

Bulli Seam Operations (BSO) Independent Environmental Audit 2022 - Revision 1 South32 Illawarra Metallurgical Coal (IMC) Action Response Table

Project Approval 08_0150

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	IMC Response December 2022
<i>Obligation to Minimise Harm to the Environment</i>					
Condition 1 of Schedule 2	The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the project.	<p>While site containment structures were relatively old, reflecting the age of the operation, they appeared to work effectively in general. Several containment areas and drains contained significant amounts of coal dust and other waste materials. However, they were still functioning and site personnel informed the auditor that they were about to be serviced and emptied.</p> <p>Pit tops drainage and water recycling and treatment systems were inspected and appear to be functioning well.</p> <p>Solid waste segregation bins were observed at most pit tops. Where waste is deposited into a single bin, this is segregated at the landfill site for recycling, as evidenced from monthly Waste and Recycling Reports by the contractor.</p> <p>Relatively large quantities of varied materials were stored outside of buildings at each of the pit tops. While these included inert materials stored on concrete pads connected to the stormwater collection system at Appin North and East, there were large</p>	NC	Whilst material harm has not been identified, it is recommended that items that have the potential to cause contamination (such as items containing oil and fuels) should be placed on bunded concrete pads that drain to treatment facilities.	<p>The spills identified are considered to be minor in nature and have resulted in localised surface staining only. Areas where spillage was observed report to the on-site water treatment system. It is not considered that these spills have caused actual or have the potential to cause material environmental harm.</p> <p>IMC will investigate and implement reasonable and feasible measures to improve housekeeping, in particular, the storage of items with potential to leak oil and other</p>

		<p>quantities of materials stored unprotected directly on gravel and soil at Appin West. Several items stored here contained hoses and other vessels with leaking oil and other fluids. There were numerous stains visible across the gravel storage areas that were derived from fluids other than water and indicative of localised ground contamination.</p> <p>There is an opportunity to erect roofs above waste deposition areas to divert rainwater away from these areas, reducing the volume of water that would need treating.</p> <p>A reverse osmosis plant has been constructed at West Cliff to treat water. At the time of the audit, the plant had not been commissioned. Site management reported that commissioning of the plant was imminent.</p>			<p>fluids. Improvements made will be reported within the relevant Annual Review.</p> <p>Date: Ongoing</p>
<p>Condition 12 of Schedule 2</p>	<p>The Proponent shall ensure that all the plant and equipment used on site is:</p> <ul style="list-style-type: none"> (a) Maintained in a proper and efficient condition; and (b) Operated in a proper and efficient manner. 	<p>The example pre-start light vehicle (2020, 2021, 2022) and truck (2022) checklist indicated the vehicles were in good working order and routinely checked.</p> <p>Example inspection records from a range of locations (including Brennans Creek Dam, STP, emplacement rehabilitation area (2020, 2021, 2022) demonstrated improvement and maintenance activities.</p> <p>A sample work order for pH probe replacement demonstrated replacement of faulty equipment.</p> <p>However, on 3 January 2022, there was a release of a small volume of ferric chloride to the</p>	<p>NC</p>	<p>Modification to the ferric chloride bund was undertaken during the audit period to re-instate adequate secondary containment. No further actions are necessary.</p>	<p>No further action is required.</p>

		sediment pond, associated with modification works to the concrete bund containing the ferric chloride. However, no release to the environment occurred. Due to the failure to properly provide containment for the ferric chloride, BSO is considered non-compliant with this condition.			
Extraction Plans					
Condition 5 of Schedule 3	The Proponent shall prepare and implement an Extraction Plan for first and second workings within each longwall mining domain to the satisfaction of the Planning Secretary. Each extraction plan must:	<p>There appears to have been a systematic overprediction of the vertical subsidence above the chain pillars whilst the maximum subsidence has been well predicted. This implies that there is an underprediction for the components above the extraction panels themselves. A possible consequence of this systemic overprediction is that tilts and curvatures may have been slightly underpredicted.</p> <p>The prediction method is apparently based on interpretation of a large data base without any resort to engineering principles. The prediction method does not separate pillar subsidence from sag above the extraction.</p> <p>The prediction method was modified in 2022 for the predictions related to 709-711 and 905.</p> <p>Maximum vertical subsidence is being acceptably predicted but the component above the pillars is being overpredicted which implies that there is an underprediction for the components above the extraction panels themselves.</p>	NC	Attach the Seismic Monitoring Annual Reports to Annual Reviews	<p>Seismic Event Monitoring Reports will be attached to future Annual Reviews or the Seismic Event Monitoring Program will be revised to remove this requirement.</p> <p>Date: 30 September 2023</p>

		According to the Bulli Seam Seismic Regional Seismic Event Monitoring Program S6.3, an annual report will be produced to be included in the Annual Review. Although ERM understands the Seismic Monitoring Reports have been prepared, no Seismic Event Monitoring reports are included in the Annual Reviews and none have been able to be reviewed by auditor as required by this condition, therefore BSO is non-compliant.			
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Noise Impact Assessment Criteria

Condition 2 of Schedule 4	From the end of December 2014, the Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 2 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.	The following non-compliances were recorded during the audit period:	NC	Issue resolved during audit period, therefore no further recommendations are made at this time.	No further action is required.																																		
	Table2: Noise Criteria dB(A)	27 Nov 2019 (Location AE-NS5) at night-time period 20 May 2020 (Location AE-NS5) at night-time period 11 Aug 2020 (Location AE-NS5) at day, evening and night-time 10 Nov 2020 (Location AE-NS5) at day, evening and night-time 18 May 2021 (Location AE-NS5) at evening and night-time																																					
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Area	Receiver Number	LAeq (15min)	LAeq (15min)	LAeq (15min)	LA1 (1min)	
Appin No. 3 receivers	58, 67, 71, 72	41	41	41	49	
	68, 74, 75	40	40	40		
	69, 70, 76	39	39	39		
	217-218, 233, 279-282	35	35	35		
Appin No.1 and No.2 Receivers	82, 91, 216	42	42	42	50	
	83, 85	41	41	41		
	78, 84, 86-90, 199	40	40	40		
	212-215, 226, 228-230, 232, 234, 235	35	35	35		
Appin Township	136, 137, 139, 142, 143	44	44	44	52	
	135	43	43	43		
	All other privately owned property	44	44	44		
Douglas Park	All privately owned residences	45	45	39	49	
All other privately owned land (excluding receivers in Table 3)		35	35	35	45	
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.						
Operating Conditions						
Condition 11 of Schedule 4	The Proponent shall:	Water trucks were observed by the auditor and truck washing areas were observed to be operational.		NC	Addressed during audit period via changes to the underground ventilation system. No further recommendations made.	No further action is required.

	<p>a) implement best practice air quality management on site, including all reasonable and feasible measures to minimise the off-site odour, fume and dust emissions generated by the project, including from any spontaneous combustion on site,</p> <p>b) minimise any visible air pollution generated by the project; and</p> <p>c) regularly assess the air quality monitoring and meteorological forecasting data, and relocate, modify and/or stop operations on site to ensure compliance with the relevant conditions of this approval; to the satisfaction of the Planning Secretary.</p>	<p>The site escort was observed sending water trucks to different areas during the site inspection to address dry roads, indicating personnel vigilance in suppressing dust.</p> <p>Meteorological stations were observed in various locations. Meteorological data is used to inform evaluation of compliance with air quality criteria, as well as when evaluating noise data.</p> <p>On 22 August 2020, a release of stone dust occurred at Ventilation Shaft 6, which resulted in visible air pollution. Dust emissions occurred at approximately 9.45 am for approximately one hour. Following an investigation it was concluded that no environmental harm occurred.</p> <p>The cause was attributed to a change in underground ventilation system – and was addressed through the change management process.</p> <p>An external meteorological contractor is used to warn the site of impending adverse weather conditions for dust so that preventive road and haul road watering can be undertaken.</p>			
Surface Water Discharges					
<p>Condition 15 of Schedule 4</p>	<p>The Proponent shall ensure that all surface water discharges from the site (including from the Brennans Creek Dam) comply with the discharge limits (both volume and quality) set for the project in any EPL.</p>	<p>The following non-compliances were identified:</p> <ul style="list-style-type: none"> ■ On 5 November 2019 and 8 January 2020, 137 mg/L and 56 mg/L BOD respectively, were recorded at Appin West, representing exceedances of the 100th percentile water 	<p>NC</p>	<p>Changes were made to the monitoring system during the audit period and no further recommendations are made at this time.</p>	<p>No further action is required.</p>

		<p>quality criteria of 50 mg/L. The first event was related to erroneous re-direction of effluent water due to tripping from control equipment power failure. The second event was caused by inefficient treatment system set-up.</p> <ul style="list-style-type: none"> ■ On 7 February 2020, 51 mg/L BOD was recorded at Appin North, representing an exceedance of the 100th percentile water quality criteria of 50 mg/L. Excessive quantities of soap entered the sewage system, affecting the STP microbial flora and its effectiveness. ■ On 31 July and 1 August 2020, discharge volumes recorded were 106.6 kL/day and 105.8 kL/day respectively, exceeding the allowable limit of 80 kL/day. <p>Changes were made to the monitoring system during the audit period to address the various causes of non-compliance, including adjustments to the control system, pond/tank functionality and personnel education on the impacts of excessive soap use.</p>			
Access to Information					
Condition 11 of Schedule 6	<p>From 30 June 2012, the Proponent shall:</p> <p>(a) make copies of the following publicly available on its website:</p> <ul style="list-style-type: none"> • the documents referred to in Condition 2 of Schedule 2; • all current statutory approvals for the project; • all approved strategies, plans and programs required under the conditions of this approval; • a comprehensive summary of the monitoring results of the project, reported in accordance with the 	<p>On 20th April 2020, a community member notified the Community Consultative Committee that minutes had not been updated recently on the IMC website. BSO rectified the situation at the time of the complaint and up to date minutes were available on the website at the time of the audit. The website was up to date at time of audit.</p>	NC	<p>The website was updated during the audit period and no further recommendations are made at this time.</p>	<p>No further action is required.</p>

	<p>specifications in any conditions of this approval, or any approved plans and programs;</p> <ul style="list-style-type: none">• a complaints register, updated on a monthly basis;• minutes of CCC meetings;• the annual reviews of the project;• any independent environmental audit of the project, and the Proponent's response to the recommendations in any audit;• any other matter required by the Planning Secretary; and <p>(b) keep this information up-to-date, to the satisfaction of the Planning Secretary.</p>				
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Schedule 8A Mining Regulation

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	IMC Response December 2022
4	<p>Must prevent or minimise harm to environment</p> <p>(1) The holder of a mining lease must take all reasonable measures to prevent, or if that is not reasonably practicable, to minimise, harm to the environment caused by activities under the mining lease.</p> <p>(2) In this clause— harm to the environment has the same meaning as in the Protection of the Environment Operations Act 1997.</p>	<p>This condition is assessed as non-compliant in the Project Approval, Sch 2, C1.</p>	NC	N/A – Duplicate NC	<p>Duplicate non-compliance. Refer to response to Project Approval, Sch 2, C1 above (Item No. 2.1).</p>
16	<p>Certain documents to be made publicly available</p> <p>(1) This clause applies to the following documents— (a) a rehabilitation management plan, (b) a forward program, (c) an annual rehabilitation report.</p> <p>(2) The holder of a mining lease must make a document to which this clause applies publicly available by— (a) publishing it on its website in a prominent position, or (b) if the holder does not have a website— providing a copy of it to a person— (i) on the written request of a person, and (ii) without charge, and (iii) within 14 days after the request is received.</p> <p>(3) If a document is published on the website of the holder of the mining lease, the holder must ensure that it is published— (a) for a rehabilitation management plan—within 14 days after it is prepared or amended, or (b) for a forward program or an annual rehabilitation report—within 14 days after it is given to the Secretary or amended,</p> <p>(4) Personal information within the meaning of the <i>Privacy and Personal Information Protection Act 1998</i> is not required to be included in a document made available to a person under this clause.</p>	<p>(1) The Rehabilitation Management Plan, Forward Program, and annual rehabilitation report (in Annual Review) are available on the IMC website, as verified by the auditor. The Forward Program was not published within 14 days of being provided to the Resources Regulator.</p> <p>(2) Noted (3) Noted (4) Noted</p>	NC	N/A	<p>Requirements under Schedule 8A of the Mining Regulation have been included in the IMC obligations management system and allocated to be actioned by the Environment Team to satisfy these requirements.</p> <p>No further action is required.</p>

Consolidated Coal Leases 724 and 767

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	IMC Response December 2022
2. CCL 724 and 767	<p>Environmental Harm</p> <p>a) The lease holder must implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or rehabilitation of any activities under this lease.</p> <p>b) For the purposes of this condition:</p> <p>i. Environment means components of the earth, including:</p> <ul style="list-style-type: none"> • Land, air and water, and • Any layer of the atmosphere, and • Any organic or inorganic matter and any living organism, and • Human-made or modified structures and areas, and includes interacting natural ecosystems that include components referred to in paragraphs (A)-(C). <p>ii. Harm to the environment includes any direct or indirect alteration of the environment that has the effect of degrading the environment and, without limiting the generality of the above, includes any act or omission that results in pollution, contributes to the extinction or degradation of any threatened species, populations or ecological communities and their habitats and causes impacts to places, objects and features of significance to Aboriginal people.</p>	<p>This condition is assessed as non-compliant in the Project Approval, Sch 2, C1.</p> <p>The lease holder did not implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the operation of any activities under this lease. ERM observed non-compliances related to the storage of materials used to carry out the activities, which included: materials stored unprotected directly on gravel and soil; hoses and other vessels with leaking oil and other fluids; and numerous stains visible across the gravel storage areas that were derived from fluids other than water.</p>	NC	N/A – Duplicate NC	Duplicate non-compliance. Refer to response to Project Approval, Sch 2, C1 above (Item No. 2.1).

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	IMC Response December 2022
36. CCL 724	<p style="text-align: center;">SCHEDULE 'A'</p> <p>The leaseholder must comply with the <i>Persoonia hirsuta</i> Offset Management Plan approved (and modified if applicable) in accordance with the requirements of the Bulli Seam Operations Expansion, Bulli, NSW (EPBC 2010/5350) Approval dated 15 May 2012, made under sections 130(1) and 133 of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act Approval).</p> <p>The leaseholder must provide the Secretary of the Department of Trade and Investment, Regional Infrastructure and Services with a copy of the Compliance Report required by condition 14 of the EPBC Act Approval at the same time that the report is published in accordance with the requirements of condition 14. The leaseholder must also provide the Secretary with a copy of the Audit Report required by condition 18 of the EPBC Act Approval as soon as practicable following confirmation that the Audit Report addresses the audit criteria to the satisfaction of the Minister responsible for the administration of the EPBC Act (or their delegate)</p>	<p>ERM reviewed Correspondence from IMC to EPBC and the Resource Regulator dated 12 August 2022 submitting respective Annual Compliance Report. Non-compliances were identified for the submission of the Compliance Reports 2020 and 2021 to the NSW Resource Regulator at the same time that the report is published in accordance with the requirements of Condition 14.</p> <p>ERM reviewed Correspondence from IMC to EPBC and the Resource Regulator dated 24 December 2019 submitting a copy of the Independent Environmental Audit Report.</p>	NC	No further action required	No further action is required.

Environmental Protection Licence 2504

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	IMC Response December 2022																																						
L2.1	For each monitoring/discharge point or utilisation area specified in the table/s 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.	Duplicate of non-compliance for item L2.4.	NC	Duplicate of non-compliance for item L2.4.	Refer to item L2.4.																																						
L2.4	Water and/or Land Concentration Limits:																																										
	Point 3 <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of Measure</th> <th>50 percentile concentration limit</th> <th>80 percentile concentration limit</th> <th>90 percentile concentration limit</th> <th>100 percentile concentration limit</th> </tr> </thead> <tbody> <tr> <td>Biochemical oxygen demand</td> <td>Milligrams per litre</td> <td>30</td> <td></td> <td></td> <td>50</td> </tr> <tr> <td>Oil and Grease</td> <td>Milligrams per litre</td> <td></td> <td></td> <td></td> <td>10</td> </tr> <tr> <td>pH</td> <td>pH</td> <td>6.5-8.5</td> <td></td> <td></td> <td>6.0-9.0</td> </tr> </tbody> </table>	Pollutant	Units of Measure	50 percentile concentration limit	80 percentile concentration limit	90 percentile concentration limit	100 percentile concentration limit	Biochemical oxygen demand	Milligrams per litre	30			50	Oil and Grease	Milligrams per litre				10	pH	pH	6.5-8.5			6.0-9.0	Non-compliances were identified with this requirement. <ul style="list-style-type: none"> Point 3: exceedance of BOD above 50 mg/L in FY2021 on 7 February 2020, reported to be caused by excess soap in the system that may have impacted the microbe community in the sewage treatment plant. No environmental harm was reported. Point 38: FY21 daily discharge volumes for LDP 38 were exceeded on two (2) days as a result of the same event. The exceedances were recorded on 31 July and 1 August 2020. Based on the information provided, pooling and runoff in the effluent application area was noticed along with a small amount of runoff on pit top. Point 38: two exceedance of BOD above 50 mg/L in FY2021 on 8 January 2020 and 5 November 2019 caused by equipment failure (which was repaired). According to the Report, no environmental harm 	NC	No recommendations given that non-compliances have been identified, notified, investigated, mitigated and reported.	No further action is required.														
Pollutant	Units of Measure	50 percentile concentration limit	80 percentile concentration limit	90 percentile concentration limit	100 percentile concentration limit																																						
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	Point 10 <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of Measure</th> <th>50 percentile concentration limit</th> <th>80 percentile concentration limit</th> <th>90 percentile concentration limit</th> <th>100 percentile concentration limit</th> </tr> </thead> <tbody> <tr> <td>Aluminium (dissolved)</td> <td>Micrograms per litre</td> <td>-</td> <td>-</td> <td>800</td> <td>-</td> </tr> <tr> <td>Arsenic (dissolved)</td> <td>Micrograms per litre</td> <td>-</td> <td>-</td> <td>19</td> <td>-</td> </tr> <tr> <td>Cadmium (dissolved)</td> <td>Micrograms per litre</td> <td></td> <td>-</td> <td>0.5</td> <td>-</td> </tr> <tr> <td>Cobalt (dissolved)</td> <td>Micrograms per litre</td> <td></td> <td>-</td> <td>20</td> <td>-</td> </tr> <tr> <td>Copper (dissolved)</td> <td>Micrograms per litre</td> <td></td> <td>-</td> <td>18</td> <td>-</td> </tr> <tr> <td>Lead (dissolved)</td> <td>Micrograms per litre</td> <td></td> <td>-</td> <td>6</td> <td>-</td> </tr> </tbody> </table>	Pollutant	Units of Measure	50 percentile concentration limit	80 percentile concentration limit	90 percentile concentration limit	100 percentile concentration limit	Aluminium (dissolved)	Micrograms per litre	-	-	800	-	Arsenic (dissolved)	Micrograms per litre	-	-	19	-	Cadmium (dissolved)	Micrograms per litre		-	0.5	-	Cobalt (dissolved)	Micrograms per litre		-	20	-	Copper (dissolved)	Micrograms per litre		-	18	-	Lead (dissolved)	Micrograms per litre		-	6	-
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Copper (dissolved)	Micrograms per litre		-	18	-																																						
Lead (dissolved)	Micrograms per litre		-	6	-																																						

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	Manganese (dissolved)	Micrograms per litre		-	40	-	was identified and no exceedance was observed following the event. <ul style="list-style-type: none"> Point 38: An exceedance was recorded on 5 November 2019 of BOD above 50 mg/L in FY2020, this was attributed to a failure in the programming of the system, corrective action to reprogram the system was taken. A second exceedance occurred on 5 December 2019 that was attributed to either the improvement actions made following the previous exceedance or increased warm weather evaporation. No corrective actions were taken. An exceedance occurred on 3 June 2020 with BOD exceeding the 50th percentile limit likely due to slow turnover of the treated effluent discharge pond. No corrective actions were taken. No other non-compliances were identified. Based on the information provided, Point 18 did not discharge during FY 2022, FY2021 or FY2020.			
	Nickel (dissolved)	Micrograms per litre		-	200	-				
	pH	pH		-	-	6.5-9.3				
	Total suspended solids	Milligrams per litre		-	-	50				
	Zinc (dissolved)	Micrograms per litre		-	84	-				
	Point 18									
	Pollutant	Units of Measure	50 percentile concentration limit	80 percentile concentration limit	90 percentile concentration limit	100 percentile concentration limit				
	pH	pH	-	-	-	6.5-8.5				
	Total suspended solids	Milligrams per litre	-	-	-	50				
	Point 19									
	Pollutant	Units of Measure	50 percentile concentration limit	80 percentile concentration limit	90 percentile concentration limit	100 percentile concentration limit				
	pH	pH	-	-	-	6.5 – 8.5				
	Total suspended solids	Milligrams per litre	-	-	-	50				
	Point 23									
	Pollutant	Units of Measure	50 percentile concentration limit	80 percentile concentration limit	90 percentile concentration limit	100 percentile concentration limit				

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	pH	pH	-	-	-	6.5 – 8.5				
	Total suspended solids	Milligrams per litre	-	-	-	50				
	Point 24									
	Pollutant	Units of Measure	50 percentile concentration limit	80 percentile concentration limit	90 percentile concentration limit	100 percentile concentration limit				
	Aluminium (dissolved)	Micrograms per litre	-	55		-				
	Bicarbonate Alkalinity	Milligrams of calcium carbonate per litre	-	185		-				
	Cobalt (dissolved)	Micrograms per litre		1.4		-				
	Copper (dissolved)	Micrograms per litre		1.4						
	Electrical conductivity	millisiemens per centimetre				600				
	Nickel (dissolved)	Micrograms per litre		11	-	-				
	Nitrogen (total)	Micrograms per litre	250							
	pH	pH		-	-	6.5-8.5				
	Zinc (dissolved)	Micrograms per litre		8		-				
	Point 38									
	Pollutant	Units of Measure	50 percentile concentration limit	80 percentile concentration limit	90 percentile concentration limit	100 percentile concentration limit				

Item No.	Assessment Requirement						Comment	IEA Classification	Recommendations	IMC Response December 2022
	BOD	Milligram per litre	30	-	-	50				
pH	pH	-	-	-	6.0-9.0					
Point 41										
Pollutant	Units of Measure	50 percentile concentration limit	80 percentile concentration limit	90 percentile concentration limit	100 percentile concentration limit					
pH	pH	-	-	-	6.5 – 8.5					
Total suspended solids	Milligrams per litre	-	-	-	50					
L3.1	For each discharge point or utilisation area specified below (by a point number), the volume/mass of: a) Liquids discharged to water, or; b) Solids or liquids applied to the area; Must not exceed the volume/mass limit specified for that discharge point or area.					Non-compliances were identified for this requirement. ERM reviewed Section 6 Environmental Performance of the Annual Return FY2022, FY2021 and FY2020. Point 19 and Point 24 were found to be compliant however it was noted that Point 18 had not been discharged from in the audit period. Point 22 was found to be non-compliant with discharge volumes per day exceeding on 31 July to August 2020. This was reported to be from a programming failure which has been fixed. No non-compliances were identified in the FY2022 period for point 22.	NC	No recommendations as the programming failure was investigated and addressed.	No further action is required.	
Point		Units of Measure			Volume/Mass Limit					
18		Kilolitres per day			1000					
19		Kilolitres per day			2000					
22		Kilolitres per day			80					
24		KL/month			93000					
24		Kilolitres per day			4700					
O1.1	Licensed activities must be carried out in a competent manner. This includes: a) The processing, handling, movement and storage of materials and substances used to carry out the activity; and b) The treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.					Refer to Table A1 – Project Approvals item #1. ERM observed non-compliances related to the storage of materials used to carry out the activity in a	NC	Refer to Table A1 – Project Approvals item #1.	Duplicate non-compliance. Refer to response to Project Approval, Sch 2, C1 above (Item No. 2.1).	

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	IMC Response December 2022
		<p>competent manner, which included: materials stored unprotected directly on gravel and soil; hoses and other vessels with leaking oil and other fluids; and numerous stains visible across the gravel storage areas that were derived from fluids other than water.</p>			
O2.1	<p>All plant and equipment installed at the premises or used in connection with the licensed activity:</p> <ul style="list-style-type: none"> a) Must be maintained in a proper and efficient condition; and b) Must be operated in a proper and efficient manner 	<p>A spill of ferric chloride into a sediment pond occurred on 3 January 2022 due to modifications made to the dosing shed bund at Appin East. No environmental harm was identified. The Site reported that as a result of this event the bund was repaired and a review of all bunds across the Illawarra Metallurgical Coal sites was undertaken. EPA issued an Official Caution on 21 February 2022 in relation to this incident.</p> <p>Maintenance documents provided by the Site show that prestart checklists are used and daily inspections of the Allman truck occur. The Site also provided work orders for replacement and maintenance of equipment used at the site. Workplace interaction reports provided also found the Site to be satisfactory or compliant against the assessment criteria.</p>	NC	<p>The loss of containment issue was rectified and a bund review conducted across the wider business as a result. Non-compliances have been addressed during the audit period and no ongoing recommendations are made as a result.</p>	<p>No further action is required.</p>
O3.1	<p>The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.</p>	<p>A non-compliance against this condition was identified.</p> <p>On 22 August 2020 a release of stone dust occurred at Ventilation Shaft 6, resulting in visible air pollution. The non-compliance was caused by a change in ventilation</p>	NC	<p>The causes of non-compliances were addressed during the audit period via changes to the underground ventilation system, therefore no</p>	<p>No further action is required.</p>

Item No.	Assessment Requirement	Comment	IEA Classification	Recommendations	IMC Response December 2022								
		underground. The primary material that was ventilated was stone dust, an inert non-hazardous material. No environmental harm was identified.		recommendations are made at this time.									
O4.1	Effluent application must not occur in a manner that causes surface runoff.	<p>A volume limit exceedance was reported to have occurred on 31/7/20 and 1/8/20. According to the Event Report (EVT-0038973), pooling was identified in surface water control channel and small amount of runoff on pit top was identified. The cause was irrigation system logic, which was rectified and further exceedances were not identified.</p> <p>According to the information provided by the Site Management, the runoff was minor in nature and did not extend outside the effluent application area; however, this Condition also applies to runoff within the effluent application area.</p>	NC	No further recommendations as the logic error was rectified and further instances of surface runoff did not occur.	No further action is required.								
O4.3	<p>The quantity of effluent/solids applied to the utilisation area must not exceed the capacity of the area to effectively utilise the effluent/solids.</p> <p>For the purpose of this condition, 'effectively utilise' include the use of the effluent/solids for pasture or crop production, as well as the ability of the soil to absorb the nutrient, salt, hydraulic load and organic material.</p>	Duplicate of non-compliance for item O4.1. The incident resulted in the exceedance of the capacity of the area to absorb the hydraulic load.	NC	Refer to item O4.1.	Refer to item O4.1.								
M2.2	<p>Air Monitoring Requirements</p> <p>POINT 27, 28, 35</p> <table border="1" data-bbox="192 1305 1008 1404"> <thead> <tr> <th data-bbox="192 1305 383 1404">Pollutant</th> <th data-bbox="383 1305 591 1404">Units of measure</th> <th data-bbox="591 1305 792 1404">Frequency</th> <th data-bbox="792 1305 1008 1404">Sampling method</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling method					Air Quality Monitoring Equipment failed on 3 March 2020 at Point 28 which was suspected to be due to a power failure. The 24 hr average from 9 February 2020 did not show that exceedances occurred and the issue was subsequently rectified.	NC	The causes of non-compliances were rectified during the audit period and therefore no further recommendations are made at this time.	No further action is required.
Pollutant	Units of measure	Frequency	Sampling method										

Item No.	Assessment Requirement				Comment	IEA Classification	Recommendations	IMC Response December 2022
	PM10	Micrograms per cubic metre	Monthly	Continuously	<p>On 24 September 2020 it was found that DustTrak equipment was not functioning correctly. The equipment was experiencing a flow blockage, however no error message was raised. This resulted in data not being available continuously, however no environmental impacts were identified.</p> <p>All other points were monitored continuously, with the exception of occasional daily estimations for Point 35, which were inferred from the adjacent Point 27 or Point 28 monitoring stations when equipment has been offline at Point 35 for servicing.</p>			