upon request and within ten (10) business days.	Report to be provided to administering authority	Report to be provided to administering authority
Design storage allowance **G26**	On 1 November of each year, storage capacity must be available in each regulated dam (or network of linked containment systems with a shared DSA volume), to meet the Design Storage Allowance (DSA) volume for the dam (or network of linked containment systems).	Gauge boards will be installed with Max Nov 1 level clearly indicated. Water levels to be included in routine monitoring.	Gauge boards will be installed with Max Nov 1 level clearly indicated. Water levels to be included in routine monitoring as defined in the Environmental Monitoring Program Competent persons to be employed on site

EA Condition	Control Strategy	Action Program
		to determine appropriate action if insufficient

EA Condition	Control Strategy	Action Program
		capacity is likely. A person or Persons shall be employed on site with clear delegated responsibility for management of structures.
G27 The holder must, as soon as possible and within forty-eight (48) hours of becoming aware that the regulated dam (or network of linked containment systems) will not have the available storage to meet the DSA volume on 1 November of any year, notify the administering authority.	Administering authority will be notified.	Administering authority will be notified.
G28 The holder must, immediately on becoming aware that a regulated dam (or network of linked containment systems) will not have the available storage to meet the DSA volume on 1 November of any year, act to prevent the occurrence of any unauthorised discharge from the regulated dam or linked containment systems.	Gauge boards will be installed with Max Nov 1 level clearly indicated. Water levels to be included in routine monitoring.	Gauge boards will be installed with Max Nov 1 level clearly indicated. Water levels to be included in routine monitoring as defined in the Environmental Monitoring Program. Competent persons to be employed on site to determine appropriate action if insufficient capacity is likely. A person or Persons shall be employed on site with clear delegated responsibility for management of structures.
Performance review **G29** The holder must assess the performance of each regulated dam or linked containment system over the preceding November to May period based on actual observations of the available storage in each regulated dam or linked containment system taken prior to 1 July of each year.	RPEQ to address this in annual report	RPEQ to address this in annual report
G30 The holder must take action to modify its water management or linked containment system so as to ensure that the regulated dam or linked containment system will perform in accordance with the requirements of this authority, for the	RPEQ to make recommendation in annual report	RPEQ to make recommendation in annual report. Competent persons to be employed on site to determine appropriate action based on recommendations.

EA Condition	Control Strategy	Action Program
subsequent November to May period.		

EA Condition	Control Strategy	Action Program
Note: Action may include seeking the necessary approvals for physical modification of a regulated dam.		A person or Persons shall be employed on site with clear delegated responsibility for management of structures.
Transfer arrangements **G31** The holder must provide a copy of any reports, documentation and certifications prepared under this authority, including but not limited to any Register of Regulated Structures, hazard assessment, design plan and other supporting documentation, to a new holder and the administering authority on transfer of this authority.	Reports shall be provided in the event of EA transfer.	Reports shall be provided in the event of EA transfer.
Decommissioning and rehabilitation **G32** Prior to the cessation of the environmentally relevant activity, each regulated structure must be decommissioned such that: 1) ongoing environmental harm is minimised by the regulated structure: i) becoming a safe site for humans and animals at the completion of rehabilitation; or ii) becoming a stable landform, that no longer contains flowable substances and minimises erosion impacts; or iii) not allowing for acid mine drainage; or iv) being approved or authorised under relevant legislation for a beneficial use; or v) being a void authorised by the administering authority to remain after decommissioning; and **2)** the regulated structure is compliant with all other relevant rehabilitation requirements of this authority.	No decommissioning of structures planned during term of the plan.	No decommissioning of structures planned during term of the plan.
Regulated structures location and performance **G33** Each regulated structure named in Column 1,	Locations to be verified by survey.	Locations to be verified by survey.

EA Condition	Control Strategy	Action Program
Table G1: Location of regulated structures must		

EA Condition		Control Strategy	Action Program
	be wholly located within the control points noted in Columns 2 and 3, Table G1: Location of regulated structures, below, for that structure.		
G34	Each regulated dam named in Column 1 of Table G2: Basic Details of Regulated Dams, must be consistent with the details noted in Columns 2 through to and including 7 of Table G2: Basic Details of Regulated Dams, below, for that dam.	Details to be verified through as-built survey.	Details to be verified through as-built survey.
G35	Each regulated dam named in Column 1 of Table G1: Location of regulated structures, must meet the hydraulic performance criteria noted in Columns 2 through to and including 4 of Table G3: Hydraulic Performance of Regulated Dams, below, for that dam.	Structures have been designed by RPEQ considering the relevant criteria.	Structures have been designed by RPEQ considering the relevant criteria
G36	Each regulated levee named in Column 1 of Table G1: Location of regulated structures, must be consistent with the details noted in columns 2 through to and including 6 of Table G4: Basic Details of Regulated Levees, below, for that levee.	Details to be verified through as-built survey.	Details to be verified through as-built survey.
Transitional arrangements			
G37	Each regulated structure specified below must, within a period of three (3) years (the transitional period) from 18 January 2013, meet the performance requirements of conditions G34 and G35 or if a levee, condition G36: a) Mine Dam 1; and, **b)** Baralaba Central Flood Protection levee.	Any required upgrades to structures required to meet new requirements shall be included in the capital works program within designated time period.	Any required upgrades to structures required to meet new requirements shall be included in the capital works program within designated time period. A RPEQ shall approve designs and certify construction of any upgrades.
G38	During the transitional period, each regulated structure specified in condition G37 must comply with either conditions G34 and G35 or if a levee, condition G36 of this authority, or the conditions set out in Schedule J of this authority which schedule expires at the end of the transitional period.	Noted	Noted
G39	During the transitional period, for each declared	RPEQ to address this in annual report	RPEQ to address this in annual report

EA Condition	Control Strategy	Action Program
regulated structure listed in condition G37, either:		

EA Condition	Control Strategy	Action Program
b) Certification must be provided, by a suitably qualified and experienced person, in the form set out in the Manual for Assessing Hazard Categories and Hydraulic Performance of Dams: i) that the declared regulated structure is suitable for use as a regulated structure and can be transitioned to meet with either conditions G34 and G35 or if a levee, condition G36 of this authority; and ii) of any design plans for the modification of the declared regulated structure where modification is required to meet with either conditions G34 and G35 or if a levee, condition G36 of this authority; or **c)** The declared regulated structure must be decommissioned.		

4.8 Schedule H – Flood Protection

EA Condition	Control Strategy	Action Program
Flood Protection Levee **H1** The design plan in accordance with condition G10 must include: a) Drawings describing the location and dimensions of the levees and the mining excavations in the vicinity of the levees, including confirmation the levees meet the specified design requirements according to hazard category assessment undertaken as part of condition G1 ; b) Documented procedures for surveillance of the levee and any adjacent mining excavation	RPEQ to ensure design plan meets requirements	RPEQ to ensure design plan meets requirements

EA Condition	Control Strategy	Action Program
slopes, to detect and report to the		

EA Condition	Control Strategy	Action Program
administering authority any ground movement that compromises or may potentially compromise the integrity of the levee; and **c)** Consideration of the results of flood modelling of alternative levee locations and the justification for the chosen location in terms of best practice environmental management.		
H2 The flood protection levee authorised under this environmental authority must be constructed and maintained such that: a) It does not result in increased erosion of the bank or bed of the Dawson River Anabranch; b) It does not significantly impact upon riparian or existing remnant vegetation; and **c)** The levee itself will not erode in any flood events up to AEP 1 in 1,000 event.	RPEQ shall design to the required standards. Annual review by RPEQ to ensure performance is as required.	RPEQ to ensure design plan meets requirements
Flood Protection Levee - Surveillance and Remedial Works **H3** The condition of constructed levees, including the surface area between the non-river side of the toe of the levee and the end wall crest of the open-cut mining pit, must be monitored for surface cracks and must at a minimum be inspected and assessed, by a suitably qualified and experienced person, at least once per year between the months of May and October inclusive (i.e. during the 'dry' season and before the onset of the 'wet' season), and at any other time if alarming, unusual or otherwise unsatisfactory conditions are observed.	To be included in the annual RPEQ inspection report for regulated structures.	To be included in the annual RPEQ inspection report for regulated structures.
H4 For each flood protection levee annual inspection, two copies of the surveillance report, including any recommendations for remedial works, must be provided to the administering authority within twenty (20) business days of the date of	Reports will be provided as required.	Reports will be provided as required.

EA Condition	Control Strategy	Action Program
inspection.		

EA Condition		Control Strategy	Action Program
H5	Remedial works identified as being required for the flood protection levee during the inspections and assessments conducted under condition H3, must be notified in writing to the administering authority within five (5) business days of the completion of the inspections, and commenced within twenty- eight (28) days unless otherwise agreed in writing by the administering authority.	RPEQ inspection report shall include defects and recommended remedial work. Notifications will be made as required.	RPEQ inspection report shall include defects and recommended remedial work. Notifications will be made as required. Competent persons to be employed on site to determine appropriate action based on recommendations. A person or Persons shall be employed on site with clear delegated responsibility for management of structures.
H6	The annual return for this environmental authority shall be accompanied by a report, by a suitably qualified and experience person, that certifies that the documented procedure for surveillance of the levee has been applied and that there has been no erosion, cracking or vertical or horizontal deformation that has impacted on the integrity of the levee, and that the levee has been maintained in accordance with the certified design plan.	Requirements to be included in the annual RPEQ assessment report.	Requirements to be included in the annual RPEQ assessment report and supplied with the annual return

4.9 Schedule I – Cultural Heritage

EA Condition		Control Strategy	Action Program
I1	The holder of this environmental authority must update the Conservation Management Plan (CMP) for the State Heritage Place (Queensland Heritage Act 1992) , Dawson Valley Colliery ID: 602723, every five (5) years (minimum) and submit the documentation to the administering authority for review and comment.	Plan will be updated as required	Plan will be updated as required. This obligation will be included in the review schedule of the project EMS