



Voluntary Transitional Environmental Program for Coppabella Mine – Water Management

May 2014
Version 7

DRAFT VOLUNTARY TRANSITIONAL ENVIRONMENTAL PROGRAM FOR COPPABELLA MINE

Section 330 of the *Environmental Protection Act 1994*

Permit Holder(s)	Name	Address
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Joint Holder	NS Coal Pty Ltd	Level 2 Navision House 10 Market Street BRISBANE QLD 4000

Title: Voluntary Transitional Environmental Program (TEP) – Water Management

Date: 8 May 2014

Reason for TEP:

Section 330(a): Reduce environmental harm caused by the activity

Section 330(c): Comply with a condition of an environmental authority (EA)

Site details: Coppabella Mine – ML70161, 70163, 70164, 70236 and 70237.

Period of TEP: 3 Years

Start date: 13 May 2014

Finish date: 12 May 2017

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1.0 ENVIRONMENTAL AUTHORITY NUMBER

MIN100555707

2.0 RELEVANT CONDITIONS

Environmental Authority conditions relevant to this TEP are listed in Appendix 1 - Environmental Authority Non-Compliances.

3.0 NATURE OF NON-COMPLIANCE

During 2013, the Department of Environment and Heritage Protection (The Department) issued Coppabella Mine:

- 7 Penalty Infringement Notices
- 2 Warning Notices
- 2 letters requesting reasoning as to why further enforcement action should not be taken

These were issued in response to notifiable events related to the mine water management system, which occurred at Coppabella Mine from November 2012 to the time at which this TEP was drafted. The events occurred in the course of operating the mine water management system and coal waste transfer system, including process water storage and transfer. The notifiable events are listed below:

- 28 NOV 2012: ROM Dam & Product Stockpile Dam releases
- 18 JAN 2013: Return Water Dam seepage
- 24 JAN 2013: Return Water Dam unauthorised release
- 19 JUN 2013: Return Water Dam diesel pump process water spill
- 29 JUN 2013: Co-disposal decant pipe leak to Thirty Mile Creek
- 31 JUL 2013: CHPP pipeline process water leak to Thirty Mile Creek
- 19 SEP 2013: CHPP pipeline process water leak to Thirty Mile Creek
- 12 DEC 2013: Co-disposal pipe spill to Thirty Mile Creek
- 12 DEC 2013: Co-disposal toe-drain spill to Thirty Mile Creek
- 18 FEB 2014: Worked water spill to Thirty Mile Creek
- 31 MAR 2014: Co-disposal toe-drain spill to Thirty Mile Creek
- 18 APR 2014: Ruptured co-disposal delivery line spill to Thirty Mile Creek

Although no environmental harm arose as a result of any of the relevant events, and the threat of environmental harm was negligible or nil in most cases, it is acknowledged that the events resulted in non-compliances against the conditions of Environmental Authority MIN100555707.

Peabody Energy has also identified areas for improvement associated with erosion and sediment controls along the High-Wire Road Drain, Main Haul Road crossing over Thirty Mile Creek South Arm Diversion, northern side of the Out of Pit Dump, East Pit perimeter slope and at the Coal Handling Processing Plant (CHPP). Further details regarding the non-compliances, their respective Environmental Authority conditions and relevant TEP objects are provided in Appendix 1 – Environmental Authority Non-Compliances.

4.0 DESCRIPTION OF TRANSITION

This voluntary TEP serves as a transitional program to achieve compliance with the following objectives:

- 1) Prevent unauthorised releases from the worked water management system;
- 2) Update Environmental Authority to include the new standard dam conditions & specifically implement condition F12 under the new conditions;
- 3) Mitigate seepage impacts in Thirty Mile Creek from the Co-disposal & Return Water Dam system; and
- 4) Implement area specific Erosion & Sediment Control Implementation Plans for the six key risk target areas to comply with the site Erosion & Sediment Control Plan (ESCP).

The Program of Works provided in Appendix 2 provides the actions and timeline to be implemented under the TEP to achieve the above objectives and provides a description of how compliance will be achieved through execution of the program. Section 331 of the Environmental Protection Act 1994 prescribes that a TEP must take into account best practice environmental management for the activity & is addressed in Appendix 2 under the heading 'Environmental Harm Risks & Best Practice'. The purpose of the TEP is to achieve compliance with Environmental Authority conditions relating to water management - best environmental practice has been considered where appropriate.

5.0 PROGRAM OF WORKS

Refer to Appendix 2 – Program of Works. The Program of Works sets out actions to be completed to achieve each of the TEP objectives, due dates for completion, performance indicators, monitoring and reporting commitments. Objective 4 in the Program of Works should be considered in conjunction with the plan provided in Appendix 3 – Erosion & Sediment Control Target Areas which represents the six erosion & sediment control improvement areas specified in the Program of Works actions.

6.0 PREVENTION OF HARM

The risk of environmental harm will be managed through execution of this TEP involving improvements to mine water management system infrastructure and operation and improved

erosion and sediment control. The risks associated with the undertaking of the actions within the Program of Works have been considered and this is addressed in Appendix 2 under the heading 'Environmental Harm Risks & Best Practice'

7.0 REPORTING

Progressive reporting to the Department will be completed on a quarterly basis commencing after the end of the third full calendar month after the activation of the TEP. Appendix 2 will be submitted with a quarterly progress update provided in the 'Quarterly Progress Report' column. At the completion of the TEP, a final report describing how the objectives of the TEP were achieved will be provided to the Department within three months of the final action being completed.

8.0 ACRONYMS

CHPP – Coal Handling Processing Plant

EA – Environmental Authority

ESC – Erosion & Sediment Control

ESCP – Erosion & Sediment Control Plan

ROM – Run of Mine

TEP – Transitional Environmental Program

9.0 APPENDICES

APPENDIX 1: ENVIRONMENTAL AUTHORITY NON-COMPLIANCES

Environmental Authority Conditions		Nature of Non-Compliance	TEP Objective
No.	Condition		
DEPARTMENT INTEREST: GENERAL			
A3	Maintenance of measures, plant and equipment The holder must: a) Install all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority; and b) Maintain such measures, plant and equipment in a proper conditions; and c) Operate such measures, plant and equipment in a proper manner.	19 JUN 2013: Return Water Dam diesel pump worked water spill (<i>Letter of threatened enforcement action & PIN issued against A3</i>) Worked water transfer pump fault resulted in spill of water from the pump manifold which flowed overland and released into Thirty Mile Creek - South Arm. 29 JUN 2013: Co-disposal decant pipe leak to Thirty Mile Creek (<i>Letter of threatened enforcement action & PIN issued against A3</i>) Corroded co-disposal decant pipe resulted in spill of worked water which flowed overland and released into Thirty Mile Creek - South Arm. 31 JUL 2013: CHPP pipeline worked water leak to Thirty Mile Creek (<i>DEHP notified</i>) The pipe used to transfer worked water from the Return Water Dam to Worked Water Dam leaked from a pipe join located within Thirty Mile Creek - South Arm. 19 SEP 2013: CHPP pipeline worked water leak to Thirty Mile Creek (<i>Letter of threatened enforcement action & PIN issued against A3</i>) A leak from a damaged section of pipe resulted in a spill of worked water which flowed into Thirty Mile Creek - South Arm. 12 DEC 2013: Co-disposal pipe spill to Thirty Mile Creek (<i>DEHP notified</i>) Co-disposal pipe leak on top of the co-disposal area flowed down access road and ponded adjacent a bund on the bank of Thirty Mile Creek - South Arm. A small amount of water seeped through the bund into the Creek. 12 DEC 2013: Co-disposal toe-drain spill into Thirty Mile Creek (<i>DEHP notified</i>) During a rain event, the Co-disposal toe-drain overtopped & ponded adjacent a bund on the bank of Thirty Mile Creek - South Arm. Some water reported to the Creek via a scour in the bund. 18 FEB 2014: Worked water spill to Thirty Mile Creek (<i>DEHP notified</i>) Water released from a worked water transfer pipe when the pump was briefly operated incorrectly as part of a routine maintenance check. The pipe outlet had been moved from the intended area which resulted in the water flowing into Thirty Mile Creek - South Arm.	Objective 1

Environmental Authority Conditions		Nature of Non-Compliance	TEP Objective
No.	Condition		
		31 MAR 2014: Co-disposal toe-drain spill to Thirty Mile Creek (DEHP notified) A section of the co-disposal wall had slipped resulting in material filling the co-disposal toe-drain causing water to overflow the toe-drain and flow into Thirty Mile Creek – South Arm. 18 APR 2014: Ruptured co-disposal delivery line spill to Thirty Mile Creek (DEHP Notified) A ruptured co-disposal delivery line released tailings/rejects into Thirty Mile Creek – South Arm.	
DEPARTMENT INTEREST: DAMS			
F11	The holder of this environmental authority must ensure that there is always a current operational plan for each regulated dam, which may form part of other plans required by legislation.	Operational Plans Although the Environmental Authority has not been amended to list the dams, DEHP has been advised of the location & details of dams assessed as significant or high and an Environmental Authority amendment is pending review of the Dam Hazard Category Assessment Report. Current Operational plans for these dams are not documented.	Objective 2
DEPARTMENT INTEREST: WATER			
G1	Contaminant Release 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 this environmental authority.	Difficulties maintaining compliance with water release conditions under the EA due to notifiable events (see below), saline seepage and inadequate minimisation of erosion and release of sediment to receiving waters and storm waters.	Objectives 1, 3 & 4
G2	The release of contaminants to waters must only occur from the release points specified in Table G1 – Contaminant Release Points, Sources and Receiving Waters and depicted in Figure 1 attached to this environmental authority.	28 NOV 2012: ROM Dam & Product Stockpile Dam releases (Warning Notice issued against W2 now G2) The dams released to Thirty Mile Creek – South Arm, via passive release structures which had historically been installed & operated to prevent dams overtopping. The dams are not authorised release points. 18 JAN 2013: Return Water Dam seepage (Warning Notice issued against W2 now G2) Water observed seeping into Thirty Mile Creek – South Arm Diversion, in the vicinity of the Co-disposal & Return Water Dam. This is not an authorised release point.	Objective 1 & 3

Environmental Authority Conditions		Nature of Non-Compliance	TEP Objective
No.	Condition		
		24 JAN 2013: Return Water Dam unauthorised release (PIN issued against W2 now G2) The Return Water Dam overtopped into Thirty Mile Creek - South Arm, during a significant rain event. 19 JUN 2013: Return Water Dam diesel pump worked water spill (Letter of threatened enforcement action & PIN issued against G2) Worked water transfer pump fault resulted in spill of water from the pump manifold which flowed overland and released into Thirty Mile Creek - South Arm. The pump was not an authorised release point. 29 JUN 2013: Co-disposal decant pipe leak to Thirty Mile Creek (Letter of threatened enforcement action & PIN issued against G2) Corroded co-disposal decant pipe resulted in spill of worked water which flowed overland and released into Thirty Mile Creek - South Arm. The co-disposal pipe is not an authorised release point. 31 JUL 2013: CHPP pipeline worked water leak to Thirty Mile Creek (DEHP notified) The pipe used to transfer worked water from the Return Water Dam to Worked Water Dam leaked from a pipe join located within Thirty Mile Creek - South Arm. 19 SEP 2013: CHPP pipeline worked water leak to Thirty Mile Creek (Letter of threatened enforcement action & PIN issued against G2) A leak from a damaged section of pipe resulted in a spill of worked water which flowed into Thirty Mile Creek - South Arm. The pipe was not an authorised release point. 12 DEC 2013: Co-disposal pipe spill to Thirty Mile Creek (DEHP notified) Co-disposal pipe leak on top of the co-disposal area flowed down access road and ponded adjacent a bund on the bank of Thirty Mile Creek - South Arm. A small amount of water seeped through the bund into the Creek. This is not an authorised release point. 12 DEC 2013: Co-disposal toe-drain spill into Thirty Mile Creek (DEHP notified) During a rain event, the Co-disposal toe-drain overtopped & ponded adjacent a bund on the bank of Thirty Mile Creek - South Arm. Some water reported to the Creek via a scour in the bund. This	

Environmental Authority Conditions		Nature of Non-Compliance	TEP Objective
No.	Condition		
		is not an authorised release point. 18 FEB 2014: Worked water spill to Thirty Mile Creek (DEHP notified) Water released from a worked water transfer pipe when the pump was briefly operated incorrectly as part of a routine maintenance check. The pipe outlet had been moved from the intended area which resulted in the water flowing into Thirty Mile Creek – South Arm. 31 MAR 2014: Co-disposal toe-drain spill to Thirty Mile Creek (DEHP notified) A section of the co-disposal wall had slipped resulting in material filling the co-disposal toe-drain causing water to overflow the toe-drain and flow into Thirty Mile Creek – South Arm. This is not an authorised release point. 18 APR 2014: Ruptured co-disposal delivery line spill to Thirty Mile Creek (DEHP Notified) A ruptured co-disposal delivery line released tailings/rejects into Thirty Mile Creek – South Arm.	
DEPARTMENT INTEREST: WATER GENERAL			
G29	The release of contaminants directly or indirectly to waters: (a) must not produce any visible discolouration of receiving waters; nor (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.	Material deposition in Thirty Mile Creek & Harrybrandt Creek (DEHP notified) Fine grey material has been deposited in Thirty Mile Creek & Harrybrandt Creek, extending off-lease into 'Oben Park' property, during low to low-medium flow events. There is no evidence of environmental harm and the material is non-toxic.	Objective 4
G36	Saline Drainage 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.	Co-disposal seepage Seepage management improvement is an overall objective with respect to the co-disposal facility. The existing control is to capture and transfer to the Return Water Dam via the Co-disposal toe-drain. However, these controls themselves seep in various locations including into Thirty Mile Creek – South Arm. This process needs to be reviewed to avoid non-compliances, minimise environmental harm through seepage and ensure maximum efficiency.	Objective 3

Environmental Authority Conditions		Nature of Non-Compliance	TEP Objective
No.	Condition		
G38	Stormwater and Water sediment controls 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 storm water.	Erosion & Sediment controls inadequate or absent An Erosion & Sediment Control Plan approved by an appropriately qualified person has been developed and is being implemented for new landforms and when existing landforms are significantly modified. Peabody Energy also intends to upgrade existing erosion & sediment controls to minimise the risk of non-compliance and environmental harm. Key risk areas are the: • Main Haul Road Thirty Mile Creek Crossing; • High-Wire Road – F-Dump drainage area; • High-Wire Road – East Pit drainage area; • Out of Pit Dump; • East Pit Perimeter & • CHPP area.	Objective 4

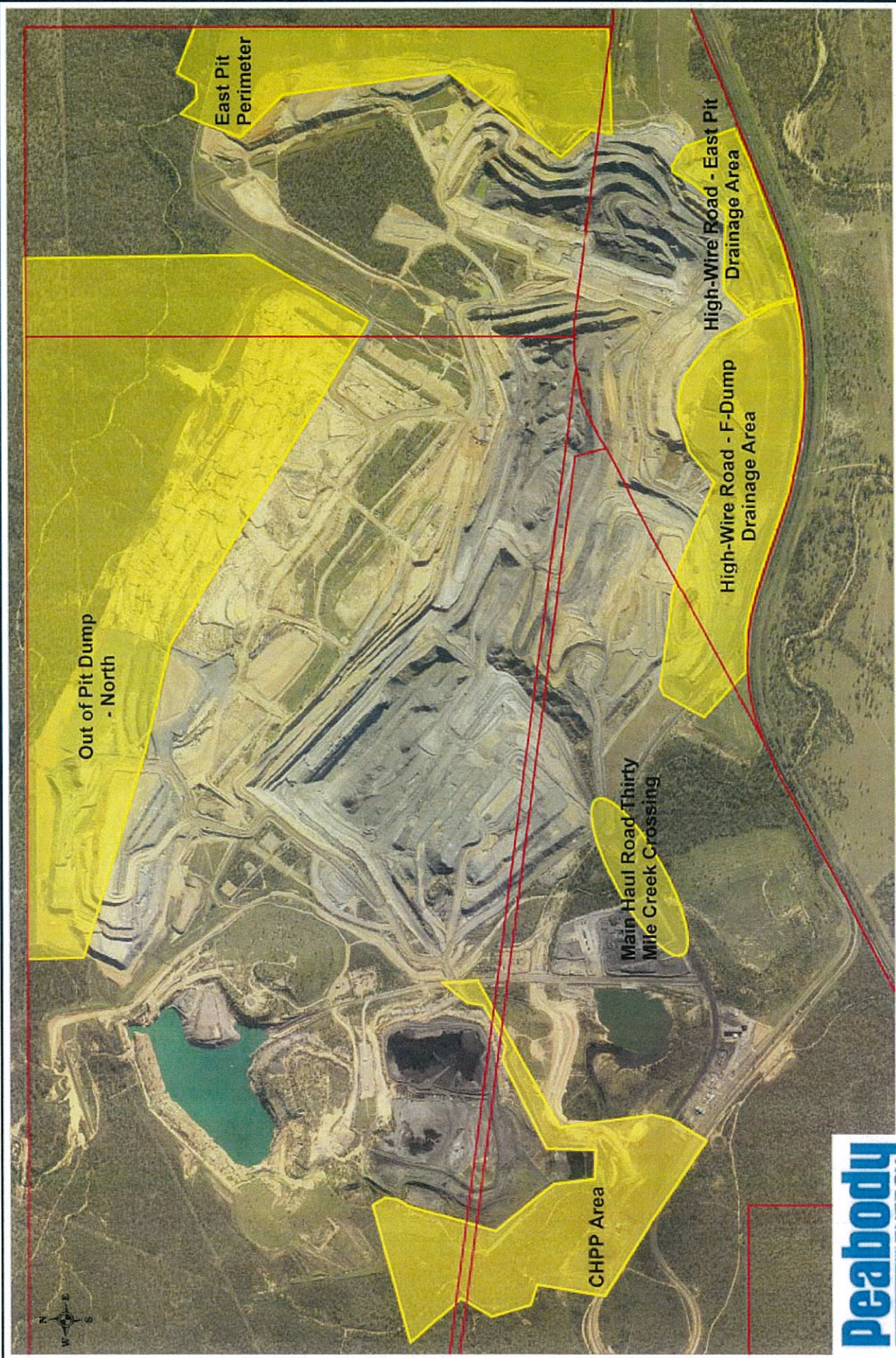
APPENDIX 2: PROGRAM OF WORKS

PROGRAM OF WORKS					QUARTERLY PROGRESS REPORT		
Objectives	# Actions	Due Date	Description of Transition <i>(few action will achieve compliance)</i>	Environmental Harm Risks & Best Practice	Performance Indicators	Monitoring	Reporting
OBJECTIVE 1: Prevent unauthorised releases from the worked water management system	1		To avoid the Return Water Dam overtopping and risk arising from interim pipe & pump infrastructure put in place to mitigate the risk of overtopping the Return Water Dam. The decant pipe will be a fit-for-purpose, BPEQ designed & appropriately constructed permanent structure. This component of the worked water management system will enable rapid, passive transfer of water from the Return Water Dam to the Return Water Dam. A larger storage capacity to manage greater inputs reporting to the Return Water Dam during rain events. The decant pipe will be suitably sealed & buried below Thirty Mile Creek - South Arm Diversion. This will eliminate the requirement for temporary pumps at the Return Water Dam & surface pipelines through the creek to manage wet weather.	Designs will be risk assessed & change management will be completed. Risk assessments will be completed for the construction phase to address & control potential environmental risks associated with construction through application of appropriate environmental & engineering standards for disturbance in watercourse & dam construction. As built will be certified by an BPEQ.	Commissioning & test operation period confirms decant operating as per design.	MA	Progress against Objective 1 actions will be reported on a quarterly basis.
	2	30 June 2014	A Return Water Dam automatic water level gauging station connected to the site telemetry system will enable remote monitoring of the dam water level. Dam levels can be monitored more frequently & system will provide alerts & pre-established trigger levels to enable timely execution of Trigger Action Response Plans (TARPs), with triggers relating to water levels, to prevent the dam overtopping under normal operating conditions due to return inputs from the Co-disposal system & other inputs. It will also assist with proactive preparations for rain events.	There is no risk of environmental harm in undertaking this activity as disturbance will be negligible & will be undertaken within the contained area of the dam. Appropriate standards will be applied in system selection, installation & operation. Gauging station levels to be calibrated against survey fits prior to wet season each year to verify accuracy of level sensor.	Gauging station installed & operational by due date.	MA	
	3	31 August 2014	To manage the risk of leaks from pipes within watercourses or areas at risk of spilling to watercourses. Due to the proximity of operational areas to watercourses & the location of operational areas on either side of watercourses, there remains a need to position pipes within & near to watercourses. A risk assessment/standard for pipes in or at risk of spilling to watercourses will ensure there is a prompt to consider the risks associated with positioning pipes in these sensitive areas & ensuring there are suitable controls in place to address the risks. This will reduce the potential for spills resulting from inadequate materials or installation & improper maintenance or operation.	There is no risk of environmental harm - administer above task only.	Develop & submit to administering authority by due date.	MA	
	4	30 September 2014	To address the risk of leaks from pipes within watercourses or areas at risk of spilling to watercourses. Due to the proximity of operational areas to watercourses & the location of operational areas on either side of watercourses, there remains a need to position pipes within & near to watercourses. A risk assessment/standard for pipes in or at risk of spilling to watercourses will ensure there is a prompt to consider the risks associated with positioning pipes in these sensitive areas & ensuring there are suitable controls in place to address the risks. This will reduce the potential for spills resulting from improper maintenance.	There is no risk of environmental harm - administer above task only.	Processes reviewed by due date.	MA	
	5	30 September 2014	To address the risk of leaks from pipes within watercourses or areas at risk of spilling to watercourses. Due to the proximity of operational areas to watercourses & the location of operational areas on either side of watercourses, there remains a need to position pipes within & near to watercourses. This will address improper operation of pump infrastructure.	There is no risk of environmental harm - administer above task only.	Procedure reviewed & personnel training by due date.	MA	
	6	31 October 2014	To address the risk of spills from the co-disposal western toe-drain, the drain will be upgraded to improve the drainage channel, improve water flow within the channel & improve visibility & access for inspections & maintenance. This will enable more effective visual monitoring of drain condition & water levels through improved accessibility.	No additional risk of environmental harm as this drain can be isolated if major earthworks are required. Risk assessments will be completed for the construction phase to address & control potential environmental risks associated with construction through application of appropriate environmental & engineering standards.	Drain constructed & commissioning confirms operating as per plan.	MA	
	7	31 October 2014	To address the risk of leaks from pipes within watercourses or areas at risk of spilling to watercourses. Due to the proximity of operational areas to watercourses & the location of operational areas on either side of watercourses, there remains a need to position pipes within & near to watercourses. Use of more robust pipe material for co-disposal delivery pipes or secondary containment (e.g. double wall pipe or pipe with secondary containment) will reduce the potential of spills into watercourses.	Change management will be completed. Risk assessments will be completed for the construction phase to address & control potential environmental risks associated with construction through application of appropriate environmental & engineering standards for disturbance in a watercourse & pipe installation.	Commissioning & test operation period confirms installation operating as per plan.	MA	
	8	31 October 2016	To address the risk of spills from the co-disposal eastern toe-drain, the drain will be upgraded to improve the drainage channel, improve water flow within the channel & improve visibility & access for inspections & maintenance. This will enable more effective visual monitoring of drain condition & water levels through improved accessibility.	No additional risk of environmental harm as this drain can be isolated if major earthworks are required. Risk assessments will be completed for the construction phase to address & control potential environmental risks associated with construction through application of appropriate environmental & engineering standards.	Drain constructed & commissioning confirms operating as per plan.	MA	

QUARTERLY PROGRESS REPORT (Q4/14)								
PROGRAM OF WORKS				Reporting				
Objectives	#	Actions	Due Date	Description of Transition <i>(how action will achieve compliance)</i>	Environmental Harm Risks & Best Practice	Performance Indicators	Monitoring	
	24	Implement erosion & sediment controls as per the Main Haul Road/Thirty Mile Creek crossing ESC Implementation Plan.	31 December 2014	Run off from the main haul road in this location has the potential to flow directly into Thirty Mile Creek. Implementation of the area specific ESC Implementation Plan will prevent surface runoff from the haul road directly entering the creek as the flow will be diverted to sediment control structures. This is expected to address the issue of material deposition downstream by capturing sediment in sediment controls on the mine lease.	Where applicable, a Permit to Disturb will be issued for the activity which will include permit conditions to prompt management of potential environmental impacts. Construction activities will be undertaken by suitably qualified operators. There is potential environmental risk associated with this action due to the proximity to Thirty Mile Creek if the plan is not effectively implemented. This will be considered in development of the plan to ensure ESCs are selected & inspection & maintenance requirements are specific, unambiguous & appropriate to manage these risks & clearly appoint accountability for execution of the requirements & response actions under the plan. Appropriate standards will be applied in execution of the plan & rigour built into the documentation & record keeping process for verification of task completion.	Controls (e.g. inspections, maintenance/doing/repairs & construction of new controls) executed as prescribed in the area specific implementation plan.	Visual inspections (including collection of photographic evidence) will be completed as per the plan.	
	25	Develop area specific Erosion & Sediment Control Implementation Plan (including maintenance & inspections) for the CHPP area.	30 April 2015	Runoff from this area has the potential to flow directly into Thirty Mile Creek. Development of an ESC Implementation Plan tailored specifically for this area will enable identification & selection of targeted controls most suitable for the requirements in this locality.	There is no risk of environmental harm - administrative task only. Appropriate standards will be applied in selection of ESCs & the maintenance & inspection requirements. Designs be reviewed through the internal review process.	Develop & submit plan to administering authority by due date.	NA	
	26	Implement erosion & sediment controls as per the High Wire Road - F-Drainage area ESC Implementation Plan.	30 June 2015	ESCs require improvement in this area & regular desilting to maintain capacity & effectiveness as sediment controls are restricted in size due to the close proximity of the lease boundary, railway line & highway. Implementation of the area specific ESC Implementation Plan will enable surface run off to pass through sediment controls, effectively preventing sediment laden water from leaving the base boundary & impacting adjacent infrastructure & property.	Where applicable, a Permit to Disturb will be issued for the activity which will include permit conditions to prompt management of potential environmental impacts. Construction activities will be undertaken by suitably qualified operators. There is potential environmental risk associated with this action due to the proximity to the lease boundary if the plan is not effectively implemented. This will be considered in development of the plan to ensure ESCs are selected & inspection & maintenance requirements are specific, unambiguous & appropriate to manage these risks & clearly appoint accountability for execution of the requirements & response actions under the plan. Appropriate standards will be applied in execution of the plan & rigour built into the documentation & record keeping process for verification of task completion.	Controls (e.g. inspections, maintenance/doing/repairs & construction of new controls) executed as prescribed in the area specific implementation plan.	Visual inspections (including collection of photographic evidence) will be completed as per the plan.	
	27	Develop area specific Erosion & Sediment Control Implementation Plan (including maintenance & inspections) for the Out of Pit Dump (OOPD) - North.	31 August 2015	ESCs require improvement in this area & regular desilting to maintain capacity & effectiveness. Development of an ESC Implementation Plan tailored specifically for this area will enable identification & selection of targeted controls most suitable for the requirements in this locality. This is especially important for the OOPD east sediment basin as a large area of the OOPD which is not yet permanent capped reports to this basin. The OOPD east sediment basin requires significant desilting & repair. As the basin has not been functioning effectively & has a damaged wall, sediment has been transferred beyond the sediment basin.	There is no risk of environmental harm - administrative task only. Appropriate standards will be applied in selection of ESCs & the maintenance & inspection requirements. Designs be reviewed through the internal review process.	Develop & submit plan to administering authority by due date.	NA	
	28	Develop area specific Erosion & Sediment Control Implementation Plan (including maintenance & inspections) for the High-Wire Road - East Pit drainage area.	30 November 2015	ESCs require improvement in this area & regular desilting to maintain capacity & effectiveness as sediment controls are restricted in size due to the close proximity of the lease boundary, railway line & highway. Development of an ESC Implementation Plan tailored specifically for this area will enable identification & selection of targeted controls most suitable for the requirements in this locality.	Where applicable, a Permit to Disturb will be issued for the activity which will include permit conditions to prompt management of potential environmental impacts. Construction activities will be undertaken by suitably qualified operators. There is no risk of environmental harm - administrative task only. Appropriate standards will be applied in selection of ESCs & the maintenance & inspection requirements. Designs be reviewed through the internal review process.	Develop & submit plan to administering authority by due date.	NA	
	29	Implement erosion & sediment controls as per the CHPP area ESC Implementation Plan.	31 December 2015	ESCs require improvement in this area & regular desilting to maintain capacity & effectiveness as sediment controls are restricted in size due to the close proximity of CHPP infrastructure & Thirty Mile Creek - South Arm. Development of an ESC Implementation Plan tailored specifically for this area will enable identification & selection of targeted controls most suitable for the requirements in this locality.	Where applicable, a Permit to Disturb will be issued for the activity which will include permit conditions to prompt management of potential environmental impacts. Construction activities will be undertaken by suitably qualified operators. There is potential environmental risk associated with this action due to the proximity to Thirty Mile Creek if the plan is not effectively implemented. This will be considered in development of the plan to ensure ESCs are selected & inspection & maintenance requirements are specific, unambiguous & appropriate to manage these risks & clearly appoint accountability for execution of the requirements & response actions under the plan. Appropriate standards will be applied in execution of the plan & rigour built into the documentation & record keeping process for verification of task completion.	Controls (e.g. inspections, maintenance/doing/repairs & construction of new controls) executed as prescribed in the area specific implementation plan.	Visual inspections (including collection of photographic evidence) will be completed as per the plan.	

PROGRAM OF WORKS										QUARTERLY PROGRESS REPORT	
Objectives	#	Actions	Due Date	Description of Transition (how action will achieve compliance)	Environmental Harm Risks & Best Practice	Performance Indicators	Monitoring	Reporting	(date)		
	30	Implement erosion & sediment controls as per the Out of Pit Dump - North ESC Implementation Plan.	31 May 2016	ESCs require improvement in this area & regular desliting to maintain capacity & effectiveness. Implementation of the area specific ESC Implementation Plan will provide for effective sediment control & containment, preventing sediment laden water from leaving the lease boundary & impacting Humbug Gully.	Where applicable, a Permit to Disturb will be issued for the activity which will include permit conditions to prompt management of potential environmental impacts. Construction activities will be undertaken by suitably qualified operators. There is potential environmental risk associated with this action due to the proximity to the lease boundary & Humbug Gully if the plan is not effectively implemented. This will be considered in development of the plan to ensure ESCs are selected & inspection & maintenance requirements are specific, unambiguous & appropriate to manage these risks & clearly appoint accountability for execution of the requirements & response actions under the plan. Appropriate standards will be applied in execution of the plan & rigour built into the documentation & record keeping process for verification of task completion.	Controls (e.g. inspections, maintenance/desliting, repairs & construction of new controls) executed as prescribed in the area specific implementation plan.	Visual inspections (including collection of photographic evidence) will be completed as per the plan.				
	31	Develop area specific Erosion & Sediment Control Implementation Plan (including maintenance & inspections) for the East Pit Perimeter area.	31 July 2016	ESCs require improvement in this area & regular desliting to maintain capacity & effectiveness as sediment controls are restricted in size due to the close proximity of the lease boundary. Development of an ESC Implementation Plan tailored specifically for this area will enable identification & selection of targeted controls most suitable for the requirements in this locality.	There is no risk of environmental harm - administrative task only. Appropriate standards will be applied in selection of ESCs & the maintenance & inspection requirements. Designs be reviewed through the internal review process.	Develop & submit plan to administering authority by due date.	NA				
	32	Implement erosion & sediment controls as per the High-Wire Road - East Pit drainage area ESC Implementation Plan.	30 September 2016	ESCs require improvement in this area & regular desliting to maintain capacity & effectiveness as sediment controls are restricted in size due to the close proximity of the lease boundary, railway line & highway. Implementation of the area specific ESC Implementation Plan will enable surface run off to pass through sediment controls, effectively preventing sediment laden water from leaving the lease boundary & impacting adjacent infrastructure & property.	Where applicable, a Permit to Disturb will be issued for the activity which will include permit conditions to prompt management of potential environmental impacts. Construction activities will be undertaken by suitably qualified operators. There is potential environmental risk associated with this action due to the proximity to the lease boundary if the plan is not effectively implemented. This will be considered in development of the plan to ensure ESCs are selected & inspection & maintenance requirements are specific, unambiguous & appropriate to manage these risks & clearly appoint accountability for execution of the requirements & response actions under the plan. Appropriate standards will be applied in execution of the plan & rigour built into the documentation & record keeping process for verification of task completion.	Controls (e.g. inspections, maintenance/desliting, repairs & construction of new controls) executed as prescribed in the area specific implementation plan.	Visual inspections (including collection of photographic evidence) will be completed as per the plan.				
	33	Implement erosion & sediment controls as per the East Pit Perimeter ESC Implementation Plan.	30 March 2017	ESCs require improvement in this area & regular desliting to maintain capacity & effectiveness as sediment controls are restricted in size due to the close proximity of the lease boundary. Implementation of the area specific ESC Implementation Plan will enable surface run off to pass through sediment controls, effectively preventing sediment laden water from leaving the lease boundary & impacting adjacent infrastructure & property.	Where applicable, a Permit to Disturb will be issued for the activity which will include permit conditions to prompt management of potential environmental impacts. Construction activities will be undertaken by suitably qualified operators. There is potential environmental risk associated with this action due to the proximity to the lease boundary if the plan is not effectively implemented. This will be considered in development of the plan to ensure ESCs are selected & inspection & maintenance requirements are specific, unambiguous & appropriate to manage these risks & clearly appoint accountability for execution of the requirements & response actions under the plan. Appropriate standards will be applied in execution of the plan & rigour built into the documentation & record keeping process for verification of task completion.	Controls (e.g. inspections, maintenance/desliting, repairs & construction of new controls) executed as prescribed in the area specific implementation plan.	Visual inspections (including collection of photographic evidence) will be completed as per the plan.				

APPENDIX 3: EROSION & SEDIMENT CONTROL TARGET AREAS



COPPABELLA MINE

EROSION AND SEDIMENT CONTROL TARGET AREAS