

WHC Response to Recommendations - Summary of Audit Findings

Item No	Assessment Requirement	Comment	Audit Classification	Response/Action	WHC Response	Due Date
<i>Minister's Conditions of Approval 10_0015</i>						
2.7	By the end of September 2012, or as otherwise agreed by the Secretary, the Proponent shall surrender the existing project approval for the Rocglen Coal Mine (06_0198) in accordance with section 75YA of the EP&A Act.	<p>Letter to DP&I formally requesting surrender in September 2012.</p> <p>Email received from DP&I October 2012 requesting confirmation of land ownership with approval from the landholder required consenting to the surrender. No further actions have been completed and therefore the surrender of this approval has not been completed.</p>	ANC	<p>Assessment of additional PA 06_198 conditions has been completed in lieu of this approval being surrendered.</p> <p>Consider formally completing the surrender of PA 06_0198.</p>	Accepted	31/10/2016
3.5	<p>The Proponent shall ensure that the blasting on site does not cause exceedances of the criteria in Table 3.</p> <p>However, these criteria do not apply if the Proponent has a written agreement with the relevant landowner to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.</p>	5% of 115dB criteria was exceeded 18 September 2014 but was not picked up in during the AEMR report development. However it was picked up through reporting for the EPL. The EPL, ML and PA all have different definitions of 12 months.	NC	No further actions recommended. Tracking of overpressure readings is now compared to a rolling 12 months to prevent further oversights.	Accepted	N/A

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3.15	The Proponent shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that the particulate emissions generated by the project do not exceed the criteria listed in Tables 4, 5 and 6 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.	<p>Review of results indicate location BD2A (Penryn)) and BD8 (Yarrowonga) are over the 12 month rolling average. Note that the Yarrowonga property is owned by the mine.</p> <p>BD8 had one high reading (115.6g/m²/month for December 2014) which skews the 12 month average for period December 2014 to November 2015. The ash content was 99% therefore the insoluble solids consisted mainly of inorganic material such as sand and dirt. Red sandy material was noted in the jar during collection and is not considered to be related to the Rocglen Mine.</p> <p>BD2A had three high readings early 2015 (13.1, 61.3 and 6.1g/m²/month) with the annual average exceeded over the period February 2015 to January 2016 as a result of the three elevated readings. The ash content consisted of between 76% and 93% of insoluble solids indicating it consisted of primarily inorganic content i.e. sand, dirt.</p> <p>HVAS indicates two 24hour exceedances for the Glenroc location on 29/12/2013 and 16/01/2014.</p>	NC	<p>Consider calculating the rolling 12 month average for the dust gauges to enable identification of any annual average exceedances.</p> <p>Consider reviewing the 24 hour result for the TEOM (the TEOM is accepted under the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (DEC 2007)) and entering into Excel spreadsheet. These results can then be reviewed against the criteria and investigated if over criteria (already reported in the EPL Annual Returns as an average and maximum). Results from other Whitehaven Coal sites in the area and the EPA Tamworth air quality monitoring station can also be utilised to determine if the impacts are regional or mine related.</p> <p>The AEMR should also report the maximum daily results from the TEOM for comparison to the 24hour criteria rather than using monthly averages which is not a recognised averaging timeframe in the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (DEC 2007)).</p>	<p>Accepted</p> <p>TEOM monitoring is for management purposes only.</p> <p>TEOM monitoring results to be reported over an accepted AM timeframe</p>	<p>9/09/2016</p> <p>N/A</p> <p>28/02/2017</p>

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		The 24hr average from the TEOM is not currently tracked or entered into an Excel spreadsheet for reporting purposes against the criteria as it's used as a management tool only. The results are summarised and reported in the EPL Annual Returns				

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3.27	<p>The Proponent shall prepare and implement a traffic management plan for the Project, to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with RMS, Gunnedah Shire Council, Narrabri Shire Council, and the owners of the Tarrawonga and Vickery coal mines;</p> <p>(b) be submitted to the Secretary for approval, by 30 June 2015;</p> <p>(c) include:</p> <ul style="list-style-type: none"> • a protocol for operating haul trucks during school bus hours; • a protocol for maximising the backfilling of haul trucks with coarse and/or fine rejects from the Whitehaven CHPP; • consideration of measures to minimise dust from unsealed roads that may be used for access to the mine site; • arrangements to comply with cumulative coal haulage limits from the Project and the Tarrawonga and Vickery 	<p>Operational/economic drivers ensure the backfilling of haul trucks with coarse and/or fine rejects occurs however it is not described in Section 3 of the Plan with other mitigants/measures.</p> <p>Arrangements to comply with cumulative coal haulage limits are not currently included in this plan. The cumulative volumes are currently tracked by the logistics manager.</p> <p>A monitoring program to audit vehicle movements, including the origin and destination of employees, against predictions in the EA is also not included in the plan.</p>	ANC	<p>Consider including following in the Road Traffic Noise Management Plan:</p> <ul style="list-style-type: none"> • protocol for maximising the backfilling of haul trucks with coarse and/or fine rejects from the Whitehaven CHPP • arrangements to comply with cumulative coal haulage limits • description of a monitoring program to audit vehicle movements, including the origin and destination of employees, against predictions in the EA 	Accepted	31/10/2016

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	coal mines; and <ul style="list-style-type: none">a monitoring program to audit vehicle movements, including the origin and destination of employees, against predictions in the EA.					

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3.31	The Proponent shall: (c) ensure that no outdoor lights shine above the horizontal; and	A light stand was noted during the site inspection at the western emplacement lookout area which appeared to shine across the valley to Belmont - site inspection at night time confirmed light is shining directly across the valley i.e. above the horizontal.	NC	Consider the placement of lights to prevent horizontal light above the horizon.	Accepted	30/09/2016
4.2	As soon as practicable after obtaining monitoring results showing: (a) an exceedance of the relevant criteria in Schedule 3, the Proponent shall notify the affected landowner and/or tenants in writing of the exceedance, and provide regular monitoring results to each of these parties until the project is complying with the relevant criteria again; and (b) an exceedance of the relevant air quality criteria in Schedule 3, the Proponent shall send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including tenants of any mine-owned land).	Review of the DDG results indicate some exceedances of the rolling 12 month average for two sampling locations which have not been reported to the landholder. HVAS indicates two 24hour exceedances for the Glenroc location on 29/12/2013 and 16/01/2014.	NC	Consider reporting all exceedances of criteria to the affected landholder to fulfil the requirement of this MCoA. Consider reviewing the 24 hour result for the TEOM (the TEOM is accepted under the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (DEC 2007)) and entering into results Excel spreadsheet. The Annual Review should also report the maximum daily results for comparison to the 24hour criteria rather than using monthly averages.	Accepted. TEOM monitoring is for management purposes only. TEOM monitoring results to be reported over an accepted AM timeframe	Ongoing N/A 28/02/2016
5.2	The Proponent shall ensure that the management plans required under this approval are prepared in	Baseline data is not included in all plans.	ANC	Consider including the air quality, noise and traffic noise baseline levels determined during the	Accepted.	31/10/2016

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(a)	accordance with any relevant guidelines, and include: detailed baseline data;			assessment phase of the project into the relevant management plans.	EMPs to reference baseline data within EA.	

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5.3	By the end of each December, the Proponent shall review the environmental performance of the project to the satisfaction of the Secretary. This review must: (d) identify any trends in the monitoring data over the life of the project;	Although the previous monitoring results are included as graphs in the report for air quality, discussion on previous results and trends in data over the life of the project is not included for water, groundwater, noise and road noise.	ANC	Consider inclusion of further discussion into the next Annual Review on any previous results and trends observed in monitoring over the life of the project for all monitored aspects such as noise, road noise, water and groundwater.	Accepted	28/02/2016
5.4	Within 3 months of: (a) the submission of an annual review under condition 3 above; (b) the submission of an incident report under condition 6 below; (c) the submission of an audit report under condition 8 below; and (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 satisfaction of the Secretary.	Review of the Management Plans indicates reviews are completed for Project Expansion. There is no evidence for reviews completed for all requirements listed as per this condition.	ANC	Consider the creation of a spreadsheet with plan review tables and update reviews completed even if no changes are required to the plans.	Accepted	30/09/2016

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5.6	As soon as is practicable after the Proponent becomes aware of any incident associated with the project, the Proponent shall notify the Secretary and any other relevant agencies of the incident. Within 7 days of the date of the incident, the Proponent shall provide the Secretary and any relevant agencies with a detailed report on the incident.	Two surface water monitoring events were missed on 19 October 2014 and 18-23 October 2014 – the written report was provided to the EPA on 11 May 2015 (7 days after occurrence). One incident reported during the audit period (5% of 115dB was exceeded 18 September 2014) through reporting for the EPL (7 days after occurrence). The tracking of overpressure readings is now compared to a rolling 12 months to prevent further oversights.	NC	Consider reviewing compliance tracking procedures/methods to improve reporting times.	WHC believe to be in compliance. No proposed action.	N/A
<i>Minister's Conditions of Approval 06_0198</i>						
3.18	During mining operations on site, the Proponent shall: (c) advertise the blasting hotline number in a local newspaper each year; and	A blasting hotline is not currently maintained however a public enquiry/complaints line is advertised on signs on Wean Rd and on the website. The blasting hotline number/complaints number is not currently advertised in local newspapers each year. Previous audit report noted this action was completed at that time.	ANC	Consider the surrender of this approval or advertise the complaints/information line annually in the local newspaper.	Accepted. Surrender consent.	31/10/16
3.37	The Proponent shall keep records of the amount of coal transported from the mine site, and number of coal truck movements each year, and include these records in the AEMR.	Records of coal movements are kept on the website. AEMRs provide an annual summary of total output and movement of coal to the CHPP	ANC	Consider the surrender of this approval or include number of total truck movements into Figure 2 of the Annual Reviews.	Accepted. Surrender consent	31/10/16

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		but do not include number of truck movements.				

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<i>Statement of Commitments</i>						
b	Within 12 months of approval, Whitehaven will review, update and integrate relevant aspects of the environmental monitoring of the Project in the existing set of environmental monitoring programs for the Rocglen Coal Mine. This will be undertaken in consultation with the relevant government agencies.	Government agencies not consulted as part of update of latest update of plans in November 2015. The previous audit report notes that the relevant agencies were consulted for the plans submitted prior to end December 2011. Changes were mostly administrative and requirements have not changed substantially.	ANC	Consider sending link to plans on website to relevant agencies and requesting comment.	Accepted. Applicable to material revisions of EMPs	Ongoing
g	Prior to re-spreading stockpiled material onto completed mining or overburden emplacement areas, an assessment of weed infestation on stockpiles will be undertaken to determine if individual stockpiles require herbicide application and/or 'scalping' of weed species prior to spreading.	The NSW Pesticides Regulation requires that records be kept of pesticide use (including herbicides). Individual spraying records are maintained. All required information for the NSW Pesticides Regulation is included in the record with the exception of who has applied the pesticide/herbicide.	ANC	ANC - Consider the recording of person/company applying the pesticide onto the current records.	Accepted	30/09/2016
g	Surface water management structures will be progressively installed on the rehabilitated landform. The heights (effective depths) and cross-sectional areas of the individual banks will be determined on the basis of individual sub-catchment areas, but will typically be less than 0.7 metres and 3 square metres (m2),	The northern emplacement area consists of banks which divert water to an eastern and western rock lined channel. The eastern channel has recently been installed and it is noted that there is an erosion channel forming alongside (northern edge). Tunnel erosion near the western channel has recently been	NC	Consider diverting water to the newly constructed eastern channel in the northern emplacement area to prevent further scouring alongside this channel. In addition, consider installing a batter shoot where water is ponding in the recently repaired tunnel erosion area or complete works to divert water to the rock lined drain on the	Accepted	31/12/2016

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	respectively. Rock-lined drains will be used, where required, to convey water safely from the rehabilitated landform into the surface water management system that takes water from the site.	repaired however it is noted that water is ponding in this area.		western face of the northern emplacement area.		

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c	Prior to being brought on-site, all earthmoving equipment will be tested to ensure sound power levels are consistent with the previous assessments undertaken by Spectrum Acoustics	Individual pieces of equipment do not currently have sound power levels checked to confirm within specifications and consistent with previous assessments undertaken by Spectrum Acoustics prior to being brought on site.	NC	Consider the requirement to test equipment prior to being brought on site. Consider developing a list of equipment and their sound power levels (design and measured) with comparison to previous assessments as a record of conformance.	Accepted.	31/12/2016
g	Mid-high frequency broadband reverse beepers are fitted to on-site mobile mining equipment	Not all equipment is fitted with mid-high frequency reverse beepers.	NC	Consider fitting all mobile mining equipment with mid-high frequency reverse beepers.	Accepted.	30/11/2016
j	For all blasts within 500 metres of Wean Road, the road will be closed with blast notice boards updated at least 24 hours prior to each blast. Road closures typically occur for a period of up to 10 minutes.	The boards are in place but are not currently used as intended. Sentries are placed along road to prevent use of the road by traffic during blasting.	NC	Consider using the blast notice boards prior to blasting.	Accepted	31/08/2016
n	Whitehaven will erect a blast notice board near the mine entrance on Wean Road notifying passing motorists when the next blast is scheduled.	The boards are in place but are not currently used as intended. Sentries are placed along road to prevent use of the road by traffic during blasting.	NC Duplicated SoC	Duplicated finding	Accepted	N/A
g	As required, appropriate drainage structures and erosion and sediment controls will be installed and maintained.	Historical erosion and sediment control devices noted during the site inspection in the rehabilitated and revegetated areas. Some scouring and erosion was noted in the newer areas of rehabilitation in the northern emplacement area.	NC	Consider removing erosion and sediment control structures that are damaged/no longer required. Consider installing additional controls where erosion is evident to prevent the need for extensive rework/repairs.	Accepted	31/12/2016

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p	Implementation of an effective revegetation, maintenance and monitoring program.	<p>Site inspection indicates mixed success with rehabilitation. The northern emplacement area (designated) pasture has numerous weeds (Class 4 such as Bathurst Burr and Prickly Pear). Galvanised Burr and Black Roly Poly is the most common weed but are not locally declared weeds.</p> <p>The soil is undergoing testing to determine ameliorant type and rate to encourage growth of any further seeding campaigns. A biodiversity expert has been recently (last two months) appointed fulltime to oversee the rehabilitation of the Whitehaven Coal sites. This will include investigating alternative methods for reseeded/replanting.</p>	NC	Continue to investigate alternative rehabilitation methods to increase success.	Accepted	Ongoing
i	Monitoring of groundwater levels will initially be undertaken on a monthly basis for the first year of the Project, after which the interval may potentially be relaxed subject to review of the results. In the longer term a monitoring interval of three months is anticipated. Samples will be analysed for all major ions, including carbonate.	<p>Groundwater is monitored every three months.</p> <p>Review of the AEMR 2011-12 indicates groundwater monitoring frequency was quarterly.</p>	NC	Monitoring of groundwater levels was not completed initially monthly for the first 12 months of the Project. No further actions are recommended.	Accepted	N/A

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j	Pressure transducers/dataloggers will be installed in monitoring bores MP-01 to MP-05 for the continual recording of groundwater levels. These instruments will be downloaded every 2 months. MP-04 and MP-05 will be deepened to at least 10 metres below the water table.	The data is downloaded by the Environment Officer - last downloaded for reporting into the AEMR.	ANC	Consider downloading data every two months as stated in the commitment.	Accepted	09/09/2016

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i	A tree felling protocol will be developed, by a suitably qualified and licensed ecologist with previous experience supervising the felling of trees, in order to minimise harm to fauna species during clearing activities.	Clearing and Pre-strip Procedure includes operational aspects to felling trees. A tree felling protocol has not been formally developed.	ANC	Consider including ecological considerations for tree felling into the existing procedure, WHC_PRO Clearing and Pre-Strip or develop a separate tree felling protocol.	Accepted	31/08/2016
f	In areas where surface excavation might occur in the future within 25 metres of the east-west oriented drainage line, Whitehaven will follow protocols in Section 4.1(iii) of the ACHMP (Whitehaven 2008c).	This commitment is not currently included in the latest version of the Heritage Management Plan	NC	Complete a review of historical documentation and assess if this commitment is still relevant to stage of works and action accordingly.	Accepted. Heritage Management Plan to be amended	31/10/2016
e	An earthen bund of appropriate height will be established between the realigned Wean Road and the active pit area. This bund will be vegetated immediately following construction. The bund will provide an effective visual screen of the site from Wean Road. In addition to the bund, a strip of bushland will be established to screen the view of the final void and generally improve the visual amenity from Wean Road.	Earthen bund has been partially installed along the southern part of the eastern boundary but has not been installed along the area of the active pit area. Bushland will be established once operations have finished in three years.	NC	Consider installing bund along Wean Rd to provide a visual screen.	Focus to be on additional tree planting to establish long term visual screen	31/03/2017
f	The requirements of the Australian Standard AS 4282 1997 - Control of Obtrusive Effects of Outdoor Lighting will be taken into consideration when placing lights required when working outside of daylight hours. In particular,	A light stand was noted at western emplacement lookout area which appears to shine across the valley to Belmont - site inspection at night time confirms	NC Duplicated with MCoA 3.31	Refer to MCoA 3.31	Accepted.	N/A

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	lighting plant will be positioned and directed away from surrounding residences and aimed downwards to avoid light spill onto adjoining lands and public roads	light is shining directly across the valley i.e. above the horizontal.				
b	Whitehaven will respond to any community complaints within 24 hours of receipt. All complaints will be investigated and the results of the investigation reported to the complainant in a timely manner.	Review of complaints indicates date/time of complaint is recorded. The date/time of responses is not recorded therefore assessment against this commitment cannot be completed.	ANC	Consider including date/timeline of response to any complaints so that assessment against this commitment can be completed.	WHC consider that this item is already addressed in complaints records. No further action proposed.	N/A
<i>ML1620</i>						
b	Blast Overpressure The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 120 dB (linear) and does not exceed 115 dB (linear) in more than 5% of the total number of blasts over a period of 12 months, at any dwelling or occupied premises, as the case may be, unless determined otherwise by the Department of Environment and Climate Change.	Refer Condition L5.1 EPL 12870	NC Duplicated with EPL L5.1	Refer Condition L5.1 EPL 12870	Accepted	N/A
<i>ML1662</i>						

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5	The lease holder must report any environmental incidents. The report must: (i) be prepared according to any relevant Departmental guidelines; (ii) be submitted within 24 hours of the environmental incident occurring	2014/15: exceedance of 5% of blasts above 115 dBL. Reporting of the incident was undertaken to the DP&E and EPA.	NC	Consider the review of compliance tracking and reporting procedures to ensure DRE is informed of any environmental incidents.	Accepted	31/12/2016
<i>EPL12870</i>						
P1.3	The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.	Controlled discharges have not been reported in the EPL Annual Returns however the EPL list monitoring points as follows: <ul style="list-style-type: none"> • Wet weather discharge • Discharge water quality monitoring Frequency is within 12 hours of a discharge occurring.	NC	Consider including in a separate file of all discharges from the licensed discharge points and report both active and passive discharges (both points are included in EPL as discharge points)	Accepted	31/12/2016
L5.1	The airblast overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) at any noise sensitive locations for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded	Two blasts during the 2014/15 period exceeded the 115dB limit, with results of 116.1dB on the 5th September 2014 and 115.7dB on the 18th September 2014. Both of these results were recorded at "Roseberry", and made up 6.7% of all blasts undertaken for the period. This was not picked up in the AEMR however was picked up through reporting for the EPL. The EPL, ML and PA all have different definitions of 12 months.	NC Duplicated with ML1602 (15(b))	The tracking of overpressure readings is now compared to a rolling 12 months to prevent further oversights.	Accepted	N/A

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		It has since been determined that the Roseberry residence is under private agreement for all affectation with subsequent discussions with the EPA indicating this monitoring point will be moved to the next nearest private residence and the EPL amended accordingly.				
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.	HVAS results indicate two exceedances during the reporting period against the 24hour criteria for PM10 - these were not reported at the time of occurrence but are reported in the Annual Returns	NC	Consider reporting any exceedance of the MCoA criteria to the EPA as soon as practicable (the results are currently reported in the Annual Return)	Exceedance of EPL criteria are reported in the Annual Return. No further action proposed	N/A
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: (a) the date(s) on which the sample was taken; (b) the time(s) at which the sample was collected; (c) the point at which the sample was taken; and (d) the name of the person who collected the sample.	Date and point of sampling included in water sampling and HVAS spreadsheets. The time the sample was taken and the sampler name is not included.	ANC	Consider including the time the sample was taken as well as the name of the sampler into the excel sheets for the HVAS and water sampling monitoring data.	Accepted	30/09/2016
M2.2	Air Monitoring Requirements Point 4,6,7 - dust	A monitoring event was missed in October 2014 at EPL ID 10 and 17 with indication it would be included in the EPL Annual	NC	Two sampling events were missed for the HVAS - no further actions are proposed.	Accepted	N/A

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	Point 10 - PM10 (HVAS) Point 17 - PM10 (real time)	Return. This was notified to EPA 11 May 2015. Email from ALS notifying of missed sampling event for Costa Vale for the 17/01/2015 sampling round (informed Whitehaven Coal staff 21/01/2015). All missed sampling events are from power failures/trips of equipment.				
M2.4	For the purposes of the table(s) above Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.	The results do not include time of sampling and confirmation sample was taken within 12 hours of discharge. Spreadsheet includes wet weather discharges - controlled discharges are not included.	ANC	Consider including column in monitoring sheet to confirm sampling has occurred within 12 hours to enable confirmation this condition is met.	Accepted	30/09/16
M2.5	For the purposes of the table(s) above Special Frequency 2 means the collection of samples quarterly (in the event of a flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.	The results do not include time of sampling and confirmation sample was taken within 12 hours of discharge.	ANC	Consider including column in monitoring sheet to confirm sampling has occurred within 12 hours to enable confirmation this condition is met.	Accepted	30/09/16

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M7.3	For the purpose of condition M8.1, the noise monitoring locations are described as: N1 (Retreat), N2 (Surrey) and N3 (portable meter)	Monitoring at N1 and N2 completed. No results are available for the portable meter as N3 is not currently used.	NC	The EPL lists N3 as a monitoring location and therefore monitoring should be completed at this location. Alternatively consider submitting an amendment to the EPL to reflect actual monitoring locations if N3 is not considered necessary to confirm compliance with noise limits.	Accepted. A variation to EPL has been submitted seeking removal of relevant condition.	Ongoing
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred	Incident reports do not record time of initial notification to the EPA. Two additional reports were completed for elevated TSS in water discharges but occurred after 5 days of 90% tile rainfall and where therefore not exceedances. The date of submission of the report to EPA is not known as correspondence was not sighted. Two surface water monitoring events were missed on 19 October 2014 and 18-23 October 2014 - the written report was provided to the EPA on 11 May 2015. One incident reported during the audit period (5% of 115dB was exceeded 18 September 2014) through reporting for the EPL. The tracking of overpressure readings is now compared to a rolling 12 months to prevent further oversights.	NC Duplicated with MCoA 5.6	Consider reviewing compliance tracking procedures/methods to improve reporting times.	Accepted	31/12/2016

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<i>Water Access Licence 29461</i>						
MW0635-00001	The licence holder must record the following in the logbook: (vii) the volume of water taken in any water year from 1 July 2011, by comparison to the maximum volume of water permitted to be taken in that water year.	Logbook not currently maintained however an excel sheet is kept recording usage to confirm maximum extraction volumes are not exceeded.	NC	Consider amending the existing Water Meter Reading Excel spreadsheet to include volume of water extracted against the maximum volume allowed.	Accepted	30/09/2016
MW0633-00001	The licence holder must record the following in the logbook: (i) each date and period of time during which water is taken under this licence; (ii) the volume of water taken on that date; (iii) the water supply work approval number of the water supply work used to take the water on that date; (iv) the purpose or purposes for which the water taken on that date.	Logbooks not currently maintained. Excel sheet logs date and meter reading.	NC Duplicated with MW0635-00001 and MW0632-00001	Consider amending the existing Water Meter Reading Excel spreadsheet to include all requirements.	Accepted	30/09/2016
MW0632-00001	The licence holder must keep a log book, except where the access licence nominates only a metered work with a data logger. A "logbook" means a written record, kept in hard copy or electronic form, which accurately records all information required to be kept for this licence.	Logbook not currently maintained however an excel sheet is kept recording usage to confirm maximum extraction volumes are not exceeded.	Duplicated with MW0635-00001 and MW0633-00001	Consider amending the existing Water Meter Reading Excel spreadsheet to include all logbook requirements.	Accepted	30/09/2016

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MW0831-00001	<p>The licence holder must notify the Minister, in writing, immediately upon becoming aware of a breach of any condition of this licence.</p> <p>Note: a notification does not authorise a breach, or continuing breach, of a condition of this licence.</p>	<p>As the requirement to maintain a logbook has not been met the Minister should be notified.</p>	<p>NC</p>	<p>Consider notifying the Minister for DPI Water regarding the non-maintenance of a logbook for the pumping wells with an estimated timeframe when the condition can be met.</p>	<p>Accepted. Non-compliance to be noted in next Annual Review</p>	<p>28/02/2017</p>

WHC Response to Recommendations - Summary of Plan Implementation Review Findings (Duplicate Findings with Regulatory Instruments Excluded)

Section	Assessment Requirement	Comment	Audit Classification	Recommended Action	WHC Response	Due Date
<i>Mining Operations Plan</i>						
3.2.5	<p>Weed Control</p> <ul style="list-style-type: none"> • Control practices implemented to minimise the spread of weed species will include: - Campaign weed spraying prior to the stripping of topsoil; - Equipment coming to site to be clean and free of soil/plant material prior to entry, or subject to clean down at the workshop facilities area; 	<p>Mechanical inspection checklist is completed - MDG15 forms which does not include checks for weeds.</p> <p>Campaign spraying prior to stripping of topsoil does not currently occur.</p> <p>Procedure has been developed for clearing and pre-stripping activities.</p>	ANC	Consider including requirement to complete campaign spraying prior to spreading topsoil into existing procedure and include checks for weeds on new equipment to site as part of initial check.	Accepted.	30/09/2016
3.2.5	Fauna monitoring will continue to be undertaken at Rocglen and is currently completed annually by a qualified ecologist with results reported in the AEMR/Annual Review.	The Rehabilitation Management Plan includes detail on fauna monitoring with fauna monitoring to be undertaken biennially. Fauna monitoring plots were established during spring 2009 in areas adjacent to the site. Fauna monitoring was undertaken in 2010 and then in 2015.	NC	Consider aligning the EMS and RMP commitments for fauna monitoring. Also consider completing monitoring of the plots established in 2009 at least biannually.	Accepted. RMP to be incorporated into MOP	31/12/2016
10	Results of rehabilitation monitoring will be reported in the AEMR/Annual Review. The AEMR/Annual Review will also discuss rehabilitation performance against	Monitoring of rehabilitation is discussed comprehensively in the AEMRs (Section 5) and includes all requirements.	ANC	Consider including the Rehabilitation TARP in the RMP to ensure	Accepted.	31/12/2016

Section	Assessment Requirement	Comment	Audit Classification	Recommended Action	WHC Response	Due Date
	key performance measures/indicators, compliance with regulatory requirements and commitments, and identified trends and instances where potential rehabilitation failure has been identified triggering intervention in accordance with a Rehabilitation TARP	TARP is not included in the current version of the Rehabilitation Monitoring Plan.		implementation of the TARP occurs	RMP to be incorporated into MOP	

Section	Assessment Requirement	Comment	Audit Classification	Recommended Action	WHC Response	Due Date
<i>Environment Management Strategy</i>						
4.6	A review of the mine's compliance with all conditions of PA 10_0015 MOD 2, ML 1620, ML 1662, EPL 12870 and all other approvals and licences will be undertaken prior to (and included within) each Annual Review submitted to DPE and DRE. The Annual Review will also be provided to GSC, relevant agencies, the CCC and to the public on Whitehaven's website.	Reviews of compliance against the conditions of the OA, ML, EPLS and other licences and approvals have not been completed in the last AEMR for 2014-15. These were included in Appendix 3 for previous reporting years.	ANC	Consider including tables of the approvals in the Annex of the Annual Reviews with review of compliance completed.	Accepted. Compliance summary will be provided in accordance with the Annual Review guidelines	31/10/2016
<i>Air Quality and Greenhouse Gas Management Plan</i>						
4.1.1	Parameters Measured No direct monitoring of TSP is proposed as PM10 concentrations are considered of greater significance given its synergies with health-related issues, however indirect calculation of TSP will be made from PM10 measurements, using a previously determined relationship factor of 2, to determine compliance with Schedule 3 Condition 15 Table 4 of PA 10_0015 MOD 2.	TSP not currently calculated in the HVAS sheet and reported in the AEMRs. Review of HVAS PM ₁₀ monitoring results indicates rolling 12 month average of TSP is below the criteria.	ANC	Consider including TSP in the monitoring results Excel spreadsheet using the relationship as described in the plan and report accordingly in the Annual Reviews.	Accepted	30/09/2016
4.1.2	In the event that PM10 levels are determined to be high as a consequence of ambient or other sources, by confirmation from surrounding PM10 networks, the activity log will identify this source, with no specific requirement for Rocglen operations to cease activity.	Dust Alarm Checklist is completed and identifies if activities are from mining activities. A review of other PM10 monitors is not currently completed as visual review of activities on site has confirmed elevated dust levels are not from site activities.	NC	As PM10 is not visible to the naked eye, consider reviewing surrounding PM10 monitors to confirm alarm is not from site activities (addition on checklist).	Accepted	30/09/2016

Section	Assessment Requirement	Comment	Audit Classification	Recommended Action	WHC Response	Due Date
<i>Blast Management Plan</i>						
4.11	<p>Additional education and awareness programs will be provided, on an ongoing basis, for relevant personnel working near blast areas such as sentries and drill and blast contractors. Training for relevant personnel (Drill and Blast Engineer, Shotfirers, Drillers, OCE's, drill and blast contractors) will be undertaken in accordance with WHC-OC-Training and Competency Management Plan, and covers:</p> <ul style="list-style-type: none"> - The identification and rating of post-blast fumes. - The potential health impacts of fume gases. - Potential causes of blast fume. - Fume mitigating actions as detailed in this procedure. 	<p>Review of the Training and Competency Management Plan does not include requirement for additional training of personnel working near blast areas.</p> <p>Evidence of additional training not available for review during the audit.</p>	ANC	Consider including the commitment for additional training of personnel working near blast areas into the Training and Competency Management Plan.	Accepted	30/06/2017
<i>Noise Management Plan</i>						
3.4	Each 15-minute statistic will have an accompanying third-octave band spectrum.	<p>Noise and weather over time is presented with no spectral data evident. Low frequency content (low frequency on charts) is presented but not tonal content.</p> <p>Presenting 15-minute statistic that's has an accompanying third-octave band spectrum would not be practicable for interpretation purposes.</p>	ANC	Consider incorporating tonal content to enable assessment against the INP (i.e. considers modifying factors).	Accepted	30/09/2016

Section	Assessment Requirement	Comment	Audit Classification	Recommended Action	WHC Response	Due Date
4.2	Data from the site weather station and the real time noise monitoring unit will be obtained for the time applicable to the complaint for use in determination of cause and identification of future remedial actions.	<p>One complaint for noise was received during the audit period:</p> <p>1 May 2013 - complaint regarding noise, dust and lights. The complaint was also raised at the CCC the following week.</p> <p>It was considered temperature inversion conditions were likely to have exacerbated noise levels.</p> <p>The complaint details do not discuss site weather station and real time data analysis.</p>	ANC	Consider including data from the weather station and the real time noise monitor when noise complaints are received for the site.	Accepted.	Ongoing
<i>Rehabilitation Management Plan</i>						
2.3	Year 1 - Rehabilitation of approximately 27 ha on the lower slopes of the Northern Emplacement Area to the east, west and north, and approximately 11 ha on the northern section of the Western Emplacement Area. Topsoil utilised for this rehabilitation will be obtained from stripped and stockpiled sources.	<p>The AEMR states that rehabilitation of the 11.2ha of the western emplacement took place during this reporting period which is in line with the MOP.</p> <p>Cumulative rehabilitation target (RMP) is 38ha against completion of 11.2ha.</p>	NC	Review the target in the MOP and Rehabilitation Management Plan and align.	Accepted. Address in MOP	31/12/2016
2.3	Year 2 - Rehabilitation of approximately 14 ha on the central slopes of the Northern Emplacement Area to the east, west and north, utilising topsoil from stripped and stockpiled sources.	The AEMR reports rehabilitation of disturbed land undertaken during the reporting period comprised of reshaping and top soiling approximately 20ha of the western emplacement and 18ha of the northern	NC	Review the target in the MOP and Rehabilitation Management Plan and align.	Accepted. Address in MOP	31/12/2016

Section	Assessment Requirement	Comment	Audit Classification	Recommended Action	WHC Response	Due Date
		<p>emplacement area. Although there was flexibility between emplacement areas, the total area rehabilitated meets the Year 1 target and is 2.8ha short of the Year 1 and 2 target.</p> <p>Cumulative rehabilitation target (RMP) is 52ha against completion of 49.2ha reported in the AEMR.</p>				

Section	Assessment Requirement	Comment	Audit Classification	Recommended Action	WHC Response	Due Date
2.3	Year 3 - Rehabilitation of approximately 4 ha within the mine pit and approximately 10 ha at the southern end of the Western Emplacement Area. Topsoil utilised for this rehabilitation will be obtained from stripped and stockpiled sources.	<p>AEMR states the total area rehabilitated is generally consistent with the progressive annual rehabilitation proposed in the MOP, with a total of 65.3ha completed to date, which is 7.8ha greater than proposed to occur by MOP Year 3.</p> <p>Cumulative rehabilitation target (RMP) is 66ha against completion of 65.3ha.</p>	NC	Review the target in the MOP and Rehabilitation Management Plan and align.	Accepted. Address in MOP	31/12/2016
2.3	Year 4 - Rehabilitation of approximately 14 ha on the lower slopes of the Northern Emplacement Area to the south, using stripped and stockpiled topsoil.	<p>The AEMR reports the total area rehabilitated is generally consistent with the progressive annual rehabilitation proposed in the MOP with a total of 65.3ha has been completed to date, which aligns with that proposed to occur within MOP Year 5 (2015).</p> <p>Cumulative rehabilitation target (RMP) is 80ha against completion of 65.3ha.</p>	NC	Review the target in the MOP and Rehabilitation Management Plan and align.	Accepted. Address in MOP	31/12/2016
2.5	Where stockpiles become weed infested, the top 150 millimetres should be scalped off and discarded prior to the remaining material being utilised for rehabilitation.	The NSW Pesticides Regulation requires that records be kept of pesticide use (including herbicides). Individual spraying records are maintained. All required information for the NSW Pesticides Regulation with the exception of who has applied the pesticide/herbicide.	ANC	Consider the recording of person/company applying the pesticide onto the current records.	Accepted.	30/09/2016

Section	Assessment Requirement	Comment	Audit Classification	Recommended Action	WHC Response	Due Date
2.8	<p>In developing the rehabilitation monitoring program, the following aspects should be taken into consideration:</p> <ul style="list-style-type: none"> • Sites should be monitored 12 months after establishment and then every two years. 	<p>Table in the RMP indicates monitoring to be completed every two years - review of AEMRs indicates Eco Logical Report completed 2015 is the first report since the report was completed for the Project Extension in 2010.</p>	<p>NC</p>	<p>Consider completing rehabilitation monitoring at the frequencies outlined in the RMP.</p>	<p>Accepted. Address in MOP</p>	<p>31/12/2016</p>

Section	Assessment Requirement	Comment	Audit Classification	Recommended Action	WHC Response	Due Date
6	Five years prior to mine closure, a more detailed Rehabilitation and Mine Closure Plan will be prepared.	Update to the Rehabilitation and Mine Closure Plan currently being prepared. Closure of the site is expected financial year 2019/20 (three to four years away).	ANC	Complete development of plans and issue as soon as practicable.	Accepted. Address in MOP	31/12/2016
<i>Traffic Noise Management Plan</i>						
5.2	<p>The monitoring report will include, as a minimum:</p> <ul style="list-style-type: none"> o the total number of trucks counted during the noise measurement (identified as empty or full); o the total measured LAeq (1 hour) from coal trucks; o the total measured LAeq (1 hour) from all sources to allow comparison of contribution from coal haul trucks comparative to other sources. o details of any identified noisy truck(s); o details of the calculation methodology; and o wind speed and directional data and a discussion of potential meteorological influence on noise levels during each measurement period. 	<p>Review of the last report issued December 2015 indicates following information is included:</p> <ul style="list-style-type: none"> • Total number of trucks – 31, 33 and 35 but not identified as empty or full • Total measured LAeq from coal trucks between 39 and 53dB(A) • Total measured LAeq from all sources not reported • Calculation methodology not detailed • Wind speed and directional data missing from reports. 	ANC	<p>Consider advising Spectrum Acoustics to include total measured LAeq for all sources, calculation method used, number of trucks to include note for whether they were full or empty and wind speed and direction during each measurement period into the Road Noise Monitoring Reports.</p> <p>Ensure monitoring include emission from Vickery Mine once it becomes operational.</p>	Accepted	30/09/2016
7.2	A summary of noise monitoring results will be reported internally on a monthly basis as well as on a quarterly basis to the Community Consultative Committee (CCC) via the Environment Monitoring	Monthly data is located on the website for period 2012 to March 2016.	ANC	Consider reviewing the reporting frequency to align with the CCC meeting frequency and attach the results to the	Accepted. Revise TNMP.	31/10/2016

Section	Assessment Requirement	Comment	Audit Classification	Recommended Action	WHC Response	Due Date
	Report. This report will be periodically uploaded onto the company's website (www.whitehavencoal.com.au).	A quarterly summary of the noise results is not currently included on the website. CCC meetings have moved from quarterly to six monthly therefore monitoring results are reported at this time.		CCC minutes which are uploaded to the website.		

Section	Assessment Requirement	Comment	Audit Classification	Recommended Action	WHC Response	Due Date
<i>Water Management Plan</i>						
3.6	An update of the site water balance will be undertaken on an annual basis as part of the annual review of the WMP, or following any new or modified approval conditions relevant to water management or where there is any change to the operations which are likely to materially change potential impacts	AEMRs report on total water usage and sources of water for usage.	NC	Consider including a table in the Annual Reviews which detail all water sources including rainfall, water losses including evaporation and discharges and final balance.	Accepted.	28/02/2017
4.9.3	Water quality monitoring results for downstream watercourses (Driggle Draggie Creek and the unnamed creek to the south of the site) will be assessed, for each monitoring event, against key default trigger values presented in Table 7 and sourced from the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC, 2000).	Unnamed drainage channel and Driggle Draggie Creek sampled for wet weather discharges analytes only (pH, TSS, TOC, and EC). No further testing or comparison to the ANZECC guidelines listed in Table 7 has occurred.	NC	Consider the review of the water monitoring program and confirm the required analytical program and action accordingly.	Accepted.	30/09/2016
4.9.5	As directed by the EPA (EPA letter dated 21st August 2015), where runoff from coal contact areas is captured in storage dams designed for sediment control, Rocglen Coal Mine will need to establish whether the discharge from these structures contains pollutants that pose a risk of non-trivial harm to human health and/or the environment. As directed by the EPA, trivial versus non-trivial pollutant concentrations can be defined with reference to the default trigger values for toxicants and physical/chemical stressors in the ANZECC (2000) Australian and New Zealand Guidelines for Fresh and Marine	SD3 and Dam 'B' are considered coal contact dams. Additional monitoring of these sites has occurred during the audit period. Comparison to the default trigger values for toxicants and physical/chemical stressors in the ANZECC (2000) Australian and New Zealand Guidelines for Fresh and Marine Water Quality has not been completed in the excel sheet.	ANC	Consider adding a line to the excel database with ANZECC trigger values to enable assessment of results and early detection of any exceedances.	Accepted.	30/09/2016

Section	Assessment Requirement	Comment	Audit Classification	Recommended Action	WHC Response	Due Date
	Water Quality. If a pollutant exceeds the relevant trigger value, it can be considered that it poses a risk of non-trivial harm to human health and/or the environment.					

Section	Assessment Requirement	Comment	Audit Classification	Recommended Action	WHC Response	Due Date
4.9.5	Rocglen Coal Mine will implement a monitoring program to address this data deficiency. This monitoring program is proposed to include sampling of waters from SD3 and Dam 'B' for parameters including the physio-chemical parameters pH, EC, TSS, organic nutrients, dissolved metals and oil and grease.	Monitoring is completed for pH Electrical Conductivity (µS/cm), Total Suspended Solids (mg/L), Total Organic Carbon (TOC), Grease & Oil (mg/L), Antimony, Selenium, Arsenic, Molybdenum.	NC	Consider the monitoring of all listed parameters such as organic nutrients and dissolved metals as listed in Table 7	Accepted	30/09/2016
4.9.6	A program to monitor creek line channel stability and health of riparian vegetation within Driggle Draggie Creek and the unnamed creek to the south of the site would be undertaken throughout the mine life. The monitoring would be undertaken along a short length of the downstream watercourses. General observations of stream health will be recorded during the quarterly water quality monitoring for these watercourses. Monitoring of the drainage lines would include: <ul style="list-style-type: none"> • Documenting general observations of water quantity and quality; • Documenting locations and dimensions of significant erosive or depositional features so that any subsequent changes can be evaluated quantitatively; 	Eco Logical completed monitoring for Spring 2014 to Autumn 2015 but includes rehabilitation monitoring only. Quarterly sampling of the creek limited to water quality sampling.	NC	Consider completing a review of the creek monitoring program and action accordingly.	Accepted	30/06/2017
4.9.8	The results will also be compared to relevant site operations and meteorological conditions to further interpret the results. This comparison between samples, between sampling periods and against other factors	Review of Excel spreadsheet – comments column includes comment if rainfall has exceeded 90%tile or if no discharge.	ANC	If no discharge then consider adding results to surface water sampling sheet to remove confusion. In addition consider	Ambient water monitoring results that are collected when the site has not	30/09/2016

Section	Assessment Requirement	Comment	Audit Classification	Recommended Action	WHC Response	Due Date
	will assist in identifying whether the activities on the site are in fact affecting the water quality of the local catchment.	No comment on operations is noted.		adding the rainfall reviewed the prior 5 days and note the activities on site that may impact water quality e.g. earthworks completed in western emplacement area with catchment to western drainage line etc.	discharged will be clearly labelled in the spreadsheet to avoid confusion.	

Section	Assessment Requirement	Comment	Audit Classification	Recommended Action	WHC Response	Due Date
5.4.3	Groundwater impact assessment criteria are contained in Table 10 below, and show trigger levels for groundwater levels and quality (pH, EC, TDS).	<p>Overview of groundwater results indicate following:</p> <p>WP5A - water levels have dropped 15metres with the bore now substantially dry. The AEMR reports that Douglas Partners predicted that at the end of the northern phase of mining during the extension of the pit, MP-5 / MP-5a could be drawn down by up to 13.4m. Results indicate that the actual drop of approximately 15.22m in SWL is slightly higher than this prediction.</p> <p>MP6 - EC is trending down indicating potential rain/freshwater impacts.</p> <p>MP7 - pH is rising and TDS is falling.</p>	NC	Investigation needs to be completed on groundwater results to confirm trigger levels for investigation have been reached in MP6 and MP7.	Accepted.	30/09/2016
5.4.5	<p>The following two methods are used to estimate groundwater inflows to the mining operations:</p> <ul style="list-style-type: none"> Whitehaven will monitor the volume of water pumped out of the pit. If this coincides with a period of low or no rainfall, this will be used directly as a measure of groundwater inflow. If this occurs during periods of rainfall the site water balance model will be used to estimate the rainfall runoff component and, by subtraction, estimate the groundwater inflow; and 	<p>Water balance not currently reported in the AEMR.</p> <p>Monitored bore levels are not currently used to calculate groundwater flow rates to the pit.</p>	NC	<p>Consider including a table in the Annual Reviews which detail all water sources including rainfall, water losses including evaporation and discharges and final balance.</p> <p>Consider using bore levels (mAHD) to assist with the calculation of groundwater flow rates to the pit.</p>	<p>Accepted</p> <p>Reporting will be undertaken in accordance with Annual Review Guidelines</p> <p>Accepted.</p>	<p>28/02/2017</p> <p>31/12/2016</p>

Section	Assessment Requirement	Comment	Audit Classification	Recommended Action	WHC Response	Due Date
	<ul style="list-style-type: none">• Monitored bore water levels is used to estimate groundwater gradients towards the open cut pit, by triangulation. Estimated gradients would be used together with estimates of strata permeability to calculate groundwater flow rates toward the pit. This would be estimated annually as part of the groundwater model verification.					