

Summary of 2020 Independent Environmental Audit Findings and TCM's Responses

Item No	Assessment Requirement	Comment	Audit Classification	Auditor Comment	TCM Response/ Status						
Minister's Conditions of Approval PA 11_0047											
Schedule 2 condition15	<p>The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works; and • Part 8 of the EP&A Regulation sets out the requirements for the certification of the project. 	<p>A new maintenance workshop was constructed in 2020. The building has not been yet been commissioned. An occupation certificate has been sought from Narrabri Shire Council but not yet received.</p>	C (Obs)	<p>Ensure an occupation certificate is obtained prior to use.</p>	<p>TCM received the occupation certificate from GMA Certification Group in August 2020. Item closed.</p>						
Schedule 3 condition3	<p>Except for the noise-affected land in Table 1 the Proponent shall ensure that operational noise generated by the project does not exceed the criteria in Table 2Table 2 at any residence on privately-owned land.</p> <p><i>Table 2: Noise criteria dB(A)</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Land</th> <th style="text-align: center;">Day, Evening & Night LAeq(15 min)</th> <th style="text-align: center;">Night LA1 (1 min)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">All other privately-owned residences</td> <td style="text-align: center;">35</td> <td style="text-align: center;">45</td> </tr> </tbody> </table> <p>Notes:</p> <ul style="list-style-type: none"> • <i>Operational noise includes noise from the mining operations and the use of private roads (excluding the Kamilaroi Highway overpass) and rail spurs.</i> • <i>Noise is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions (also see condition 13)), of the NSW Industrial Noise Policy.</i> <p>However, these noise criteria do not apply if the Proponent has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Proponent</p>	Land	Day, Evening & Night LAeq(15 min)	Night LA1 (1 min)	All other privately-owned residences	35	45	<p>The following noise exceedance were reported during the audit period:</p> <p>7/6/19 – monitoring location TN2 on privately owned land. Day time exceedance of 42 dB recorded during quarterly attended noise monitoring.</p> <p>Following the reported exceedance TCM engaged an independent specialist to review the monitoring data and methods. It was concluded that the monitoring location was on the road not at the residence and SLR did not apply a factor accounting for this. No</p>	NC	<p>Comply with direction form EPA with regard to the reported noise exceedance.</p>	<p>Noted. Item closed</p>
Land	Day, Evening & Night LAeq(15 min)	Night LA1 (1 min)									
All other privately-owned residences	35	45									

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	has advised the Department in writing of the terms of this agreement.	<p>further exceedances have been recorded during subsequent attended noise monitoring events.</p> <p>The incident was reported to DPIE and EPA. DPIE confirmed EPA as the regulating authority. TCM is awaiting a response from EPA.</p>	NC					
Schedule 3 condition8	<p>The Proponent, together with the owners of the Rocglen and Vickery coal mines, shall ensure that the noise generated on public roads by the Project and the other mines, does not exceed the criteria in Table 4 at any existing residence on privately-owned land.</p> <p><i>Table 4: Road traffic noise criteria dB(A)</i></p> <table border="1"> <thead> <tr> <th>Land</th> <th>Day and Evening LAeq (15 hour)</th> </tr> </thead> <tbody> <tr> <td>All privately-owned residences</td> <td>60</td> </tr> </tbody> </table> <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> <p><i>Note: Traffic noise generated by the Project is to be measured in accordance with the relevant procedures in the NSW Road Noise Policy.</i></p>	Land		Day and Evening LAeq (15 hour)	All privately-owned residences	60	<p>Noise monitoring is conducted at three locations along the haul road on a six monthly basis. No exceedances in noise criteria have been recorded during the audit period.</p> <p>Noise monitoring on the haul road was not carried out in the six month ending December 2017. TCM identified the issue and notified DPIE and conducted the monitoring in January 2018. DPIE issued an official caution on 23 March 2018.</p> <p>Monitoring has been conducted as required during 2018, 2019 and 2020.</p>	Historic NC. No further action
Land	Day and Evening LAeq (15 hour)							
All privately-owned residences	60							

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Schedule 3 condition15	The Proponent shall only carry out blasting on the site between 9 am and 5 pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Secretary.	<p>Auditor reviewed blast monitoring records, no blasts occurred on Sunday. Time of blast was recorded to be 00:00:00 for approximately 60% of blasts in 2018.</p> <p>Time was not recorded for 4 blast events between 18 and 30 May 2020 and one blast even on 14 July 2020. All other blasts were recorded to be carried out between the hours 9am to 5pm.</p>	C (Obs)	Ensure accurate blast times are recorded (Duplicate finding see EPL)	TCM has updated the blast register and added missing blast times. No further action required, item closed.
Schedule 3 condition19	<p>During mining operations on site, the Proponent shall:</p> <p>(a) implement best practice blasting management to:</p> <ul style="list-style-type: none"> • protect the safety of people and livestock in the surrounding area; • protect public or private infrastructure/property in the surrounding area from any damage; • minimise the dust and fume emissions of any blasting; and • minimise blasting impacts on heritage items in the vicinity of the site; <p>(b) co-ordinate the timing of blasting on site with the timing of blasting at other mines within the Leard Forest Mining Precinct to minimise the cumulative blasting impacts of the mines; and</p> <p>(c) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site,</p> <p>to the satisfaction of the Secretary.</p>	<p>TCM has implemented a Blast Management Plan which complies with this condition.</p> <p>Communication with other mines is conducted by email. The distribution list also includes NSW Forestry. Notification email includes the scheduled time of the blast, location and map with the exclusion zone.</p> <p>Information regarding scheduled blasts is posted on the company</p>	NC	Historic NC. No further action	No action required. Item closed

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		<p>website and on a board at the site entrance.</p> <p>TCM failed to notify a landowner for a blast on the 18 January 2018.</p> <p>DPIE was notified and issued a warning letter on 8 March 2018.</p>			

Statement of Commitments

No non-compliances have been identified.

Environmental Protection Licence 12365

L2.1	For each monitoring/discharge point or utilisation area specified in the table below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.	<p>TCM had a wet weather discharge event from the EPL ID 3 (SB14) on 8 February 2020. Oil and grease was recorded to be 11mg/L exceeding the 10mg/L limit. The EPA issued a Show Cause on 25 June 2020 and TCM responded on 9 July 2020. TCM is awaiting a response from EPA.</p> <p>The TSS limit was exceeded at EPL ID 1, 2, 3 and 27. However, this was not considered an exceedance, as TSS limits do not apply after</p>	NC	Comply with the direction from EPA with regard to the Show Cause.	Penalty infringement notice received from the EPA. Item closed
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		<p>more than 38.3mm of rainfall in 5 days preceding the discharge.</p> <p>TCM had a discharge from EPL ID 1 on 21 October 2018. TSS value was recorded to be 3,970. However this was not considered an exceedance as TSS limits do not apply after more than 38.3mm of rainfall in 5 days preceding the discharge</p>			
L2.5	<p>The Total Suspended Solids concentration limits specified for Points 1, 2, 3, 24, 26 and 27 may be exceeded for water discharged provided that:</p> <ul style="list-style-type: none"> a) the discharge occurs solely as a result of rainfall measured at the premises that exceeds 38.4 millimetres over any consecutive 5 day period immediately prior to the discharge occurring; and b) all practical measures have been implemented to dewater all sediment dams within 5 days of rainfall such that they have sufficient capacity to store run off from a 38.4 millimetre, 5 day rainfall event. <p>Note: 38.4 mm equates to the 5 day 90%ile rainfall depth for Gunnedah sourced from Table 6.3a Managing Urban Stormwater: Soils and Construction Volume 1: 4th edition, March 2004.</p>	<p>TCM had a wet weather discharge event from the EPL ID 3 (SB14) on 8 February 2020. The TSS limit was recorded to be 17,700 mg/L. However, this was not considered an exceedance, as TSS limits do not apply after more than 38.3mm of rainfall in 5 days preceding the discharge.</p> <p>The EPA undertook an investigation of the discharge from LDP 3 (SB14) on 8 February 2020. The EPA's investigation found that</p>	NC	Duplicate NC. Refer to L2.1 above	As above (L2.1). Item closed

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		<p>the discharge from SB14 may have polluted waters, in that:</p> <ul style="list-style-type: none"> • The discharge exceeded licence limit conditions for Oil and Grease, and • At the time of discharge the Licensee did not meet all the requirements of condition L2.5, in that it did not appear to take all reasonable steps to ensure that all sediment dams were emptied within 5 days of the last preceding rainfall event. Had this occurred, exceedance of the discharge limits may have been avoided. • SB14 discharges into 			

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		<p>Goonbri Creek, which defined as waters under the Act.</p> <p>Interview with Site Environmental Superintendent indicated TCM is awaiting a final response from the EPA regarding this matter.</p>													
L4.1	<p>Noise generated at the premises must not exceed the noise limits in the table below.</p> <table border="1" data-bbox="359 732 1003 1013"> <thead> <tr> <th data-bbox="359 732 516 886">Locality and Location</th> <th data-bbox="516 732 634 886">Day-LAeq (15 minute)</th> <th data-bbox="634 732 768 886">Evening-LAeq (15 minute)</th> <th data-bbox="768 732 884 886">Night-LAeq (15 minute)</th> <th data-bbox="884 732 1003 886">Night-LA1 (1 minute)</th> </tr> </thead> <tbody> <tr> <td data-bbox="359 886 516 1013">All other surrounding residences</td> <td data-bbox="516 886 634 1013">35</td> <td data-bbox="634 886 768 1013">35</td> <td data-bbox="768 886 884 1013">35</td> <td data-bbox="884 886 1003 1013">45</td> </tr> </tbody> </table>	Locality and Location	Day-LAeq (15 minute)	Evening-LAeq (15 minute)	Night-LAeq (15 minute)	Night-LA1 (1 minute)	All other surrounding residences	35	35	35	45	<p>Quarterly attended noise monitoring resulted in one occurrence of the attended monitoring measurement of 42dB (including 2dB Noise Modifying factor applied as per the Noise Policy for Industry) at the 'Coomalgah' monitoring point. TCM engaged a separate noise specialist to take supplementary operational noise monitoring. The results showed that throughout the entire period there were no recorded noise non-compliances. TCM is awaiting feedback from EPA with regard to this incident.</p>	NC	Comply with the directions of EPA.	Noted. Item closed.
Locality and Location	Day-LAeq (15 minute)	Evening-LAeq (15 minute)	Night-LAeq (15 minute)	Night-LA1 (1 minute)											
All other surrounding residences	35	35	35	45											

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L4.4	<p>Determining compliance</p> <p>To determine compliance:</p> <ul style="list-style-type: none"> a) with the Leq(15 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located: <ul style="list-style-type: none"> i) approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or 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 iii) within approximately 50 metres of the boundary of a National Park or a Nature Reserve. 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. c) with the noise limits in the Noise Limits table, the noise measurement equipment must be located: <ul style="list-style-type: none"> i) at the most affected point at a location where there is no dwelling at the location; or ii) at the most affected point within an area at a location prescribed by part (a) or part (b) of this condition. 	<p>Monitoring locations are stated in the Noise Management Plan (2015) and the quarterly monitoring reports. Auditor observed a sample of noise monitoring locations while on Site.</p> <p>Interview with Site Environmental Superintendent indicated that noise monitoring cannot be conducted within 30 m of the residence at night due to privacy concerns. TCM requested a variation to the EPL condition, however, this was not approved.</p>	C (Obs)	Continue to discuss night-time noise monitoring locations with the EPA.	<p>In the most recent EPL variation (Jan 2020) EPA stated: <i>“This condition is a standard condition and cannot be amended. Where agreements with landholders have been reached and where it is not feasible or reasonable to monitor as per the requirements of L4.4, the EPA uses regulatory discretion when considering if any breaches of the monitoring requirements”.</i> Item closed.</p>
L5.5	Blasting operations on the premises must only be carried out between the hours 9am to 5pm, Monday to Saturday, inclusive.	Auditor reviewed blast monitoring records, no blasts occurred on Sunday. Time of blast was recorded to be	C (Obs)	Ensure accurate blast time is recorded.	As noted above under response for PA11_0047 Schedule3 Condition 15.

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		<p>00:00:00 for approximately 60% of blasts in 2018.</p> <p>Time was not recorded for 4 blast events between 18 and 30 May 2020 and one blast even on 14 July 2020. All other blasts were recorded to be carried out between the hours 9am to 5pm.</p>			No further action required. Item closed.
O2.1	<p>All plant and equipment installed at the premises or used in connection with the licensed activity:</p> <p>a) must be maintained in a proper and efficient condition; and</p> <p>b) must be operated in a proper and efficient manner.</p>	<p>During the Site inspection, no observations were made of unmaintained or inappropriately operated equipment.</p> <p>The EPA undertook an investigation into the discharge of sediment laden water from sediment dam SB 14 on or around 8 February</p> <p>The EPA's investigation found that the discharge from SB14 may have polluted waters, in that the licensee appears to have failed to maintain and operate SB14 in a proper and efficient manner prior to the</p>	NC	Duplicate NC. Refer L2.1	As above (L2.1). Item closed.

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		<p>discharge on the 8 February 2020.</p> <p>Interview with Site Environmental Superintendent indicated TCM is awaiting a final response from the EPA regarding this matter.</p> <p>TCM is currently working with environmental professionals to implement water management improvements including staff training, risk assessment, and water pumps.</p>											
M7.3	<p>For the purpose of conditions M7.1, M7.2 and M7.3 the monitoring locations are described as:</p> <table border="1" data-bbox="359 948 1003 1398"> <thead> <tr> <th data-bbox="359 948 646 976">EPA ID No.</th> <th data-bbox="646 948 1003 976">Description of Location</th> </tr> </thead> <tbody> <tr> <td data-bbox="359 976 646 1008">N2</td> <td data-bbox="646 976 1003 1008">Portable monitor</td> </tr> <tr> <td data-bbox="359 1008 646 1256">TN2</td> <td data-bbox="646 1008 1003 1256">Within 30 metres of the 'Matong' property boundary as shown within 30 metres of the 'Matong' property boundary as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).</td> </tr> <tr> <td data-bbox="359 1256 646 1398">TN3</td> <td data-bbox="646 1256 1003 1398">Within 30 metres of the residence on the property 'Barbers Lagoon' as shown on the map entitled "EPL12365 Monitoring Locations Onsite</td> </tr> </tbody> </table>	EPA ID No.	Description of Location	N2	Portable monitor	TN2	Within 30 metres of the 'Matong' property boundary as shown within 30 metres of the 'Matong' property boundary as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).	TN3	Within 30 metres of the residence on the property 'Barbers Lagoon' as shown on the map entitled "EPL12365 Monitoring Locations Onsite	<p>The auditor observed a sample of noise monitoring locations in the field. Monitoring locations are stated in the NMP and in quarterly monitoring reports.</p> <p>Interview with Site Environmental Superintendent indicated that noise monitoring cannot be conducted within 30 m of the residence at night. TCM requested a variation to the EPL condition,</p>	NC	Duplicate NC. Refer above	As above in EPL12365, L4.4. Item closed.
EPA ID No.	Description of Location												
N2	Portable monitor												
TN2	Within 30 metres of the 'Matong' property boundary as shown within 30 metres of the 'Matong' property boundary as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).												
TN3	Within 30 metres of the residence on the property 'Barbers Lagoon' as shown on the map entitled "EPL12365 Monitoring Locations Onsite												

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	<table border="1"> <tr> <td></td> <td>and Offsite" received by EPA on 14 October 2019 (DOC19/978674).</td> </tr> <tr> <td>TN4</td> <td>Within 30 metres of the residence on the property 'Bungalow' as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).</td> </tr> <tr> <td>TB2</td> <td>Within 30 metres of the residence on the property Coomalgah as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).</td> </tr> </table> <p>Note: Point N2 is a portable monitor enabling the monitor to be relocated to areas of potential greatest impact. The licensee is responsible to ensure that it is located at the most suitable location.</p> <p>Note: The location, frequency of monitoring and the parameters to be monitored may be varied by the EPA once the variability of the noise impact is established.</p>		and Offsite" received by EPA on 14 October 2019 (DOC19/978674).	TN4	Within 30 metres of the residence on the property 'Bungalow' as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).	TB2	Within 30 metres of the residence on the property Coomalgah as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).	however, this was not approved.			
	and Offsite" received by EPA on 14 October 2019 (DOC19/978674).										
TN4	Within 30 metres of the residence on the property 'Bungalow' as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).										
TB2	Within 30 metres of the residence on the property Coomalgah as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).										
R4.1	<p>A noise compliance assessment report must be submitted to the EPA within thirty (30) days of the completion of the quarterly noise monitoring. The assessment must be prepared by a suitably qualified and experienced acoustical consultant and include:</p> <p>a) an assessment of compliance with noise limits detailed in the limit conditions of this licence; and</p>	Last quarterly attended noise monitoring report for 2017 was not submitted within 30 days of completion of monitoring.	NC	Historic NC. No further action required.	Reported within the Annual Return 2017. Noted. Item closed.						

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	an outline of any management actions taken within the monitoring period to address any exceedances of the limits detailed in the limit conditions of this licence.				
Mining Licence 1579					
Condition 2.3b	(2) A Plan must be lodged with the Director-General:- (a) (b) subsequently as appropriate prior to the expiry of any current Plan; and	TCM was required to update MOP amendment C to report on progress against rehabilitation undertakings by 1 April 2019. TCM submitted amendment D on 15 March 2019. Amendment D was approved on 12 April 2019. The DRG issued a caution letter to TCM for continuing operations between the 2 and 11 April 2019 without an approved MOP. Amendment E was lodged on the 19 December 2019.	NC	Historic NC. No further action required.	No action required. Item closed.
Mining Licence 1693					
Condition 12.	Prospecting operations must be carried out in a manner that does not cause or aggravate air pollution, water (including groundwater) pollution, soil contamination or erosion, unless	Site inspection by the auditor identified that erosion and sediment control on-site is	NC	Duplicate NC. Refer to EPL	Item closed

<p>otherwise authorised by a relevant approval, and in accordance with an accepted Mining Operations Plan.</p>	<p>managed with basins and progressive rehabilitation. Water carts were observed working on site to manage dust. A dust suppressant is also utilised.</p> <p>An exceedance of the EPL limits for oil and grease was recorded for Dam SD14 on 8 February 2020.</p> <p>An uncontrolled discharge from Dam SD2 occurred on 10 February 2020 due to a wall failure after a significant rainfall event. A penalty notice was issued by the EPA.</p> <p>Areas of significant erosion were observed above SD14.</p> <p>TCM is currently working with environmental professionals to implement water management improvements including staff training, risk assessments and water pumps.</p> <p>Environmental Superintendent indicated</p>			
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		that weather conditions monitored prior to blasts such that the blast is only carried out during conditions to prevent fugitive dust migration.			
Mining Licence 1685					
No non-compliances have been identified					No action required
Mining Licence 1749					
No non-compliances have been identified					No action required