

Narrabri Mine Action Plan 2014

Project Approval No: 08_0144 - Stage 2 Operations

Approval dated 26 July 2010

Schedule	Condition No.	Requirement	Compliance Status C/NC/O/NT	Evidence/Findings	Auditor's Comment/Additional Information	Proposed Action/Response	Due Date
2	1	The Proponent shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the project.	NC	Five incidents have occurred at the Narrabri Mine since November 2011. These are: <ul style="list-style-type: none"> two discharges from SB3, located at the REA, during heavy rain in Nov 2011 and Feb 2012; two discharges from SB2, located at the coal processing and stockpile areas, during heavy rain in Nov 2011 and Feb 2012; a discharge of coal impacted water from VPW 26, used for pre-drainage of water and gas from the underground coal workings in Feb 2012. These incidents resulted in the following Penalty Infringement Notices (PINs) being issued by EPA: <ul style="list-style-type: none"> SB3 discharge on 25/11/2011 – two PINs, one for pollution of waters (contravene POEO Act) and one for not maintaining equipment (pump taken from dam and placed in box cut) (contravened condition O1.1 of licence, i.e. not undertaking activities in a competent manner); SB2 discharge (coal impacted water) – two PINs (25/11/2011 & 1/02/2012) as contravened condition O1.1 of licence (not undertaking activities in a competent manner), i.e. dams undersized; and VPW26 discharge on 10/02/2012 – two PINs, one for pollution of waters (contravene POEO Act) and one for not maintaining equipment (contravened condition O1.1 of licence, i.e. not undertaking activities in a competent manner). No PINs were issued for February 2012 discharge from SB3. Additionally, the issue of tree death along the sections of Greylands Road and Pine Creek Tributary 1 above LW101 is most likely related to unplanned subsidence impacts. NCOPL has initiated investigations into the cause of the tree death.	NCOPL has implemented suitable actions to address the unlicensed discharges and minimise the potential for any future unplanned discharges.	Narrabri Mine has implemented actions to address the unlicensed discharges and minimise the potential for any future unplanned discharges. This includes: expanding dams SB1 and SB2; modifying the catchment of SB3 and removing the by-wash from SB3. As such no further action is considered to be required.	Complete
	2	The Proponent shall carry out the project generally in accordance with the: (a) EA;	O	The site inspection and discussions with site staff identified some changes to operations to that described in the EA.	Goaf gas drainage plants were proposed to be located at 200 metre spacings. During the mining of LW01, it was necessary to increase the number of gas drainage plants which were now observed to be spaced at 50 metre intervals. It is understood that NCOPL is investigating alternate spacings, however, if 50 metre spacings will be required for future longwall panels, this is unlikely to be considered as generally in accordance with the EA. Discussions with site staff also identified that the plant on site appears to be noisier than that originally envisaged in the EA.	Narrabri Mine is currently reviewing the disturbance footprint for the mine. The current plan is to reduce surface drilling operations by increasing the underground drilling programme.	Ongoing
		(e) conditions of this approval.	NC	Non-compliances with conditions identified.		Refer above and below.	Ongoing
	7	The Proponent shall transport all coal from the site by rail.	NC	Due to a train derailment on the Gunnedah rail line in November 2012, NCOPL undertook a trial of transporting coal from Narrabri to the Gunnedah CHPP by road. It is understood that the trial only lasted 1.5 days. DP&I issued a letter advising that the trucking of coal was in breach of the Project Approval. The trial was stopped and no further transport of coal by road has occurred.	No further action is considered to be required.		Complete
	12	Stage 1 strategies, plans or programs continue to have effect until replaced by an equivalent approved strategy, plan or program prepared and approved under this approval.	O	Stage 1 management plans were in effect at the last audit and NCOPL advised that they remained in effect until the Stage 2 plans were approved by DP&I. It was noted that a Biodiversity Offset Strategy was not required under the conditions of the Stage 1 project approval, hence there is currently no Biodiversity Offset Strategy in place as the Stage 2 plan is currently still in draft form.		The Stage 2 Offset Strategy has been approved and this will be reflected in the next Independent Audit.	Complete
3	1	The Proponent shall ensure that mine subsidence does not cause any exceedances of the performance measures in Table 1.	O	Water Management Plan (URS 2013) It was observed that a number of large trees appeared to have died off along Greylands Road and Pine Creek Tributary 1 following the mining of longwall panel LW01. NCOPL are currently investigating this issue to ascertain if it was related to subsidence - if so, this would not be considered to be minimising the disturbance of vegetation above the mining area, as these impacts were not predicted to occur.	It was advised during the site visit that NCOPL plan to offset any loss of water flow into the Great Artesian Basin aquifers. However, it was noted that the timeframe for doing so was within 5 years after the date of the approval (i.e. before July 2015). This should be verified at the next audit. It was noted that NCOPL has a licence to extract 248ML from the Great Artesian Basin, however modelling predicts that losses are only likely to be in the order of 10ML/year.	Narrabri Mine is currently investigating potential causes for the tree death above LW101. Works include tree root investigation, shallow GW investigations in LW103 and mine site soils across the site.	30-Nov-14

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4	4	(d) include reactive noise control measures to manage noise impacts for sensitive receivers; and	O	It was noted that the NMP includes the use reactive noise control measures. The current real-time noise monitoring unit is mobile and is moved from monitoring site to monitoring site on an as-needs basis to assess concerns regarding actual or perceived noise levels. To support reactive noise control, the real-time noise monitoring system needs to have consistency in the monitoring through the use of at least one fixed unit.		Narrabri Mine will review the NMP utilising a noise expert. During this review the use of a fixed unit will be reviewed.	6-Dec-14																							
	5	(b) investigate ways to reduce the noise generated by the project, including off-site road and rail noise and maximum noise levels which may result in sleep disturbance.	O	Minimal information in the Annual Reviews	Potentially non-compliant but longwall mining operations have only commenced in the last two years	Narrabri Mine will review the NMP utilising a noise expert. During this review additional ways to reduce noise impacts will be investigated.	6-Dec-14																							
		(c) report on these investigations and the implementation and effectiveness of these measures in the Annual Review;	O	Minimal information in the Annual Reviews	Potentially non-compliant but longwall mining operations have only commenced in the last two years	Narrabri Mine will review the NMP utilising a noise expert. During this review additional ways to reduce noise impacts will be investigated and summarised in the corresponding AEMR/AR report.	6-Dec-14																							
	6	The Proponent shall ensure that dust emissions generated by the project do not cause additional exceedances of the criteria listed in Tables 4 to 6 at any residence on privately owned land, or on more than 25 percent of any privately-owned land. <table border="1"> <caption>Table 4: Long term impact assessment criteria for particulate matter</caption> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td>90 µg/m³</td> </tr> <tr> <td>Particulate matter < 10 µm (PM₁₀)</td> <td>Annual</td> <td>30 µg/m³</td> </tr> </tbody> </table> <table border="1"> <caption>Table 5: Short term impact assessment criteria for particulate matter</caption> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Particulate matter < 10 µm (PM₁₀)</td> <td>24-hour</td> <td>60 µg/m³</td> </tr> </tbody> </table> <table border="1"> <caption>Table 6: Long term impact assessment criteria for deposited dust</caption> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Maximum increase in deposited dust level</th> <th>Maximum total deposited dust level</th> </tr> </thead> <tbody> <tr> <td>Deposited dust</td> <td>Annual</td> <td>2 g/m²/month</td> <td>4 g/m²/month</td> </tr> </tbody> </table> <small>Note: Calculated dust is assessed as possible with as defined by Standards Australia, AS/NZS 3840 1:1-2003 Method for Sampling and Analysis of Ambient Air - Determination of Particulate - Deposited Matter - Gravimetric Method.</small>	Pollutant	Averaging period	Criterion	Total suspended particulate (TSP) matter	Annual	90 µg/m ³	Particulate matter < 10 µm (PM ₁₀)	Annual	30 µg/m ³	Pollutant	Averaging period	Criterion	Particulate matter < 10 µm (PM ₁₀)	24-hour	60 µg/m ³	Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level	Deposited dust	Annual	2 g/m ² /month	4 g/m ² /month	O	No exceedances in PM10. Individual exceedances of 4g/m2 but annual averages for gauges below 4. Due to a monitor malfunction, PM10 results were not recorded for the period 20 May to 13 June 2012. A review of monitoring data also identified other incidents where a run cycle has not been completed, either due to monitor malfunction or power outage.	Dust has been raised as an issue by EPA and Pollution Reduction Programs have been included in the EPL for the site to address the dust issue. On the day of the audit, visible dust was observed coming from the site whilst driving along the highway. It is suggested that NCOPL review the maintenance and power requirements for monitors with the objective of maximising data capture.	No exceedances of the relevant data has been identified to date and while the HVAS units have been reported down during the audit period, the available data for the ND9 unit was 94% and 97% for the ND10 unit. Should power supply become an issue for both ND9 and ND10 then alternate power supplies will be utilised.	Ongoing
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	10	Except as may be expressly provided for by an EPL, the Proponent shall not discharge any waters from the disturbed areas of the site. However, raffinate from the water conditioning plant may be transferred to water users in accordance with an approved Water Management Plan (see below).	NC	Five incidents have occurred at the Narrabri Mine since November 2011. These are: <ul style="list-style-type: none"> • two discharges from SB3, located at the REA, during heavy rain in Nov 2011 and Feb 2012; • two discharges from SB2, located at the coal processing and stockpile areas, during heavy rain in Nov 2011 and Feb 2012; • a discharge of coal impacted water from VPW 26, used for pre-drainage of water and gas from the underground coal workings in Feb 2012. These incidents resulted in the following Penalty Infringement Notices (PINs) being issued by EPA: <ul style="list-style-type: none"> • SB3 discharge on 25/11/2011 – two PINs, one for pollution of waters (contravene POEO Act) and one for not maintaining equipment (pump taken from dam and placed in box cut) (contravened condition O1.1 of licence, i.e. not undertaking activities in a competent manner); • SB2 discharge (coal impacted water) – two PINs (25/11/2011 & 1/02/2012) as contravened condition O1.1 of licence (not undertaking activities in a competent manner), i.e. dams undersized; and • VPW26 discharge on 10/02/2012 – two PINs, one for pollution of waters (contravene POEO Act) and one for not maintaining equipment (contravened condition O1.1 of licence, i.e. not undertaking activities in a competent manner). No PINs were issued for February 2012 discharge from SB3.	Following the discharge of coal impacted water from vertical production well (VPW) 26 in February 2012, NCOPL commissioned a vegetation assessment of the impacted area and also revised the procedure for accessing well heads. Vegetation assessments of the impacted area have shown that no long-term impacts have occurred. No further action is considered to be required. It was noted by the audit team that actions have been implemented to address the issues that resulted in the discharges and minimise the potential for any further unplanned discharges.	Narrabri Mine has implemented actions to address the unlicensed discharges and minimise the potential for any future unplanned discharges. This includes: expanding dams SB1 and SB2; modifying the catchment of SB3 and removing the by-wash from SB3. As such no further action is considered to be required.	Complete																							

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	18	The Groundwater Monitoring Program must include: (g) procedures for reporting the results of this monitoring.	O	The WMP and water extraction plan do not indicate procedures for reporting monitoring results.	A report of water levels and quality is produced annually: the AEMR/Annual Review. This records the groundwater levels and quality of groundwater. Laboratory analyses are checked by Cation Anion Balance. No result was seen in the data sheets of a balance greater than 5% indicating all results are within acceptable levels. Procedures should be established and a separate section included in the WMP that covers the type and purpose of reports (regulatory or mine management or sustainable development reports), the report schedule (weekly, monthly, quarterly, annually) the methods of displaying the data and production of information (types of graphs and the data that should be discussed).	During the next review of the WMP this will be included.	Mar-15
	19	The Proponent shall ensure that the integrity of the low permeability layers lining the evaporation/storage ponds is maintained and achieves a permeability of less than 1×10^{-14} m/s whenever these ponds are in use for the storage of saline waters and less than 1×10^{-9} m/s when being used to store raffinate or captured surface waters.	O	Section 7.4 of the WMP	An "As Constructed" report was prepared for the ponds upon commissioning, however there does not appear to be any confirmation of permeability of membranes / lining and how these permeabilities are to be maintained during the life of the ponds. WMP specifies monitoring boreholes within the area surrounding the rail loop for increases in salinity. If elevated salinity levels are detected, further investigations are recommended to identify the source and mitigation measures undertaken as necessary.	Narrabri Mine will commission an investigation into the adequacy of the lining in terms of permeability and also include measures for maintenance of the lining. An investigation into water in the monitoring bores in the rail loop has been undertaken which concluded that the water in the bores surrounding the rail loop was of a different chemical composition to the water stored in the rail loop ponds and hence the two were not considered to be connected.	31-Dec-14
	20	The Proponent shall ensure that the integrity of the low permeability layers lining the brine storage ponds is maintained and achieves a permeability of less than 1×10^{-14} m/s whenever these storage ponds are in use.	O	Section 7.4 of the WMP	An "As Constructed" report was prepared for the ponds upon commissioning, however there does not appear to be any confirmation of permeability of membranes / lining and how these permeabilities are to be maintained during the life of the ponds. WMP specifies monitoring boreholes within the area surrounding the rail loop for increases in salinity. If elevated salinity levels are detected, further investigations are recommended to identify the source and mitigation measures undertaken as necessary.	Narrabri Mine will commission an investigation into the adequacy of the lining in terms of permeability and also include measures for maintenance of the lining. An investigation into water in the monitoring bores in the rail loop has been undertaken which concluded that the water in the bores surrounding the rail loop was of a different chemical composition to the water stored in the rail loop ponds and hence the two were not considered to be connected.	31-Dec-14
	25	The Proponent shall maintain the Mine Access Road Intersection with Kurrajong Creek Road and the Kamilaroi Highway in consultation with NSC and to the satisfaction of RTA.	O	The intersection was observed to be in good condition at the time of the audit site inspection, however, no evidence was sighted to indicate how the intersection is to be maintained.		Narrabri Mine will liaise with RMS and NSC in relation to a maintenance program for the intersection.	31-Dec-14
	26	Prior to using Greylands and Scratch Roads to construct mine-related infrastructure, the Proponent shall enter into an agreement with NSC to: (a) construct watercourse crossings (either culverts or concrete causeways) on those sections of these roads that it uses in a manner that does not restrict fish passage, in consultation with I&J NSW (Fisheries) and to the satisfaction of NSC; and	O	Narrabri Mine is currently in negotiations with Narrabri Shire Council to close and purchase Greylands Road where it traverses the mining lease. Sighted copy of letter from NSC dated 3/9/13 re closure of SR186-Greylands Road.	Once the road has been closed and purchased by the mine, this condition will no longer be applicable.	Narrabri Mine has applied to Crown Lands NSW to purchase Greylands Rd. No indication from Crown Lands has been received in relation to timeframes for processing the pending application. The Greylands Road Management Plan developed as part of the Extraction Plan and signed by NSC outlines that purchasing this road is the mine's long-term management strategy.	Ongoing

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	30	The Proponent shall revise the Energy Savings Action Plan for the Stage 1 project to encompass all proposed mine activities and potential impacts associated with energy management for the site (Stages 1 and 2) and subsequently implement this revised version of the Energy Savings Action Plan to the satisfaction of the Director-General. This plan must: (c) be submitted to the Director-General for approval prior to 30 June 2011; and	NC	Plan was submitted 11 August 2011 beyond the timeframe specified in the condition. It was subsequently approved by DP&I on 6/12/11 (letter sighted).			Complete												
	32	Prior to carrying out longwall coal mining operations, the Proponent shall submit a Greenhouse Gas Minimisation Plan for the approval of the Director-General. This plan must: (d) propose the measures that would be implemented in the short to medium term on site; and	O	Energy savings opportunities for reducing electricity usage on site have been described in Section 4.2 of the Plan. Whilst a research program has been described for the CMM emissions, there does not appear to be any measures proposed to minimise emissions from CMM in the short to medium term.		An updated ESAP has subsequently been submitted outlining more detail on the CMM emissions and options for mitigation. This will be reviewed in the next audit period.	Ongoing												
	33	The Proponent shall revise the Waste Management Plan for the Stage 1 project to encompass all proposed mine activities and potential impacts associated with waste management for the site (Stages 1 and 2) and subsequently implement this revised version of the Waste Management Plan to the satisfaction of the Director-General. This plan must be: (d) ensure irrigation of treated wastewater is undertaken in accordance with <i>Environmental Guidelines: Use of Effluent by Irrigation</i> (DEC, 2004), or its latest version; and	O	Described in Section 4.6 and Table 1 of Plan.	It was observed during the audit site inspection that there appears to be evidence of ponding/waterlogging within the effluent irrigation area. The environmental performance objectives set out in the EPA Effluent Guidelines identify that an effluent irrigation system should maintain or improve the capacity of the land to grow plants, and should result in no deterioration of land quality through soil structure degradation, salinisation, waterlogging, chemical contamination or soil erosion. Given that the area currently utilised is static and not rotated from area to area, there is potential for a degradation of land quality with persistent use. It is suggested that Narrabri Mine should consider a monitoring program (eg annual soil condition monitoring) and rotate the effluent irrigation to other areas if monitoring determines any issues with soil health.	Narrabri Mine will implement the recommendations as outlined by the Auditor.	31-Dec-14												
5	1	The Proponent shall rehabilitate the site to the satisfaction of the Director-General and DII in accordance with the rehabilitation objectives in Table 1. <small>Table 1. Rehabilitation Objectives <table border="1"> <tr> <td>Domain</td> <td>Rehabilitation objective</td> </tr> <tr> <td>Surface Disturbance Area</td> <td>Get through condition 4 faster</td> </tr> <tr> <td>Other land affected by the project</td> <td>Restore ecosystem function, including maintaining or establishing self-sustaining native ecosystems <ul style="list-style-type: none"> • comprised of local native plant species; with • a landform consistent with the surrounding environment </td> </tr> <tr> <td>Soil Resources</td> <td>Restore to pre-mining condition or equivalent</td> </tr> <tr> <td>Community</td> <td>Minimise the adverse socio-economic effects associated with mine closure including the reduction in local and regional employment</td> </tr> <tr> <td></td> <td>Ensure public safety</td> </tr> </table> <small>Note: The Proponent may be required to define other rehabilitation objectives in management plans or strategy required under this schedule.</small> </small>	Domain	Rehabilitation objective	Surface Disturbance Area	Get through condition 4 faster	Other land affected by the project	Restore ecosystem function, including maintaining or establishing self-sustaining native ecosystems <ul style="list-style-type: none"> • comprised of local native plant species; with • a landform consistent with the surrounding environment 	Soil Resources	Restore to pre-mining condition or equivalent	Community	Minimise the adverse socio-economic effects associated with mine closure including the reduction in local and regional employment		Ensure public safety	O	The area around the vent fan site was inspected as part of the audit. It was noted that rehabilitation works had commenced in this area now that works have been completed. The audit site inspection also included the areas above longwall 1, where ripping of the paddocks has occurred and rehabilitation of Greylands Road has been undertaken.	It was observed during the site inspection that there was an area over LW1 where almost all large trees had died off. The mine had engaged consultants to investigate the cause of such tree death (sighted report by EcoLogical dated 4/9/13).	Narrabri Mine is currently investigating potential causes for the tree death above LW101. Works include tree root investigation, shallow GW investigations in LW103 and mine site soils across the site.	30-Nov-14
Domain	Rehabilitation objective																		
Surface Disturbance Area	Get through condition 4 faster																		
Other land affected by the project	Restore ecosystem function, including maintaining or establishing self-sustaining native ecosystems <ul style="list-style-type: none"> • comprised of local native plant species; with • a landform consistent with the surrounding environment 																		
Soil Resources	Restore to pre-mining condition or equivalent																		
Community	Minimise the adverse socio-economic effects associated with mine closure including the reduction in local and regional employment																		
	Ensure public safety																		
	6	The Proponent shall provide a suitable biodiversity offset strategy to compensate for the impacts of Stages 1 and 2 of the project. This offset strategy must:	O	The Biodiversity Offset Strategy had not been submitted for approval at the time of the audit and was in draft form. It is understood that the draft Plan has now (post audit) been submitted for approval. The strategy has been worded so that the long-term security issue is not yet resolved, however NCOPL has requested DP&I/SEWPaC approve the strategy with this pending.	Whitehaven currently has a biobanking agreement in place for some of its offset requirements for its open cut operations, but this agreement did not extend to the Narrabri Mine. NCOPL is currently proposing the use of a restrictive covenant under Section 88B of the Conveyancing Act as a measure to secure the offset area in the longer term. Whilst this mechanism has been accepted in principle by the federal Department of SEWPAC in meeting the offsetting requirements under the Environment Protection and Biodiversity Conservation Act 1999, it has not been accepted by either DP&I or OEH at this time. DoPI have advised NCOPL of its development of a formal offset policy, including requirements for in perpetuity security which will assist in determining an appropriate security mechanism, however this has not yet been made available to NCOPL.	The Offset Strategy has subsequently been approved outside of the audit period and will be covered in the next audit period. DP&E have extended the timeframe for securing the offsets to 30 June 2015. The EPBC approval has also been modified so that the management plans and offset strategy can be approved, which occurred outside of the reporting period, by separating the management plan and security into two separate conditions where previously they were the same condition.	Complete												

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		(a) be prepared in consultation with DECCW;	O	This consultation is currently ongoing.			On going
	7	The Proponent shall make suitable arrangements to provide appropriate long-term security for the offset areas by 31 December 2011, or other date agreed by the Director-General, to the satisfaction of the Director-General.	O	NCOPL has proposed the use of a restrictive covenant under Section 88B of the Conveyancing Act. Whilst this has been accepted in principle by the Commonwealth as a measure for long term security of the offset area, it has not been accepted by either OEH or DP&I and is currently subject to further negotiation. Evidence was sighted to indicate that NCOPL has sought and obtained extensions to this timeframe such that the arrangements are now due to be in place by 31 December 2013.	It was noted that a larger area of land for use as an offset may potentially be required if NCOPL are required to proceed with a Biobanking Agreement.	The Offset Strategy has subsequently been approved outside of the audit period and will be covered in the next audit period. DP&E have extended the timeframe for securing the offsets to 30 June 2015. The EPBC approval has also been modified so that the management plans and offset strategy can be approved, which occurred outside of the reporting period, by separating the management plan and security into two separate conditions where previously they were the same condition.	30-Jun-15
6	1	The Proponent shall revise the Environmental Management Strategy for the Stage 1 project to encompass all proposed mine activities and potential impacts associated with environmental management for the site (Stages 1 and 2) and subsequently implement this revised version of the Environmental Management Strategy to the satisfaction of the Director-General. This strategy must : (c) identify the statutory requirements that apply to the project;	O	Whilst Section 3.1 of EMS references the approvals etc that were in place at the time the EMS was prepared, it does not include the EPBC approval, the Subsidence Management Plan approvals or any changes to conditions as a result of MODs 1 and 2.	Condition 3 of Schedule 6 requires that within 3 months of a submission of an annual review or any modification to the conditions of this approval, the Proponent shall review and if necessary revise the strategies, plans and programs. Given that the 2012-2013 Annual Review has been submitted, it would be appropriate to review the EMS and amend it to include the subsidence management approvals and any other approvals that have been obtained. It would also be appropriate to update the list of legislation where changes have been made (eg Work Health and Safety Act 2011)	All management plans are due for review in 2014 including the EMS and as such all of the Auditors recommendations will be included in this review.	6-Dec-14
	2	The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include: (b) a protocol for periodic review of the plan	O	Whilst mine staff advised that management plans were reviewed as described in the Plans, the revision status of the plans is only updated if amendments are made. There is no system in place to document a review of the plan if the review concludes that no amendments are required. This makes it difficult to verify if periodic reviews are implemented as required.		Narrabri Mine will implement a review process where by the all reviews are documented.	6-Dec-14
	3	Within 3 months of the submission of an: (b) incident report under condition 4 of schedule 6; and (c) annual review under condition 5 of schedule 6, (d) any modification to the conditions of this approval (unless the conditions require otherwise); the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the	O	Whilst mine staff advised that management plans were reviewed as required, the revision status of the plans is only updated if amendments are made. There is no system in place to document a review of the plan if the review concludes that no amendments are required. This makes it difficult to verify if this condition has been adequately implemented.		Narrabri Mine will implement a review process where by the all reviews are documented.	6-Dec-14
	10	The Proponent shall: (a) make copies of the following publicly available on its website: • the documents referred to in Condition 2 of Schedule 2; • all current statutory approvals for the project; (b) keep this information up-to-date;	NC	Copies of the EA and the consolidated conditions of approval were noted to be available on the mine's website. However, it was noted that the documentation for MODs 1 and 2 were not available on the website. Whilst the Project Approval, EPL, Mining Lease and EPBC Approval are available on the website, it was noted that the Subsidence Management Plan approvals are not available on the website.		Copies of the information stated by the Auditor will be added to the Whitehaven Coal website, www.whitehavencol.com.au	30-Sep-14
			O	With the exception of the Subsidence Management Plan approvals, the information on the website was observed to be up-to-date.			Ongoing

Narrabri Mine Action Plan 2014

Environment Protection Licence No. 12789

Review Due Date: 20/2/2013

Condition No.	Requirement	Compliance Y/N/NT/O	Evidence/Findings	Auditor's Comment/Additional Information	Proposed Action/Response	Due Date
L1.1	Except as may be expressly provided in any other condition of this license, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.	N	<p>Five incidents have occurred at the Narrabri Mine since November 2011. These are:</p> <ul style="list-style-type: none"> • a discharge from SB3, located at the Reject Emplacement Area (REA), during heavy rain in November 2011; • a discharge from SB3, located at the Reject Emplacement Area (REA), during heavy rain in February 2012; • a discharge from SB2, located at the coal processing and stockpile areas, during heavy rain in November 2011; • a discharge from SB2, located at the coal processing and stockpile areas, during heavy rain in February 2012; and • a discharge of coal impacted water from Vertical Production Well (VPW) 26, used for pre-drainage of water and gas from the underground coal workings in February 2012. <p>The SB3 discharge on November 25, 2011, and the VPW26 discharge on October 10, 2012, resulted in two Penalty Infringement Notices (PINs) being issued by EPA for contravening the POEO Act.</p> <p>It is understood that the November discharge from SB3 occurred during a period of heavy rain at a time when SB3 was collecting water from the Reject Emplacement Area, which was not receiving rejects at the time.</p> <p>Following the October discharge from VPW26, NCOPL commissioned a vegetation assessment of the impacted area and also revised the procedure for accessing well heads. Vegetation assessments of the impacted area have shown that no long term impacts have occurred. No further action is considered to be required.</p>	NCOPL has implemented suitable actions to address the unlicensed discharges and minimise the potential for any future unplanned discharges.	Narrabri Mine has implemented actions to address the unlicensed discharges and minimise the potential for any future unplanned discharges. This includes: expanding dams SB1 and SB2; modifying the catchment of SB3 and removing the by-wash from SB3. As such no further action is considered to be required.	Complete
L3.3	<p>To determine compliance:</p> <p>a) with the Leq(15 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located:</p> <p>i) approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or</p> <p>ii) within 30 metres of a dwelling façade, but not closer than 3m, where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or where applicable</p> <p>iii) within approximately 50 metres of the boundary of a National Park or a Nature Reserve.</p> <p>b) with the LA1(1 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located within 1 metre of a dwelling façade.</p> <p>c) with the noise limits in the Noise Limits table, the noise measurement equipment must be located:</p> <p>i) at the most affected point at a location where there is no dwelling at the location; or</p> <p>ii) at the most affected point within an area at a location prescribed by part (a) or part (b) of this condition.</p>	O	<p>Monitoring reports reviewed during the audit identified that monitoring is generally undertaken in accordance with this condition. However, it is understood that access is limited to at least one location and so the monitoring results are extrapolated from a representative location, and monitoring at Belah Park, due to a change in ownership, is now carried out at the residence at Merriman.</p>		Narrabri Mine is undertaking the monitoring programme as approved but circumstances beyond the control of the mine have meant some locations are monitored at alternate locations.	On going
O1.1	Licensed activities must be carried out in a competent manner. This includes:	N	<p>Five incidents have occurred at the Narrabri Mine since November 2011. These are:</p> <ul style="list-style-type: none"> • a discharge from SB3, located at the Reject Emplacement Area (REA), during heavy rain in November 2011; • a discharge from SB3, located at the Reject Emplacement Area (REA), during heavy rain in February 2012; • a discharge from SB2, located at the coal processing and stockpile areas, during heavy rain in November 2011; • a discharge from SB2, located at the coal processing and stockpile areas, during heavy rain in February 2012; and • a discharge of coal impacted water from Vertical Production Well (VPW) 26, used for pre-drainage of water and gas from the underground coal workings in February 2012. <p>These incidents resulted in four Penalty Infringement Notices (PINs) being issued by EPA for contravening condition O1.1:</p> <ul style="list-style-type: none"> • SB3 discharge on 25/11/2011 – ono PIN issued for not maintaining equipment (pump taken from dam and placed in box cut) (contravened condition O1.1 of licence, i.e. not undertaking activities in a competent manner); • SB2 discharge (coal impacted water) – two PINs (25/11/2011 & 1/02/2012) as contravened condition O1.1 of licence (not undertaking activities in a competent manner), i.e. dams undersized; and • VPW26 discharge on 10/02/2012 – one PIN issued for not maintaining equipment (contravened condition O1.1 of licence, i.e. not undertaking activities in a competent manner). 	NCOPL has implemented suitable actions to address the unlicensed discharges and minimise the potential for any future unplanned discharges.	Narrabri Mine has implemented actions to address the unlicensed discharges and minimise the potential for any future unplanned discharges. This includes: expanding dams SB1 and SB2; modifying the catchment of SB3 and removing the by-wash from SB3. As such no further action is considered to be required.	Complete

Narrabri Mine Action Plan 2014

Environment Protection Licence No. 12789

Review Due Date: 20/2/2013

Condition No.	Requirement	Compliance Y/N/NT/O	Evidence/Findings	Auditor's Comment/Additional Information	Proposed Action/Response	Due Date																
	(a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and	O	Whilst bunding and spill management was generally observed to be well implemented, there were areas around the workshop where pallets of new drums of oils and greases were not stored within bunded areas as the existing bunded container lacked sufficient capacity for the volumes of oils and greases required to be stored.	NCOPL staff advised that they were in the process of obtaining an additional bunded storage container to address this issue.	Narrabri Mine is investigating the establishment of an additional permanent bunded area for hydrocarbon management on the site.	31-Dec-14																
	(b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	O	Waste management systems were observed to have been generally well implemented in most areas. An area of concern, where wastes were observed to be stored haphazardly, was the longwall assembly pad. This area now appears to be used as a hard stand or storage area, however, it lacks appropriate housekeeping practices and contains a mixture of disused parts, wastes, and other materials.		Narrabri Mine has since assigned areas of responsibility on the longwall pad to ensure the area is kept tidy and free of any waste materials	On going																
O3.1	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	N	Dust was observed to be visible from the site on the day of the audit. A review of the complaints register for the site shows that dust has been an ongoing issue for the operations.	As a result of the dust issues being experienced and the complaints received, EPA placed requirements for dust pollution reduction program in the EPL for the site. These are discussed in conditions U1.1, and U2.1 to U2.4.	Narrabri Mine has subsequently completed the requirements added to the site's EPL. New dust pollution conditions have also been added and this will be covered in the next Independent Audit period. The new items include: automated spray system for coal stockpiles and tripper chute redesign.	28-Nov-14																
M3.6	For the purpose of this condition, the noise monitoring locations are described as: <table border="1" data-bbox="286 438 660 603"> <thead> <tr> <th>EPA Identification No.</th> <th>Description of Location</th> </tr> </thead> <tbody> <tr> <td>N1</td> <td>Within 50m of the residence on property "Dow Hills"</td> </tr> <tr> <td>N3</td> <td>Within 50m of the residence on property "Horse"</td> </tr> <tr> <td>N5</td> <td>Within 50m of the residence on property "Cocklebrig"</td> </tr> <tr> <td>N6</td> <td>Within 50m of the residence on property "Nehaween"</td> </tr> <tr> <td>N7</td> <td>Within 50m of the residence on property "Belah Park"</td> </tr> <tr> <td>N8</td> <td>Within 50m of the residence on property "Kajlin View"</td> </tr> <tr> <td>N10</td> <td>Portable monitor</td> </tr> </tbody> </table>	EPA Identification No.	Description of Location	N1	Within 50m of the residence on property "Dow Hills"	N3	Within 50m of the residence on property "Horse"	N5	Within 50m of the residence on property "Cocklebrig"	N6	Within 50m of the residence on property "Nehaween"	N7	Within 50m of the residence on property "Belah Park"	N8	Within 50m of the residence on property "Kajlin View"	N10	Portable monitor	O	Monitoring data and noise reports reviewed identified that monitoring is generally being undertaken at the locations specified. It is understood that access is limited to at least one location and so the monitoring results are extrapolated from a representative location, and monitoring at Belah Park, due to a change in ownership, is now carried out at the residence at Merriman.		Narrabri Mine is undertaking the monitoring programme as approved but circumstances beyond the control of the mine have meant some locations are monitored at alternate locations.	On going
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M7.1	To assess compliance with the noise limits presented in the Noise Limits table, attended noise monitoring must be undertaken in accordance with the condition titled Determining Compliance, outlined above, and: a) at each one of the locations listed in the Noise Limits table.	O	Monitoring data and noise reports reviewed identified that monitoring is generally being undertaken at the locations specified. It is understood that access is limited to at least one location and so the monitoring results are extrapolated from a representative location, and monitoring at Belah Park, due to a change in ownership, is now carried out at the residence at Merriman.		Narrabri Mine is undertaking the monitoring programme as approved but circumstances beyond the control of the mine have meant some locations are monitored at alternate locations.	On going																

Narrabri Mine Action Plan 2014

Mining Lease No: 1609

Lease granted 18 January 2008 - due to expire January 2029

Conditions 2-8 and 17-23 are identified as conditions relating to environmental management.

Condition No.	Requirement	Compliance Y/N/NT/O	Evidence/Findings	Auditor's Comments/Additional Information	Proposed Action/Response	Due Date
2	The proponent shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or rehabilitation of the development.	N	<p>Five incidents have occurred at the Narrabri Mine since November 2011. These are:</p> <ul style="list-style-type: none"> • two discharges from SB3, located at the REA, during heavy rain in Nov 2011 and Feb 2012; • two discharges from SB2, located at the coal processing and stockpile areas, during heavy rain in Nov 2011 and Feb 2012; • a discharge of coal impacted water from VPW 26, used for pre-drainage of water and gas from the underground coal workings in Feb 2012. <p>These incidents resulted in the following Penalty Infringement Notices (PINs) being issued by EPA:</p> <ul style="list-style-type: none"> • SB3 discharge on 25/11/2011 – two PINs, one for pollution of waters (contravene POEO Act) and one for not maintaining equipment (pump taken from dam and placed in box cut) (contravened condition O1.1 of licence, i.e. not undertaking activities in a competent manner); • SB2 discharge (coal impacted water) – two PINs (25/11/2011 & 1/02/2012) as contravened condition O1.1 of licence (not undertaking activities in a competent manner), i.e. dams undersized; and • VPW26 discharge on 10/02/2012 – two PINs, one for pollution of waters (contravene POEO Act) and one for not maintaining equipment (contravened condition O1.1 of licence, i.e. not undertaking activities in a competent manner). <p>No PINs were issued for February 2012 discharge from SB3.</p>		Narrabri Mine has implemented actions to address the unlicensed discharges and minimise the potential for any future unplanned discharges. This includes: expanding dams SB1 and SB2; modifying the catchment of SB3 and removing the by-wash from SB3. As such no further action is considered to be required.	Complete
3	(a) Mining operations must not be carried out otherwise than in accordance with a Mining Operations Plan (MOP) which has been approved by the Director-General of the Department of Primary Industries.	O	Current MOP : Mining Operations Plan for the Stage 2 Longwall Project of the Narrabri Mine for the period ending 31 December 2017.	Goaf gas drainage plants were proposed to be located at 200 metre spacings as described in Section 3.3.5 of the MOP. During the mining of LW01, it was necessary to increase the number of gas drainage plants which were now observed to be spaced at 50 metre intervals. It is understood that NCOPL is investigating alternate spacings, however, if 50 metre spacings will be required for future longwall panels, this is unlikely to be considered as generally in accordance with the approved MOP.	Narrabri Mine is currently reviewing the disturbance footprint for the mine. The current plan is to reduce surface drilling operations by increasing the underground drilling programme.	On going
8	(c) The lease holder must not commence or undertake underground mining operations that will potentially lead to subsidence other than in accordance with a Subsidence Management Plan approved by the Director-General, an approval under the <i>Coal Mine Health and Safety Act 2002</i> , or the document <i>New Subsidence Management Plan Approval Process - Transitional Provisions</i> (EDP09).	O	It was observed that a number of large trees appeared to have died off along Greylands Road and Pine Creek Tributary 1 following the mining of longwall panel LW01. NCOPL are currently investigating this issue to ascertain if it was related to subsidence - if so, this would not be considered to be minimising the disturbance of vegetation above the mining area, as these impacts were not predicted to occur.		Narrabri Mine is currently investigating potential causes for the tree death above LW101. Works include tree root investigation, shallow GW investigations in LW103 and mine site soils across the site.	30-Nov-14
	(d) Subsidence Management Plans as approved shall form part of the Mining Operations required under Condition 2 and will be subject to the Annual Environmental Management Report process as set out under Condition 3. The SMP is also subject to the requirements for subsidence monitoring and reporting set out in the document <i>New Approval Process for Management of Coal Mining Subsidence - Policy</i> .	O	The issue of trees dying over LW01 was not initially raised as an issue with DRE. Condition 16 of the Subsidence Management Plan Approval for Longwalls 101-105 requires the Leaseholder to report within 24 hours of any exceedance of predicted impacts on groundwater resources or the natural environment that may have been caused (either partly or wholly) by subsidence. It was noted, however, that the issue was reported in the 2013 AEMR which was submitted to the Department.		See above	30-Nov-14

Narrabri Mine Action Plan 2014

Mining Lease No: 1609

Lease granted 18 January 2008 - due to expire January 2029

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Condition No.	Requirement	Compliance Y/N/NT/O	Evidence/Findings	Auditor's Comments/Additional Information	Proposed Action/Response	Due Date
18	Operations must be carried out in a manner that does not cause or aggravate air pollution, water pollution (including sedimentation) or soil contamination or erosion, unless otherwise authorised by a relevant approval, and in accordance with an accepted Mining Operations Plan. For the purpose of this condition, water shall be taken to include any watercourse, waterbody or groundwaters. The lease holder must observe and perform any instructions given by the Director-General in this regard.	N	As outlined in condition 2, five incidents occurred at Narrabri Mine since November 2011. Of these incidents, two unlicensed offsite water discharges from the mine site resulted in two PINs being issued by the EPA for pollution of waters during the period covered by the audit.	It was noted by the audit team that actions have been implemented to address the issues that resulted in the discharges and minimise the potential for any further unplanned discharges.	No further action is considered to be required.	Complete
22	Access tracks must be kept to a minimum and be positioned so that they do not cause any unnecessary damage to the land. Temporary access tracks must be ripped, topsoiled and revegetated as soon as possible after they are no longer required for mining operations. The design and construction of access tracks must be in accordance with specifications fixed by the Department of Climate Change and Environment.	O			Narrabri Mine will continue to limit access tracks within the mining lease and rehabilitate tracks that will not be required for future agricultural activity.	On going
23	(b) The lease holder must not cut, destroy, ringbark or remove any timber or other vegetative cover on the lease area except such as directly obstructs or prevents the carrying on of operations. Any clearing not authorised under the Mining Act 1992 must comply with the provisions of the Native Vegetation Act 2003.	O	It was observed that a number of large trees appeared to have died off along Greylands Road and Pine Creek Tributary 1 following the mining of longwall panel LW01. NCOPL are currently investigating this issue.		See above	30-Nov-14