

GLENCORE

Baal Bone 2013 Independent Audit Response and Actions

Development Approval DA 09-0178

Schedule	Condition	Requirement	Finding	Baal Bone Comments and/or Actions	Target Date for Completion
3	14	The Proponent shall ensure that all surface water discharges from the site comply with the discharge limits (both volume and quality) set for the project in any EPL.	Iron exceedance at LD6 in Sept 2012 (2012 AEMR, 3.3.1). TSS exceedances in Feb 2013 (monitoring spreadsheet)	Remedial action implemented at the time of the non-compliances. No further action required.	N/A
3	20	The Surface Water Monitoring Plan must include: (a) detailed baseline data on surface water flows and quality in creeks and other waterbodies that could be impacted by the project (including the Coxs River, Ben Bullen Creek, Baal Bone Creek and Jews Creek);	Cox's River is not specifically characterised for baseline data, within the SWMP. The Water Management Plan is used to manage the site but is not yet approved allowing revision prior to approval, Administrative Non-compliance	Finalise the Baal Bone Water Management Plan incorporating a review of the SWMP for inclusion of Cox's River.	June 2014 (EMS review)
3	21	The Groundwater Monitoring Plan must include: (a) baseline data of groundwater levels, yield and quality in the region that may be affected by mining operations on site;	Baseline data of groundwater levels and quality, but not yield outlined. The Water Management Plan is used to manage the site but is not yet approved allowing revision prior to approval, Administrative Non-compliance		
3	22	The Surface and Ground Water Response Plan must describe what measures and/or procedures would be implemented to: (c) mitigate and/or offset any adverse impacts on riparian vegetation.	Riparian vegetation impacts not included in the Surface and Ground Water Response Plan. The Water Management Plan is used to manage the site but is not yet approved allowing revision prior to approval, Administrative Non-compliance		

Baal Bone Colliery

Castlereagh Highway, Cullen Bullen, NSW, 2790

T + 61 2 6350 6900 F + 61 2 63590530 www.xstratacoal.com

The Wallerawang Collieries Limited ABN 39 000 001 436

GLENCORE

Schedule	Condition	Requirement	Finding	Baal Bone Comments and/or Actions	Target Date for Completion
3	21	<p>The Groundwater Monitoring Plan must include:</p> <p>(e) a program to validate the groundwater model for the project, and calibrate it to site specific conditions.</p> <p>Validated by qualified groundwater consultant every 2 years (4.2.1)</p>	<p>Groundwater Model Validation not completed Biennially.</p>	<p>Complete groundwater model validation within 2014 period and every two years thereafter.</p>	<p>December 2014</p>
3	25	<p>The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the Director-General of I&I NSW and the Director General. The Rehabilitation Management Plan must:</p> <p>(d) investigate options for the future use of the site in a manner consistent with any regional planning strategies;</p>	<p>The RMP/MOP does not reference Regional Planning Strategies.</p> <p>Administrative Non-compliance</p>	<p>Review Rehabilitation Management Plan and Mining Operation Plan and include reference to Regional Planning Strategies.</p>	<p>June 2014 (EMS review)</p>
5	1	<p>The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General.</p>	<p>No evidence of approval by the Director General.</p> <p>Administrative Non-compliance</p>	<p>Review Environmental Management Strategy and request written approval of document from the Director General of Planning.</p>	<p>June 2014 (EMS review)</p>
5	3	<p>By 31 March 2012, and annually thereafter, the Proponent shall submit a report to the Director-General reviewing the annual environmental performance of the project to the satisfaction of the Director-General.</p> <p>This review must:</p> <p>(b) include a comprehensive review of the monitoring results and complaints records of the</p>	<p>Statutory requirements and/or trigger levels not mentioned for all areas. Only Surface water, Groundwater levels, flora and fauna refer to results of previous years.</p> <p>Administrative Non-compliance</p>	<p>Include within 2013 AEMR and future AEMRs comparison of results against statutory requirements or performance criteria results.</p>	<p>31 March 2014</p>

GLENCORE

Schedule	Condition	Requirement	Finding	Baal Bone Comments and/or Actions	Target Date for Completion
		<p>project over the previous calendar year, which includes a comparison of these results against:</p> <ul style="list-style-type: none"> • the relevant statutory requirements, limits or performance measures/criteria; • the monitoring results of previous years; and • the relevant predictions in the EA; 			

Environmental Protection Licence 765

Condition	Requirement	Finding	Baal Bone Comments and/or Actions	Target Date for Completion
L2.1	For each monitoring/discharge point or utilisation area specified in the tables below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.	<p>EPL Annual Return 2012 states: "Limit exceeded for Iron in September 2012 at LDP6. No apparent cause. Continued to monitor results. Follow-up investigation to review water monitoring results.</p> <p>TSS exceedance for LDP3 and LDP6 in Feb 2013.</p>	Reported as part of Annual Return for EPL765	Completed
M2.2	<p>For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:</p> <p>Air Monitoring Requirements [see table in audit protocol – Appendix B]</p>	<p>EPL Annual Return 2012 states: "Breach of M2.2; 6 dust deposition gauges exposed outside the standard on various occasions due to accessibility issues; 1 sample broken in transit; significant rainfall prevented access to 2 gauges. EPA has written to licensee." November and December 2013 samples were not collected within the required time.</p>	<p>Most recent issues with DM5 have been rectified with the removal of monitoring point from EPL765 on 19/2/2014.</p> <p>Reported as part of Annual Return for EPL765</p>	Completed

GLENCORE

Condition	Requirement	Finding	Baal Bone Comments and/or Actions	Target Date for Completion
M2.3	<p>For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:</p> <p>Water and/ or Land Monitoring Requirements Points 2, 11 and 12</p>	EPL Annual Return 2012 states: "Breach of M2.3 due to accessibility issues. Water sampling carried out at water monitoring point downstream of sample points. Provided contractor with procedures to be followed in the event of site access issues. EPA has written to licensee."	<p>Site has provided procedures to be followed and appropriate contact details in the event of a site access issue with EPL monitoring requirements</p> <p>Reported as part of Annual Return for EPL765.</p>	Completed

Environmental Management Strategy

Reference	Requirement	Finding	Baal Bone Comments and/or Actions	Target Date for Completion
4.2.2	The Environment and Community Risk Assessment and environmental aspects and impacts register are reviewed on an annual basis.	No review of the ECRA since July 2012	Complete review of Environment & Community Risk Assessment and document review as part of the Environmental Management Strategy.	June 2014
6.2	<p>Baal Bone's stakeholder engagement process involves the following four steps:</p> <ul style="list-style-type: none"> • Identification of stakeholders; • Identification of stakeholders information requirements and timing; • Assigning responsibility for undertaking the engagement; 	<p>Previous two community newsletters (March 2012, May 2013) have been on an annual frequency, not six monthly.</p> <p>CCC met in May and November 2012, and November 2013 not 6 monthly</p>	Review requirement for 6 monthly newsletters and CCC meetings. Discuss with members of the CCC at next scheduled meeting and review EMS if changes to time frames to be made.	June 2014 (EMS review)

GLENCORE

Reference	Requirement	Finding	Baal Bone Comments and/or Actions	Target Date for Completion
	CCC meetings to be held 6 monthly Newsletters to be published 6 monthly			
6.3	Baal Bone Colliery operates an incident reporting and inquiry telephone line (02 6350 6900) advertised to the public via the Baal Bone website, the EPA and public notices such as newsletters. Community complaints are forwarded to the Environment and Community Officer and managed in accordance with BBN SD PRO 0012 Community Complaints Management Procedure.	Telephone line is advertised on the Baal Bone website and the community newsletter, however the number was not available from the EPA. Administrative Non-compliance	Review EMS and remove reference to number being available from the EPA.	June 2014 (EMS review)
7.1	HSEC Meetings run monthly	HSEC meetings are run 6-monthly	Review EMS to change timeframe of HSEC meetings being held	June 2014 (EMS review)

Air Quality Monitoring Program

Reference	Requirement	Finding	Baal Bone Comments and/or Actions	Target Date for Completion
4.6.1	Air quality monitoring results will be compiled and reported to internal management on a monthly basis. Monitoring results will be compared to assessment criteria to demonstrate compliance. Completed monitoring will be displayed against legislative monitoring requirements (see Section 3.0) as a demonstration of compliance with the requirements to undertake monitoring.	Reporting done through XSD by exception. It is recommended that the Air Quality Monitoring Program should be reviewed and this requirement be removed as it is deemed not necessary.	Review AQMP and remove reference to results being reported to internal management on a monthly basis	June 2014 (EMS review)

GLENCORE

Biodiversity and Land Management Plan

Reference	Requirement	Finding	Baal Bone Comments and/or Actions	Target Date for Completion
4.2	<p>The status of the following land management issues will be reviewed during the annual inspection:</p> <ul style="list-style-type: none"> • Weed populations and infestations • Vertebrate pests • Vegetation levels within asset protection zones • Soil erosion / land degradation • Pasture and native vegetation condition • Condition of exclusion fencing, gates and signposting • Subsidence management and any subsidence remediation works. 	<p>2012 Inspection report reviews status of these issues. 2013 Inspection report does not mention vegetation levels within asset protection zones, condition of exclusion fencing, gates and signposting and subsidence management issues.</p>	<p>Inspection sheets to be modified to include a checklist of requirements from the BLMP.</p>	<p>June 2014 (EMS Review)</p>

Noise Management Plan

Reference	Requirement	Finding	Baal Bone Comments and/or Actions	Target Date for Completion
6	<p>The results and findings of all scheduled noise monitoring and incident investigations will be reported on the Baal Bone website within two weeks of receiving results in line with the Protection of the Environment Operations Act 1997.</p>	<p>Only August 2012 and November 2013 (Atkins Acoustics) noise audit reports were posted within 2 weeks of date of receipt. The other 3 reports were not posted within the required 2 week period.</p>	<p>Review Noise Management Plan and remove requirement for results to be reported on website within 14 days as noise monitoring is not a requirement under EPL765.</p>	<p>June 2014 (EMS review)</p>
6	<p>Results will be summarised in the Annual Review as per PA 09_0178 Schedule 5 Condition 3 and other various mining lease conditions.</p>	<p>The 2012 AEMR only compared monitoring results to the EA. No comment on comparison with previous year's results or specific measurement criteria as required</p>	<p>Include within 2013 AEMR and future AEMR's, comparison of results against Schedule 5 Condition 3 of PA 09_0178.</p>	<p>31 March 2014</p>

GLENCORE

Reference	Requirement	Finding	Baal Bone Comments and/or Actions	Target Date for Completion
		by PA 09_0178.		
6.1	The attended noise monitoring reports will include the following: <ul style="list-style-type: none"> • • Details and qualifications of person(s) who conducted the monitoring. • 	Noise audit reports (Atkins Acoustics) do not include details or qualifications of the personnel conducted the monitoring.	Future monitoring results to include details or qualifications of Personnel conducting the monitoring	30 November 2014

Water Management Plan

Reference	Requirement	Finding	Baal Bone Comments and/or Actions	Target Date for Completion
4.10.6	The water balance will be reviewed annually as part of the Annual Review for the site (refer to Section 5.5.3). This will include a comparison of the performance against the predictions in the Baal Bone Colliery Continued Operations Environmental Assessment (AECOM, 2010).	2012 AEMR does not include a review of the Site Water Balance	2013 AEMR to have review of site water balance included	31 March 2014
5.5.5	A summary of the surface water and groundwater monitoring results will be provided in the Annual Review. The following information will be reported in accordance with the Project Approval: <ul style="list-style-type: none"> • a summary of monitoring results (surface water, groundwater, channel stability and stream health); • an analysis of monitoring results against impact assessment criteria, historical monitoring results and predictions in the EA; • an identification of any trends in the monitoring results; • the site water balance; • any non-compliances reported during the year; and • actions taken to address any non-compliances. 	No reference to the Site Water Balance in the 2012 AEMR, no reference to stream health or channel stability.	2014 AEMR to have review of stream health and channel stability included after monitoring carried out in 2014.	31 March 2015
6	The WMP will be made publicly available on the Baal Bone Colliery website.	Only Surface Water and Groundwater Response Plan and the Baal Bone Colliery Environmental Management Strategy are	Finalise Water Management Plan and include on website	June 2014 (EMS review)

GLENCORE

Reference	Requirement	Finding	Baal Bone Comments and/or Actions	Target Date for Completion
		available online. Administrative Non-compliance		

Surface Water Monitoring Program

Reference	Requirement	Finding	Baal Bone Comments and/or Actions	Target Date for Completion
4.5	Channel stability monitoring will be undertaken annually for Coxs River, Ben Bullen Creek, Baal Bone Creek and Jews Creek to assess the condition of the watercourse.	No channel stability monitoring has been undertaken	Channel Stability monitoring to be undertaken in 2014	November 2014
4.6	Stream health monitoring is to be undertaken for Coxs River, Ben Bullen Creek, Baal Bone Creek and Jews Creek and will include the monitoring of macro invertebrate assemblages and riparian vegetation.	Stream health monitoring has been conducted for Ben Bullen Creek only.	Stream health monitoring to be undertaken	November 2014

GLENCORE

Erosion and Sediment Control Management Plan

Reference	Requirement	Finding	Baal Bone Comments and/or Actions	Target Date for Completion
4.1	<ul style="list-style-type: none"> stockpiles (topsoil) will generally be less than three metres high and will be set out in windrows to maximise surface exposure and biological activity; 	Stockpiles on site do not conform to the requirement.	As stockpiles are freedig material (subsoil) minimal biological activity would not have been prevalent in material. Site to review carrying out seeding on stockpiles to minimise surface exposure	November 2014
4.1	<ul style="list-style-type: none"> establishing a vegetation cover on soil stockpiles if stored for longer than three months; 	There are topsoil stockpiles that haven't been reseeded that were in place before the audit period.	Carry out seeding on topsoil stockpiles to minimise surface exposure.	November 2014
5.1	<p>During the life of the project at Baal Bone Colliery, monitoring of the erosion and sediment control measures will be undertaken on at least a monthly basis as well as during and after high rainfall events (greater than 50 millimetres of rainfall in 24 hours).</p> <ul style="list-style-type: none"> scouring or erosion in drainage lines 	Monitoring of erosion in drainage lines is not included in the ESC Checklist.	Include in regular inspection schedule	June 2014

Waste Management Plan

Reference	Requirement	Finding	Baal Bone Comments and/or Actions	Target Date for Completion
4.2	Waste management data will be compiled and reported to internal management on a monthly basis. Data should be compared to the major waste stream requirements outlined in Appendix 1.	This is no longer done.	Review Waste Management Plan and remove requirement for report to internal management on a monthly basis	June 2014 (EMS review)

GLENCORE

Mining Operations Plan

Reference	Requirement	Finding	Baal Bone Comments and/or Actions	Target Date for Completion
3.7.4	An Emergency Spill Response Trailer is retained on site at all times. The trailer contains containment booms suited to local creeks and dams, and sufficient absorbents to cater for a 2,000 L spill. The trailer has been purchased to complement those of Springvale Coal and Delta Electricity such that a range of Emergency Environmental Responses could be addressed.	Trailer is in poor order, materials still on board but trailer roadworthiness and effectiveness in an incident is doubtful.	During next MOP review determine whether reference to trailer should be removed	December 2014
7.14	Vegetation height beneath powerlines is also a component of the land management review which is conducted annually in response to the requirements of the Biodiversity and Land Management Plan.	2012 Land Management Inspection (Eco Logical) assessed this but 2013 Inspection by DnA Environmental did not.	Future inspection reports to review status of this issue. Duplication of BLMP action to update the inspection form.	Ongoing