

Item No	Assessment Requirement	Comment	Audit Classification	Response/Action	Proposed Response/Action	Due Date
Minister's Conditions of Approval PA 08_0144						
4.18	The Groundwater Monitoring Program must include: (a) further development of the regional and local groundwater model; (b) detailed baseline data to benchmark the natural variation in groundwater levels, yield and quality (including at any privately owned bores in the vicinity of the site); (c) groundwater impact assessment criteria; (d) a program to monitor the impact of the project on groundwater levels, yield and quality; (e) a program to monitor any impacts of the project on the Namoi River Alluvium; (f) a program to monitor (by the use of shallow piezometers/lysimeters), detect, and quantify any leakage/leachate from the site's evaporation/storage ponds, brine storage area or coal reject emplacement area; and (g) procedures for reporting the results of this monitoring.	A Groundwater Monitoring program that meets the requirements is included in the WMP. An annual review of groundwater monitoring is undertaken by Groundwater Exploration Services. NCO notified DPE of a breach of the maximum predicted drawdown level at P16 in 2021. As per the TARP process, a hydrologist was engaged to review groundwater monitoring data and investigate the exceedance. It is considered that the groundwater model has under-predicted the impacts at P16. NCO engaged AGE to review the groundwater model and will incorporate revised triggers to the Groundwater Management Plan (to be finalised). Groundwater monitoring field sheets have also been updated to include groundwater level triggers.	Obs C	Revise the Groundwater Management Plan in accordance with updated predictions following recalibration of the Groundwater Model.	NCO have engaged AGE June 2022 to undertake a full re-calibration of the Groundwater Model. Trigger levels will be updated following completion of this re-calibration. An updated WMP will be submitted to the Major Projects Portal for NSW DPE review.	11 Oct 2023
4.25D	The Proponent must implement the approved Shuttle Bus Traffic Control Protocol.	The Shuttle Bus Traffic Control Protocol requires the bus driver to coordinate phone contact with the CHPP control room to receive advice on coal train movements. No records of such contact are maintained to verify this occurs. The protocol also requires that where coal train movements may impact on the bus access to the site, the driver must not queue on the Kamilaroi Highway and Kurrajong Creek Road intersection. Drivers must continue along the highway and park at a safe place to wait the coal train to clear. This requirement has not been tested.	Obs C	It is recommended that NCO develop and maintain records of a verification process to ensure the protocol is being adhered to.	Update the Shuttle Bus Traffic Control Protocol to propose verification method. The updated protocol will be submitted to the Major Projects Portal for NSW DPE review.	Completed

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4.30	<p>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 Secretary. This plan must:</p> <ul style="list-style-type: none"> a) be prepared in consultation with OEH; b) be prepared in accordance with the <i>Guidelines for Energy Savings Action Plans</i> (DEUS, 2005), or its latest version; c) be submitted to the Secretary for approval prior to 30 June 2011; and d) include a program to monitor the effectiveness of measures to reduce energy use on site. 	<p>The effective Energy Savings Action Plan was approved by DPIE in May 2015. The ESAP details 12 management actions developed in the first iteration of the EAP in 2011. These include a range of management and reporting actions for identification of energy savings opportunities and monitoring of effectiveness including, adding ESAP implementation to site management meetings, reporting on monthly energy usage at monthly site meetings, develop and report energy targets, develop a site Energy Management Committee to review and report on energy management initiatives and develop energy efficiency training.</p> <p>Electricity use for FY20 and FY21 was tracked for individual meters and entered into Pulse. For FY22, electricity use has been tracked in a custom-built NGRS tracking platform.</p> <p>Monthly energy reports as referenced in the ESAP were reviewed during the previous IEA however, no evidence of this report being prepared during the current audit period was provided. Whilst there is efforts by site management to monitor and reduce energy consumption it does not appear to be organised as outlines in the ESAP i.e. Energy Management Committee, monthly reporting and setting of targets. The current ESAP is based on energy audits conducted in 2013 and assumptions made prior to production commenced.</p>	NC	It is recommended the ESAP is reviewed and updated to consider actual production data since 2013 and work currently underway to review GHG emissions (see 4.31 below).	ESAP will be updated and submitted to the Major Projects Portal for NSW DPE review.	Completed

Statement of Commitments

9.18	Ensure that if any further Aboriginal artefacts are uncovered at any time during the life of the mine, work in the vicinity of the subject area ceases and the Proponent follows the procedures recorded in the ACHMP.	Refer CoA Sch 4 Cl 22	NC	Ensure the ACHMP continues to be implemented and employees made aware of requirements of the plan.	Update NCO ACHMP Training Package and revise training schedules. Evidence will be submitted to the Major Projects Portal for NSW DPE review.	11 Oct 2023
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5. Subsidence Management

Desired Outcome: Identify and remediate surface cracks to minimise impacts on local hydrology, ecology and soils are minimised.

5.1	Inspect the identified 'cracking zones' above each longwall panel to identify occurrence of cracks.	Note comments above on the limitations of relying upon smartphones in areas of limited mobile phone reception.	C	The current approval implies that all impacts from the project are identified. For example, Clause 5 (g) of the Mod 7 approval calls for a Subsidence Monitoring Program to "analyse the relationship between the subsidence effects and impacts under the plan and any ensuing environmental consequences" to the satisfaction of the Resource Regulator.	Inspection area information will be provided in the Annual Rehabilitation Report required for submission on the Resources Regulator Portal. Evidence will be submitted to the Major Projects Portal for NSW DPE review.	Completed
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Narrabri Mine – Independent Audit 2022 – Action Plan

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				Currently Rehabilitation and Land Management Plans state that the field surveys are based on “a stratified random and targeted design”. It is recommended that NCO provide details of inspection areas to assist the Resource Regulator in assessing whether the inspection coverage undertaken by NCO is sufficient.		
Desired outcome: Identify and minimise the impacts of far field displacement on local infrastructure.						
5.17	Monitor surface features (such as culverts) within 800m of the eastern edge and 1.5km of the western edge of the Mining Area.	Such surface features that are not owned by NCO lie outside the approved monitoring area.	C	Update the extraction plan to show extent of land owned by NCO.	The Extraction Plan will be updated to include this information and submitted to the Major Projects Portal for NSW DPE review.	Completed
Desired outcome: Prepare and implement a Subsidence Monitoring Program (or similar as required under any Extraction Plan requirements) which includes the following element.						
5.22	<p>Prepare a Subsidence Monitoring Program (or similar as required under any Extraction Plan requirements) which includes the following elements.</p> <ul style="list-style-type: none"> • A transverse subsidence line across the northern and southern panels. The lines will be installed to at least the middle of the next adjacent longwall before undermining occurs. • A longitudinal line extending in-bye and out-bye from the starting and finishing point of each panel, for a minimum distance equal to the cover depth. • A survey line along the riparian management zone of Kurrajong and Pine Creeks and their tributaries over the Mine Site. • A minimum of three monitoring pegs space 10 m apart in a line or triangle at any feature of interest, e.g. dam, walls, archaeological sites, to measure subsidence, tilt and strain. • Visual inspections and mapping of damage before, during and after mining. 	The committed accuracy of +/- 3 mm is not evidenced in the documents provided. However, discussions with the surveyor indicate industry practice including regional control points is being adopted to minimise survey error.	C	Include details of regional network for verifying regional baseline and the achieved survey accuracy in the subsidence monitoring procedure or other relevant report.	Subsidence Monitoring Program documentation will be updated to include this information and submitted to the Major Projects Portal for NSW DPE review.	Completed