# Annual Environmental Performance Audit Report 2022

McArthur River Mine, Independent Monitor

Department of Industry, Tourism and Trade

31 October 2022





### **Disclaimer**

This report has been prepared on behalf of and for the exclusive use of Department of Industry, Tourism and Trade, and is subject to and issued in accordance with the agreement between Department of Industry, Tourism and Trade and Advisian Pty Ltd. Advisian Pty Ltd accepts no liability or responsibility whatsoever for it in respect of any use of or reliance upon this report by any third party. Copying this report without the permission of Department of Industry, Tourism and Trade and Advisian Pty Ltd is not permitted.

# **Company details**

Advisian Pty Ltd ABN 50 098 008 818

Level 31, 12 Creek Street Brisbane QLD 4000 PO Box 15081, City East QLD 4002 Australia

T: +61 7 3377 7000

Annual Environmental Performance Audit Report 2022 31 October 2022



# Table of contents

Executive Summary		8			
Acro	onyms ar	nd abbreviations	19		
1	Intro	oduction	22		
	1.1	Purpose and Objective	22		
	1.2	McArthur River Mine Overview	22		
	1.3	Audit Methodology	22		
	1.4	Regulatory Requirements	23		
		1.4.1 Authorisation	23		
		1.4.2 Waste Discharge Licence	23		
		1.4.3 NT EPA Recommendations	24		
2	Appr	roach	25		
	2.1	Process			
	2.2	Quantitative Compliance Audit	25		
	2.3	Qualitative Review	26		
	2.4	Reference Documents	27		
	2.5	Review Team	28		
	2.6	Stakeholder Engagement	29		
3	Revie	ew of Operator	30		
	3.1	Objective	30		
	3.2	Authorisation – Operator Compliance Audit	30		
		3.2.1 Scope and Approach	30		
		3.2.2 Findings	31		
		3.2.3 Opportunities for Improvement	36		
		3.2.4 Conclusions	38		
	3.3	Waste Discharge Licence – Operator Compliance Audit	38		
		3.3.1 Scope and Approach	38		



		3.3.2	Findings	39
		3.3.3	Opportunities for Improvement	40
		3.3.4	Conclusions	41
	3.4	NT EP	A Recommendations – Operator Compliance Audit	41
	3.5	Volun	tary Commitments – Operator Review	42
		3.5.1	Scope and Approach	42
		3.5.2	Findings	43
		3.5.3	Opportunities for Improvement	43
		3.5.4	Conclusions	44
	3.6	Enviro	onmental Risk - Operator Review	44
		3.6.1	Scope and Approach	44
		3.6.2	Findings	45
		3.6.3	Opportunities for Improvement	47
		3.6.4	Conclusions	47
	3.7	Opera	ntor Success	47
4	Revie	w of DI	тт	50
	4.1	Object	tive	50
	4.2	Autho	orisation – DITT Compliance Audit	50
		4.2.1	Scope and Approach	50
		4.2.2	Findings	50
		4.2.3	Opportunities for Improvement	53
		4.2.4	Conclusions	55
	4.3	NT EP	A Recommandations – DITT Compliance Audit	55
		4.3.1	Scope and Approach	55
		4.3.2	Findings	55
		4.3.3	Opportunities for Improvement	56
		4.3.4	Conclusions	57
	4.4	Regula	atory Approach – DITT Review	58
		4.4.1	Scope and Approach	58



		4.4.2	Findings	58
		4.4.3	Opportunities for Improvement	62
		4.4.4	DITT Successes	63
		4.4.5	Conclusions	64
5	Revie	w of Riv	ver System Health	65
	5.1	Object	tive	65
	5.2	Scope	e and Approach	65
	5.3	Findin	ngs	66
		5.3.1	Context	66
		5.3.2	Management Actions	66
		5.3.3	Freshwater Ecology Monitoring Programs	68
		5.3.4	Environmental Management Objectives	68
		5.3.5	River System Health	70
	5.4	Орроі	rtunities for Improvement	71
	5.5	Conclu	usions	72
6	Revie	w of Wa	aste Rock Handling Procedures	74
	6.1	Object	tive	74
	6.2	Scope	e and Approach	74
	6.3	Findin	ngs	75
	6.4	Conclu	usions	77
7	Com	parative	Analysis 2020, 2021 and 2022	79
	7.1	Object	tive	79
	7.2	Scope	e and Approach	79
	7.3	Findin	ngs	79
		7.3.1	Operator	80
		7.3.2	DITT	81
		7.3.3	River System Health	82
8	Statu	s of Opp	portunities for Improvement	83
	8.1	Opera	ator OFI Status	83



		8.1.1	Findings	83
	8.2	DITT C	DFI Status	90
		8.2.1	Findings	90
9	Stake	holder E	Ingagement	95
	9.1	Overa	rching Scope and Approach	95
	9.2	2021 A	AEPAR Engagement	95
		9.2.1	Scope and Approach	95
		9.2.2	2021 AEPAR Engagement Outcomes Summary	97
		9.2.3	Identified opportunities for improvements to future engagement	98
10	Overa	II Concl		
11				
۸ ۵	oondi	icoc		
ΑΡΙ	Jenu	CES		
Appe	ndix A	Autho	orisation Compliance Workbook - Operator	
Appe	ndix B	Waste	e Discharge Licence Compliance Workbook - Operator	
Appe	ndix C	Autho	orisation Compliance Workbook - DITT	
Appe	ndix D	NT EP	A Recommandations Compliance Workbook - DITT	
Appe	ndix E	River	Health Review	
Tak	ole lis	t		
Table	2-1: Cor	npliance	Scores and Guidelines	26
Table	2-2: Anr	ual Envi	ronmental Performance Audit Report Key Reference Documents	27
Table	2-3: Anr	nual Envi	ronmental Performance Audit Report Review Team Members	28
Table	9.1 Overarching Scope and Approach			
Table	3-2: Aut	horisatio	on – Operator Compliance Scores by Environmental Aspect	32
Table	3-3: Aut	horisatio	on – Operator Compliance Scores by Operator Domain	34
Table	3-4: Aut	horisatic	on – Operator Opportunities for Improvement	36
Table	3-5: Aut	horisatic	on – Operator Observations	38
Table	3-6: Sun	nmary of	f WDL Compliance - Operator	39



Table 3-7: WDL – Operator Compliance Scores by WDL Section	39
Table 3-8: WDL – Operator Opportunities for Improvement	40
Table 3-9: WDL – Operator Observations	41
Table 3-10: Operator Commitments - Opportunities for Improvement	43
Table 3-11: Risk Management - Opportunities for Improvement	47
Table 4-1: Summary of Authorisation Compliance - DITT	50
Table 4-2: Authorisation – DITT Compliance Scores by Section	51
Table 4-3: Authorisation – DITT Opportunities for Improvement	53
Table 4-4: Authorisation – DITT Observations	54
Table 4-5: Summary of NT EPA Recommendations Implementation Compliance – DITT	55
Table 4-6: NT EPA Recommendations – DITT Opportunities for Improvement	56
Table 4-7: DITT's Regulatory Approach Opportunities for Improvement	63
Table 4-8: DITT's Regulatory Activities Successes	64
Table 5-1: River Health System Opportunities for Improvement	71
Table 6-1: NOEF Management Plan objectives	74
Table 7-1: Summary Table for Comparison of 2020, 2021 and 2022 Operator Authorisation Findings	80
Table 7-2: Summary Table for Comparison of 2020, 2021 and 2022 Operator WDL Findings	80
Table 7-3: Summary Table for Comparison of 2020, 2021 and 2022 DITT Authorisation Findings	81
Table 7-4: Summary Table for Comparison of 2020, 2021 and 2022 DITT NT EPA Recommendations Findings	81
Table 8-1: Status of Operator Opportunities for Improvement	84
Table 8-2: Status of DITT Opportunities for Improvement	.91
Figure list	
Figure 3-1: Authorisation – Operator Compliance Level Illustrated by Environmental Aspect	32
Figure 3-2: Authorisation – Operator Compliance Level Illustrated by Operator Domain	35
Figure 3-3: WDL – Operator Compliance Level by Section	39
Figure 4-1: Authorisation – DITT Compliance Level Illustrated by Authorisation Section	51



# **Executive Summary**

This Annual Environmental Performance Audit Report (AEPAR) presents findings on the environmental regulatory compliance of the McArthur River Mine (Mine), considering the activities of McArthur River Mining Pty Ltd (MRM) and the Northern Territory (NT) Department of Industry, Tourism and Trade (DITT), during the audit period 01 May 2021 to 30 April 2022.

The primary objective of this AEPAR is to provide transparency to the community in assessing whether MRM (Operator) and DITT are fulfilling and managing compliance-related environmental obligations. This AEPAR also identifies areas for improvement in environmental compliance.

This audit has been conducted by the Independent Monitor (Advisian Pty Ltd), the role of which is to assess compliance against regulatory conditions, recommendations and commitments. This AEPAR reviews the activities undertaken by both the Operator and DITT to meet regulatory and non-regulatory obligations. In addition, the Independent Monitor is to report any environmental issues requiring investigation.

The 2022 AEPAR found that both the Operator and DITT had a high level of compliance with regulatory approval requirements during the audit period. Based on the audit findings and review by the relevant experts, the McArthur River and its tributaries were considered to be in good health. The audit did not identify any environmental issues or risks of concern that would require immediate attention or significant changes to the current environmental management and monitoring regime.

# Findings - General

Based on audit interview findings and documentation reviews, no significant environmental issues requiring urgent investigation or attention were found to have occurred during the audit period.

This AEPAR examined 908 conditions, requirements and individual elements contained in the Authorisation, Waste Discharge Licence (WDL) and NT Environment Protection Authority (NT EPA) recommendations, and identified 481 active requirements. Out of these active requirements 435 were assessed as compliant and 26 part compliances were identified for the Operator and 20 part compliances identified for DITT. A part-compliance is where a small number of elements of the condition or requirements were not satisfied.

The continued attention on key environmental risk areas by the Operator and DITT has resulted in improved performance during the audit period. This involved continued implementation of management actions to avoid or reduce environmental risks, including in relation to historical air quality emissions associated with the North Overburden Emplacement Facility (NOEF).

Each section of this AEPAR describes the Independent Monitor's findings and relevant opportunities that may support continuous improvement. The listed opportunities for improvement are considerations proposed to enhance compliance, noting these are not mandatory requirements. Successes achieved by the Operator and DITT that exceed regulatory compliance and have contributed to improved environmental outcomes have also been noted.



# **Findings – Operator Compliance Performance**

### **Authorisation**

The Independent Monitor reviewed the Operator's compliance across 439 Authorisation conditions. Based upon the Authorisation audit, the Operator attained a high level of compliance (97%) with the Authorisation conditions across key mining operational activities. This finding is an indicator of the high level of environmental performance achieved by the Operator.

The key findings in relation to the assessment of Environmental Aspects and Operator Domains are outlined below with further detail provided in the main report.

# **Environmental Aspects**

Environmental Aspects are defined as environmental or community receptors that would be protected by relevant conditions or impacted if the conditions are not met.

The *Marine Waters* and the *Vegetation and Rehabilitation* Environmental Aspects achieved a full compliance score of 100%.

The Aquatic Fauna Environmental Aspect attained a full compliance score of 100%, which is a significant improvement from the 2021 AEPAR where it previously had the lowest compliance score (83%). Previous part compliance issues have been addressed in the 2022 AEPAR audit period.

The *Community* Environmental Aspect attained a high compliance score of 99%. There was one part compliance due to a lack of evidence related to 'no unauthorised entry' warning signage along the length of the shipping channel at the Bing Bong Loading Facility (BBLF).

The *Groundwater* Environmental Aspect attained a high compliance score of 99%. Part compliance was attributable to a small number of bores not being classified as decommissioned in the Water Management Plan and some access restrictions, given a small number of bores were not accessible for monitoring during the wet season.

The *Surface Water* Environmental Aspect achieved a high compliance score of 99%. There were conditions with part compliances that related to:

- Permanent gauging stations were not yet installed on Emu Creek and Glyde River due to a delay in obtaining the Aboriginal Areas Protection Authority (AAPA) certificate for those locations
- The Water Management Plan was not satisfied in full as the external laboratory was unable to provide Boron analysis for some surface water samples for a short period of time, due to equipment failure.

The *Monitoring and Reporting* Environmental Aspect achieved a high compliance score of 96%. There were part compliances identified related to:

- The High Volume Air Sampler (HVAS) sampling results were not submitted to DITT quarterly
- The Independent Certifying Engineer (ICE) will not warrant and accept both the design and construction works specifically without limitation on responsibility for the NOEF or the Tailings Storage Facility (TSF)
- A lack of evidence to show that the ICE has overseen and certified TSF buttress works conducted between December 2021 to April 2022



- Inspection and Test Plans (ITPs) for the NOEF were not submitted for the operational (waste placement) phase which would enable the ICE to approve re-commencement of construction at hold points or warrant and accept the waste placement works
- The TSF Cell 1 Stage 5 Raise to Relative Level (RL) 10059 m, TSF Cell 2 Stage 6 Raise to RL 10061 m and TSF Cell 2 Stage 7 Raise to RL 10063 m Construction Reports were not submitted to DITT within 30 days
- Construction of the Eastern Perimeter Run-Off Dam (EPROD) was completed before the audit period but the 'as built' construction report had not been finalised in the audit period
- The TSF Operations, Maintenance and Surveillance Manual (OMS Manual) was not finalised and requires updating following TSF construction and changes in operation and subsequent review and endorsement by the Independent Tailings Review Board (ITRB)
- Characterisation data for the exploration holes was not included in the Environmental Monitoring Report (EMR)
- Sampling results were not obtained at some dust depositional gauges due to equipment damage for prolonged periods and monitoring access issues.

The *Waste* Environmental Aspect includes the management of waste rock in the overburden emplacement facilities, an area of high potential environmental risk if management controls are not adequately implemented. The Operator had a high compliance score of 95% for *Waste* that was marginally lower than the 97% *Waste* score in the 2021 AEPAR. The part compliances were related to:

- Construction documentation (e.g. ITPs) not being provided for the operational phase of the NOEF
  to the ICE to warrant and accept both the design and construction works, oversee and certify the
  works meet design specifications, approve recommencement of works at hold points and prepare
  weekly / monthly progress reports
- ITRB has not been involved in endorsing TSF minor design changes for the buttress and the TSF Operations, Maintenance and Surveillance Manual.

Construction reports or 'as built' construction reports verify that the Mine's facilities (e.g. dams, NOEF and TSF) have been built in accordance with the relevant authorisation conditions and approved design and specifications. Some 'as built' construction reports have not been available for a combination of reasons. Clarification on which structures (facilities) and what interim stages of construction require 'as built' construction reports, and what defines construction completion, will assist the Operator to meet requirements and support the progressive preparation of 'as built' construction reports in a timely manner.

The Air Quality Environmental Aspect attained a high compliance score of 95%, some sampling results were not obtained at a small number of dust depositional gauges due to equipment damage for prolonged periods and monitoring access issues.

# **Operator Domains**

Operator Domains are defined as areas of the mineral lease that are distinguished by an operational activity and have been utilised by the Independent Monitor to examine different areas of the Mine site.

The *Open Pit/Underground Workings* Operator Domain was assessed as achieving the highest compliance (100%) with the Authorisation.



The *Tailings Storage Facility* and *Overburden Emplacement Facilities* Operator Domains have amongst the highest levels of potential environmental risk and achieved compliance scores of 93% and 96% respectively. The *Overburden Emplacement Facilities* score is the same as for the 2021 AEPAR. The *Tailings Storage Facility* score is lower than the 95% score for the 2021 AEPAR and is the lowest score for an Operator Domain in the 2022 AEPAR. For the *Tailings Storage Facility* there were three part compliances related to ITRB and three were ICE related. For the *Overburden Emplacement Facilities* three part compliances were ICE related and one was related to environmental commitments not being actioned.

The *Exploration* Operator Domain scored a high compliance score of 98% with only one part compliance relating to characterisation data for exploration holes not being included in the EMR.

Operator Domains *Water Management and Storages* and *Waterways* achieved high compliance scores of 99% and 97% with 52 and 48 active conditions respectively.

Governance activities are the requirements and procedural elements of the regulatory conditions that provide an overarching means to achieve compliance and environmental performance outcomes. There are 183 conditions relevant to the *Governance/General* Operator Domain, and the Operator was assessed as achieving a high compliance score of 97%.

The BBLF Operator Domain scored a high compliance score of 95% from five active conditions; one of which was a part compliance .

# **Waste Discharge Licence**

The audit assessed the Operator as having a high level of overall compliance with the WDL conditions, at 98%. All six WDL sections of grouped conditions achieved high to full compliance namely, *general* (97%), *operational* (100%), *discharges* (100%), *monitoring* (95%), *recording and reporting* (98%), and *performance improvement* (100%).

The WDL monitoring Section was assessed as achieving lower compliance at 95% when compared with the other WDL sections. This was predominately due to restricted access to undertake continuous monitoring and data capture for wet season water level and flow in the Glyde River, Emu Creek and McArthur River and no National Association of Testing Authorities (NATA) accreditation provided for turbidity analysis at the laboratory.

# **NT EPA Recommendations**

The Operator's performance with regard to the implementation of the Northern Territory Environment Protection Authority (NT EPA) recommendations was assessed by examining compliance against those recommendations that have been adopted as Authorisation conditions. A high overall compliance score of 97% was attained by the Operator for the Authorisation conditions incorporating the NT EPA recommendations.

# **Voluntary Commitments**

Voluntary environmental commitments made by the Operator are included in the Mining Management Plan (MMP), Operational Performance Report (OPR), and the EMR<sup>1</sup>. These commitments are not strictly

<sup>&</sup>lt;sup>1</sup> The Operational Performance Report and Environmental Monitoring Report prepared by the Operator are understood to meet the requirements of an Environmental Mining Report under Section 37(4) of the MMA.



regulatory requirements but are voluntary actions and opportunities identified by the Operator to further improve environmental outcomes. The implementation status of each commitment is provided by the Operator in annual registers within the EMR.

The EMR contains 230 commitments. Of these, 158 commitments are identified as ongoing, eight commitments are identified as complete, 64 commitments are identified as future requirements or not currently relevant. Eight of the 158 ongoing commitments are identified as being incomplete. The key opportunities for improvement for tracking and reporting on the implementation of commitments include:

- Consolidation of the MMP's commitments (refer to MRM EMR 2020-2021, Appendix L and Appendix M) into a single commitment register for reporting against future EMRs, and rationalise these commitments to avoid duplication
- Clear indication in the commitments register where a commitment is closed out with no further action proposed.

The majority of the Operator's reported commitments are adequately addressed through the EMR.

# **Risk Management Process**

The Risk Management Plan provides the Mine with a comprehensive process and appropriate environmental risk management framework, in accordance with the international risk standard, ISO 31000 (2018) *Risk Management*. The Environmental Risk Assessment Register contains appropriate identification, risk analysis and proposed controls for the Mine's key environmental risks.

The risk management monitoring and review process was strengthened in 2022 with verification of the implementation of existing risk mitigating control measures and the additional inclusion of an assessment of risk control effectiveness. The risk register assessed 55% of the 40 identified risks as 'low' and 45% as 'medium risk. An analysis of 2019, 2020 and 2022 risk registers found an improvement trend of fewer 'medium' risks each year-on-year with the implementation of control measures supporting the re-categorisation of more risks to the 'lower' risk category.

# **Operator Successes**

The audit and review process identified some noteworthy operations successes achieved by the Operator during the audit period which have contributed to continuous environmental improvement, these include:

- Ecotoxicological Program
- Purple-crowned Fairy Wren relocation
- Permanent Dump Supervisor role
- McArthur River Diversion Channel vegetation rehabilitation
- Little Barney Creek release point management
- Tailings Storage Facility interception trench
- Barney Creek sediment management
- Djirrinmini groundwater monitoring
- Water quality monitoring Indigenous participation.



# Findings – DITT Compliance Performance

### **Authorisation**

DITT achieved a high level of overall compliance (96%) against the 68 active Authorisation conditions. DITT achieved high to full compliance for four out of six Authorisation sections, namely *General* (97%), *Environment and Independent Monitoring* (98%), *Tailings Storage Facility* (96%) and *Mine Closure* (100%).

The Overburden Management Project Section was assessed as achieving a lower compliance score (93%) due to a lack of timely review/approval of submitted documents and the Community Reference Group and Independent Panels (NOEF and TSF) not yet being established.

It was noted that there are no regulatory timeframes for the establishment of the Independent Panels or for providing responses for some review and approval tasks. The situation has arisen that there are now potential delay implications for other regulatory requirements that are reliant upon Independent Panel commencement.

Construction reports or 'as built' reports to verify that the Mine's facilities (e.g. dam, NOEF and TSF) have been built in accordance with the relevant authorisation conditions and approved design and specifications have not been available for a combination of reasons. Clarification from DITT regarding which structures, what distinct interim stages of construction and a definition of construction completion would assist obtaining progressive 'as built' reports in a timely manner.

# **NT EPA Recommendations**

DITT's responsibilities include ensuring the Authorisation conditions are not contrary to the NT EPA recommendations and that the intent of the NT EPA recommendations have been addressed. The audit found DITT had effectively incorporated the NT EPA recommendations into the Authorisation conditions. A compliance score of 98% was achieved.

To improve the compliance score, the NT EPA recommendation details not explicitly stated in the Authorisation conditions could be incorporated into a DITT process to assist capturing the NT EPA recommendations specific details to facilitate implementation of the finer points.

# **Regulatory Approach**

DITT completed an overhaul of the Mining Management Plan (MMP) process by developing a new MMP template to improve assessment efficiency and consistency between projects. The MMP template has been developed in consultation with the mining industry to clearly set out the process, required information and level of detail for an MMP application submission. The template structure, now available for other mining projects, has been designed to facilitate quantitative risk assessment of the potential environmental impacts to expedite assessment reviews.

Significant effort on DITT's part achieved the consolidation of the previous conditions and created a simplified and more useable Authorisation document (dated 13 November 2020). The audit period for the Independent Monitor's annual review of the Mine's performance now aligns with the same dates for the corresponding EMR reporting period. The timing of DITT's program for 2022 has enabled the Independent Monitoring reporting to be finalised in the same calendar year, which was not the case in the previous two years.



The updated format of the EMR, informed by DITT feedback, allows the outcomes and data from each monitoring programs' technical report to be reviewed against the mining operations key environmental objectives in the EMR executive summary. A new EMR inclusion provides further overview of the environmental performance of each monitoring program with a summary of the relevant TARPs (Trigger Action Response Plans). The majority of TARPs remained at level 1 (lowest environmental risk level) and 2 throughout the reporting period, while the McArthur River Diversion Channel revegetation TARP reached level 3.

The review findings identified opportunities around streamlining activities, especially those recurring regulatory processes (e.g. annual EMR review) that may be made more efficient. The potential benefit of streamlining some of DITT's documentation and approval processes would be efficiency gains. This would enable greater focus on the implementation of initiatives to continuously improve the Mine's environmental performance.

One improvement suggestion is for DITT to implement a process to assist to track and manage the regulatory requirements of the Authorisation conditions and some specific NT EPA recommendations.

# **Findings – River Health**

The monitoring and management actions conducted by the Operator included a comprehensive range of programs to detect and manage potential impacts to protect the aquatic ecosystems and beneficial uses of the McArthur River. The Independent Monitor found that the monitoring and management actions were well-implemented and where impacts were noted, they were adequately described, and the recommended mitigation actions were consistent with the approved TARPs.

A site visit was conducted by the Independent Monitor's Aquatic Ecologist in May 2022 to assess the effectiveness of the monitoring program through interviewing and observing field operators. A general assessment on river system health, as it relates to fish health and general aquatic ecology, was conducted based on the information provided by the Operator. Overall, the McArthur River and its tributaries were considered to be in good health.

Notwithstanding the overall good health of the river system metals above the maximum permitted concentration levels<sup>2</sup> were detected at one location at Barney Creek, in one specimen of an environmental indicator species, *Melanotaenia splendida* (eastern rainbowfish). Public access is not permitted to this area of Barney Creek as it is located within the mineral lease boundary. A range of management measures are implemented in this area by the Operator, including public exclusion zones and ongoing monitoring programs. The metal levels will require ongoing monitoring and management consistent with the current regulatory focus of protecting the health of the McArthur River.

Monitoring program data collected found that all other fish from the McArthur River catchment taken outside the mineral lease boundary had low levels of metals and pose a low risk to human health through consumption of the fish.

The following freshwater monitoring programs have been continuous since their commencement: macroinvertebrates (started 2008); aquatic fauna diversity and abundance (started 2006); metals in aquatic fauna (started 2005); and sawfish and barramundi acoustic tracking (started 2001). The overarching objectives for freshwater aquatic ecosystem health and the beneficial uses of the

<sup>&</sup>lt;sup>2</sup> Maximum permitted concentration levels, as prescribed by the Australia New Zealand Food Standards Code - Standard 1.4.1.



McArthur River have guided the monitoring activities, and the changes implemented have broadened and strengthened the management and monitoring programs as they have evolved.

The adaptive management action undertaken to remove potentially contaminated sediments from Barney Creek and the construction of silt traps to capture runoff have contributed to protecting downstream beneficial uses and environmental values. Results of sediment analysis show reductions in cadmium, arsenic, lead, and zinc concentrations, compared with those recorded in 2018, with cadmium and arsenic no longer in exceedance of the relevant sediment quality guideline value. In turn, this appears to have led to reducing lead concentrations in aquatic fauna sampled in years following contaminated sediment removal.

Consistently high levels of metals have been recorded in mussels in most river catchments throughout the region. It is considered unlikely that enough mussels could be collected and consumed to cause a detrimental health effect. Regardless, due to the high levels of naturally-occurring metals found in the mussels in the region, it is suggested that intake should be limited, consistent with findings from previous reports.

The 2021-2022 monitoring findings showed that it was safe for people to eat commonly-fished animals from the McArthur River, namely barramundi, sooty grunter and cherabin (giant freshwater prawn).

# Findings – Waste Rock Handling Procedures

A site audit was conducted in June 2022 to assess the Operator's processes associated with waste rock classification, mining and haulage operations and the NOEF design, construction and operation. The audit found that the high emphasis and effort that the Mine places on identification and classification of the waste rock material to ensure potentially reactive material is transported and placed in appropriate zones within the NOEF provides an indication of the level of importance given to waste rock handling and management to avoid oxidation or Acid Metalliferous Drainage (AMD).

The Mine has invested in systems and personnel roles directly related to the management and handling of waste rock. The Modular Global Positioning System (GPS) is a step change advancement in waste rock handling enabling the optimisation of real time information to embed a very high level of rigor in relation to waste rock handling for environmental protection.

This audit has assessed the Mine to be achieving a "good to very good" level of implementation of the NOEF Management Plan requirements. The Mine has demonstrated a high level of effective action to implement the plan's requirements to support the fulfilment of the stated objectives for the design, construction and operation of the NOEF based on the risks identified.

The 1000 year design life of the NOEF facility, underscores the importance of the current cover system trials to demonstrate the performance and durability of the Bituminous Geotextile Membrane (BGM) to prevent rainfall infiltration and to safety store the waste rock for the long term.

A large improvement in waste rock handling has been achieved in recent years with the enhanced waste rock classification system, updated design of the NOEF and implementation of the fleet management GPS system.



# Comparative Analysis 2020, 2021 and 2022

The findings of the 2021 and 2022 AEPARs were examined to identify and assess any improvement or deterioration in the findings of the Authorisation, WDL, NT EPA recommendations and river health sections of the AEPAR.

The Operator's 2022 AEPAR overall compliance scores compared to the 2021 AEPAR show the Operator has maintained a very high level of compliance for the WDL (98%) and improved compliance with the Authorisation by 1% (97%). The total number of Operator Opportunities for Improvements (OFIs) was 30 in 2020, 28 in 2021 and 22 OFIs have been raised in this 2022 AEPAR. Two Operator OFIs are carried over from 2021.

DITT has increased the overall compliance scores by 1% for both the Authorisation and the NT EPA recommendations. DITT has maintained a very high level of compliance. The total number of DITT OFIs was 12in 2020 and 19 in 2021, and 17 OFIs have been raised in this 2022 AEPAR. Six DITT OFIs from 2020 and eleven OFIs from 2021 are carried over (including the six OFIs from 2020) and remain to be addressed.

Similar to 2020 and 2021 no significant environmental issues requiring urgent investigation and attention were found to have occurred during the audit period.

Consistent with the river system health findings reported in the 2021 AEPAR, the Independent Monitor's audit and review outcomes indicates:

- No observable decline in freshwater aquatic fauna species diversity and abundance
- Aguatic ecosystems of the McArthur River and its tributaries are in good condition
- Exceedance of metal concentrations were limited to one specimen at one site in Barney Creek, located adjacent to mining activities within the mineral lease boundary
- An extremely low risk to human health from consuming the monitored fish species caught in the McArthur River catchment, in the vicinity or immediately downstream of the mineral lease.

# **Stakeholder Engagement**

The Independent Monitor engaged with the local community in March 2022 to communicate the findings of the 2021 AEPAR. Face to face engagement sessions were held in Borroloola and were also conducted in Robinson River, Wandangula (Police Lagoon), Goolminyini (Devil Springs) and Minyalini (Campbell Springs).

Engagement was conducted by Cross Cultural Consultants, supported by a local community member who is a long-time Borroloola resident and well known throughout the region. Feedback from the participants indicated this approach was very well received by community members.

Hard copies of the 2021 Annual Report Card (a plain English visual summary report of the 2021 AEPAR) were presented to stakeholders. Community members provided feedback that the Annual Report Card (ARC) enabled the local community improved access to the Independent Monitor outcomes.

As river health was previously identified as a key interest of the local community, community members were consulted about the findings relating to the health of the McArthur River fish and mussels. However, none of the community members who were engaged mentioned any concerns with the



findings relating to these issues and were satisfied that the audit results indicate that the Operator has a high level of compliance with the regulatory conditions set for Operator to fulfil.

Community members stated they would like to be involved with the water quality monitoring program and believe their participation would increase local confidence in the results.

Some stakeholders noted that there was not enough time within the engagement period for local people to receive the ARC, reflect on it and then ask questions, despite increased time spent in community during this round of engagement. No follow up calls or questions were received by the engagement team in the weeks following the local community engagement.

# **Future**

A large proportion of Authorisation conditions (414 of 681) and WDL conditions (12 of 110) were not active during the audit period as they related to 'future' requirements e.g. 24 months following the approval of the Overburden Management Project (OMP).

The OMP was approved in the Authorisation (dated 13 November 2020), which triggered future statutory timeframes for 109 extra environmental management requirements for the Operator and DITT. The environmental compliance of the Mine against these regulatory requirements that are to commence after the audit period will be assessed in subsequent AEPARs.

In addition to preparation of an AEPAR, the scope of works for the Independent Monitor in 2023 is to include a review and audit of the Adaptive Management Plan (AMP) and potentially one of the water or sulphur dioxide monitoring programs, or geosynthetic liner trial.

Subject to the timing of the establishment of the Independent Panel(s) of experts, the Independent Monitor's scope of works includes consideration of the panel's reports and review of DITT and the Operator's responses to the panel's findings regarding:

- The Tailings Storage Facility
- The Northern Overburden Emplacement Facility
- Closure planning.

# **Conclusion**

This 2022 AEPAR provides a compliance audit of the Mine by assessment against regulatory requirements, including the Authorisation, WDL and NT EPA recommendations. This AEPAR also reviewed the Operator's commitments, DITT's regulatory approach, the health of the McArthur River system and waste rock handling. A comparison between the findings of the 2021 and 2022 AEPARs was undertaken to assess any changes in environmental performance.

The Operator's high level of compliance with the Authorisation and WDL conditions across all key operational activities is a measure of the level of fulfillment of regulatory requirements. The Operator has increased the overall high compliance from the 2021 AEPAR, with a 1% increase for the Authorisation (97%) and maintained the same high compliance score for the WDL (98%).

Consistent with the river system's health findings reported in the 2021 AEPAR, the McArthur River and its tributaries overall were considered to be in good health. Exceedances of metal concentrations were limited to one specimen at one site on Barney Creek in an area immediately adjacent to operational



areas within the mineral lease boundary, where public access is not permitted and that poses a low risk to human health but will require ongoing management.

The part compliances identified for the Operator, were not considered to be of a significant environmental issue or consequence requiring urgent investigation or attention. The majority were of an administrative nature (e.g. relating to the submission of data and reporting to DITT) and were of no physical environmental consequence.

DITT attained a high level of compliance with the Authorisation (96%) and the NT EPA recommendations (98%) and increased both these overall compliance scores by 1% from the 2021 AEPAR. It was noted that timeframes for the establishment of the Independent Panels have been pushed out.

The environmental performance of both the Operator and DITT is fundamentally linked to the level of compliance achieved against Authorisation and WDL conditions, specifically designed to safeguard the environmental values of the McArthur River and protect the health of the McArthur River from the potential impacts of the Mine. Based on the documentation reviewed, where the review found the Operator or DITT had attained part compliance, the Independent Monitor identified opportunities that support continuous improvement. The opportunities outlined in this AEPAR are considerations for potential enhancements in environmental compliance and performance.



# Acronyms and abbreviations

Acronym/abbreviation	Definition
AEPAR	Annual Environmental Performance Audit Report
AMD	Acidic and Metalliferous Drainage
AMP	Adaptive Management Plan
AAPA	Aboriginal Areas Protection Authority
Aspect	Environmental Aspect - environmental or community receptor e.g. air quality or surface water
Authorisation	Variation of Authorisation issued under the <i>Mining Management Act</i> 2001 (NT)
BBLF	Bing Bong Loading Facility
BBRA	Broad Brush Risk Assessment
BGM	Bituminous Geotextile Membrane
ССС	Cross Cultural Consultants
CCL	Compacted Clay Liner
CRG	Community Reference Group
DAWE	Department of Agriculture, Water and the Environment (Commonwealth), formerly Department of the Environment and Energy
DCCEEW	Department of Climate Change, Energy and the Environment (since July 2022), formerly Department of Agriculture, Water and the Environment
DEPWS	Department of Environment, Parks and Water Security (NT)
DITT	Department of Industry, Tourism and Trade (NT)
Domain	Operator Domain – an operational area of the Mine, e.g. Tailings Storage Facility
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EMR	Environmental Mining Report (submitted from 2019-2020 onwards, replacing the Operational Performance Report), document tilled Environmental Monitoring Report
EMU	Environmental Monitoring Unit (DITT, Mining Operations)
EPROD	Eastern Perimeter Run-Off Dam
ESDAT	DITT's environmental monitoring database system



Acronym/abbreviation	Definition
GPS	Global Positioning Systems
HSEC	Health, Safety, Environment and Community
HVAS	High Volume Air Sampler
ICE	Independent Certifying Engineer
ITP	Inspection and Test Plan
ITRB	Independent Tailings Review Board
JSA	Job Safety Analysis
JSEA	Job Safety and Environment Analysis
LWD	Large Woody Debris
Mine	McArthur River Mine
Minister	NT Minister for Mining and Industry
MMA	Mining Management Act 2001 (NT)
MMP	Mining Management Plan
NATA	National Association of Testing Authorities
NOEF	Northern Overburden Emplacement Facility
NT	Northern Territory
NT EPA	Northern Territory Environment Protection Authority
OBIS	Operations Based Information System – register of mining activities authorised under the MMA
OFI	Opportunity for Improvement
OMP	Overburden Management Project
OMS Manual	Operations, Maintenance and Surveillance Manual
Operator	McArthur River Mining Pty Ltd
OPR	Operational Performance Report (submitted until 2018-2019, superseded by the Environmental Mining Report submitted from 2019-2020)
PCFW	Purple Crown Fairy Wren
PROD	Perimeter Runoff Dam
QA	Quality Assurance
QC	Quality Control
RL	Relative Level



Acronym/abbreviation	Definition
RMP	Rehabilitation Management Plan
SSTV	Site-Specific Trigger Value
TARP	Trigger Action Response Plan
TSF	Tailings Storage Facility
TWG	Technical Working Group
WDL	Waste Discharge Licence, issued under the Water Act 1992 (NT)
WMD	Water Management Dam



# 1 Introduction

# 1.1 Purpose and Objective

This Annual Environmental Performance Audit Report (AEPAR) presents findings for regulatory compliance at the McArthur River Mine (the Mine) during the audit period, 01 May 2021 to 30 April 2022. This audit period coincides with the reporting period for the Environmental Monitoring Report 2022 (EMR 2022). The audit considers the activities of the Operator and the Northern Territory (NT) Department of Industry, Tourism and Trade (DITT). This AEPAR has been prepared by the Independent Monitor.

The primary objective of this AEPAR is to assess and report to the Minister for Mining and Industry the Operator's and DITT's level of compliance in relation to fulfilling and managing the Mine's environmental obligations. It is also to provide transparency to the community in relation to the findings. This audit identifies areas for environmental compliance performance improvement.

# 1.2 McArthur River Mine Overview

The Mine is located on one of the world's largest deposits of zinc and lead, approximately 970 kilometres (km) south-east of Darwin. The closest community is Borroloola, which is about 65 km north-east of the Mine. The McArthur River mining operation includes an open cut mine, processing plant, tailings storage, and overburden emplacement facilities. Zinc and lead are mined and processed at the Mine and trucked to the Bing Bong Loading Facility (BBLF) on the Gulf of Carpentaria. The mineral concentrate is loaded onto a barge and transported to deeper water for transferring onto bulk carrier export vessels.

# 1.3 Audit Methodology

The following actions were undertaken by the Independent Monitor in preparing this AEPAR:

- Audit of the level of compliance of the Operator and DITT against regulatory approval conditions in Authorisation 0059 (Authorisation), issued under the *Mining Management Act 2001* (NT) (MMA) and regulated by DITT (439 conditions and sub-conditions for the Operator and 242 conditions and sub-conditions for DITT)
- Audit of the level of compliance of the Operator against regulatory approval conditions in the
  Waste Discharge Licence (WDL) Number 174, issued under the Water Act 1992 (NT) and regulated
  by the Department of Environment, Parks and Water Security (DEPWS) (110 conditions and subconditions)
- Audit of both the Operator and DITT on the implementation of the Northern Territory Environment Protection Authority (NT EPA) recommendations provided in Assessment Report 86, McArthur River Mine Overburden Management Project (OMP), July 2018 (117 recommendations and subparts for DITT)
- Review of the Operator's implementation of other environmental commitments
- Review of DITT's regulatory approach
- Review of the health of the McArthur River system in the vicinity and downstream of the Mine



- Review of the Operator's environmental risk management process
- Review of the findings of the 2020 AEPAR and 2021 AEPAR in comparison with one another
- Review of the status of the 2021 AEPAR Opportunity for Improvements (OFIs) list for both the Operator and DITT.

Additional to the 2021 scope, this 2022 AEPAR included:

- Review of the Mine's waste rock handling procedures
- Review of aquatic ecosystem monitoring.

Stakeholder engagement with Borroloola community residents was completed by Cross Cultural Consultants Pty (CCC) and supported by a local community member who is a long-time Borroloola resident and well known throughout the region, on behalf of the Independent Monitor in May 2022. As part of the engagement, CCC presented the results of the 2021 AEPAR, gathered feedback on the engagement approach and informed the Borroloola community on proposed engagement for the 2022 AEPAR.

The Independent Monitor audits are planned to occur annually. The detailed findings will be reported in the AEPAR with key findings presented in an 'Annual Report Card'. Both the AEPAR and Annual Report Card will be made publicly available.

# 1.4 Regulatory Requirements

# 1.4.1 Authorisation

Authorisation 0059 issued under the *Mining Management Act 2001* (NT) (MMA) to the Operator for the Mine is the principal mechanism that enables DITT to regulate the Mine's operation.

During the audit period of this AEPAR (01 May 2021 to 30 April 2022), two variations to the Authorisation dated 13 November 2020 and 18 June 2021 were issued, subject to the MMA.

This audit focussed on compliance against the Authorisation, in effect as of the 18 June 2021. An updated security amount being the only difference from the Authorisation dated 13 November 2020. The earlier Authorisation approved activities in the Overburden Management Project (OMP) incorporating new conditions that addressed relevant aspects of the proposed mining operations submitted in the Mining Management Plan (MMP) amendment, dated 31 January 2020.

There were 240 Authorisation conditions not triggered or that will only become relevant outside the audit period of this AEPAR. These have been noted as future requirements to assess in subsequent AEPARs.

# 1.4.2 Waste Discharge Licence

The WDL authorises the Operator to manage the controlled discharge of water to nominated water courses from specified discharge points. Discharge is to consist only of wastewater from sources identified in the WDL. Water quality parameters are compared to the specified trigger values at nominated surface water monitoring locations. The WDL requires monitoring, measurement and reporting of water quality parameters at authorised monitoring points.



The WDL approval is under the *Water Act 1992* (NT) and is administered by DEPWS. The intention of the WDL is to regulate discharge activities so that the Operator, in conducting the activity, does "all things reasonable and practical to ensure the activity does not adversely affect the Declared Beneficial Uses and Objectives and Sites of Conservation Significance." In other words, the intention of the Mine WDL is to regulate activities so that the Operator does all things reasonable and practical to ensure that the discharge of water from the Mine does not adversely affect the McArthur River area.

The conditions contained in WDL 174-12 and 13 (dated 25 May 2021 to 25 May 2023) were in place during the audit period. The Operator's compliance against the relevant 110 WDL conditions and subconditions are presented in Section 3.3.

# 1.4.3 NT EPA Recommendations

The NT EPA recommendations have a central aim of achieving the overarching environmental outcome that: "...requires the health of the McArthur River to be protected along its entire length at all times from Mine related impacts...".<sup>4</sup>

The NT EPA recommendations are non-statutory requirements but contain proposed actions for both the Operator and DITT. The NT EPA recommendations were provided in the NT EPA's Assessment Report 86, McArthur River Mine Overburden Management Project, dated July 2018. In accepting the NT EPA recommendations of Assessment Report 86, the then Minister for Primary Industries and Resources took responsibility for implementing the recommendations that applied under the authority of the MMA.

The NT EPA recommendations under the direct control of the Operator have been adopted into statutory requirements as conditions of the Authorisation, dated 13 November 2021. As part of this audit, all NT EPA recommendations and sub-parts were reviewed against the Authorisation conditions to confirm whether the recommendations had been transferred into the Authorisation.

The NT EPA recommendations also provide matters for action by DITT as the agency responsible for the administration of the MMA. This audit report reviews the levels of compliance of both the Operator and DITT in their implementation of the NT EPA recommendations.

<sup>&</sup>lt;sup>3</sup> Waste Discharge Licence (WDL 174-12), Section 16.

<sup>&</sup>lt;sup>4</sup> NT EPA Assessment Report 86, McArthur River Mine Overburden Management Project, July 2018, page 101, Recommendation No.3.



# 2 Approach

# 2.1 Process

The audit was undertaken in alignment with the approach and principles of ISO 19011 (2018) *Guidelines for auditing management systems*. The key principles underpinning the audit included: integrity; fair presentation; due professional care; confidentiality; independence; and use of an evidence-based and risk-based approach.

The format of this audit had been designed to allow comparative evaluation between this AEPAR and subsequent years to readily identify year-on-year compliance performance improvements and/or indicate trends that may need to be addressed.

A quantitative audit was undertaken to assess compliance against the Authorisation and WDL conditions, as well as implementation of the non-statutory NT EPA recommendations. A qualitative review was undertaken to provide an assessment of the Operator's commitments, DITT's regulatory approach, the overall health of the McArthur River system and the Operator's waste rock handling procedures. The methodology and scoring guide are described in Section 2.2.

# 2.2 Quantitative Compliance Audit

The following steps were undertaken for the quantitative compliance audit, which assessed the level of compliance against the Authorisation conditions, WDL conditions and implementation of the NT EPA recommendations:

- All Authorisation and WDL conditions, sub-conditions and NT EPA recommendations were assigned to either the Operator, DITT or both, based on the party with the responsibility for meeting, or contributing to, each requirement.
- All Authorisation and WDL conditions, sub-conditions and NT EPA recommendations were
  assigned a status of active or inactive, based on whether the requirement was triggered and/or
  active during the audit period. Conditions yet to be triggered have been noted as future
  requirements, assigned as inactive, and were scored as not applicable. The number of active
  conditions assessed in future audits will increase as additional time, activity and approval-based
  triggers occur.
- Compliance audits were conducted through a combination of audit interviews with representatives
  of the Operator and DITT, and a review of sample documentation and selected relevant
  information obtained by the Independent Monitor through a Request for Information process. The
  audit interviews, evidence collection and review processes were undertaken on-site and remotely
  during the period of May 2022 to September 2022.
- The level of compliance for each active condition, sub-condition and NT EPA recommendation was
  assessed and given a score between 0 to 4, using the scoring guidelines presented in Table 2-1. In
  cases where more than one score was applicable for a condition, the most conservative (lowest)
  score was applied. Only active conditions and sub-conditions were considered in the calculation of
  the compliance scores.
- The scores for each active condition, sub-condition and NT EPA recommendation were aggregated against the highest potential total score to calculate overall compliance scores (%) for the Authorisation, WDL and NT EPA recommendations respectively for both the Operator and DITT.



- Additional analysis of Operator compliance against Operator Domains and Environmental Aspects was also undertaken for the active Authorisation conditions. This is described in Section 3.2.1.
- OFIs and notable successes were documented and presented in Sections 3, 4 and 5. Typically, a
  non-compliance or part compliance finding will be accompanied by a related OFI; however, in
  some circumstances, an OFI has not been prepared because the situation has since been rectified
  or the requirement has been superseded.

Table 2-1: Compliance Scores and Guidelines

Score	Description	Guidelines
0	Non-Compliance	<ul> <li>Fails to meet all elements of the condition/requirement</li> <li>Negligible/no evidence of action</li> <li>Lack of plan to address condition/requirement</li> <li>Represents high risk to the environment, Operator and/or DITT</li> </ul>
1	Part Compliance (low)	<ul> <li>Fails to meet a majority of elements of the condition/requirement</li> <li>Limited evidence of action</li> <li>Limited plan to address condition/requirement</li> <li>Represents high risk to the environment, Operator and/or DITT</li> </ul>
2	Part Compliance (moderate)	<ul> <li>Fails to meet a number of elements of the condition/requirement</li> <li>Medium level of evidence of action</li> <li>Plan to address condition/requirement, but not fully implemented</li> <li>Represents medium risk to the environment, Operator and/or DITT</li> </ul>
3	Part Compliance (high)	<ul> <li>Fails to meet a small number of elements of the condition/requirement</li> <li>High level of evidence of action</li> <li>Implemented plan to address</li> <li>Represents low risk to the environment, Operator and/or DITT</li> </ul>
4	Full Compliance	<ul> <li>Full compliance based on sample evidence</li> <li>All elements of the condition/requirement are met</li> <li>High level of evidence of action</li> <li>Represents negligible risk to the environment, Operator and/or DITT</li> </ul>

# 2.3 Qualitative Review

The qualitative reviews focussed on:

- The Operator's implementation of the voluntary commitments (refer to Section 3.5)
- The Operator's environmental risk management process (refer to Section 3.6)
- DITT's regulatory approach (refer to Section 4.4)
- The McArthur River system's overall health in the vicinity and downstream of the Mine (refer to Section 5)
- The Operators' waste rock handling procedures (refer to Section 6).



As with the quantitative compliance audit, the qualitative reviews were conducted using a combination of audit interviews with representatives of the Operator and DITT, and a review of sample documentation and selected relevant information obtained through a Request for Information process. The Independent Monitor interviews, evidence collection and review processes were undertaken remotely during the period of June 2022 to October 2022 and supplemented with a site visit in June 2022.

The findings of the qualitative reviews are presented as narratives in Sections 3.5, 3.6, 4.4, 5 and 6. OFIs and notable successes are also documented in these sections.

# 2.4 Reference Documents

The main reference documents considered during the AEPAR review are listed in Table 2-2.

Table 2-2: Annual Environmental Performance Audit Report Key Reference Documents

No.	Reference Document	Document Source
1	Adaptive Management Plan, McArthur River Mine, Mining Management Plan, Appendix B revisions 31 January 2020, 31 March 2021, 23 June 2021 and 13 November 2021)	Operator
2	Adaptive Management Plan, Appendix A – Water Management Plan	Operator
3	Adaptive Management Plan, Appendix B – Air Quality Management Plan	Operator
4	Adaptive Management Plan, Appendix C – Rehabilitation Management Plan	Operator
5	Environmental Monitoring Report (EMR), 2021, 31 August 2021	Operator
6	Environmental Monitoring Report (EMR), 2022, 31 August 2022	Operator
7	Mining Management Plan, McArthur River Mine, 31 January 2020	Operator
8	Mining Management Plan, McArthur River Mine, Appendix G - NOEF Management Plan, 31 January 2020	Operator
9	Mining Management Plan, McArthur River Mine, Appendix I - TSF Raising - General Specification for Design and Construction Document, 31 January 2020	Operator
10	NT EPA Assessment Report 86, McArthur River Mine Overburden Management Project, July 2018	NT EPA
12	Variation of Authorisation 0059, dated 13 November 2020, noting conditions included to manage risks associated with OMP related activities approved in the MMP amendment of January 2020 and address NT EPA recomendations	DITT
13	Variation of Authorisation 0059, dated 18 June 2021, noting an updated security amount was the only revision from the previous Authorisation	DITT



No.	Reference Document	Document Source
14	Waste Discharge Licence 174-12, dated 25 May 2021	DEPWS
15	Waste Discharge Licence 174-13, dated 10 March 2022	DEPWS

# 2.5 Review Team

Advisian Pty Ltd (Advisian) was appointed to the Independent Monitor role in December 2019. Representatives of the Independent Monitor visited the Mine and the BBLF in March 2020 for project inception meetings and site orientation. Until May 2022, no further Independent Monitor site visit has been practical due to COVID-19-related interstate and local travel restrictions. Members of the Independent Monitor team conducted the following site visits in 2022:

- Stakeholder engagement, local community in Borroloola (May 2022)
- Aquatic ecosystem monitoring audit (May 2022)
- Waste rock handling procedures audit (June 2022).

The AEPAR team consisted of staff from Advisian and sub-consultants with relevant experience and qualifications (refer to Table 2-3).

Table 2-3: Annual Environmental Performance Audit Report Review Team Members

Role	Qualifications	Number of Years' Experience
Lead Environmental Auditor	B. Eng., M.Env.Mgmt	30
Assistant Environmental Auditor	B.Eng.Env. (Hons), MBA Tech Mgt	22
Assistant Environmental Auditor	B. Eng. (Mining), M.Env.Mgmt. (Sustainable Development)	19
Stakeholder Engagement Lead	B. Sc. (AES), B. Hlth. Sc. (Env. Hlth.) (Dist)	22
Reviewer	BA (Soc Sci), B App Sci (Env Sci), MAAPD (Master Applied Anthropology and Participatory Development)	26
Data Analyst	B.Eng., M.Env.Mgmt	10
Data Analyst	B. Env Science., M.Env.Eng	17
Community Engagement Lead	B. Indigenous Community Mgmt	20
Aquatic Ecologist	B. Aqua Sci (Hons)., PhD Aqua Sci	22
Technical Reviewer	B. Eng., M.Env.Eng (Hons)	27



# 2.6 Stakeholder Engagement

A Stakeholder Engagement Plan was prepared to guide community and stakeholder engagement and communications for the Independent Monitor. A NT-based Aboriginal business, Cross Cultural Consultants (CCC), was appointed to facilitate community engagement throughout the Independent Monitor process. The Stakeholder Engagement Plan nominated community consultation activities to align with the key Independent Monitor outputs and activities. The stakeholder engagement activities and findings are discussed in Section 9.



# 3 Review of Operator

# 3.1 Objective

The objective of the review of the Operator is to assess the level of compliance of the Operator against the relevant conditions of the Authorisation (addressing NT EPA recommendations) and the WDL. It is also to review the performance of the Operator against relevant commitments contained in the MMP and EMR.

# 3.2 Authorisation – Operator Compliance Audit

# 3.2.1 Scope and Approach

The audit period commenced 01 May 2021 to 30 April 2022 and compliance evidence was gathered during this period.

The Operator was assessed against the regulatory conditions contained in the Authorisations (dated 13 November 2020 and 18 June 2021) during the audit period using the quantitative audit approach and scoring criteria described in Section 2.2. An analysis of the two Authorisations was conducted to determine which conditions from each should be included in the audit. The only change between the two versions was the update to the security amount in condition 10. Otherwise, all conditions were identical and included in the audit as the 18 June 2021 Authorisation.

Further analysis was undertaken by categorising all Authorisation conditions and sub-conditions as either Environmental Aspects and/or Operator Domains.

Environmental Aspects are defined as environmental or community receptors that would be protected by relevant conditions or impacted if the conditions are not met. An additional Aspect, *Monitoring and Reporting*, was added for the purposes of the audit because of its relevance to many Authorisation conditions in determining compliance. The Environmental Aspects are:

- Air quality
- Surface water (rivers, creeks and artificial dams)
- Marine waters (BBLF and marine sediments)
- Groundwater
- Aquatic fauna
- Vegetation and rehabilitation
- Waste (mining overburden and general waste)
- Community
- Monitoring and reporting.

Operator Domains are defined as areas of the mineral lease that are distinguished by an operational activity and utilised by the Independent Monitor to examine different areas of the Mine. In general, the Operator Domain names used in this compliance audit align with those used by the Operator in management plans, monitoring programs and reporting. An additional Domain, *Governance/General*,



was added to categorise conditions which have overarching management oversight, and/or apply to multiple Domains. The Operator Domains are:

- Governance/General
- Open Pit/Underground workings
- Tailing's storage facility
- Water Management and Storages
- Overburden emplacement facilities
- Exploration
- Waterways (including river diversion)
- Bing Bong Loading Facility
- Non-Mineral waste management (Waste).

# 3.2.2 Findings

A summary of findings is shown in Table 3-1.

Table 3-1: Summary of Authorisation Compliance - Operator

Description	No.
Total number of conditions and sub-conditions relevant to Operator	439
Number of active conditions and sub-conditions during the audit period	199
Number of part compliances (high)	15
Number of part compliances (moderate)	3
Overall compliance score of active conditions	97%

Detailed audit findings, supporting evidence, part compliances and scores are contained in *Authorisation Compliance Workbook – Operator*, refer Appendix A.

A summary of the Operator's Authorisation compliance score for each Environmental Aspect is presented in Table 3-2 and Figure 3-1.



Table 3-2: Authorisation – Operator Compliance Scores by Environmental Aspect

Environmental Aspect	Total No. of Conditions	No. of Active Conditions	Scores	Compliance (Active Conditions)
Air Quality	12	10	38	95%
Surface Water	178	91	360	99%
Marine Waters	6	4	16	100%
Groundwater	51	24	95	99%
Aquatic fauna	48	11	44	100%
Vegetation and Rehabilitation	21	6	24	100%
Waste	123	54	206	95%
Community	38	22	87	99%
Monitoring and Reporting	246	94	360	96%

# Compliance Level by Environmental Aspect 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Air Quality Surface Water Marine Waters Groundwater Aquatic fauna Vegetation and Rehabilitation Waste Community Monitoring and Reporting

Figure 3-1: Authorisation – Operator Compliance Level Illustrated by Environmental Aspect

The overall high level of compliance with the Authorisation conditions across the Environmental Aspects is an indicator of the level of fulfilment of regulatory requirements by the Operator. The key findings in relation to Environmental Aspects are outlined below and detailed audit findings for compliance levels and OFIs for all Environmental Aspects are presented in the Appendix A.

The *Marine Waters* Environmental Aspect achieved a full compliance score of 100% based on four active conditions. The *Vegetation and Rehabilitation* Environmental Aspect was assessed as achieving a full compliance score of 100% based on six active conditions.

The Aquatic Fauna Environmental Aspect attained a full compliance score of 100% from 11 active conditions, which is a significant improvement from the 2021 AEPAR where it had the lowest compliance score (83%).

The Community Environmental Aspect attained a high compliance score of 99%, based on 22 active conditions. There was one part compliance due to a lack of evidence related to 'no unauthorised entry' warning signage along the length of the shipping channel, and in the immediate area surrounding the shipping channel and swing basin at BBLF. However, this is considered an operational safety and administrative aspect rather than an environmental issue. This was identified in 2021 AEPAR with the



Operator advising: "MRM is in the process of formally requesting that DITT exempt MRM from needing to comply with this sub-condition, on the basis of the impracticalities associated with maintaining signage along the shipping channel."

The *Groundwater* Environmental Aspect attained a high compliance score of 99%, with the part compliance attributable to incomplete implementation of the Water Management Plan. This related to groundwater bores not being classified as decommissioned and access improvements, given they were not accessible for monitoring.

The *Surface Water* Environmental Aspect achieved a high compliance score of 99% based on 91 active conditions. There were 4 conditions with part compliances that related to:

- Gauging stations not installed on Emu Creek and Glyde River
- The Water Management Plan was not implemented in full given Boron analysis for surface water monitoring was not undertaken for approximately four weeks, which included during the releases when it is required at SW03 and SW06.

The *Monitoring and Reporting* Environmental Aspect achieved a compliance score of 96% from 94 active conditions. There were 12 conditions that scored Part Compliance (high) and two that were scored Part Compliance (moderate). These part compliances were due to:

- The High Volume Air Sampler (HVAS) sampling results were not submitted to DITT quarterly
- The Independent Certifying Engineer (ICE) will not warrant and accept both the design and construction works specifically without limitation on responsibility for the Northern Overburden Emplacement Facility (NOEF) or Tailings Storage Facility (TSF)
- A lack of evidence to show that the ICE has overseen and certified that TSF buttress works conducted December 2021 to April 2022 meet design specifications
- Inspection and Test Plans (ITPs) for the NOEF were not submitted which would enable the ICE to approve re-commencement of construction at hold points or warrant and accept the waste placement works for the NOEF
- The TSF Cell 1 Stage 5 Raise to RL 10059 m, TSF Cell 2 Stage 6 Raise to RL 10061 m and TSF Cell 2 Stage 7 Raise to RL 10063 m Construction Reports were not submitted to DITT within 30 days
- Construction of the Eastern Perimeter Run-Off Dam (EPROD) was completed before the audit period but the 'as built' construction report had not been finalised in the audit period.
- The TSF Operations, Maintenance and Surveillance Manual (OMS Manual) is not finalised based on updates required following construction and changes in operation and the ITRB has not reviewed and endorsed it
- Boron sampling for surface water monitoring was not undertaken for approximately 4 weeks, which included during the releases when it is required at SW03 and SW06
- Characterisation data for the exploration holes was not included in the EMR
- Permanent gauging stations were not installed on Glyde River or Emu Creek
- Sampling results were not obtained at some dust depositional gauges due to jar damage for prolonged periods and access issues (e.g., DDG24, DDG58, BBDDG8).

The *Waste* Environmental Aspect includes the management of waste rock in the overburden emplacement facilities, an area of high potential environmental risk if management controls are not adequately implemented. Against the 54 active waste-related conditions, the Operator had a



compliance score of 95% with four part compliances (high) and three part compliances (moderate). This is marginally lower than the 97% *Waste* score in the 2021 AEPAR. The part compliances were related to:

- Construction documentation (e.g. ITPs) not being provided for the operational phase of the NOEF
  to the ICE to warrant and accept both the design and construction works, oversee and certify the
  works meet design specifications, approve recommencement of works at hold points and prepare
  weekly / monthly progress reports
- Independent Tailings Review Board (ITRB) has not been involved in endorsing Tailings Storage Facility (TSF) design changes (buttresses), TSF Operations, Maintenance and Surveillance Manual (OMS Manual) and construction documentation
- The ICE does not warrant and accept both the design and construction works specifically without limitation on responsibility for the NOEF or TSF
- A lack of evidence provided to show that the ICE has overseen and certified that TSF buttress works conducted December 2021 to April 2022 meet design specifications
- The TSF Cell 1 Stage 5 Raise to RL 10059 m, TSF Cell 2 Stage 6 Raise to RL 10061 m and TSF Cell 2 Stage 7 Raise to RL 10063 m Construction Reports were not submitted to DITT within 30 days upon construction being finalised.

Construction reports or 'as built' construction reports verify that the Mine's facilities (e.g. dams, NOEF and TSF) have been built in accordance with the relevant authorisation conditions and approved design and specifications. Some 'as built' construction reports have not been available for a combination of reasons. Clarification on which structures (facilities) and what interim stages of construction require 'as built' construction reports, and what defines construction completion, will assist the Operator to meet requirements and support the progressive preparation of 'as built' construction reports in a timely manner.

The *Air Quality* Environmental Aspect attained a compliance score of 95% because sampling results were not obtained at some dust depositional gauges due to jar damage for prolonged periods and access issues (e.g. DDG24, DDG58, BBDDG8).

A summary of the Operator's Authorisation compliance score for each Operator Domain is presented in Table 3-3 and Figure 3-2.

Table 3-3: Authorisation – Operator Compliance Scores by Operator Domain

Domain	Total No. of Conditions	No. of Active Conditions	Scores	Compliance (Active Conditions)
Governance/General	183	79	305	97%
Open Pit/Underground Workings	3	1	4	100%
Tailings Storage Facility	65	34	127	93%
Water Management and Storages	98	52	206	99%
Overburden Emplacement Facilities	74	41	158	96%
Exploration	16	13	51	98%
Waterways (including river diversion)	99	48	187	97%
Bing Bong Loading Facility	7	5	19	95%
Non-mineral Waste Management	10	0	0	-



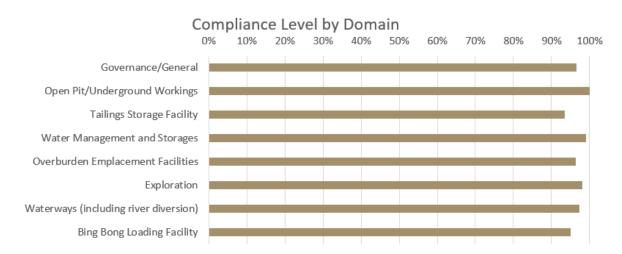


Figure 3-2: Authorisation – Operator Compliance Level Illustrated by Operator Domain

The key findings in relation to Operator Domains are outlined below, and the detailed audit findings for compliance levels and opportunities for all Operator Domains are presented in *Authorisation Compliance Workbook – Operator*, refer Appendix A.

The *Open Pit/Underground Workings* Operator Domain was assessed as achieving the highest compliance (100%) with the Authorisation, based on one active condition.

The Tailings Storage Facility and Overburden Emplacement Facilities Operator Domains have amongst the highest levels of potential environmental risk. The Tailings Storage Facility and Overburden Emplacement Facilities Operator Domains achieved compliance scores of 93% and 96% respectively. The Overburden Emplacement Facilities score is the same as for the 2021 AEPAR. The Tailings Storage Facility score is lower than the 95% score for the 2021 AEPAR and is the lowest score for an Operator Domain in the 2022 AEPAR. For the Tailings Storage Facility Operator Domain 34 active conditions, there were six part compliances. Three were ITRB related and three were ICE related. For the Overburden Emplacement Facilities Operator Domain 41 active conditions, there were four part compliances. Three were ICE related part compliances, two of which were identical to the ICE related part compliances from the Tailings Storage Facility Operator Domain and the final one was related to environmental commitments not being actioned. The ICE and ITRB conditions are critical for ensuring independent oversight of the TSF and Overburden Emplacement Facilities.

Two other Operator Domains (*Water Management and Storages* and *Waterways*) achieved high compliances of 99% and 97%, with 52 and 48 active conditions respectively.

The Exploration Operator Domain scored a high compliance of 98% with only one part compliance.

Governance activities are the requirements and procedural elements of the regulatory conditions that provide an overarching means to achieve compliance and environmental performance outcomes. There are 183 conditions relevant to the *Governance/General* Operator Domain, 79 of which are currently active. The Operator was assessed as achieving a compliance score of 97%.

The *Bing Bong Loading Facility* Operator Domain scored 95% from five active conditions; one of which was a part compliance (high).



Where relevant, OFIs have been developed for those conditions in all Operator Domains assessed as having less than full compliance, and these are outlined in Section 3.2.3.

# 3.2.3 Opportunities for Improvement

Potential opportunities identified by the Independent Monitor for the Operator to consider that support continuous improvement are detailed in Table 3-4.

Table 3-4: Authorisation – Operator Opportunities for Improvement

OFI Ref.	Authorisation Condition No.	Opportunities for Improvement			
General					
OFI-22-OP- AUTH-01	3	Prepare annual as-built factual reports for the NOEF as required by the MMP.			
Mining Mana	Mining Management Plan and Reporting				
OFI-22-OP- AUTH-02	7*	Submit all monitoring data inclusive of HVAS results annually to the Department in the required format.			
OFI-22-OP- AUTH-03	8	Submit 'as built' construction reports for the TSF to DITT within 30 days upon construction being finalised.			
Independent oversight - Appointment of ICE					
OFI-22-OP- AUTH-04	48.a*	Obtain approval of the ICE's limitation on responsibility position with DITT.			
OFI-22-OP- AUTH-05	48.a, 48.b and 48.c	Provide construction documentation (e.g., ITPs) for the operational phase of the NOEF to the ICE so that they can warrant and accept both the design and construction works, oversee and certify the works meet design specifications, approve recommencement of works at hold points and prepare weekly / monthly progress reports.			
OFI-22-OP- AUTH-06	48.b	Obtain evidence that the ICE has overseen and certified that TSF buttress works conducted December 2021 to April 2022 meet design specifications.			
OFI-22-OP- AUTH-07	48.g*	Ensure the ICE finalise the as-constructed report for EPROD that meets the requirements of condition 48.g, including sub-conditions.			
OFI-22-OP- AUTH-08	48.g*	Ensure the ICE prepare as-constructed reports in a timely fashion.			
Independent Tailings Review Board					



OFI Ref.	Authorisation Condition No.	Opportunities for Improvement
OFI-22-OP- AUTH-9	50.b.ii	Involve the ITRB related to TSF design changes and timely review of construction documentation and the updated TSF OMS Manual.
OFI-22-OP- AUTH-10	50.e	Retrospectively obtain ITRB endorsement for the TSF buttress design changes in writing and ensure any future modifications are endorsed by the ITRB in a timely fashion.
OFI-22-OP- AUTH-11	50.e.ii	Finalise the TSF OMS Manual and ensure that it is reviewed annually and if updates are required, update it and issue the revised version for ITRB review and endorsement.
Water Manag	gement and Stora	age
OFI-22-OP- AUTH-12	62.c.iii.d^^^	Correspond with DITT about the intent of this condition and specifically the impracticality of locating signage along the length of the shipping channel and in the immediate area surrounding the shipping channel and swing basin.
Geochemical,	Geotechnical an	nd Hydrogeological Assessments and Investigation Drilling
OFI-22-OP- AUTH-13	83	Include characterisation data for exploration drilling in the EMR.
ENVIRONME	NTAL MONITOR	ING AND MANAGEMENT
OFI-22-OP- AUTH-14	Schedule D - 3.a and 3.b*	Construct the permanent gauging stations on Emu Creek and Glyde River now that approvals are in place. In the meantime, deploy multiple loggers in Emu Creek and the Glyde River to provide redundancy to ensure continuous data collection in lieu of permanent gauging stations.
OFI-22-OP- AUTH-15	Schedule D - 6.b^^^	Update management plans to indicate the process relating to advising DITT when a part of the plan cannot be implemented.
OFI-22-OP- AUTH-16	Schedule D - 6.b	Keep the Water Management Plan and Monitoring Schedule up to date in terms of removing decommissioned groundwater bores.
OFI-22-OP- AUTH-17	Schedule D - 6.b and 6.c	Improve the access to groundwater bores (e.g., GW19008 to GW19011, GW19013 to GW19015, GW19018, GW19019 and GW19021) or update the Water Management Plan to acknowledge access is not available at all times.
OFI-22-OP- AUTH-18	Schedule D - 6.c	Improve access to dust depositional gauges, seek approval for alternative locations (e.g., DDG24, DDG58, BBDDG8) or update the Air Quality Management Plan to acknowledge access is not available at all times.

Note: ^^^ indicates OFI was carried over from 2021 AEPAR.

Where there were observations of importance relating to a condition but a part compliance and OFI were not deemed warranted, these observations are included in the *Authorisation Compliance Workbook – Operator*, refer Appendix A, preceded by the text, 'OBS'. Key observations are included in Table 3-5.

<sup>\*</sup> Indicates OFI was very similar to an OFI from 2021 AEPAR.



Table 3-5: Authorisation – Operator Observations

OBS Ref.	Authorisation Condition No.	Observations
OBS-22-OP- AUTH-01	48	Structures currently under construction (e.g. north eastern Sump (NES), WMD wall and spillway, etc) will be required to meet this condition, including the ICE to warrant and accept both the design and construction works and provide certified as constructed reports.
OBS-22-OP- AUTH-02	69.g.ii	In the event of being unable to provide the complete analytical suite (e.g., due to laboratory issues) attempts to arrange alternative analysis should be made (e.g., another laboratory) and the regulator should be advised of any inability to meet the monitoring condition.
OBS-22-OP- AUTH-03	Schedule D - 6.b	The WMP is required to be reviewed, and if necessary revised, on an annual basis. Consider updating the WMP annually once Trigger Action Response Plans (TARPs) are revised to ensure it is up to date for each wet season.

#### 3.2.4 Conclusions

The high level of compliance with the Authorisation conditions across all key operational activities is an indicator of the fulfillment of relevant regulatory requirements achieved by the Operator.

The Operator Authorisation audit findings identified 18 OFIs (presented in Table 3-4) based on conditions having part compliance.

# 3.3 Waste Discharge Licence – Operator Compliance Audit

# 3.3.1 Scope and Approach

The Operator was assessed against the relevant conditions contained in WDL 174-12 and 13 (25 May 2021 - 25 May 2023) during the audit period using the quantitative audit approach and scoring criteria described in Section 2.2. WDL 174-13 was issued on 10 March 2022 and contained the same conditions as WDL 174-12 with some minor changes. Therefore, each condition from WDL 174-13 is included in the audit with any minor differences between it and the relevant WDL 174-12 condition noted in the comments section.



## 3.3.2 Findings

A summary of findings is shown in Table 3-6.

Table 3-6: Summary of WDL Compliance - Operator

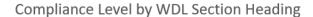
Description	No.
Total number of conditions and sub-conditions relevant to Operator	110
Number of active conditions and sub-conditions during the audit period	98
Number of part compliances (high)	8
Overall compliance score of active conditions	98%

Detailed audit findings, supporting evidence, part compliances and scores are contained in the WDL Compliance Workbook – Operator, refer to Appendix B.

A summary of the Operator's WDL compliance score for each WDL Section is presented in Table 3-7 and Figure 3-3.

Table 3-7: WDL – Operator Compliance Scores by WDL Section

WDL Sections	Total No. of Conditions	No. of Active Conditions	Scores	Compliance (Active Conditions)
General	31	25	97	97%
Early Surrender of Licence	1	0	0	-
Operational	13	11	44	100%
Discharges	11	11	44	100%
Monitoring	19	16	61	95%
Recording and reporting	31	31	122	98%
Performance improvement	4	4	16	100%



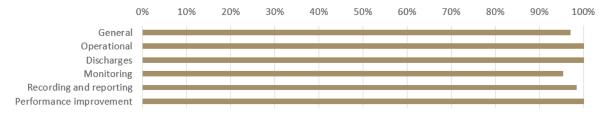


Figure 3-3: WDL – Operator Compliance Level by Section

The key findings in relation to the WDL compliance by the Operator are outlined below. The detailed audit findings for compliance levels and opportunities for all sections are presented in *WDL Compliance Workbook – Operator*, refer Appendix B.



The *Operational, Discharges* and *Performance Improvement* sections of the WDL achieved 100% compliance indicating that, while part compliances within conditions of other sections of the WDL have been identified, waste discharge is in compliance with the specific operational and discharge conditions.

High levels of compliance of 98% and 97% were also achieved in WDL sections relating to *Recording and Reporting* and *General* respectively. The *Recording and Reporting* Section had two part compliances (high) out of 31 active conditions. The part compliances related to not reporting the lack of continuous water level and flow monitoring to the regulator and not reporting a non-compliance within 24 hours. The General Section had three part compliances (high). The part compliances in this Section were of an administrative nature, relating to:

- Not having signage at the public entrance to the BBLF showing the waste discharge licence number and the 24 hour emergency contact details
- Not including the community feedback phone number in the Communication Plan Waste
  Discharge Licence, although the Operator's emergency phone number is included for feedback
  and this has been rectified after the audit period.

The *Monitoring* Section had the lowest compliance at 95% based on 16 active conditions. The part compliances were related to:

- Continuous monitoring and data capture for water level and flow in the Glyde River, Emu Creek and McArthur River to capture 90% or greater was not achieved
- Monitoring site signage was not maintained at SW08, so that the location was always 'reasonably' identifiable. However, signage has been installed following the audit period
- Turbidity was not analysed at a laboratory with NATA accreditation for turbidity analysis.

OFIs have been developed for those conditions assessed as having part compliance and are outlined in Section 3.3.2

# 3.3.3 Opportunities for Improvement

Potential opportunities to support continuous improvement identified by the Independent Monitor through the review and audit process are detailed in Table 3-8.

Table 3-8: WDL – Operator Opportunities for Improvement

OFI Ref.	WDL Condition No.	Opportunities for Improvement
OFI-22-OP- WDL-01	26*	Obtain continuous wet season river level and flow monitoring data (greater than 90% capture) for SW09 (Glyde River), SW21 (McArthur River) and SW31 (Emu Creek).
OFI-22-OP- WDL-02	31	Either use a NATA accredited laboratory for turbidity analysis or obtain a WDL amendment from DEPWS.
OFI-22-OP- WDL-03	36	Include all non-compliances (not only those related to exceedances) in the WDL non-compliance register.



OI	FI Ref.	WDL Condition No.	Opportunities for Improvement
	-22-OP- DL-04	37*	Implement any actions to facilitate notification of non-compliances within 24 hours of receiving final laboratory results.

Note: \* indicates OFI very similar to an OFI from 2021 AEPAR.

Where there were observations of importance relating to a condition but a part compliance and OFI were not deemed warranted, these observations are included in the *WDL Compliance Workbook* – *Operator*, refer to Appendix B, preceded by the text, 'OBS'. Key observations are included below in Table 3-9.

Table 3-9: WDL – Operator Observations

OBS Ref.	WDL Condition No.	Observations
OBS-22-OP- WDL-01	9.3	Preparing an environmental risk assessment as part of future submissions when plans are amended would better meet compliance requirements. It is noted that the submission of the Communication Plan (after the audit period) did include an assessment of environmental risk.
OBS-22-OP- WDL-02	28	Diffuse gradients in thin films sampling should be undertaken quarterly as required.

#### 3.3.4 Conclusions

The audit review has assessed the Operator as having a high level of overall compliance with active WDL conditions at 98%.

The WDL audit identified four OFIs, presented in Table 3-8, to support improved environmental performance and assist in compliance with the WDL.

# 3.4 NT EPA Recommendations – Operator Compliance Audit

In accepting the NT EPA recommendations of *Assessment Report 86*, the then Minister for Primary Industries and Resources took responsibility for implementing the recommendations that apply under the authority of the MMA.

As part of this audit, all 117 NT EPA recommendations and sub-parts were individually reviewed against the current Authorisation conditions to confirm whether the recommendations had been transferred into the Authorisation. The majority of the recommendations had been transferred directly to the Authorisation and all the recommendations, to varying extents, are included in the Authorisation, refer to Section 4.3 and Appendix D for details. The NT EPA recommendations adopted as Authorisation conditions became enforceable under the MMA.

There are 116 out of 117 NT EPA recommendations relevant to DITT to incorporate into the Authorisation and subsequently become regulatory requirements for the Operator to develop or



implement. It is noteworthy that 109 of these recommendations are future requirements that will be triggered at timeframes between eighteen months to five years from the date of authorisation of the OMP, which is outside of the period of this audit.

As the NT EPA recommendations have been included in the Authorisation conditions, the Authorisation Operator compliance audit has fulfilled the audit task to review the Operator's compliance audit against implementation of the NT EPA recommendations, refer to the review of Operator findings contained in Section 3.2 and Appendix A. The high level of Operator compliance with the Authorisation (97%) reflects the high level of Operator compliance with the NT EPA recommendations.

# 3.5 Voluntary Commitments – Operator Review

# 3.5.1 Scope and Approach

In addition to the regulatory requirements under the Authorisation and WDL the Operator has made a number of commitments to support improved outcomes across the Mine operation. These commitments have been identified and adopted by the Operator from various sources, including from the OMP Environmental Impact Statement (EIS), and have been set out in the MMP. The EMR contains a reconciliation of commitments, i.e., it provides a status update against the commitments set out in the MMP based on activity undertaken in the Operator's monitoring period.

The Independent Monitor reviewed the commitments set out in the MMP. The MMP describes commitments at Section 5.3 and refers to two sets of commitments:

- Key commitments contained in the MMP, which are presented in the MMP (Appendix L)
- Relevant OMP EIS commitments provided in the MMP (Appendix M).

In 2021 the Independent Monitor sought clarification regarding the relationship between the sets of commitments contained in the MMP. The Operator was able to clarify that MMP's 'EIS Commitments Register' (Appendix M) was adapted from the OMP EIS Commitments (Appendix AB) and that MMP's 'Commitments contained within the MMP' (Appendix L) included commitments relating to regulatory approvals and actions that had not been included in the OMP's EIS Commitments Register. Furthermore, the Operator indicated that two registers were current, with neither superseding the other.

As the commitments are not necessarily regulatory requirements, the scorecard approach adopted for the audit of the Authorisation and WDL (as described in Section 2.2) was not used in this case. Instead, and consistent with the approach undertaken for the 2021 AEPAR, a qualitative review of the registers was undertaken (as described in Section 2.3), with general commentary and OFIs provided.

Both sets of MMP commitments were reviewed (Appendix L and Appendix M), along with the reconciliation of commitments contained within the EMR (Appendix B). Consideration was given to whether the commitments set out in the MMP were addressed in the EMR, and whether they were complete, ongoing or not currently relevant because they related to later stages of operation at the Mine or similar. For review of the reconciliation of commitments contained within the EMR, consideration was also given to whether the EMR 2022 effectively addressed the commitments. It is noted that the wording of a number of commitments is non-specific and as such, review of performance against these is not quantifiable.



## 3.5.2 Findings

The review identified that all the OMP EIS commitments provided in the MMP (Appendix M) were addressed in the EMR; however, other commitments identified in the MMP (Appendix L) were not addressed. Notwithstanding, from the 13 commitments identified in the MMP (Appendix L), all appear to be addressed to some extent within the OMP EIS commitments, apart from one commitment, i.e., 'Install additional groundwater monitoring at Bing Bong'.

In total, 230 commitments were identified in the EMR. Of these, 158 commitments were identified to be ongoing (i.e., relating to ongoing committed activity at the Mine), eight commitments were identified to be complete (i.e., no further action required), and 64 commitments were identified to be not currently relevant (e.g., commitments relating to specific actions during closure stage).

Of the 158 ongoing commitments, the EMR 2022 provided by the Operator indicated that eight commitments may be incompletely addressed. These related to the following activities:

- Geochemical investigations had not been undertaken for the Western Overburden Emplacement Facility and BBLF
- Termination of a field barrel leaching experiment in the reporting period due to issues with experimental set up and protocol, with post kinetic testing proposed to be undertaken
- A water level gauging station on the Glyde River was not operational, noting that works to recommission the Amelia Yard gauging station on the Glyde River are on hold pending approval of an NT Aboriginal Areas Protection Authority (AAPA) certificate for the works
- Vegetation trials on the southern levee wall were not conducted due to delays in approval of the MMP, noting that trials are intended to be completed on the NOEF in late 2022
- A Gouldian Finch Monitoring Program has not been prepared
- Dust management control measures have not been added to site inductions to brief employees and contractors on air quality management requirements
- The Operator noted intention to continue to conduct internal corporate Health Safety Environment and Community (HSEC) audits for the Mine, rather than undertake both internal and external audits.

Reporting against commitments in the EMR 2022 was consistent with the previous audit period.

## 3.5.3 Opportunities for Improvement

Potential opportunities to support continuous improvement of the implementation, tracking and reporting of commitments are detailed in Table 3-10 noting the opportunities are not mandatory requirements. It is notable that these opportunities are replicates of those identified for the previous audit period.

Table 3-10: Operator Commitments - Opportunities for Improvement

OFI Ref.	Opportunities for Improvement
OFI-22-OP- COM-01^	Provide detail and address the outstanding commitments from the MMP (Appendix L), along with the eight incomplete actions for the commitments reported in the EMR (Appendix B).



OFI Ref.	Opportunities for Improvement
OFI-22-OP- COM-02^	Incorporate the commitments from the MMP (Appendix L and Appendix M) to a single commitment register for reporting against in future EMRs and rationalise the commitments to avoid duplication.
OFI-22-OP- COM-03^	Provide additional information in the commitments register to identify where a commitment is closed out with no further action proposed. Provide details of close-out actions to confirm commitments are complete, e.g., date completed, brief description of action completed, reference to relevant supporting report/ data/ documentation.
OFI-22-OP- COM-04^	Provide a unique reference number to each commitment to facilitate tracking and reporting.

Note: ^ indicates OFI carried over or replicated from 2021 AEPAR.

#### 3.5.4 Conclusions

The majority of the Operator's reported commitments are adequately addressed through the EMR. In line with the 2021 AEPAR, commitment management would further benefit from consolidation and rationalisation of the commitment register, along with clearer tracking and reporting of commitments.

# 3.6 Environmental Risk - Operator Review

# 3.6.1 Scope and Approach

The objective of the risk review is to assess the Operator's environmental risk management process, implementation status, and the effectiveness of controls.

A review of the Operator's performance in environmental risk management was conducted by examining the following key documents:

- Environmental Risk Assessment (MMP January 2020)
- Environmental Risk Assessment (Risk Workshop May 2022)
- Risk Management Plan (October 2021).

A qualitative review of the environmental risk management process was undertaken (as described in Section 2.3) with general commentary and OFIs provided. Through assessment of the relevant documents and samples of information, the following were reviewed:

- Risk management process
- Risk register
- Preventative controls implementation and risk status
- Risks presented in the EIS and the MMP
- Annual findings to determine improvement in risk profile
- Effectiveness of controls.

This review scope is not to recreate the environmental risk register, but to review the risk register and associated documents to assess the adequacy of the risk process and to determine whether key environmental risks have been afforded appropriate consideration.



#### 3.6.2 Findings

#### **Risk Process**

The Operator utilises a comprehensive suite of risk management processes, including corporate governance, risk assessment workshops, risk registers and software tools, which provide an appropriate framework for identifying and managing environmental risks associated with the Mine's operations. The main risk management document is the Risk Management Plan, which establishes the structured framework for a common approach to the risk management process. The Risk Management Plan's framework is based upon ISO 31000 (2018) Risk Management - Guidelines, and incorporates overall risk management processes, risk responsibilities and guidance on risk identification, analysis and reviews of effectiveness.

The majority of risks in the MMP Environmental Risk Assessment are based upon risks identified at the time of the OMP EIS and generated by an externally-facilitated risk assessment process, based upon ISO 31000 and MRM Corporate standards. An external facilitator was engaged to conduct a risk assessment workshop in May 2022 to produce the current risk register. The MMP environmental aspects and impacts register has also been utilised to identify risks evaluated in the environmental risk register.

#### **Environmental Risk Assessment Registers**

The Operator's two most recent environmental risk assessment registers reviewed are summarised below.

2020 MMP (Appendix A: Environmental Risk Assessment, January 2020)

- 34 'scenario' risks listed
- Source, pathway, receptor and potential causes described
- Environmental controls are described and generally appear to be existing controls or management plans
- No reference to indicate if the risk is derived from OMP EIS or a newly identified risk
- One of the 34 inherent risk ranking scores is the same as the residual risk ranking score.

2022 Risk Register (Risk Workshop, May 2022)

- 40 'risk title' risks listed
- Risk 'Caused by' described
- 'Risk Control Effectiveness' and 'Treatment Plan (new controls)' added
- Reference added indicating whether the risk is derived from OMP EIS or a newly identified risk following Broad Brush Risk Assessment (BBRA)
- Environmental controls are described and generally appear to be existing controls or management plans
- Six out of the 40 risk ranking scores are the same as the residual risk ranking score
- Risk Status of all 40 risks assessed are listed as 'In-progress'.

The 2022 risk register has an improved and more comprehensive format with more information than the 2020 register. All 34 risks, including two risks split into four sub risks, from the 2020 register along



with two new risks are assessed in the 2022 version. The risk scenarios in the 2020 register can be associated with the risks listed in the 2022 register. Comparisons between the annual environmental risk performance and the identification of improvements in risk profile can be made.

The latest 2022 register presents 'existing preventative controls' and 'existing mitigation controls' and introduces some new controls under the column heading of 'Treatment Plan'. The 2022 environmental risk assessment register format with unique individual risk identifiers has been enhanced to become a more effective environmental risk status tracking tool.

#### **Environmental Mining Report**

The 2021 EMR's Executive Summary contains a reference to a recent review of the risk assessment, which found there was no increase in the environmental risks compared to those presented in the OMP EIS and all risks (including new/altered risk) were determined to be 'low' or 'medium' based upon the assessment matrix.

Any new, altered or emerging risks from the review are potential candidates to be added to the risk register and provided with new controls or modified existing controls. Two risks given additional consideration in the 2022 risk register, were:

- Spontaneous combustion of reactive material in the overburden emplacement facility
- Poor water quality releases from TSF overflow.

#### **Risk Status**

Based upon the information reviewed, the EMR provided an annual review of the most recent environmental risk assessment to check there was no change in the environmental risk profile. However, it appears there was no revision of environmental risk assessment register or documentation to capture new or altered risks or controls that may have occurred during the 12-month period.

The 2022 risk register lists numerous mitigation measures implemented during the period which constitute environmental controls. Examples of improved environmental performance and potentially reduced residual risk ratings not previously noted have been incorporated into the risk register (e.g. 'TSF interception trench project completion' and 'consider sumps at the mill to control dust in runoff'). The risk ranking status of these control measures is summarised in the Environmental Risk Assessment register and where appropriate improvements in the residual risk profile shown.

Monitoring risk status is a key step in regularly reviewing the risk register. As individual risks are mitigated and their risk status changed (e.g. closed), the risk rating score after effective risk treatment will be lower and environmental risk management progress can be tracked. An analysis of risk ratings between 2019, 2020 and 2022 register found fewer 'medium' risks each year on year with the implementation of control measures supporting the recategorisation of more risks to the 'lower' risk category. The 2022 risk register assessed 55% of the 40 risks as 'low' and 45% as 'medium risk.

#### **Effectiveness of Controls**

As part of risk monitoring and review, the environmental control should be reviewed to determine the adequacy and effectiveness of actions associated with managing the risk and achieving objectives.

An assessment of the risk control effectiveness has been added to the 2022 risk register to allow the effectiveness of controls to be assessed.



Over time, the effectiveness of controls (e.g., fully effective, substantially effective, partially effective, largely ineffective, totally ineffective) may change, and the resultant residual risk level may be altered. The effectiveness of controls can be assessed by considering if they reduce the likelihood of the situation occurring or if they reduce the consequence. The 2022 risk register assessed risk control effectiveness as 'satisfactory' for 36 risks and 'requires improvement' for four risks.

#### 3.6.3 Opportunities for Improvement

Potential opportunities to support continuous improvement of the environmental risk management processes are detailed in Table 3-11, noting the opportunities are not mandatory requirements.

Table 3-11: Risk Management - Opportunities for Improvement

OFI Ref.	Opportunities for Improvement	
OFI-22-OP- RI-01^^^	Implement regular formal environmental risk assessment reviews to monitor the effectiveness of controls as part of continuous improvement.	
OFI-22-OP- RI-02^^^	Undertake regular formal environmental risk assessment reviews to update risk status and track environmental risk management progress as part of continuous improvement.	

Note: ^^^indicates OFI ongoing from 2021

#### 3.6.4 Conclusions

The Risk Management Plan provides the Mine with a comprehensive process and appropriate risk management framework in accordance with the relevant international risk standard series, ISO 31000 (2018) *Risk Management*. The Environmental Risk Assessment register contains appropriate identification, risk analysis and proposed controls for the Mine's key environmental risks.

The review found there is improved correlation between the 2020 and 2022 MMP Risk Assessment registers, as the risk descriptions and referencing of individual risks match to enable tracking of risks and risk performance over time. An assessment of the risk control effectiveness has been added to the 2022 risk register.

Strengthening the monitoring and risk review steps in the Risk Management Plan process would assist environmental performance. This would be achieved by conducting regular, e.g. annual, formal environmental risk assessment reviews of the effectiveness of risk controls, status and risk profile trends as part of continuous improvement to demonstrate risk management progress.

# 3.7 Operator Success

The audit and review process identified some noteworthy successes achieved by the Operator during the audit period which have contributed to continuous improvement, these are summarised below.

**Ecotoxicological Program** - An ecotoxicological research and investigation program was conducted to establish the concentration of contaminants at which chronic and acute impacts to biota of relevance occur. The water quality guideline values derived from the ecotoxicological testing were highly specific to the local McArthur River catchment as the testing was completed using local reference waters from the McArthur River and ecologically relevant species. The new water quality



guidelines proposed aim to provide life-long protection of the McArthur River aquatic organisms from potential Mine influences. The program's findings were submitted in October 2021 and approval of changes to several site-specific trigger values (SSTVs) was provided by DEPWS on 10 March 2022. DITT approved the research and investigation program on the 03 August 2022.

**Purple-crowned Fairy Wren Relocation** - During construction of the Mine Levee Wall in 2007-2008, a small population of Purple-crowned Fairy wrens (PCFW) became geographically isolated from surrounding populations. In September 2020, 13 birds from five discrete family groups were captured and translocated. The translocation program is understood to be the first PCFW translocation in the world. Initial results indicate the translocation has been successful, with all the translocated males maintaining and defending territories in the translocation area and all five groups successfully breeding in the latest monitoring season 2020-2021. One translocated subordinate male also established a territory adjacent to its original group territory, and this new group also bred successfully. Ongoing post-release monitoring is required to evaluate success of the program. In addition, there will be continued management of habitat in the translocation release area to progress recovery of riparian vegetation and improve habitat condition.

**Permanent Dump Supervisor Role** – A new Dump Supervisor full time role has been created in the Mining Operations team to provide oversight of the handling and placement of waste rock material in the NOEF. Such a position with dedicated responsibility for waste rock management is uncommon in the mining industry and is an indicator of the importance that the Operator places on safeguarding the environment.

**McArthur River Diversion Channel Vegetation Rehabilitation** - The key objective of rehabilitation of the McArthur River Diversion Channel is to establish a functioning riverine ecosystem comparable to the original water course. Over 800,000 tubestock have been planted in the McArthur River Diversion Channel since 2010 and a total of 68,581 were planted in 2022. The results of the revegetation monitoring program indicate that rehabilitation is on a positive trajectory. In 2021, one revegetation site within the Barney Creek domain and two revegetation sites within the McArthur River domain attained an acceptable status, not requiring further rehabilitation works or monitoring. An additional four sites only require further monitoring.

Little Barney Creek Release Point Management - The Authorisation requires continuous flow in Little Barney Creek before release from the Water Management Dam (WMD) can be activated. The 2021-2022 annual site water balance for the Mine forecast high water storage volumes in the on-site dams, MRM sought an exemption from the continuous flow requirement in Little Barney Creek to maximise utilisation of the WMD Release Point over the 2021/22 wet season. The exemption assists to lower the risk of uncontrolled release from the Mine and potential open pit inundation. The exemption request included controls to minimise the environmental risk of the activity, including endorsement of the approach from aquatic ecology specialists. A further benefit of the exemption was the ability to better time releases with peak flow events in the McArthur River to maximum dilution. The exemption request was approved by DITT on 25 January 2022.

**TSF Interception Trench** - A 1.7 kilometre-long interception trench on the northern side of the TSF was commissioned in October 2020 to manage groundwater seepage from the TSF entering Surprise Creek. Groundwater monitoring to assess the effectiveness of the interception trench is conducted at five monitoring transects to provide an understanding of the groundwater flow and water quality conditions between the TSF and the trench, downgradient of the trench up to Surprise Creek, and across Surprise Creek.



Monitoring data from the trench found a slight reduction in electrical conductivity and sulphate concentration and notably lower filtered thallium and filtered zinc metal concentrations in Surprise Creek downstream of the interception trench after the trench was commissioned. Monitoring data from this area will continue to be reviewed to inform the operation of this intervention.

**Barney Creek Sediment Management** - Dust impact to the surface water system is an important driver of fluvial sediment quality and concentrations of metals in biota. This is being addressed through ongoing remediation of Barney Creek (including physical removal of sediment). Additional measures to be examined, include extension of the sediment removal program, silt traps and implementation of additional dust management measures at Barney Creek Haul Road and the Mill.

**Djirrinmini Groundwater Monitoring** - Groundwater levels and quality continue to behave in a consistent and expected manner. At Djirrinmini, the groundwater elevations at all monitoring bores remained above the performance indicator levels during the reporting period and therefore there were no exceedances or actions triggered.

**Water Quality Monitoring Indigenous Participation** – The operator is currently considering opportunities to enable local indigenous community members to be involved in the McArthur River water quality monitoring program to contribute to the findings and support the building of local capacity.



# 4 Review of DITT

# 4.1 Objective

The objective of the audit of DITT was to assess DITT's level of compliance against the relevant Authorisation conditions and the implementation of NT EPA recommendations, as well as a review of DITT's regulatory procedures.

# 4.2 Authorisation – DITT Compliance Audit

# 4.2.1 Scope and Approach

Using the quantitative audit approach and scoring criteria described in Section 2.2, DITT's performance was assessed against the regulatory conditions contained in the Authorisations (dated 13 November 2020 and 18 June 2021) over the audit period.

Consistent with the approach for the audit of the Operator related to the Authorisation, an analysis of the two Authorisations was conducted to determine which conditions from each should be included in the audit. As these Authorisations' conditions were identical, except for the security amount in condition 10, the more recent 18 June 2021 Authorisation was assessed. This is consistent with the approach described in Section 3.2.1.

Following determination of the conditions to be audited, each condition was reviewed to confirm if it had a DITT action or not. Only conditions with an explicit or implied action required by DITT were then audited.

# 4.2.2 Findings

A summary of findings is shown in Table 4-1.

Table 4-1: Summary of Authorisation Compliance - DITT

Description	No.
Total number of conditions and sub-conditions relevant to DITT	242
Number of active conditions and sub-conditions during the audit period	68
Number of part compliances (high)	9
Number of part compliances (moderate)	1
Overall compliance score of active conditions	96%

Detailed audit findings, supporting evidence, part compliances and scores are contained in *Authorisation Compliance Workbook – DITT*, refer Appendix C.

Further analysis was undertaken by assessing Authorisation conditions and sub-conditions under Authorisation sections, generally aligned with the Section headings in the Authorisation. Some of the Section headings below have been amalgamated under related Authorisation sections and where this occurred, it has been noted.



- General incorporates MMP and reporting, security and levy, exploration, non-mineral waste management and geochemical, geotechnical and hydrogeological assessment, and investigation drilling
- Waste Rock Management
- Water Management incorporates storage, transfer and discharge
- Tailings Storage Facility incorporates ITRB
- Environmental and Independent Monitoring incorporates two conditions related to dredging at BBLF
- Overburden Management Project
- Adaptive Management
- Mine Closure incorporating unplanned closure.

A summary of DITT's Authorisation compliance score for each Authorisation Section is presented in Table 4-2 and Figure 4-1.

Table 4-2: Authorisation – DITT Compliance Scores by Section

VoA Sections	No. of Conditions	No. of Active Conditions	Scores	Compliance
General	21	15	58	97%
Waste Rock Management	3	0	0	-
Water Management	7	0	0	-
Tailings Storage Facility	10	6	23	96%
Environmental and Independent Monitoring	69	24	94	98%
Overburden Management Project	118	18	67	93%
Adaptive Management	7	4	15	94%
Mine Closure	7	1	4	100%

#### Compliance Level by VoA Section

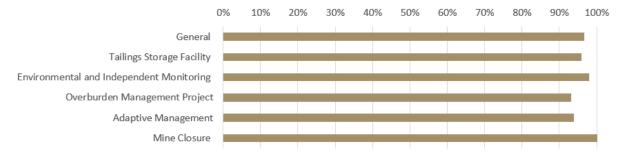


Figure 4-1: Authorisation – DITT Compliance Level Illustrated by Authorisation Section

The key findings in relation to Authorisation compliance by DITT are outlined below and the detailed audit findings for compliance levels and opportunities for all sections are presented in *Authorisation Compliance Workbook – DITT*, refer Appendix C.



The proportion of active conditions is low as a large number of the conditions are future requirements not triggered during the audit period.

The Authorisation provides environmental safeguards in the form of conditions, primarily concentrated on the potential higher environmental risks associated with the *Overburden Management Project* and *Waste Rock Management* sections. The review found DITT to have a strong focus on key environmental risks with correspondingly high number of conditions on the NOEF and the TSF.

DITT has been audited against some conditions that do not explicitly state that it is a DITT requirement but where the Operator had an action to provide a report or evidence to DITT. For DITT to have regulatory oversight and determine any areas of risk or non-compliance, review by DITT of submissions from the Operator or tracking of potential absence of submission/s needs to occur.

The *Mine Closure* Section achieved a compliance score of 100%. The one active condition was related to a review of the Operator's submitted Unplanned Closure Plan for 2022 activities.

The *Environmental and Independent Monitoring* Section attained a compliance score of 98% with 24 active conditions. The part compliances all related to two conditions that refer to conducting monitoring in accordance with a list of Environmental Management Plans (EMP) based on the approved MMP. However, the titles of the EMPs in the conditions is different from the actual titles of the plans in the MMP. These EMP titles have since been amended in the Authorisation issued 5 May 2022.

The *General* Section received a compliance score of 97% from 15 active conditions. This was due to one part compliance (moderate) related to DITT not ensuring that the Operator submitted 'as built' constructed reports for the TSF.

Construction reports or 'as built' reports are central to verifying that the Mine's facilities (e.g. dams, NOEF and TSF) have been built in accordance with the relevant authorisation conditions and approved design and specifications. Some 'as built' construction reports have not been available for a combination of reasons. Clarification on which structures (facilities), what interim stages of construction and what defines of construction completion will assist to clearly state requirements and support the progressive preparation of 'as built' construction reports in a timelier manner.

The *Tailings Storage Facility* Section attained a compliance score of 96%. The one part compliance, that is not explicitly a DITT requirement but is related to DITT, was to monitor overdue Operator TSF actions from the TSF Recommendation Instruction and Action Register to ensure they are closed out satisfactorily.

The *Adaptive Management* Section was assessed as achieving a compliance score of 94%. This was related to one part compliance for not having reviewed and approved the Adaptive Management Plans (AMPs) submitted by the Operator in a timely fashion. The review of the AMP and its approval have occurred after the audit period.

It was noted that there are no regulatory timeframes for responses for some review and approval tasks or establishment of Independent Panels . With a considerable amount of time elapsed there are now potential delay implications for other regulatory requirements that are reliant upon Independent Panel commencement.

The Overburden Management Project Section relates to the management of waste rock in the overburden emplacement facilities, which is an area of high potential environmental risk if risk



management controls are not adequately implemented. A 93% compliance score was achieved against 18 active related conditions. This Section had five part compliances related to:

- Submitted documents were not reviewed or approved in a timely manner (e.g. NOEF Interception Scheme Report VOA Condition 22 dated 13 Nov 2021, Ecotoxicology research and investigation program submitted 25 Oct 2021, Air Quality Management Plan submitted 13 Nov 2021 and AMP submitted 13 Nov 2021). Note that since August 2022 only the NOEF Interception Scheme Report approval has not yet been approved and there are no timeframes for review/approval.
- Community Reference Group (CRG) and Independent Panels (NOEF and TSF) have not been established.

The Waste Rock Management and Water Management sections did not have any active conditions.

OFIs have been developed for those conditions assessed as attaining part compliance and are outlined in Section 4.2.2.

## 4.2.3 Opportunities for Improvement

Potential opportunities to support continuous improvement identified by the Independent Monitor through the review and audit process are detailed in Table 4-3, noting these are not mandatory requirements.

Table 4-3: Authorisation – DITT Opportunities for Improvement

OFI Ref.	Authorisation Condition No.	Opportunities for Improvement
Mining Mana	agement Plan and	d Reporting
OFI-22-DE- AUTH-01	8	Amend the condition to specify what 'as built' construction reports are required rather than relying on the MMP to provide a clear list of what 'as built' construction reports are required.
OFI-22-DE- AUTH-02	8^^^	Prepare an annual program/register of Operator deliverables and submissions to assist DITT to manage the acknowledgement of receipt, adequacy review of submissions, and timely request for additional information, if required.
OFI-22-DE- AUTH-03	8^^^	Monitor construction progress to identify upcoming completion so that the anticipated date of receipt of construction reports is known in advance and to prompt follow-up action if anticipated due date is passed.
Overburden	Management Pro	oject
OFI-22-DE- AUTH-04	22, 28.b, 34.c and 94.d.	Review and approve submitted document in a more timely manner (e.g. NOEF Interception Scheme Report VOA Condition 22 dated 13Nov2021, Ecotoxicology research and investigation program submitted 25Oct2021, Air Quality Management Plan submitted 13Nov2021 and AMP submitted 13Nov2021 to allow for implementation of any recommendations.
OFI-22-DE- AUTH-05	22	Establish the independent expert panel (NOEF) or use an alternative expert review in the interim to assess requirement for the NOEF seepage interception trench and recovery system.



OFI Ref.	Authorisation Condition No.	Opportunities for Improvement
OFI-22-DE- AUTH-06	27.d	Establish the Independent Panels (NOEF and TSF) so that consultation during the preparation of future management plans can occur.
OFI-22-DE- AUTH-07	43	Establish the Community Reference Group.
Tailings Storage Facility		
OFI-22-DE- AUTH-08	80.d	Monitor overdue Operator TSF actions from the TSF Recommendation Instruction and Action Register to ensure they are closed out satisfactorily.

Note: ^^^ indicates OFI carried over from 2021 AEPAR.

Where there were observations of importance related to a condition but a part compliance and OFI were not deemed warranted, these observations are included in the *Authorisation Compliance Workbook – DITT*, comments column, refer to Appendix C, preceded by the text, 'OBS'. Key observations are included below in Table 4-4.

Table 4-4: Authorisation – DITT Observations

OBS Ref.	Authorisation Condition No.	Observations
OBS-22-DE- AUTH-01	41.b	DITT may consider changing the wording of this condition if reapproval of the qualified person to undertake the independent third-party assessment of the security is not required.
OBS-22-DE- AUTH-02	50.c	DITT could liaise with the Operator on the ITRB not meeting in the audit period in relation to matters including:
		ITRB review of TSF construction documentation not occurring in timely manner
		<ul> <li>OMS Manual not being finalised for the Cell 1 stage 5 and Cell 2 Stage 7 raises or reviewed by ITRB</li> </ul>
		<ul> <li>design changes to the Cell 2 Stage 7 raise buttressing not being reviewed or endorsed by the ITRB.</li> </ul>
OBS-22-DE- AUTH-03	75.k	The condition could be amended so that provision of construction reports is required regardless of whether dewatering has occurred or not.
OBS-22-DE- AUTH-04	83	EMR 2021-2022 does not appear to include all characterisation data from exploration drilling but includes data related to hydrogeological drilling characterisation only.
OBS-22-DE- AUTH-05	Schedule C - 6.a.ii	Reports or memos documenting the purpose and findings of site visits could be prepared to provide a valuable record of DITT regulatory activities.



#### 4.2.4 Conclusions

DITT achieved a high level of compliance with the active Authorisation conditions at 96%. Opportunities for improvement which could be adopted include:

- Preparation of an annual program/register of Operator deliverables and submissions to assist DITT to manage the adequacy review of submissions and timely request for additional information, if required
- Follow up on deliverables that have not been received or review documents to provide timely feedback so that actions can be implemented in a timely manner by the Operator
- Establish Community Reference Group and Independent Panels (NOEF and TSF).

# 4.3 NT EPA Recommandations – DITT Compliance Audit

# 4.3.1 Scope and Approach

DITT was assessed against the implementation of the NT EPA recommendations over the audit period using the quantitative audit approach and scoring criteria described in Section 2.2. There were 117 NT EPA recommendations and sub-parts were considered relevant to DITT. DITT's task is to ensure that the NT EPA recommendations' intent had been transferred to the Authorisation conditions.

The audit of DITT's compliance with the NT EPA recommendations was considered in two parts;

- 1. the extent to which the intent of the NT EPA recommendations had been adopted in the wording of the Authorisation conditions
- 2. the extent to which the intent of the NT EPA recommendations had been implemented.

## 4.3.2 Findings

A summary of findings is shown in Table 4-5.

Table 4-5: Summary of NT EPA Recommendations Implementation Compliance – DITT

Description	No.
Total number of recommendations (including sub-parts) relevant to DITT to incorporate into the Authorisation	117
Number of active recommendations (including sub-parts) relevant to DITT to incorporate into the Authorisation	116
Number of part compliances (high)	10
Overall compliance score for recommendations adopted into Authorisation	98%

Detailed audit findings, supporting evidence, part compliances and scores are contained in *NT EPA Recommendations Compliance Workbook – DITT*. Appendix D also references which Authorisation conditions correspond to the NT EPA recommendation and sub-part.

Of the 117 NT EPA recommendations very few have implementation requirements for DITT. Those that were relevant generally involved the receipt and review of the Operator's monitoring programs,



management plans and reports, and the establishment of the CRG and Independent Panels of experts. The majority of NT EPA recommendation requirements are implementation tasks for the Operator.

One particular NT EPA recommendation received a part compliance score because the specified timeframe differed from the timeframe stated in the Authorisation condition. No OFI was prepared as the regulatory timeframes have been met as per the Authorisation conditions.

Other NT EPA recommendations achieved part compliance scores due to element(s) of the recommendation not being met in the Authorisation condition. These have been categorised as:

- Timeframes and responsibility for conducting the reviews of Operator reports/submissions, i.e. NOEF, air quality, synthesis of all monitoring programs
- Consultation on management plans and monitoring programs with nominated NT and Commonwealth government agencies
- Independent Panel on closure to review the risk of failure of the Mine levee wall and assess the trajectory for closure options
- Making reports available to government agencies and the public
- Specific NT EA recommendation requirements that may or may not be implemented when an authorisation condition is considered in isolation.

The NT EPA recommendations that are currently being progressed by DITT include:

- Establishing the CRG following ministerial approval of the terms of reference
- Developing terms of reference for independent panels of experts (NOEF and TSF) for ministerial approval.

# 4.3.3 Opportunities for Improvement

Potential opportunities to support continuous improvement identified by the Independent Monitor through the review and audit process are detailed in Table 4-6, noting these are not mandatory requirements.

Table 4-6: NT EPA Recommendations – DITT Opportunities for Improvement

OFI Ref.	NT EPA Recommendation No.	Opportunities for Improvement	
Inland Wate	Inland Water Environmental Quality		
OFI-22- DE-REC-01	8.i^	Incorporate into DITT processes a review of the Operator's NOEF management program every three years.	
Aquatic Ecosystems			
OFI-22-DI- REC-02	14. cont.^^	Incorporate into DITT processes consultation with other government agencies on the preparation and implementation of the ecotoxicological program, e.g. NT DEPWS and Commonwealth DAWE (now DCCEEW).	



OFI Ref.	NT EPA Recommendation No.	Opportunities for Improvement
OFI-22-DI- REC-03	15. cont.^^	Incorporate into DITT processes consultation with other government agencies on the preparation and implementation of the aquatic ecosystem monitoring program, e.g. NT DEPWS and DAWE (no DCCEEW).
Human Hea	lth	
OFI-22-DI- REC-04	19. cont.^^	Update a future Authorisation to include reference to the results of the air quality monitoring plan to be audited by the Independent Monitor every three years.
Matters of N	lational Environmen	tal Significance
OFI-22-DI- REC-05	21.^	Incorporate a requirement into DITT processes to consult other government agencies on the development of non-lethal monitoring program for sawfish monitoring program, including trigger threshold for investigation and management measures, e.g. NT DEPWS and DAWE (now DCCEEW).
Closure and	Rehabilitation	
OFI-22-DI- REC-06	23.ii^	Incorporate a requirement into DITT processes for the Independent Panel to review the risk of failure of the Mine levee wall and the McArthur River diversion channel as part of the closure plan objectives.
OFI-22-DI- REC-07	23. cont.^	Incorporate a requirement into DITT processes for the Independent Panel to provide a 3-5 yearly review report on the Mine closure plan to assess the trajectory of closure options to DITT and the Independent Monitor. To subsequently be made available to the Operator, government agencies, CRG and the public.
Adaptive Ma	anagement	
OFI-22-DI- REC-08	27^	Incorporate into DITT processes a mechanism for the Operator's review and synthesis of all monitoring programs and revised monitoring program to be reviewed by the Independent Panel(s) and the Independent Monitor, and be approved by the relevant regulators, e.g. DITT.
General		
OFI-22-DI- REC-09	Not applicable^	Consider the development of a DITT process or register to assist capturing the NT EPA recommendations details that are not explicitly stated in the Authorisation conditions to ensure implementation of the specific requirements is achieved.

Note: ^ indicates OFI carried over from 2020 NT EPA recommendations compliance audit.

## 4.3.4 Conclusions

Based on the documentation reviewed, the audit identified that DITT has effectively incorporated the NT EPA recommendations into the Authorisation conditions with an overall compliance score of 98%.

<sup>^^</sup> indicates OFI carried over from 2020 and 2021 NT EPA recommendations compliance audit.



The audit process identified nine relatively minor opportunities that DITT may adopt as continuous improvement initiatives relating to process improvements to incorporate particular element(s) of some NT EPA recommendations. An action register may assist capturing the NT EPA recommendations details that are not explicitly stated in the Authorisation conditions to ensure implementation of the specific requirement is achieved.

Six of the NT EPA recommendations part compliances were identified in the 2021 AEPAR and three were identified in the 2020 AEPAR and remain as OFIs in-progress.

## 4.4 Regulatory Approach – DITT Review

## 4.4.1 Scope and Approach

A review of DITT's performance and regulatory approach was conducted by examining the following key regulatory activities:

- DITT regulatory strategy
- MMP Template
- Environmental Mining Report
- Technical Working Group
- DITT assessments and site visits to the Mine
- Authorisation approach
- Establishment of the CRG and Independent Panel(s) of experts
- MMP and authorisation approval.

Through interviews and assessment of relevant documents and samples of information, the review considered performance indicators (such as timeliness of actions completed, environmental risk profile and adequacy of response, environmental protection outcomes, follow up/close out of actions, achievements, and OFIs). Pre-prepared questions were used to provide structure and consistency around the review of DITT's regulatory activities. These focused the review on key environmental issues, environmental risk management processes, challenges and communication.

#### 4.4.2 Findings

#### **DITT Regulatory Strategy**

Streamlined regulatory process during the audit period has resulted in efficiencies in the processes for the MMP and EMR.

The department's Operations Based Information System (OBIS) is the statutory register for projects authorised under the MMA captures information regarding approved contacts, security amounts, notifiable incidents, timeframes and approval documentation pertinent to assessment and compliance activities conducted by DITT in administration of the MMA. Improvements to the register are resulting in easier tracking of action items.



#### **Mining Management Plan Template**

DITT has updated MMP templates to improve assessment efficiency and consistency between projects following a review of the MMP submission and assessment process. The MMP template for mines has been redesigned by the Mining Operations in consultation with the mining industry to clarify the level of detail and nature of information required facilitate quantitative risk assessment of the various potential environmental impact aspects of a mining project. The template supports assignment of environmental risk levels to aspects of the project and supports consistency of assessment between officers. The assigned risk level informs the level of expertise required to undertake the assessment and project aspects with higher risk levels are escalated to senior staff for consideration.

The template provides guidance on the format of MMPs and management plans supporting the management systems required under the MMA. Succinct information provided in the MMP references technical reports provided as appendices. The MMP template includes a summary table to enable rapid assessment of the management plan contents. Key issues and risks are highlighted in the summary table checklist.

The revised template extends the Trigger Action Response Plan (TARP) and Operational Maintenance and Surveillance Manual (OMSM). approach across key facilities such as tailings storage, overburden emplacement, pits and dams. The template adopts the TARP trigger level criteria (level 1,2 and 3) for adaptive response in the management plans. A pilot template was trialed in early 2022 with final template published for other mining projects to use in June 2022.

#### **Environmental Mining Report**

The EMR is the Operator's annual report to describe the environmental and operational performance of the Mine and the BBLF. The 2021-2022 EMR covers the period 01 May 2021 to 30 April 2022, which aligns with this APEAR's audit period, was submitted to DITT on 31 August 2022. The timeframe of the 2022 Independent Monitor's assessment complements the existing EMR annual assessment processes undertaken by the Operator and the Department. The timing of DITT's program for 2022 now enables the Independent Monitoring reporting to be finalised in the same calendar year as the corresponding EMR.

The 2020-2021 EMR prepared by the Operator was submitted on 31 August 2021 and is under review by DITT.

A revised approach to the EMR format was developed by DITT and the Operator. The focus has shifted to presentation of the key findings in the EMR, and not the supporting technical appendices. The outcomes and data from each monitoring program is reviewed against the Mine operations key environmental objectives and reported in the EMR executive summary.

The revised EMR format also includes a summary of the relevant TARPs. This summary provides an overview of the environmental performance of each monitoring program. The majority of TARPs remained at level 1 and 2 throughout the reporting period, while the McArthur River Diversion Channel revegetation TARP reached level 3. Refer to Section 5.3.2, Adaptive Management for TARP level description.



The revised EMR format has improved readability by organising and presenting the key environmental performance outcomes and recommendations in a concise manner, while retaining all the supporting technical information in the appendices.

Recommendations for additional monitoring or management measures include the extension of the sediment remediation program in the lower reach of Barney Creek and a trial of dust suppression for watering of haul roads.

#### **Technical Working Group**

The Technical Working Group (TWG) is a forum that meets regularly, (typically fortnightly), for DITT and the Operator to discuss regulatory matters, review project progress, consider and proactively resolve potential concerns and plan upcoming environmental management programs or activities. The Independent Monitor views the TWG as a valuable regular communication opportunity to facilitate review of environmental issues and as a way to enhance environmental performance at the Mine through fostering and maintaining an effective working relationship. The TWG enables emerging issues to be addressed in a timely manner rather than waiting for quarterly or annual reporting of monitoring results. During COVID-19 restrictions on travel to site (early 2020 to early 2022), the TWG has provided an important way for DITT to remain well-informed of Mine related activities.

Through the TWG forum, DITT and the Operator are jointly investigating the feasibility of an additional hydrogeological monitoring program to examine migration of contaminate plumes. Interrogation of existing monitoring data including rainfall, groundwater recharge and analysis of chlorine and sulphate levels can produce a map of contaminate movement against baseline data. Chlorine can be used as an indicator of rainfall groundwater recharge and sulphate as an indicator of contaminates of concern. These indicators can be tracked over time to produce chlorine-sulphate mapping to indicate if and how contaminate plumes are migrating and to visualise any areas of high concentration. The proposed program's objectives are to monitor contaminate plumes, assess attenuation capacity and protect creeks from potential impacts.

The proposed chlorine-sulphate mapping of groundwater and hydrogeological monitoring program is a good example of a continuous improvement initiative developed collaboratively in the TWG and could provide another line of evidence demonstrating compliance with the Authorisation.

#### **DITT Assessment and Site Visits to the Mine**

Three site inspections were conducted by DITT officers in 2022, following the relaxation of COVID-19 travel restrictions. None of the visits were in relation to compliance breaches or regulatory enforcement. DITT site inspections by Lead Mining Officer and accompanying officers occurred on:

- 20 May 2021 DITT visit
- 02 February 2022 DITT visit and routine inspection
- 03 March 2022 DITT and site familiarisation
- 19 May 2022 DITT Ministerial delegation visit (outside the audit period).

The number of days DITT officers spend on-site is a key performance indicator for DITT that is measured and tracked. Regular site inspections by DITT are beneficial as they allow a first hand observation and assessment of the Mine's condition to verify evidence of progress against the monitoring programs, reporting, Authorisation, AMP and EMR. DITT advised that given their resources, mine site visits, inspections and audits are conducted based on priority. Visits are prioritised based on



relative risk considerations across all projects regulated under the MMA with the intention to visit high priority sites annually. Restrictions due to the COVID-19 were unpredictable and added uncertainty to site visit planning. Where practical, it is DITT's intention to conduct site visits to the Mine twice per year.

The Environmental Monitoring Unit (EMU) is part of DITT Mining Operations and conducts check monitoring at the request of assessment and compliance officers. The focus of the EMU field program is to obtain independent environmental data to validate whether operators' monitoring data is representative and reliable. The Independent Monitor is not aware of any monitoring conducted by the EMU at the Mine during this audit period or since 24 April 2018.

In response to a notification under Section 29 of the MMA in November 2020, DITT investigated a minor concentrate minor spill incident on the Carpentaria Highway. Since that time the Operator has implemented remedial actions, including appointment of a new contractor with an upgraded fleet of haulage vehicles, which has resulted in fewer incidents.

No enforcement notices were issued by DITT to the Operator during the audit period. This indicates there were no serious environmental incidents or breaches of Authorisation conditions identified or reported that triggered DITT regulatory enforcement action.

#### **Authorisation Approach**

DITT's approval of the OMP provided the opportunity to overhaul the Authorisation, which was encumbered with historic unwieldly and/or obsolete amendment conditions. Significant effort on DITT's part achieved the consolidation of the previous conditions and created a simplified and more useable Authorisation document (dated 13 November 2020).

The revised Authorisation has:

- Successfully shifted focus to a risk-based approach where the emphasis is on pragmatic outcomes.
  Potentially higher risk activities are central to the Authorisation conditions and changes to
  reporting highlight the most relevant information to inform management of these risks. The Mine
  continues to adapt its business processes and reporting to better align with the Authorisation
  requirements.
- Strengthened oversight for some technical review work through independent experts involvement while DITT retains accountability for regulatory activities.
- A range of complex technical reviews may necessitate expertise that is not held within DITT and accordingly the Authorisation has requirements for the Independent Tailings Review Board and to establish an Independent Panel(s) of experts to advise on matters affecting the environmental performance of the NOEF, TSF and Mine closure planning. It is worth noting that the Independent Panels' draft terms of reference have been prepared but the panels are not yet established.

DITT has developed a draft Compliance Tracking Register to assist, anticipate and track regulator actions in response to Authorisation requirements. The Compliance Tracking Register outlines the condition requirements including:

- Due date, frequency
- Status (compliant, under assessment, pending)
- DITT role (review, approve, accept)



- Other relevant agencies
- NT EPA recommendations reference and related conditions.

A noteworthy inclusion is 'Condition update required' where potential amendments to improve clarity, remove obsolescence or simplify regulatory tasks can be captured for consideration in future Variation of Authorisation. The value of the Compliance Tracking Register could be enhanced with the addition of the residual NT EPA recommendations, not incorporated in the Authorisation conditions, to assist with tracking and actioning some finer points.

Groundwater data is regularly reviewed at the location of seven sacred sites flagged by the Northern Territory Aboriginal Areas Protection Authority (AAPA) as being potentially groundwater-dependent. DITT and the Operator have worked to include hydrogeological information relevant to theses sacred sites in the EMR 2022 as part of the annual groundwater review report.

#### Establishment of a CRG and Independent Panel(s) of Experts

Community Reference Group

DITT is responsible for the establishment and operation of a CRG, with the support of the Operator.

The CRG will be appointed by the Minister and will be coordinated by DITT. The CRG's draft terms of reference were endorsed by NT EPA and has been published on DITT CRG's website. Public advertising for expressions of interest for members to join the CRG closed on 31 October 2021.

The CRG is anticipated to be established during 2023.

**Independent Panels** 

DITT, with the support of the Operator, is to establish and operate an Independent Panel of expert(s) to advise on the NOEF, TSF and Mine closure planning. The panels are to provide oversight and review of key technical issues culminating in reporting to DITT and the Operator at three-yearly intervals. DITT is then responsible for coordinating distribution to relevant government agencies, review by the Independent Monitor and publication of the report on the department's website

Authorisation conditions for independent review of some of the Operator's monitoring programs and reporting are not triggered (and are constrained from commencing) until the establishment of the Independent Panel(s). The Authorisation does not stipulate any timeframes for the establishment of the Independent Panel(s).

DITT provided copies of the final draft terms of reference for the Independent Panels for the NOEF and TSF dated August 2022. Neither the Independent Panel of expert for the NOEF or TSF has been established. The terms of reference for the independent expert panel for closure has not progressed at this time.

## 4.4.3 Opportunities for Improvement

Potential opportunities to support continuous improvement identified by the Independent Monitor through the review process are detailed in Table 4-7, which applies to the regulatory approach, noting these are not mandatory requirements.



Table 4-7: DITT's Regulatory Approach Opportunities for Improvement

OFI Ref.	Opportunities for Improvement
OFI-22-DE- REG-01^^	Prioritise the establishment of the Independent Panel of Experts for TSF and NOEF to facilitate independent reviews of the Operator's monitoring program and reporting.
OFI-22-DE- REG-02^^	Facilitate an internal DITT review to examine the annual EMR process, tasks and outputs with a view to streamline the activity. As part of this review, examine what is sufficient for regulatory requirements and responding to community expectations, as well as how the annual process could be more efficient.
OFI-22-DE- REG-03^	Prepare an internal procedure for the regulation of the Authorisation conditions and NT EPA recommendations to document the processes, timing, due dates, overdue submissions, approvals, decisions, public /community communication and records requirements to assist managing the complex regulatory requirements relating to DITT activities.
OFI-22-DE- REG-04^	Improve communication and collaboration with other government agencies (Commonwealth and NT) to align objectives and actions, streamline processes, and improve environmental outcomes.
OFI-22-DE- REG-05^	Reduce reliance on key individuals within DITT to ensure consistency and continuity of compliance and performance.

Note: ^ indicates OFI carried over from 2020 regulatory approach DITT review.

## 4.4.4 DITT Successes

The audit and review process identified some noteworthy successes achieved by DITT during the audit period which exceeded the regulatory compliance requirements and have contributed to continuous improvement (refer to Table 4-8).

<sup>^^</sup> indicates OFI carried over from 2020 and 2021 regulatory approach review.



Table 4-8: DITT's Regulatory Activities Successes

No.	DITT Success
2	Expressions of Interest were publicly advertised for applications for membership of the CRG following ministerial approval fo the terms of refernce.
3	Improved readability of the EMR which now presents key outcomes of the monitoring programs and recommendations in the executive summary, while retaining all the supporting technical information in the appendices.
4	Regular communication between DITT and MRM, including the TWG forum, supports an effective and valuable working relationship that facilitates early resolution of potential regulatory issues
5	Seven sacred sites flagged by the AAPA as being potentially groundwater-dependent have hydrogeological data regularly reviewed and are included in the annual groundwater review report and the EMR 2022.
6	Mines Branch is making better use of the environmental systems database (ESDAT) to summarise quarterly Mine monitoring data and highlight any critical exceedances.
7	The continued strong focus on key environmental areas that could be high risk if adequate risk controls were not in place (e.g., high number of conditions on NOEF and TSF), and a practical approach to compliance and monitoring.
8	The continued improved environmental performance and high levels of regulatory compliance by the Operator can be attributed, at least in part, to the processes and approach developed and adopted by DITT for the Mine.

#### 4.4.5 Conclusions

A review of DITT's performance in regulatory procedures and regulatory approach was conducted by examining a selection of key regulatory activities that were, for the most part, different from those reviewed in the previous AEPAR in 2021.

DITT achieved an overhaul of the MMP process by developing a new MMP template to improve assessment efficiency and consistency between projects. The redesign clarifies the level of detail and nature of information required facilitate quantitative risk assessment of the various potential environmental impacts and to expedite assessment reviews.

The review findings identified some opportunities around streamlining activities, especially those recurring regulatory processes (e.g., annual EMR review) that may be made more efficient. The potential benefit of streamlining some of DITT's documentation and approval processes would be efficiency gains. This would enable greater focus on the implementation of initiatives to continuously improve the Mine's environmental performance.



# 5 Review of River System Health

# 5.1 Objective

The objectives of the review of river system health were:

- To assess relevant freshwater aquatic ecology monitoring programs and management actions developed by the Operator to meet the Authorisation conditions
- to provide an assessment of the monitoring program and general river system health, based on documentation provided by the Operator.

# 5.2 Scope and Approach

The scope of this review included reviewing the freshwater aquatic ecology-related environmental assessments and monitoring activities undertaken during the audit period by the Operator and subcontractors engaged by the Operator. An assessment was undertaken of the McArthur River health monitoring program areas that covers a large, but defined area, in the vicinity and downstream of the Mine. The monitoring program and this review does not provide information on the larger catchment scale area.

The river health and freshwater aquatic ecology assessment was undertaken by Independent Monitor sub-consultant, Freshwater Ecology Pty Ltd, and included:

- Reviewing the conditions of Authorisation relevant to the freshwater aquatic ecology assessment
- Reviewing monitoring programs and management actions developed to meet the conditions of Authorisation and environmental objectives stated in the approved MMP
- Assessing the Operator's implementation of management and monitoring programs during the audit period including conclusions drawn
- Undertaking a general assessment of the health of the McArthur River system in the vicinity and downstream of the Mine based on the information provided by the Operator.

Site visits have previously been delayed due to COVID-19 site restrictions. During this audit period a site visit was conducted by Freshwater Ecology Pty Ltd in May 2022 to:

- Familiarise the team with the Mine and sites sampled as part of the freshwater ecology monitoring programs
- Assess the effectiveness of the monitoring program through interviewing and observing field operators (aquatic ecologist specialists) undertaking the assessments, and interviewing MRM staff.

The review was undertaken with the following limitations:

- This review focused on the monitoring report documentation provided by the Operator for the
  audit period in consideration of the Authorisation conditions' requirements, the MMP and
  Appendices (specifically the management plans). Documents dated prior to 2018 were not
  reviewed, except for the Freshwater Sawfish Management and Monitoring Plan.
- A high level river health assessment was based on data provided by the Operator.



# 5.3 Findings

#### 5.3.1 Context

The significance of river health is reflected in the overarching environmental management objectives for the Mine as set out in the MMP, which includes:

- Objective 1: Protect the McArthur River's beneficial uses and community values from potential mining impacts
- Objective 2: Facilitate development of the ecosystems and their functions along the McArthur River Diversion Channel for terrestrial and aquatic flora and fauna.

Management actions and monitoring programs for freshwater aquatic ecology relevant to these objectives are discussed below, followed by a description of the efficacy of these actions and programs in addressing the objectives. A summary discussion of river system health is subsequently provided.

# 5.3.2 Management Actions

As set out in the MMP, the Operator undertakes various activities as part of the management of potential mining impacts on freshwater aquatic ecology and for protection of river health, including:

- Implementation of design and operational controls
- Application of adaptive management
- Rehabilitation.

#### **Design and Operational Controls**

Design and operational controls relevant to the management of impacts to freshwater aquatic ecology and protection of river health include:

- A water management system to prevent contaminated water from entering the river system
- Dust emission controls to prevent contamination of waterways via dust
- Stipulated conditions under which good quality water, following storage and treatment, may be released into the surrounding waterways and not impact the environmental values (as detailed in the WDL)
- Detailed design for the NOEF, which includes various quality control checks, including the requirement for independent oversight by an ICE
- Detailed design for the TSF, which includes various quality control checks including the requirement for independent oversight by an ICE and ITRB
- Seepage-capture ponds and sumps to prevent contaminated seepage from entering waterways
- Routine inspections and monitoring of infrastructure.

#### **Adaptive Management**

A central component of the Operator's Environmental Management Framework is the AMP, a document that facilitates management and decision-making over time in response to evolving knowledge, environmental performance, and changing circumstances. TARPs are implemented by the Operator as part of the AMP to manage potential adverse environmental conditions, mitigate



environmental impacts, inform mitigation options where required, and to assess performance against overarching environmental objectives.

The TARP structure consists of three levels which each have specific triggers, actions and responses. Level 1 is when a trigger value suggests the performance is achieving its environmental objective, and Level 2 is when a performance indicator is above the Level 1 trigger value (indicating that performance is within expected, predicted and/or conditional levels) and the environmental objective is still being met; however, further investigation of the trend is warranted. Level 3 is when a performance indicator is above the Level 2 trigger value (indicating that performance is outside expected, predicated and/or conditioned levels) and further investigation is needed to determine if additional controls are required to continue to meet environmental objectives. For Level 1, TARPs monitoring and management continue as per the MMP, whereas for Levels 2 and 3, TARPs additional monitoring and mitigation controls are required.

TARPs relevant to the management of impacts to freshwater aquatic ecology and protection of river health include:

- Presence of freshwater sawfish and migratory species diversity
- Macroinvertebrate species richness/assemblage
- Aquatic fauna species diversity and relative abundance
- Metal concentrations in aquatic fauna
- Progress of revegetation along the McArthur River Diversion Channel.

Ongoing management actions are undertaken by the Operator as part of adaptive management to support achievement of the overarching environmental management objectives. Relevant to the assessment of river health during the audit period is the Operator's removal of potentially-contaminated sediments from a tributary to McArthur River (i.e. Barney Creek channel) within the mineral lease boundary.

#### Rehabilitation

The Rehabilitation Management Plan (RMP), prepared by the Operator, establishes a rehabilitation management and monitoring system that enables the progress of rehabilitation towards closure objectives. The key rehabilitation activities relevant for freshwater aquatic ecology are:

- Revegetation along the McArthur River and Barney Creek diversion channels
- The introduction of instream woody debris along the McArthur River Diversion Channel.

Revegetation of the diversion channels has been ongoing since 2007. The key objectives of revegetation are to:

- Increase bank stability
- Provide shading within the river channel
- Provide a source of carbon for freshwater aquatic ecosystems
- Provide a long-term source of instream woody debris.

To date, the focus has been on replanting the upper sections of the diversion channels in accordance with the schedule in the RMP.



Installation of Large Woody Debris (LWD) in the diversion channels has been undertaken since 2010, with the key objectives of LWD introduction being to:

- Increase meso and microhabitat diversity within the channel
- Alleviate bank erosion
- Provide a source of carbon for freshwater aquatic ecosystems
- Provide refuge holes for migrating fish.

To supplement the LWD program, small and medium-sized woody debris has been added to the McArthur River Diversion Channel. The aim of this is to provide additional organic matter to the channel to improve macroinvertebrate assemblages.

## **5.3.3** Freshwater Ecology Monitoring Programs

The Operator undertakes several freshwater ecology monitoring programs to support assessment of the efficacy of management actions and associated outcomes relevant to the overarching environmental management objectives, including:

- Freshwater macroinvertebrate monitoring
- Freshwater aquatic fauna diversity and abundance
- Freshwater sawfish and barramundi acoustic monitoring
- Metals in freshwater aquatic fauna.

During the reporting period the monitoring programs were conducted in full for the first time since COVID-19 restrictions commenced in early 2020. The only exception was for the Robinson River upstream site as access is still restricted. This site is used as a reference and an alternative site on the Wearyan River (previously used as a reference prior to 2015) was used.

#### **5.3.4** Environmental Management Objectives

For each of the overarching environmental management objectives for the Mine (described below), consideration is given to the relevant management actions and monitoring programs.

# Objective 1. Protect the McArthur River beneficial uses and community values from mining impacts

The current monitoring programs are considered suitable and sufficiently well-designed to assess potential impacts on the McArthur River freshwater ecosystems and beneficial uses. Table E-1 in Appendix E provides a summary of the applicability of each monitoring program relevant to this objective that was undertaken during the audit period and the key conclusions drawn.

For each of the monitoring programs, the 2022 EMR assesses compliance against the relevant performance triggers. The performance indicators and SSTVs provide clear direction and actions to mitigate potential impacts when and if they occur. Level 1 performance was achieved for all freshwater aquatic ecology monitoring categories relevant to this objective.



It is notable that with respect to fluvial sediments samples several sites were identified at trigger level 2a<sup>5</sup> namely, McArthur River Diversion Channel and within Barney Creek and Surprise Creek. Two fluvial sediments samples sites within Barney Creek were considered to be at trigger level 2b. There is a relationship between fluvial sediment metal concentrations and tissue metal concentrations in fauna. Albeit that the ephemeral nature of Barney Creek and Surprise Creek is likely to reduce the exposure of aquatic fauna to periods in which water persists.

The Independent Monitor agrees with the conclusions of the Operator's external expert's assessment that the adaptive management action undertaken to remove potentially-contaminated sediments from a tributary to McArthur River (i.e., Barney Creek channel) and the construction of silt traps to capture runoff have contributed to protecting downstream beneficial uses and environmental values. Results of sediment analysis show reductions in cadmium, arsenic, lead, and zinc concentrations, compared with those recorded in 2018, with cadmium and arsenic no longer in exceedance of the relevant sediment quality guideline value. This appears to have led to reducing lead concentrations in aquatic fauna sampled in 2021-2022 following potentially-contaminated sediment removal.

Small numbers of the freshwater mussel, *Velesunio angasi*, were collected due to their limited abundance in the environment. Tissue metal concentrations were highly variable across the study area but consistent with results of previous sampling, where very high concentrations of naturally occurring analytes, including aluminum, manganese andiron, have been consistently recorded in this species throughout the region, including for catchments outside of the Mine's area of operations.

Analysis of metals in aquatic fauna during the audit period showed that exceedances of Maximum Permitted Concentrations (Australia New Zealand Food Standards Code, Standard 1.4.1, Schedule 19) in lead tissue concentrations were limited to environmental indicator species at one site on Barney Creek for one specimen of *Melanotaenia splendida* (eastern rainbowfish). The location is within the Mine and mineral lease boundary. The public do not have access to this location and waterway signage states that public access to these areas is prohibited. Reductions in tissue metal concentrations since 2018 appear to be attributable to the management actions (described above) taken to remove potentially contaminated sediments from the Barney Creek channel.

Data collected over the 2021-2022 monitoring program demonstrated that all other fish caught throughout the McArthur River catchment were considered safe to consume. This includes commonly consumed species such as *Lates calcarifer* (barramundi) and *Hephaestus fuliginosus* (sooty grunter).

# Objective 2. Facilitate development of the ecosystems and their functions along the McArthur River Diversion Channel for terrestrial and aquatic flora and fauna

The current monitoring programs are considered by the Independent Monitor to be suitable and sufficiently well-designed to monitor the development of ecosystems and their functions along the McArthur River Diversion Channel. The management actions to revegetate the stream banks and to introduce instream LWD are appropriate for facilitating the development of the ecosystems and their functions along the McArthur River Diversion Channel. While the McArthur River Diversion Channel appears to offer a lower level of quality aquatic habitat in edge habitats than the natural river channel, there appears to be trajectory of increasing ecosystem diversity and resilience.

Annual Environmental Performance Audit Report 2022

<sup>&</sup>lt;sup>5</sup> The TARP for fluvial sediment has two stages at level 2; 2a which requires an investigation to determine if additional controls or management actions can be taken to reduce analyte concentrations, and 2b requires both the same investigation as well as sampling frequency to be increased from annually to quarterly.



Table E-2 in Appendix E provides a summary of the applicability of each monitoring program (relevant to this objective) that was undertaken during the audit period and the key conclusions drawn.

For each of the monitoring programs, the 2022 EMR assesses compliance against the relevant performance triggers. The performance indicators and trigger values provide clear direction and actions to mitigate potential impacts when and if they occur. Level 1 performance was achieved for all freshwater aquatic ecology monitoring categories relevant to this objective.

The management action to revegetate banks along the diversion channels is providing short-term benefits in the form of bank stabilisation, and long-term benefits through providing organic input, increased shading, and a natural source of instream woody debris recruitment. The Independent Monitor agrees that the development of a functional riparian vegetation community will facilitate the development of the ecosystems along the diversion channels.

The management action which introduced instream woody debris is providing a short to medium term benefit of providing habitat, increasing mesohabitat and habitat diversity, and provides organic input for aquatic ecosystems. The Independent Monitor agrees with the results of the Operator's external expert's assessment that the introduction of instream woody debris is most likely contributing to increased macroinvertebrate assemblage development and resilience.

While the objectives of the monitoring programs have been met (i.e. assessing responses of *Macrobrachium* species and fish assemblages, and the effectiveness of adding woody debris), it would be useful to assess and quantify the extent of rehabilitation along the entire McArthur River Diversion Channel. Such an assessment would provide an indication of the reach scale trajectory of rehabilitation for fish habitat. A reach-scale assessment may be undertaken at a coarse level and provide a measure of the success of the riparian revegetation combined with introduced woody debris over time.

The Largetooth Sawfish is a species listed as Vulnerable under the Environmental Protection and Biodiversity Conservation Act 1999 and the focus of an acoustic monitoring program in the McArthur River Diversion Channel. The recording of two sawfish at the upstream extent of the McArthur Diversion Channel during the audit period brings the total to five individuals recorded as passing through the Diversion Channel since 2017. This supports the assertion that fish passage for this species is not impaired and exceeds the minimum requirement of demonstrating passage of sawfish through the Diversion Channel once every five years.

## 5.3.5 River System Health

The Operator has classified the condition of the McArthur River within the Mine area as a slightly to moderately-disturbed ecosystem, in accordance with Australian and New Zealand guidelines for fresh and marine water quality (2018). Slightly to moderately-disturbed systems (95% biodiversity protection) are ecosystems in which aquatic biological diversity may have been slightly adversely affected by human activity; however, biological communities remain in a healthy condition and ecosystem integrity is largely retained.

Overall, the monitoring results obtained from the Operator indicate that the aquatic ecosystems of the McArthur River and its tributaries are in good condition. However, creeks adjacent to the NOEF and TSF, Barney Creek and Surprise Creek are highly ephemeral and retain little water for much of the year. As described above, analysis of metals in aquatic fauna during the audit period showed that exceedances of Maximum Permitted Concentrations (Australia New Zealand Food Standards Code, Standard 1.4.1, Schedule 19) in lead tissue concentrations was limited to one specimen at one site on



Barney Creek. The location is within the Mine site and mineral lease boundary. The public do not have access to this location and waterway signage states that public access to these areas is prohibited.

Data collected over the 2021-2022 monitoring program demonstrated that all other fish caught throughout the McArthur River catchment, including commonly consumed species such as barramundi and sooty grunter, were safe to consume. The review of monitoring data to date indicates there is an extremely low risk to human health from consuming the monitored fish species caught in the McArthur River catchment in the vicinity or immediately downstream of the mineral lease.

Consistent with previous sampling results, concentrations of metal in freshwater mussel tissue were highly variable and commonly included very high concentrations of naturally occurring analytes, including aluminum, manganese, iron and total arsenic, across the area monitored which includes catchments not affected by the Mine. It is considered unlikely that enough mussels could be collected and consumed by an individual to exceed an intake of metals that would have a detrimental health effect; however, due to the high levels of metals found naturally in the mussels in the region, it is suggested that their consumption be limited.

The McArthur River Diversion Channel was constructed over the 2008-2009 wet season to enable the Mine's transition from an underground to an open pit operation. While it does not provide the same habitat as naturally formed river channels, there have been significant and ongoing efforts to reinstate habitat conditions typical of natural river channels, primarily development of the riparian vegetation and the introduction of instream woody debris. The monitoring data collected to date suggests that these actions have improved and are likely to continue to improve the aquatic habitat along the McArthur River Diversion Channel.

# 5.4 Opportunities for Improvement

Potential opportunities to support continuous improvement identified for river system health through the review and audit process are detailed in Table 5-1, noting these are not mandatory requirements.

Table 5-1: River Health System Opportunities for Improvement

OFI Ref.	Monitoring Program / Management Action	Opportunities for Improvement
OFI-22-OP- RH-01^	Freshwater Macroinvertebrate Monitoring	Adopt the conclusions of the Operator's external experts that it is preferable to increase the number of reference sites along the McArthur River rather than in adjacent catchments.
OFI-22-OP- RH-02^	Freshwater Macroinvertebrate Monitoring	Increase the number of downstream reference sites with riffle microhabitat in future sampling as planned.
OFI-22-OP- RH-03^	Diversity and Abundance of Freshwater Aquatic Fauna	Maintain longer term data collection for comparison of annual aquatic fauna program to better understand longer-term trends and influences of inter-year variability in-flow on aquatic fauna community development and resilience in the McArthur River Diversion Channel.
OFI-22-OP- RH-04^	Freshwater Sawfish and Barramundi Acoustic Monitoring	Increase the number of tagged fish to replace the fish for which batteries in the tag are reaching their expiry dates.



OFI Ref.	Monitoring Program / Management Action	Opportunities for Improvement
OFI-22-OP- RH-05^	Aquatic Fauna – Metals	Determine if inclusion of tissue metal concentration sampling at the remote Batten Point (McArthur River estuary) location would be beneficial to the monitoring program and/or enhance the relevance of the monitoring program to the local community.
OFI-22-OP- RH-06	Diversity and Abundance of Freshwater Aquatic Fauna	Undertake a reach-scale assessment to measure the extent of rehabilitation along the entire McArthur River Diversion Channel and provide an indication of the reach scale trajectory of rehabilitation for fish habitat. This may be undertaken at a coarse level and provide a measure of riparian revegetation success combined with introduced woody debris over time.

Note: ^ indicates OFI carried over or replicated from 2021 AEPAR.

#### 5.5 Conclusions

Since the commencement of operations at the Mine in 1995, there have been numerous changes to the mining operations and the Authorisation conditions. Some of the changes have arisen from NT Government interests in the freshwater aquatic ecosystem health and the beneficial uses of the McArthur River. These changes have broadened and strengthened the management and monitoring programs as they have evolved.

The Operator has a broad range of aquatic ecosystem monitoring programs and management actions that have been developed over the Mine's life to meet the environmental objectives. During the audit period, these were well-implemented and where impacts were noted, they were adequately described and mitigation actions recommended consistent with the TARPs. The review supports the continuation of the current aquatic ecology monitoring programs as these activities are appropriate and effective to achieve the river system health objectives.

Overall, the McArthur River and its tributaries are considered to be in good health with one exception noted immediately adjacent and proximal to the Mine's operational areas. These localised issues are associated with some elevated levels of metals in Barney Creek immediately adjacent to mining activities and within the mineral lease boundary. These will require ongoing monitoring and management.

The management actions undertaken to remove potentially contaminated sediments from Barney Creek channel have contributed to protecting downstream beneficial uses and environmental values. Results of sediment analysis show reductions in metals concentrations compared with those recorded in 2018, with cadmium and arsenic no longer in exceedance of the relevant sediment quality guideline value. These management actions should be continued and expanded where practical to include sites further upstream on Barney Creek and on Surprise Creek.

Consistent with previous sampling results, concentrations of metal in freshwater mussel tissue were highly variable and commonly included very high concentrations of naturally occurring analytes, including aluminum, manganese, iron and total arsenic, across the area monitored which includes catchments not affected by the Mine. It is considered unlikely that enough mussels could be collected and consumed by an individual to exceed an intake of metals that would have a detrimental health



effect; however, due to of the high levels of metals found naturally in the mussels in the region, it is suggested that their consumption be limited.

Data collected over the 2021-2022 monitoring program demonstrates that fish caught outside of the mineral lease boundary and throughout the McArthur River catchment, including commonly consumed species such as barramundi and sooty grunter, are safe to consume. The review of monitoring data to-date indicates there is an extremely low risk to human health from consuming the monitored fish species caught in the McArthur River catchment in the vicinity or immediately downstream of the mineral lease boundary.

Monitoring of the McArthur River Diversion Channel suggests that the management actions to vegetate the riparian zone and introduce instream woody debris are facilitating the development of the ecosystems and their functions.



# 6 Review of Waste Rock Handling Procedures

# 6.1 Objective

The review of the environmental performance of the Operator included undertaking an audit of the Operator's waste rock handling procedures. Waste rock from the open cut mining operations, if not managed appropriately, has the potential to cause environmental harm. This review included the following activities:

- Auditing waste rock handling procedures
- Auditing the extent of implementation of waste rock handling procedures in accordance with relevant management plans
- Reviewing waste rock handling against the stated key objectives for the NOEF's design, construction and operation
- Reviewing relevant monitoring programs
- Identifying opportunities for continuous environmental improvement.

## 6.2 Scope and Approach

A site inspection was conducted between 13 and 15 June 2022 to assess the Operator's waste rock handling procedures. The audit involved a review of the Operator's commitments and safeguards associated with waste rock handling procedures and their implementation with regards to the environment and the health of the McArthur River. The audit considered the Operator's processes associated with waste rock classification, mining and haulage operations, and the NOEF design, construction and operation.

The scope of this waste rock handling procedures audit was to assess, using a risk-based qualitative approach, the Operator's extent of compliance and performance status against the key relevant document, the NOEF Management Plan. A qualitative review was undertaken, (as described in Section 2.3), where performance against the NOEF Management Plan was assessed and a rating provided which could range from 'very good' to' good', 'satisfactory', 'poor' or 'very poor'.

The NOEF Management Plan provides an overarching management document for the design, construction and operation of the NOEF and describes the various aspects of waste rock handling procedures. The NOEF Management Plan's key objectives listed in Table 6-1, were incorporated into an audit interview questionnaire, that was utilised to assess the extent to which the objectives have been achieved.

Table 6-1: NOEF Management Plan objectives

No.	NOEF Mangment Plan Key Objectives
1	Manage spontaneous combustion of overburden to control release of Sulphur dioxide and associated potential effects on nearby receptors
2	Manage dust to control movement of metals into the terrestrial and aquatic environment



No.	NOEF Mangment Plan Key Objectives
3	Maintain functionality of the surface water management system within/around the NOEF, to achieve acceptable downstream water quality
4	Control seepage from the NOEF and potential impacts on groundwater and surface water quality
5	Maintain functionality of the surface water management system within/around the NOEF to achieve acceptable downstream water quality
6	Control seepage and maintain functionality of the surface water management system within/around the NOEF to achieve acceptable downstream water quality (during operations)
7	Control seepage and maintain functionality of the surface water management system within/around the NOEF, to achieve acceptable downstream water quality (during construction)
8	Manage vegetation clearance and re-establishment (rehabilitation) to control weeds and potential impacts on biodiversity at the Mine

The requirements and commitments made by the Operator are contained in the NOEF Management Plan and were collated into an audit checklist. This audit checklist was utilised during audit interviews and provided another means to assess the extent of implementation of the NOEF Management Plan requirements.

## 6.3 Findings

The key findings in relation to the waste rock handling procedures audit are outlined below. The detailed audit findings and identified opportunities for improvement are provided in a separate Independent Monitor report.

Fundamental to the management of the waste rock material is the classification of six different waste material types, ranging from benign to non-benign, and their selective placement within the NOEF. The location of non-benign material within the overall facility has been planned so that the most potentially harmful materials are stored deepest in the Core Zone and progressively lower risk materials placed towards the outer surface. The entire NOEF, with time, will be encapsulated within a cover layer.

The NOEF has been specially designed to encapsulate waste rock material and to avoid or limit oxidation and the potential emission of contaminates to the receiving environment. The NOEF Management Plan contains a large number of commitments to be adopted as requirements. Based upon the audit evidence provided that demonstrated a high level of action to implement the plan's requirements, the audit assessment found the Mine to generally have a 'good' to 'very good' level of implementation of the plan's stated requirements.

#### **Waste Rock Classification**

The audit found the Mine places particular focus on grade control processes to identify and classify the ore and waste rock material to ensure potentially reactive material is segregated, transported and placed in appropriate zones within the NOEF.

To inform grade control metallurgical testing on drill hole material samples is conducted prior to blasting. This data is entered into the three dimensional Mine model to define the location and extent



of materials in the pit and provide control over dig activities. Daily inspections of the pit are conducted by the Mine's Geologist to check the blasted waste rock pile boundaries and to confirm the waste rock classification. These findings are entered into a mobile phone app and added to a three dimensional pit model to inform waste rock locations.

The emphasis the Mine places on the classification of waste rock material is an indication of the importance that the Mine places on waste rock handling and management to avoid potential oxidation or Acid and Metalliferous Drainage (AMD)<sup>6</sup> issues.

### **Transport**

The Mine's fleet management Global Positioning System (GPS) system technology monitors and controls the dig, haul and dump activities to ensure the separation and correct emplacement location for different classifications of waste rock material.

Known as 'Modular', the fleet management system is a sophisticated GPS and digital software system commissioned in 2019 to monitor in real time the haul truck and waste material movements from the open pit to the NOEF. All production vehicles' (e.g., excavators, mine haul trucks, dozers, water carts) activities are captured and comprehensive data on waste rock material movements, locations and vehicles involved is recorded.

Potential incidents, e.g., haul truck misdump or an excavator operating outside a defined area of waste rock material classification, are identified in real time by the Modular system and trigger 'fail safe' alarms in the control room. This is a significant improvement on past practice as misdumps are almost eliminated. If required, a corrective action response can occur immediately removing any 'dump-over' that would require rehandling of a larger volume.

#### **Northern Overburden Emplacement Facility**

The NOEF has been specially designed to manage the risks of waste rock storage considering the long-term (post-mine closure) and during the construction phase. The two key principals influencing the NOEF design are limiting oxygen and water ingress and the management of water.

The latest NOEF design and construction has been successful in managing spontaneous combustion as there has been no sulphur dioxide emission criteria exceedances related to the NOEF. In the audit period there was a single sulphur dioxide emission criteria exceedance recorded at the authorised air quality monitoring location with elevated results confined to the mining areas, and no exceedances recorded at the other air quality monitoring site.

Following liner testing and cover system trials, a ten hectare area of the NOEF cover system has been installed which incorporates a Bituminous Geotextile Membrane (BGM) as a barrier layer to inhibit water and oxygen ingress. Monitoring sensors and telemetry, for temperature, moisture and gases, has been embedded under the BGM to evaluate the performance of this cover system.

Waste rock material placement layers 'lift heights' have been reduced compared with previous NOEF designs. A two metre lift height is used for more reactive material to achieve greater compaction and to reduce the passage of air and water. The Mine uses finer alluvium material to construct barriers between layers in the NOEF to reduce the development of advection currents in order to reduce

<sup>&</sup>lt;sup>6</sup> Acid and Metalliferous Drainage (AMD) - all possible potential geochemical impacts on surface and groundwater resulting from mining activities including saline drainage, neutral metalliferous drainage and acid drainage.



oxidation rates of the placed waste rock materials. The ITPs are detailed documents utilised to specify the requirements and acceptance criteria for the NOEF construction activities.

Infiltrating water generally migrates downward to a low permeability foundation incorporating a basal compacted clay liner (CCL). The CCL directs water to engineered underdrains which transport infiltrated water towards toe seepage recovery points or sumps. Seepage water is recovered for storage and treated in Perimeter Runoff Dams (PRODs). Surface water runoff from non-benign areas is directed to drains, sumps and PRODs.

The NOEF and cover system is planned to have a design life of 1000 years. During the period of the Mine's operation the NOEF is under construction and susceptible to rainfall infiltration. The Mine has the processes and systems to be able to detect, respond and manage any potential waste rock issues that may arise. Beyond the initial 50 years of mining the cover system needs to prevent infiltration. The current cover trials will need to demonstrate the NOEF's long term performance ability to safely encapsulate waste rock.

#### **Approach**

A consistent and conservative approach exists to managing potentially reactive waste rock material across Mine Operations. Any waste rock classification queries from the production team (e.g., haul truck operators, excavator operators, dozer operators), is referred to the Mine Geologist and if there is level of uncertainty the material is classified and treated as higher risk material.

The Mine Engineers, Mine Geologists, Operations Supervisor and Dump Supervisors are in frequent communication checking conformance with waste rock handling processes across business units. This is good practice and supports implementation of procedures with the benefit of experience and oversight.

The Dump Supervisor is a new role, recently created to provide additional oversight of waste rock handling activities. It was advised that the Dump Supervisor role is particular to this Mine which is an indication of the Operator's focus and effort placed on waste rock handling performance.

### 6.4 Conclusions

The emphasis and extra effort that the Operator places on identification and classification of the waste rock material to ensure potentially reactive material is transported and placed in appropriate zones within the NOEF provides an indication of the importance given to waste rock handling and management to avoid oxidation or AMD.

The Mine has invested in systems and personnel directly related to the management and handling of waste rock. The Modular GPS system is a step change advancement in waste rock handling enabling the optimisation of real time data and embedding a very high level of rigor in relation to waste rock handling for environmental protection.

The long 1000 year design life of the NOEF, underscores the importance of the BGM cover system trials to demonstrate the performance and durability of the BGM to prevent rainfall infiltration and to safely store the waste rock for the long term.

A large improvement in waste rock handling has been achieved in recent years with the enhanced waste rock classification system, updated design of the NOEF and implementation of the fleet management GPS system. Given the implementation of current procedures the opportunities for waste



rock handling improvements in the short term are relatively small. Foreseeable waste rock handling procedure improvements are likely to be in the refinement and optimisation of existing processes.

This audit has assessed the Mine as achieving a 'good to very good' level of implementation of the NOEF Management Plan requirements. The Mine Operator has demonstrated a high level of action to implement the plan's requirements to support the fulfilment of the stated objectives for the design, construction and operation of the NOEF based on the risks identified.



# 7 Comparative Analysis 2020, 2021 and 2022

# 7.1 Objective

The objective of the comparative analysis between the 2020, 2021 and 2022 AEPAR findings is to assess trends in the Authorisation, WDL, NT EPA recommendations and river health sections of the AEPAR.

## 7.2 Scope and Approach

The scope of this comparative analysis involved: (i) for the Operator, a quantitative comparison between the 2020, 2021 and 2022 AEPAR findings relating to the Authorisation and WDL; and (ii) for DITT, a quantitative comparison between the 2020, 2021 and 2022 AEPAR findings relating to the Authorisation and NT EPA recommendations. A review of OFI action status considered if OFIs raised in 2020 and 2021 have been closed or remain to be addressed. The river system health findings for the current audit were compared to those of the 2021 AEPAR.

# 7.3 Findings

This AEPAR examined 908 conditions, requirements and individual elements contained in the Authorisation, WDL and NT EPA recommendations. There were 481 active requirements identified. Out of these active requirements 22 part compliances were identified where the Operator and 17 part compliances where DITT were assessed as not having met all of the elements of the condition or requirement.

The comparative findings are discussed in the relevant sections below, grouped by Operator, DITT, and river system health.

The overall Operator 2022 AEPAR compliance scores compared to the 2021 AEPAR have remained the same for the WDL (98%) and improved by 1% for the Authorisation (97%). The total number of Operator OFIs was 30 in 2020, 28 in 2021 and 22 OFIs have been raised in this 2022 AEPAR. Two Operator OFIs are carried over and remain to be addressed from 2021. Seven Operator OFIs are very similar to 2021 OFIs.

The overall compliance scores attained by DITT have increased by 1% for both the Authorisation and the NT EPA recommendations. DITT has maintained a very high level of compliance. The total number of DITT OFIs was 27 in both the 2020 and 2021 AEPAR and 17 OFIs have been raised in this 2022 AEPAR. Six DITT OFIs from 2020 and five OFIs from 2021 are carried over and remain to be addressed.

Consistent with the findings reported in the 2021 AEPAR, the river system health monitoring indicates:

- No observable change in freshwater aquatic fauna species diversity and abundance outside the range of natural variance
- Aquatic ecosystems of the McArthur River and its tributaries are in good condition
- An extremely low risk to human health from consuming the monitored fish species caught in the McArthur River catchment in the vicinity or immediately downstream of the mineral lease.



## 7.3.1 Operator

There was a significant overhaul of the Authorisation released on 13 November 2020. There were 78 conditions in the two previous Authorisations that were no longer relevant for the 13 November 2020 Authorisation (i.e. there was no equivalent condition in the 13 November 2020 Authorisation). The 13 November 2020 Authorisation and the 18 June 2021 Authorisation that are both relevant to this AEPAR were identical, except for the security amount in condition 10.

The comparison between the 2020, 2021 and 2022 Operator Authorisation audit condition numbers and compliance scores are shown in Table 7-1.

Table 7-1: Summary Table for Comparison of 2020, 2021 and 2022 Operator Authorisation Findings

Operator Authorisation	2020	2021	2022
Total number of conditions and sub-conditions*	399	516	439
Number of active conditions and sub-conditions*	176	221	199
Number of part compliances	32	34	18
Overall compliance score	95%	96%	97%

Note: \*Relevant to the Operator.

The Operator's Authorisation audit has achieved a high level of overall compliance, with a 1% improvement from the 2021 AEPAR and fewer part compliances.

The Operator's Authorisation audit process identified 21 OFIs in 2020, 20 OFIs in 2021 and 18 OFIs in 2022. Two of the OFIs remain from the 2021 AEPAR with another five very similar to OFIs in the 2021 AEPAR.

The comparison between the 2020, 2021 and 2022 Operator WDL audit condition numbers and compliance scores are shown in Table 7-2.

Table 7-2: Summary Table for Comparison of 2020, 2021 and 2022 Operator WDL Findings

Operator WDL	2020	2021	2022
Total number of conditions and sub-conditions	200	148	110
Number of active conditions and sub-conditions	123	126	98
Number of part compliances	9	10	8
Overall compliance score	97%	98%	98%

The Operator's WDL has achieved a high level of overall compliance, equal to the 2021 AEPAR with two less part compliances.

The WDL audit process identified three OFIs in 2020, eight OFIs in 2021 and four OFIs in 2022, with the majority being administrative in nature. Two of the 2022 OFIs are very similar to OFIs in the 2021 AEPAR.



#### 7.3.2 **DITT**

The comparison between the 2020, 2021 and 2022 DITT Authorisation audit condition numbers and compliance scores are shown in Table 7-3. A greater proportion of DITT Authorisation conditions were active in the 2020 audit period (30%) compared with the 2021 audit period (22%) as shown in Table 7-3. In the 2022 audit period, the proportion of active conditions rose to 28%, still not as high as the 2020 audit period.

Table 7-3: Summary Table for Comparison of 2020, 2021 and 2022 DITT Authorisation Findings

DITT Authorisation	2020	2021	2022
Total number of conditions and sub-conditions*	203	274	242
Number of active conditions and sub-conditions*	60	61	68
Number of part compliances*	5	11	10
Overall compliance score	97%	95%	96%

Note: \*Relevant to DITT.

The audit process identified five OFIs in 2020 and five new OFIs in 2021. There were six new OFIs in 2022, plus two OFIs that were carried over from 2021, making a total of 8 OFIs for 2022. DITT has attained a high level of compliance with the active Authorisation conditions.

The total number of 117 NT EPA recommendations was the same between 2020, 2021 and 2022 as shown in Table 7-4.

Table 7-4: Summary Table for Comparison of 2020, 2021 and 2022 DITT NT EPA Recommendations Findings

DITT NT EPA Recommendations	2020	2021	2022
Total number of recommendations including subparts	117	117	117
Number of relevant recommendations including sub-parts*	97	116	116
Number of part compliances	9	15	10
Overall compliance score	98%	97%	98%

Note: \* The 2020 number of relevant recommendations considered implementation of the active recommendations while in 2021 and 2022 the audit considered the number of recommendations requiring incorporation into the Authorisation.

The audit process identified seven OFIs in 2020, 14 OFIs in 2021 and nine OFIs in 2022. Six of the NT EPA recommendations' part compliances and corresponding OFIs remain in-progress from the 2020 AEPAR and three OFIs are carried over from 2021.

DITT has attained a high level of compliance at 98% for adopting the intent of the NT EPA recommendations in the wording of the Authorisation conditions and implementation of the recommendations, with an increase of 1% when compared with 2021.



## 7.3.3 River System Health

As noted in Section 5, during the current audit period there were restrictions placed on site access due to COVID-19 restrictions. The reduced dataset challenges impacted the direct comparison between the current audit and the 2020 and 2021 AEPAR. Notwithstanding, findings identified for river system health for the current AEPAR were broadly similar to those of the 2020 and 2021 AEPAR, with key points as follows:

- Observations of freshwater macroinvertebrate assemblages are consistent with those of the 2020 and 2021 AEPAR, i.e. macroinvertebrate assemblages riffle sites along the McArthur River Diversion Channel appear to resemble those in reference sites and edge habitats are becoming more similar over time
- Building on the findings reported in the 2020 and 2021 AEPAR, the recording of two sawfish at the upstream extent of the McArthur River Diversion Channel during the current audit period further supports the assertion that fish passage for this species is not impaired
- With respect to the TARPs relevant to freshwater aquatic ecology monitoring, Level 1 performance
  was achieved for all categories in the current audit period, whereas for the 2020 AEPAR period
  Level 1 performance was achieved for all monitoring categories except tissue metal concentration,
  which was at Level 2 performance
- Consistent with the findings reported in the 2020 and 2022 AEPAR, the monitoring data collected in the current audit period suggest that efforts to reinstate habitat conditions typical of natural river channels have improved and are likely to continue to improve the aquatic habitat along the McArthur River Diversion Channel.



# 8 Status of Opportunities for Improvement

## 8.1 Operator OFI Status

OFIs for the Operator were identified in the AEPAR for the audit period of 01 May 2020 to 30 April 2021 and were also identified in previous AEPAR for the audit period of 01 April 2018 to 30 April 2020. It is notable that the opportunities are not mandatory requirements. These opportunities were identified with respect to:

- Authorisation conditions
- WDL conditions
- Operator commitments.

There were no OFIs in relation to the Operator's compliance with NT EPA recommendations in the previous audit periods and accordingly are not mentioned in the findings below.

The status of the OFIs has been reviewed as part of the 2022 audit. This was undertaken through review of summary information provided by the Operator.

## 8.1.1 Findings

The status of each of the Operator 2021 AEPAR OFIs is set out in Table 8-1. Of the 43 OFIs that were identified for the Operator:

- 19 have been completed
- One is ongoing
- 21 are in progress
- Two were not implemented.

A review shows that almost half of all the Operator 2021 AEPAR OFIs are completed with most of the remainder in-progress. The two OFIs not implemented relate to minor suggested changes to the Risk Management Plan.

Review of each of the Operator OFIs from the previous audit period of 01 April 2018 to 30 April 2020 shows that of the 27 OFIs that were identified for the Operator:

- 26 have been completed
- One OFI is in progress.

The opportunity for improvement that is 'in progress' (OFI-20-OP-AUTH-15) relates to improvement of ICE reports on future TSF cell embankment raise work by stating the relevant Authorisation conditions and MMP amendments as design criteria, and that the report is certifying against these listed regulatory requirements.

The OFI status in Table 8-1 has been provided by the Operator and where the Independent Monitor is aware of OFI actions still to be completed, a note has been added.



Table 8-1: Status of Operator Opportunities for Improvement

OFI Ref.	Operator OFI <sup>1</sup>	Document Section / Key Regulatory Activity	Status
OFI-21-OP- AUTH-01	Continue to review the approved MMP annually on 31 August and include a reference to that in the EMR. If the EMR is not submitted on 31 August, the Operator should correspond with the Minister confirming the annual review of the approved MMP has occurred. (Condition 6)	Mining Management Plan and Reporting	Ongoing
OFI-21-OP- AUTH-02	Submit all quarterly monitoring data inclusive of soil sampling to the Department in the required format. (Condition 7.d) <sup>2</sup>	Mining Management Plan and Reporting	Complete <sup>3</sup>
OFI-21-OP- AUTH-03	Obtain confirmation regarding the ICE's agreement to warrant and accept both the design and construction works, without limitation on responsibility. Otherwise, the Operator should obtain approval of the ICE's limitation on responsibility position with DITT. (Condition 48.a)	Independent Oversight - Appointment of ICE	In progress
OFI-21-OP- AUTH-04	Include the following statement in the monthly ICE reports: "The Independent Certifying Engineer warrants and accepts both the design and construction works, without limitation on responsibility" or an agreed level of limitation related to works by other parties prior to its appointment as ICE. (Condition 48.a)	Independent Oversight - Appointment of ICE	In progress
OFI-21-OP- AUTH-05	Retain evidence that the ICE warrants and accepts both the design and construction works for more than the NOEF (e.g., TSF or other construction on site), without limitation on responsibility. (Condition 48.a)	Independent Oversight - Appointment of ICE	In progress
OFI-21-OP- AUTH-06	Retain evidence that the ICE is present during all phases of construction where required in the approved MMP (including at hold points) and oversees and certifies that the works meet design specifications for more than the NOEF (e.g., TSF or other construction on site). The ICE should prepare reviews of the TSF and any other construction to demonstrate progressive compliance. (Condition 48.b)	Independent Oversight - Appointment of ICE	Complete <sup>4</sup>
OFI-21-OP- AUTH-07	Progressively implement actions raised by the ICE throughout construction to address issues to allow close out of Inspection and Test Plans (ITP). (Condition 48.b)	Independent Oversight - Appointment of ICE	Complete <sup>5</sup>
OFI-21-OP- AUTH-08	Confirm that the ICE is approving recommencement of construction at defined hold points and include a statement that the ICE "approved recommencement of construction at defined hold points" for the NOEF, TSF and any other construction in relevant monthly ICE reports. (Condition 48.c)	Independent Oversight - Appointment of ICE	Complete <sup>6</sup>
OFI-21-OP- AUTH-09	Ensure the Independent Tailings Review Board (ITRB) review comments on the TSF Operations, Maintenance and Surveillance (OMS) manual are incorporated into the OMS before new construction commissioning. (Condition 50.e.ii)	Independent Tailings Review Board	In progress <sup>7</sup>



OFI Ref.	Operator OFI <sup>1</sup>	Document Section / Key Regulatory Activity	Status
OFI-21-OP- AUTH-10	Provide evidence that test results for construction of Central West Charlie Flood Proofing works were in accordance with the relevant acceptance criteria. (Condition 22.a.ii – relevant to Condition 48.a)	Waste Rock Management - Charlie Stage	Complete
OFI-21-OP- AUTH-11	Correspond with DITT about the intent of this condition and specifically the impracticality of locating signage along the length of the shipping channel and in the immediate area surrounding the shipping channel and swing basin. (Condition 62.c.iii.d)	Water Management and Storage	In progress
OFI-21-OP- AUTH-12	Update the water storage infrastructure master list related to the open pit footwall quarry sump and open pit 'K stage' sump if they do not contain AMD or request DITT amend the condition to include these additional storages. (Condition 64).	Water Management and Storage	In progress
OFI-21-OP- AUTH-13	Update the water storage infrastructure master list for Old Stores Dam, North East Sump and Central East Bravo Sump to include relevant information and retain evidence of any inspections. (Condition 64.I, s and w)	Water Management and Storage	In progress
OFI-21-OP- AUTH-14	Measure and record field parameters daily at SW03 and SW06 during water release from the WMD into Little Barney Creek, unless the Department approves the alternative SW06 sampling location. If sampling is undertaken at an alternate location, the field sheet should reflect the actual sampling location. (Condition 69.g.i)	Water Transfer and Discharge	Complete
OFI-21-OP- AUTH-15	Prepare and submit the construction reports including Quality Assurance (QA) and Quality Control (QC) data endorsed by the ICE for EPROD, given that early approval to operate EPROD was granted 20 March 2020. The EPROD Commissioning Plan stated the EPROD construction report needed to be completed "as soon as possible". (Condition 45 – 10 August 2020 Authorisation)	Perimeter Run-Off Dams - SPROD, SEPROD, WPROD and EPROD	In progress
OFI-21-OP- AUTH-16	Ensure TSF construction reports including QA and QC data are submitted within the 30-day timeframe stipulated in the condition. While this condition is no longer in the 13 November 2020 Authorisation, an equivalent requirement exists for all of the ICE construction reports in Condition 48.g. Condition 46.d – 10 August 2020 Authorisation)	Tailings Storage Facility	Complete <sup>8</sup>
OFI-21-OP- AUTH-17	Implement the Exploration Management Plan that now includes environmental controls and retain evidence (e.g., Job Safety Analysis (JSA), environmental inspections, etc.). (Condition 86.b.ii, iii and iv)	Exploration	Complete



OFI Ref.	Operator OFI <sup>1</sup>	Document Section / Key Regulatory Activity	Status
OFI-21-OP- AUTH-18	Continue to develop continuous monitoring solutions to avoid logger loss and failure during deployment. (Schedule D – 2)	Schedule D - Environmental Monitoring and Management	Complete
OFI-21-OP- AUTH-19	Progress negotiations relating to necessary approval requirements with other authorities to enable construction of the permanent monitoring structures, e.g., Glyde River. Deploy additional loggers in the Glyde River to provide redundancy to ensure continuous data collection. (Schedule D – 3.b)	Schedule D - Environmental Monitoring and Management	Complete <sup>9</sup>
OFI-21-OP- AUTH-20	Update management plans to indicate the process relating to advising DITT when a part of the plan cannot be implemented. (Schedule D – 6.b and c)	Schedule D - Environmental Monitoring and Management	In progress
OFI-21-OP- WDL-01	Issue updated Emergency Response Plan to DEPWS within ten days of updates and include a tabulated summary of the amendments with document references, reasons for the amendment and an assessment of environmental risk associated with the amendments. (Condition 9)	Waste Discharge License	Complete
OFI-21-OP- WDL-02	Request a change to the condition to state that submission is only required when a change directly relevant to the WDL is made to the documents listed in Table 1 - Licence Documents. (Condition 9)	Waste Discharge License	In progress
OFI-21-OP- WDL-03	Include the community feedback phone number in the next revision of the Communication Plan Waste Discharge Licence. (Condition 12.2)	Waste Discharge License	Complete
OFI-21-OP- WDL-04	Install and maintain appropriate identification signage at SW08 or obtain agreement from DEPWS that a sign is not required. (Condition 32.1)	Waste Discharge License	In progress
OFI-21-OP- WDL-05	Investigate why notifications to DEPWS were occurring more than 24 hours after first becoming aware of the non-compliance (more than 24 hours after the final laboratory reports were emailed from the laboratory) and implement any actions to rectify findings. (Condition 36)	Waste Discharge License	In progress



OFI Ref.	Operator OFI <sup>1</sup>	Document Section / Key Regulatory Activity	Status
OFI-21-OP- WDL-06	Notify DEPWS within 24 hours of becoming aware of non-compliances with this licence, including non-compliances relating to the inability to monitor continuous flow. Noting that while Condition 62 relating to monitoring continuous flow in the Glyde River and Emu Creek is no longer in WDL174-12 (i.e., the WDL for the next audit period), the requirement is now included as part of Condition 26 due to their inclusion in WDL Appendix 4 (Table 1). (Condition 36)	Waste Discharge License	Complete
OFI-21-OP- WDL-07	Ensure that all required water quality monitoring data are submitted in Condition 38 reports. (Condition 38.6)	Waste Discharge License	Complete
OFI-21-OP- WDL-08	Progress negotiations relating to necessary approval requirements with other authorities to enable construction of the permanent monitoring structures (e.g., Glyde River). Deploy additional loggers in Emu Creek and Glyde River to provide redundancy to ensure continuous data collection. (Condition 60 and 62)	Waste Discharge License	Complete <sup>10</sup>
OFI-21-OP- COM-01	Provide detail and address the outstanding commitments from the MMP (Appendix L), along with the eight incomplete actions for the commitments reported in the EMR (Appendix B).	Operator Commitments OFI	In progress
OFI-21-OP- COM-02	Incorporate the commitments from the MMP (Appendix L and Appendix M) to a single commitment register for reporting against in future EMRs, and rationalise the commitments to avoid duplication.	Operator Commitments OFI	In progress
OFI-21-OP- COM-03	Provide additional information in the commitments register to identify where a commitment is closed out with no further action proposed. Provide details of close-out actions to confirm commitments are complete, e.g., date completed, brief description of action completed, reference to relevant supporting report/ data/ documentation.	Operator Commitments OFI	In progress
OFI-21-OP- COM-04	Provide a unique reference number to each commitment to facilitate tracking and reporting.	Operator Commitments OFI	In progress
OFI-21-OP- RI-01	Implement regular formal environmental risk assessment reviews to monitor the effectiveness of controls as part of continuous improvement.	Risk Management OFI	Complete
OFI-21-OP- RI-02	Undertake regular formal environmental risk assessment reviews to update risk status and track environmental risk management progress as part of continuous improvement.	Risk Management OFI	Complete
OFI-21-OP- RI-03	Develop a risk profile monitoring and tracking process to illustrate annual positive and/or negative deviation trends in risk profile and to enable comparative analysis between annual risk registers.	Risk Management OFI	Complete



OFI Ref.	Operator OFI <sup>1</sup>	Document Section / Key Regulatory Activity	Status
OFI-21-OP-	Consider revising the environmental risk assessment register format to include:	Risk Management OFI	Complete
RI-04	a unique identifier reference for each risk to facilitate tracking for monitoring and review		
	a prefix to indicate where the risk was originally identified, e.g., OMP EIS, MMP, BBRA, etc.		
	risk status information, e.g., identified, in-progress, closed and risk eliminated, closed and monitor, accepted		
	risk register version control.		
OFI-21-OP- RI-05	Revise the Risk Management Plan to explicitly state HSEC responsibility includes Environment in Section 12, which only mentions Safety.	Risk Management OFI	Not implemented
OFI-21-OP- RI-06	Revise JSA references in the Risk Management Plan to Job Safety and Environment Analysis (JSEA) to prompt environmental considerations in risk assessments.	Risk Management OFI	Not implemented
OFI-21-OP- RH-01	Adopt the conclusions of the Operator's external experts that it is preferable to increase the number of reference sites along the McArthur River rather than in adjacent catchments.	Freshwater Macroinvertebrate Monitoring	In progress <sup>11</sup>
OFI-21-OP- RH-02	Increase the number of downstream reference sites with riffle microhabitat in future sampling as planned.	Freshwater Macroinvertebrate Monitoring	In progress <sup>11</sup>
OFI-21-OP- RH-03	Maintain longer term data collection for comparison of annual aquatic fauna program to better understand longer-term trends and influences of inter-year variability in-flow on aquatic fauna community development and resilience in the McArthur River Diversion Channel.	Diversity and Abundance of Freshwater Aquatic Fauna	In progress <sup>11</sup>
OFI-21-OP- RH-04	Increase the number of tagged fish to replace the fish for which batteries in the tag are reaching their expiry dates.	Freshwater Sawfish and Barramundi Acoustic Monitoring	In progress <sup>11</sup>
OFI-21-OP- RH-05	Determine if inclusion of tissue metal concentration sampling at the remote Batten Point (McArthur River estuary) location would be beneficial to the monitoring program and/or enhance the relevance of the monitoring program to the local community.	Aquatic Fauna – Metals	In progress <sup>11</sup>

**Table notes** 



- <sup>1</sup> Reference to related Authorisation, WDL condition or commitment is provided where applicable
- <sup>2</sup> On 5 May 2022 requirement changed from quarterly to annual reporting
- <sup>3</sup> Additional OFI (2022) developed for submission of all data, specifically relevant to the HVAS results
- <sup>4</sup> Additional OFI (2022) developed for ICE overseeing and certifying the waste placement at the NOEF and the buttress work on the TSF
- <sup>5</sup> Additional OFI (2022) developed for issue of ITPs
- <sup>6</sup> Additional OFI (2022) developed for hold point process and ICE involvement
- <sup>7</sup> Additional OFI (2022) developed for ITRB review process and OMS
- <sup>8</sup> Additional OFI (2022) developed for 30-day requirement via condition 8.
- <sup>9</sup> Approvals for construction were received after the audit period. Additional OFI (2022) developed for construction and deployment of loggers in the meantime
- <sup>10</sup> Marked as complete as this is the same action as OFI-21-OP-AUTH-19
- <sup>11</sup> Note MRM indicated status as complete; however, has been shown as 'In progress' as appears to be subject to further review.



## 8.2 DITT OFI Status

OFIs for DITT were identified in the AEPAR for the audit period of 01 May 2020 to 30 April 2021 and were also identified in previous AEPAR for the audit period of 01 April 2018 to 30 April 2020. It is notable that the opportunities are not mandatory requirements. These opportunities were identified with respect to:

- Authorisation conditions
- NT EPA recommendations
- Performance in regulatory procedures and regulatory approach.

The status of the OFIs has been reviewed as part of the 2022 audit. This was undertaken through review of summary information provided by DITT.

## 8.2.1 Findings

The status of each of the DITT 2021 AEPAR OFIs is set out in Table 8-2. Of the 27 OFIs that were identified for DITT:

- 14 have been completed
- Three are ongoing
- Nine are in progress
- One was not implemented.

Review of the status of DITT 2021 AEPAR OFIs shows that over half of the opportunities for improvement have been completed with most of the remainder ongoing or in progress.

Review of each of the DITT OFIs from the previous audit period of 01 May 2020 to 30 April 2021 shows that of the 27 OFIs that were identified for DITT:

- Eight have been completed
- Two have been part-completed
- Sixteen are in progress
- One requires further consideration.



Table 8-2: Status of DITT Opportunities for Improvement

OFI Ref. 2021 AEPAR	Opportunity for Improvement	Document Section / Key Regulatory Activity	Status
OFI-21-DE- AUTH-01	Identify and follow up on any data omissions (i.e. soils, sediments or water transfers in 2021) in the quarterly reports. (Condition 7.d,e,g)	Mining Management Plan and Reporting	Complete
OFI-21-DE- AUTH-02	Prepare an annual program/register of Operator deliverables and submissions to assist DITT to manage the acknowledgement of receipt, adequacy review of submissions, and timely request for additional information, if required. (Condition 7.d,e,g)	Mining Management Plan and Reporting	Complete
OFI-21-DE- AUTH-03	Request a copy of the independent TSF annual audit reports for Department records. (Condition 45 - 10 August 2020 Authorisation)	Perimeter Run-Off Dams – SPROD, SEPROD, WPROD and EPROD	Complete
OFI-21-DE- AUTH-04	Monitor construction progress to identify upcoming completion so that the anticipated date of receipt of construction reports is known in advance and to prompt follow-up action if anticipated due date is passed. (Condition 46.d, 52.d and 56.a - 10 August 2020 Authorisation)	Tailings Storage Facility	Ongoing
OFI-21-DE- AUTH-05	Amend the Authorisation to accurately reflect the Environmental Management Plan titles approved in the MMP. (DITT advised this task is underway.) (Schedule D – 6.a,d,e,f)	Schedule D – Environmental Monitoring and Management	Complete
OFI-21-DE-REC- 01	Incorporate into DITT processes a review of the Operator's NOEF management program every three years. (NT EPA Recommendation 8.i.)	Inland Water Environmental Quality	In progress
OFI-21-DE-REC- 02	Incorporate into the TSF Independent Panel's terms of reference a review of the Operator's TSF management program every three years. (NT EPA Recommendation 11.i.)	Inland Water Environmental Quality	Complete
OFI-21-DE-REC- 03	Incorporate into the TSF Independent Panel's terms of reference a review of the TSF seepage monitoring results and appropriateness of the monitoring program every three years. (NT EPA Recommendation 11.ii.)	Inland Water Environmental Quality	Complete
OFI-21-DE-REC- 04	Incorporate into the TSF Independent Panel's terms of reference a TSF review report every three years to be made available to the Operator, government agencies, CRG and the public (NT EPA Recommendation 11.cont.)	Inland Water Environmental Quality	Complete



OFI Ref. 2021 AEPAR	Opportunity for Improvement	Document Section / Key Regulatory Activity	Status
OFI-21-DE-REC- 05	Incorporate into DITT processes a mechanism to confirm that "the results of the ecotoxicological program shall be used to inform trigger criteria in the AMP". (NT EPA Recommendation 14.)	Aquatic Ecosystems	Complete
OFI-21-DE-REC- 06	Incorporate into DITT processes consultation with other government agencies on the preparation an implementation of the ecotoxicological program, e.g., NT DEPWS and Commonwealth DAWE. (NT EPA Recommendation 14.cont.)	Aquatic Ecosystems	Complete
OFI-21-DI-REC- 07	Incorporate into DITT processes consultation with other government agencies on the preparation and implementation of the aquatic ecosystem monitoring program, e.g., NT DEPWS and DAWE. (NT EPA Recommendation 15.cont.)	Aquatic Ecosystems	In progress
OFI-21-DI-REC- 08	Incorporate into DITT processes a mechanism for the Operator's three-yearly report on the Aquatic Ecosystem Monitoring Program, and the Independent Monitor's audit of this report, to be made publicly available on DITT website. (NT EPA Recommendation 15.cont.)	Aquatic Ecosystems	Complete
OFI-21-DE-REC- 09	Update a future Authorisation to include reference to the results of the air quality monitoring plan to be audited by the Independent Monitor every three years. (NT EPA Recommendation 19.cont.)	Human Health	Ongoing
OFI-21-DE-REC- 10	Incorporate a requirement into DITT processes to consult other government agencies on the development of non-lethal monitoring program for sawfish monitoring program, including trigger threshold for investigation and management measures, e.g., NT DEPWS and DAWE. (NT EPA Recommendation 21.)	Matters of National Environmental Significance	Complete
OFI-21-DE-REC- 11	Incorporate a requirement into DITT processes for the Independent Panel to review the risk of failure of the mine levee wall and the McArthur River Diversion Channel as part of the closure plan objectives. (NT EPA Recommendation 23.ii.)	Closure and Rehabilitation	In progress
OFI-21-DE-REC- 12	Incorporate a requirement into DITT processes for the Independent Panel to provide a 3-5 yearly review report on the mine closure plan to assess the trajectory of closure options to DITT and the Independent Monitor. To subsequently be made available to the Operator, government agencies, CRG and the public. (NT EPA Recommendation 23.cont.)	Closure and Rehabilitation	In progress



OFI Ref. 2021 AEPAR	Opportunity for Improvement	Document Section / Key Regulatory Activity	Status
OFI-21-DE-REC- 13	Incorporate into DITT processes a mechanism for the Operator's review and synthesis of all monitoring programs and revised monitoring program to be reviewed by the Independent Panel(s) and the Independent Monitor, and be approved by the relevant regulators, e.g., DITT. (NT EPA Recommendation 27.)	Adaptive Management	In progress
OFI-21-DE-REC- 14	Consider the development of a DITT process or register to assist capturing the NT EPA recommendations details that are not explicitly stated in the Authorisation conditions to ensure implementation of the specific requirements is achieved.	General	In progress
OFI-21-DE-REG- 01	Prioritise the establishment of the Independent Panel of Experts for TSF and NOEF to trigger and facilitate independent reviews of the Operator's monitoring program and reporting.	Regulatory Approach	In progress
OFI-21-DE-REG- 02	Ensure the Independent Panel(s) terms of reference encompass the appointment of a suitable level expertise and experience if a single Independent Panel is established to cover both the NOEF and TSF.	Regulatory Approach	Complete
OFI-21-DE-REG- 03	Create Independent Panel terms of reference with the flexibility to enable the addition of mine closure expertise to any existing panel, rather than the need to establish a standalone mine closure Independent Panel.	Regulatory Approach	Not implemented
OFI-21-DE-REG- 04	Facilitate an internal DITT review to examine the annual EMR process, tasks and outputs with a view to streamline the activity. As part of this review, examine what is sufficient for regulatory requirements and responding to community expectations, as well as how the annual process could be more efficient.	Regulatory Approach	Ongoing
OFI-21-DE-REG- 05	Prepare an internal procedure for the regulation of the Authorisation conditions and NT EPA recommendations to document the processes, timing, due dates, overdue submissions, approvals, decisions, public /community communication and records requirements to assist managing the complex regulatory requirements relating to DITT activities.	Regulatory Approach	In progress
OFI-21-DE-REG- 06	Further streamline the documentation and approval process to improve efficiencies and focus on implementation of initiatives to improve performance.	Regulatory Approach	Complete
OFI-21-DE-REG- 07	Improve communication and collaboration with other government agencies (Commonwealth and NT) to align objectives and actions, streamline processes, and improve environmental outcomes.	Regulatory Approach	Complete



OFI Ref. 2021 AEPAR	Opportunity for Improvement	Document Section / Key Regulatory Activity	Status
OFI-21-DE-REG- 08	Reduce reliance on key individuals within DITT to ensure consistency and continuity of compliance and performance.	Regulatory Approach	In progress

**Table notes** <sup>1</sup> Reference to related Authorisation condition or NT EPA Recommendation is provided where applicable.



# 9 Stakeholder Engagement

# 9.1 Overarching Scope and Approach

The Independent Monitor's stakeholder engagement approach aims to meet the following objectives:

- Communication reflects local community interests
- Engagement is appropriate, relevant and inclusive and builds stakeholders' trust of the Independent Monitor team, process and outcomes
- Stakeholders' perceive the Independent Monitor process as transparent, which facilitates stakeholder trust of the outcomes
- Community and key stakeholders are informed about the environmental review and audit report findings.

A comprehensive Stakeholder Engagement Plan was prepared to guide community and stakeholder engagement and communications for the Independent Monitor. The Stakeholder Engagement Plan was revised in response to COVID-19 restrictions and updated in 2022. Advisian engaged CCC, a Northern Territory Aboriginal business as a subconsultant, to facilitate community engagement throughout the Independent Monitor process. This was crucial during the COVID-19, with many interstate travel restrictions in place.

An overview of the engagement approach, scope, limitations, key outcomes, and recommendations for future engagement is summarised in the following sections.

## 9.2 2021 AEPAR Engagement

## 9.2.1 Scope and Approach

Prior to the release of the 2021 AEPAR, the Independent Monitor stakeholder engagement team met with the local community on-country in March 2022 to communicate the findings of the 2021 AEPAR.

Participatory face-to-face stakeholder engagement was undertaken in Borroloola and surrounding outstations from 28 March to 31 March 2022 to discuss the outcomes of the 2021 AEPAR and answer any questions. The engagement approach included:

- Providing copies of the Independent Monitor Annual Report Card 2021, a visual reader-friendly version of the full report, to community stakeholders in Borroloola and surrounding area
- Meeting with community stakeholders, both one-on-one and in small group settings, to talk them
  through the findings of the report and provide an opportunity for stakeholders to ask questions
  regarding the audit findings in a culturally sensitive and private setting
- Providing community stakeholders with the contact details of the Independent Monitor stakeholder engagement team, offering the opportunity to discuss the report and ask questions.

A detailed overview of specific engagement approaches is outlined below.



#### **Face-to-Face Consultation**

The Independent Monitor addressed feedback from previous engagement and held face-to-face engagement with community members, both one-on-one and in small group settings. During consultation, CCC explained the AEPAR findings and provided an opportunity for stakeholders to ask questions in a culturally safe and private setting, allowing stakeholders to confidentially express their opinion and ask questions.

In total, 46 stakeholders were engaged in person during the time spent in Borroloola and the surrounding region. During engagement, community members were advised that they could be added to the Independent Monitor's stakeholder list if they wished to be directly engaged during future rounds of engagement.

### Increased time in community

Feedback from previous engagement indicated was that community members would prefer the engagement team spend more time on the ground and that engagement was broadened to include consultation in communities, outstations and homelands surrounding Borroloola to ensure a wider cross section of community members had the opportunity to be engaged. In response to this, the engagement period was extended and included the following locations:

- Borroloola (including town camps)
- Robinson River
- Wandangula (Police Lagoon)
- Goolminyini (Devil Springs)
- Minyalini (Campbell Springs).

#### **Traditional Owner Engagement Consultant**

To assist facilitate Borroloola local community meetings a community member who is a long-time Borroloola resident, well known throughout the region and a Yanyuwa/Marra Traditional Owner was engaged to support the Independent Monitor stakeholder engagement team. Many community members and stakeholders were positive about this aspect of the engagement approach and commented that it had ensured individuals who previously would not have been consulted were engaged.

### **Annual Report Card**

The 2021 Annual Report Card was used as a communication tool and given to community members to provide an overview of the key findings of the full 2021 AEPAR. Presenting the information in the form of this smaller report in plain English and with visual representation of findings increased accessibility for some community members. This engagement approach was in direct response to requests made by community members during previous engagement who noted the full report was difficult for some people to understand. Copies of the 2021 Annual Report Card were distributed to community members and left at key community congregation points to allow interested local community members access to the findings. Additional copies of the Annual Report Card were also left at:

- Mabunji Aboriginal Resource Indigenous Corporation, Borroloola
- Mungoorbada Aboriginal Corporation, Borroloola



- National Indigenous Australians Agency (NIAA), Borroloola
- MRM's Community Office, Borroloola.

#### **Engagement Limitations**

At the time when the Independent Monitor stakeholder engagement team were in the local community to undertake consultation a fibre optic cable had been severed near Borroloola, which prevented some stakeholders being contacted by telephone to arrange meetings. While attempts were made to mitigate this, there were some stakeholders who were unable to be contacted and who were not able to be located for engagement.

Where appropriate, the Independent Monitor stakeholder engagement team visited individual residences to meet with these stakeholders but often were unable to locate them, additionally, some stakeholders were in COVID-19 isolation and did not have telephone access.

Community members, including those who were not available for the 2021 AEPAR round of community engagement, were provided with the contact details of the Independent Monitor stakeholder engagement team and offered the opportunity to discuss the AEPAR after the engagement team had left.

## 9.2.2 2021 AEPAR Engagement Outcomes Summary

Engagement feedback from local community members during the consultation activities for the 2021 AEPAR focused on:

- Health of the McArthur River and fish
- Water testing locations and opportunities to for local community involvement in monitoring
- Providing more time for community members to consider results before asking questions.

#### **Health of the McArthur River and fish**

The local community members' primary concern was the health of fish in the McArthur River and whether the fish were safe to eat.

The AEPAR found that the fish in the McArthur River were safe to eat and that a high level of compliance with the conditions set upon them. Community members were generally happy with the results of the report, although some perceived the data collection process as lacking independence.

#### Monitoring locations and local involvement in water monitoring

Community members indicated that they would like additional information included in the report regarding the frequency and locations of water monitoring. Some community members noted that in the past the Sea Rangers had been involved with the collection of samples and the monitoring process by the Operator, but this was no longer the case. During engagement discussions it was noted by community members that they would like local people to be involved with the water quality monitoring process and believe their involvement would increase local confidence in the results.

### **Time for Reflection**

Some stakeholders noted that there was limited time within the engagement period for people to receive the ARC, reflect on it and then ask questions, even with increased time spent in community



during this round of engagement. All stakeholders were provided with the engagement teams contact details and advised that they could contact the engagement team with any follow-up questions. Stakeholders stated they would be happy to ask these questions over the phone, as the initial engagement was face-to-face and they met the person who they would direct their questions. While the engagement duration and time for reflection was raised by some stakeholders, no follow up calls and questions were received by the engagement team in the weeks following engagement.

## 9.2.3 Identified opportunities for improvements to future engagement

To improve future rounds of engagement the consultation process could continue to include a Traditional Owner Engagement Consultant, and additional time on-country. It was recognised that the engagement time had been increased, however some community members indicated additional time could allow some people further time to reflect on the ARC findings and then ask questions. It is recommended the engagement period be reviewed and potentially extended during the next round.



# 10 Overall Conclusions

The Independent Monitor has assessed that both the Operator and DITT have achieved a high level of overall compliance with the Authorisation conditions, WDL conditions and with implementation of the NT EPA recommendations. The Operator's level of regulatory compliance has assisted to manage potential operational environmental risks while safeguarding environmental values.

The audit period covered 01 May 2021 to 30 April 2022. It is the opinion of the Independent Monitor that during the audit period, the Operator has continued to avoid or minimise potential environmental risks by proactively managing and monitoring environmental issues across a wide range of site activities while maintaining a strategic focus on continuous improvement in environmental performance.

No significant environmental issues requiring urgent investigation and attention were found to have occurred during the audit period based on the information reviewed.

The Authorisation conditions target the potentially high-risk mining activities. The Operator's high level of compliance with the Authorisation conditions across all key operational activities is a measure of the level of fulfillment of regulatory requirements. The Operator has maintained the same high level of overall compliance score for the WDL and improved the Authorisation compliance score by 1%.

The Operator has a comprehensive Risk Management Plan that contains an appropriate environmental risk management framework and process. There is improved correlation between the 2020 and 2022 MMP Risk Assessment registers, as the risk descriptions and referencing of individual risks match to enable tracking of risks and risk performance over time. An assessment of the risk control effectiveness has been added to the latest risk register.

A high level of compliance continued to be attained by DITT; with an increase in the overall compliance scores of 1% for both the Authorisation and the NT EPA recommendations. The review found that DITT has effectively incorporated the NT EPA recommendations into the Authorisation conditions.

The review of DITT's regulatory approach identified some efficiency opportunities around streamlining activities, especially those involving recurring regulatory processes. It was observed that DITT could improve action timeframes around some tasks such as the establishment of the Independent Panel of Experts and providing formal review acceptance or approval responses. The review found DITT to have a strong focus on key environmental risks (e.g. high number of conditions on NOEF and TSF) and a practical approach to compliance and monitoring. The Operator's performance and high levels of regulatory compliance can be attributed, at least in part, to the approach adopted by DITT.

DITT completed an overhaul of the MMP submission and assessment process by developing a new MMP template to improve assessment efficiency and consistency between projects.

DITT has progressed the CRG terms of reference and the membership expressions of interest for the establishment of the group. The final draft terms of reference for the Independent Panel of Experts for the NOEF and TSF have been prepared by DITT. The four site visits conducted by DITT since the lifting of COVID-19 restrictions are beneficial as they allow a physical observation and assessment of the Mine's condition to verify progress against the management plans, monitoring and reporting.



The aquatic ecology review and site inspection provides a general assessment on overall river system health based on the information provided by the Operator. Consistent with the river system health findings reported in the 2021 AEPAR, the McArthur River and its tributaries overall were considered to be in good health. Exceedances of metal concentrations were limited to one specimen at one site on Barney Creek in areas immediately adjacent to operational areas within the mineral lease boundary, where public access is not permitted, and which require ongoing management.

The emphasis and extra effort that the Operator places on identification and classification of the waste rock material to ensure potentially reactive material is transported and placed in appropriate zones within the NOEF indicates the importance given to waste rock handling. A large improvement in waste rock handling has been achieved in recent years with the enhanced waste rock classification system, updated design of the NOEF and implementation of the fleet management GPS system.

The stakeholder engagement approach to communicating the AEPAR findings was expanded to include outstations surrounding Borroloola to ensure a wider cross section of stakeholders were engaged. On-country engagement was supported by a local community member who is a long-time Borroloola resident and well known throughout the region. The engagement activities included meeting community members in both one-on-one and small group settings, and providing a copy of the Annual Report Card, which is a condensed version of the full report to allow for easier reading and understanding.

Each section of the AEPAR describes the findings of the environmental compliance review, identifies opportunities for improvement and provides relevant conclusions. The listed opportunities are considerations aimed at continuous improvement for potentially enhanced environmental compliance, noting these are not mandatory requirements. Noteworthy successes that achieved improved performance beyond regulatory compliance by the Operator or DITT have been identified. The 2022 AEPAR did not identify any environmental issues requiring urgent investigation.

During the audit period, a number of Authorisation conditions, WDL conditions and NT EPA recommendations were not applicable as they relate to 'future' requirements, which will be assessed in subsequent AEPARs.



# 11 Bibliography

GHD, 2020/2021. ICE Peer Review of NOEF Monthly Construction Progress Reports (July 2020 dated September 2020, September 2020 dated December 2020, November 2020 dated January 2021, January 2021 dated August 2021, February 2021 dated September 2021, March 2021 dated October 2021, April 2021 dated November 2021)

GHD, 2019. MMP Jan 2020 – Appendix I – Tailings Storage Facility Raising General Specification for Design and Construction (Revision 2 January 2019)

GHD, 2021. Eastern Perimeter Runoff Dam Construction Report - Working Draft - November 2021.

GHD, 2022. TSF Cell 1 Stage 5 - Raise to RL 10059 m Construction Report (March 2022)

GHD, 2022. TSF Cell 2 Stage 6 – Raise to RL 10061 m Construction Report (May 2022)

GHD, 2022. TSF Cell 2 Stage 7 Raise to RL 10063 m Construction Report (2 May 2022)

Glencore, 2014. Glencore Zinc HSEC Management System Procedure MSP-03: Compliance (Legal and Other Requirements) and Document Control version 1 dated 30Jun2014

IndoPacific Environmental, 2021. Bing Bong Dredge Spoil Saline Impact Assessment 2020

International Organisation for Standardization, 2018. ISO 19001:2018 Guidelines for auditing management systems

International Organisation for Standardization, 2018. ISO 31000:2018 Risk Management- Guidelines

MRM, 2022. Environmental Monitoring Report 2021-2022 1 May 2021 to 30 April 2022

EMR 2021-2022 Appendix A 2021-2022 Drilling Register

EMR 2021-2022 Appendix B Reconciliation of Commitments and Actions

EMR 2021-2022 Appendix C 2021-2022 Environmental Monitoring Schedule

EMR 2021-2022 Appendix D NOEF Temperatures

EMR 2021-2022 Appendix E Ambient Air Monitoring Report

EMR 2021-2022 Appendix F Revegetation Monitoring Report

EMR 2021-2022 Appendix G Riparian Bird Monitoring Report Early Dry Season

EMR 2021-2022 Appendix H Riparian Bird Monitoring Report Late Dry Season

EMR 2021-2022 Appendix I Freshwater Aquatic Macroinvertebrate Assessment

EMR 2021-2022 Appendix J Monitoring of Select Analytes & Lead in Fluvial Sediments & Aquatic Fauna 2021

EMR 2021-2022 Appendix K Aquatic Fauna Monitoring Early Dry Season

EMR 2021-2022 Appendix L Aquatic Fauna Monitoring Late Dry Season



EMR 2021-2022 Appendix M Acoustic Monitoring in the McArthur River

EMR 2021-2022 Appendix N Annual Seagrass Survey of the BBLF

EMR 2021-2022 Appendix O BBLF Annual Marine Monitoring

EMR 2021-2022 Appendix P 2011 Diesel Spill Incident 2022

EMR 2021-2022 Appendix Q Surface Water Monitoring Report 2021-22

EMR 2021-2022 Appendix R Groundwater Monitoring Report

EMR 2021-2022 Appendix S 2021 Hydrogeological Drilling and Field Campaign

EMR 2021-2022 Appendix T DGT Monitoring at the BBLF

EMR 2021-2022 Appendix U Metals and Metalloids in the Near Shore Sediment

EMR 2021-2022 Appendix V Assessment of Bioavailable Metal Concentrations and Lead Isotope Ratios of Seafloor Sediments in the Bing Bong Loading Facility Transhipment Area, November 2021

EMR 2021-2022 Appendix W Reportable Incident Summary 2021-22

MRM, 2021. Environmental Monitoring Report 2020-2021 01 May 2020 to 30 April 2021

EMR 2020-2021 Appendix A 2020-2021 Drilling Register

EMR 2020-2021 Appendix B Reconciliation of Commitments and Actions

EMR 2020-2021 Appendix C 2020-2021 Environmental Monitoring Schedule

EMR 2020-2021 Appendix D Soil Monitoring Report McArthur River Mine and Bing Bong Loading Facility, May 2020 – April 2021

EMR 2020-2021 Appendix E Ambient Air Monitoring Report McArthur River Mine and Bing Bong Loading Facility, May 2020 – April 2021

EMR 2020-2021 Appendix F McArthur River and Barney Creek Revegetation Monitoring 2020

EMR 2020-2021 Appendix G McArthur River Riparian Bird Monitoring, Early Dry Season, May 2020

EMR 2020-2021 Appendix H McArthur River Riparian Bird Monitoring, Late Dry Season, November 2020

EMR 2020-2021 Appendix I McArthur River Purple-crowned Fairy wren (*Malurus coronatus macqillivrayi*) Translocation Program Progress Report September – November 2020

EMR 2020-2021 Appendix J McArthur River Freshwater Aquatic Macroinvertebrate Assessment 2020

EMR 2020-2021 Appendix K Monitoring of Select Analytes and Lead Isotope Ratios in Fluvial Sediments, Fish, Crustaceans and Molluscs of the McArthur River 2020



EMR 2020-2021 Appendix L Aquatic Fauna Abundance and Diversity of the McArthur River, Northern Territory, Early Dry Season 2020

EMR 2020-2021 Appendix M Report on the Aquatic Fauna of the McArthur River, Northern Territory, Late Dry Season 2020

EMR 2020-2021 Appendix N Acoustic Monitoring of Largetooth Sawfish (*Pristis pristis*) and Barramundi (Lates calcarifer) within the McArthur River, Northern Territory, 2020

EMR 2020-2021 Appendix O Annual Seagrass Survey of the Bing Bong Loading Facility, 2020

EMR 2020-2021 Appendix P Annual Marine Monitoring Program of the Bing Bong Loading Facility, November 2020

EMR 2020-2021 Appendix R Surface Water Monitoring Report 2020/21

EMR 2020-2021 Appendix S Environmental Monitoring Report Groundwater 2020/21

EMR 2020-2021 Appendix T 2020 Hydrogeological Drilling and Field Campaign

EMR 2020-2021 Appendix U Concentrations of Select Bioavailable Metals and Lead Isotope Ratios within Ocean Water in the Vicinity of the Bing Bong Loading Facility as Monitored by Diffusive Gradients in Thin Films: 2020 – 2021

EMR 2020-2021 Appendix V Metal and Metalloid Concentrations of Near Shore Sediments of the Bing Bong Loading Facility

EMR 2020-2021 Appendix W Assessment of Bioavailable Metal Concentrations and Lead Isotope Ratios of Seafloor Sediments in the Bing Bong Loading Facility Transhipments Area, November 2020

MRM undated. Communication Plan Waste Discharge Licence (WDL 174-10)

MRM undated. Communication Plan Waste Discharge Licence (WDL 174) (updated 3 August 2022)

MRM 2019. MMP Jan 2019 – Appendix A – MMP Amendment Environmental Risk Assessment

MRM 2020. MMP Jan 2020 – Appendix A – MMP Environmental Risk Assessment

MRM 2020. MMP Jan 2020 – Appendix F – NOEF Management Plan, Waste Characterisation Report, Mining Management Plan –, Acid and Metalliferous Drainage Management (version 0, 15 October 2018)

MRM 2020. MMP Jan 2020 – Appendix G – NOEF Management Plan, Version 1.0, January 2020

MRM 2020. MMP Jan 2020 – Appendix G – NOEF Management Plan, Version 1.0, Appendix A - NOEF Design and Construction Guidelines (version 1.0, 17 January 2020)

MRM 2020. MMP Jan 2020 – Appendix H – NOEF Management Plan, ICE Endorsement of NOEF Management Plan (23 January 2020)

MRM, May 2018, Overburden Management Project Supplementary EIS Review, McArthur River Mine Overburden Management Project, Section 2 – Geochemistry



MRM , May 2017, EIS Review Report, McArthur River Mine Overburden Management Project EIS Review, Section 2 – Geochemistry

McArthur River Mine, Overburden Management Project, Draft Environmental Impact Statement, Chapter 6 - Materials Characterisation, 2017

McArthur River Mine, Risk Management Plan, version 2.0, 21 October 2021, number MPN-GV-0002-2600023

McArthur River Mine, Risk Register, Risk Assessment Spreadsheet, Risk Workshop 17 May 2022

MRM 2021. MRM TSF Quarterly Report - March 2021 to May 2021

MRM 2021. MRM TSF Quarterly Report - June 2021 to August 2021

MRM 2021. MRM TSF Quarterly Report - September to November 2021

MRM 2022. MRM TSF Quarterly Report - December 2021 to March 2022

MRM 2021. WDL 174-11 Monitoring Report 01 May 2020 to 30 April 2021

MRM 2022. WDL 174-13 Monitoring Report 01 May 2021 to 30 April 2022

MRM 2020. Emergency Response Plan version 8, March 2020

MRM undated. TSF Operations, Maintenance and Surveillance (OMS) Manual, Draft, Version 6.0

MRM 2021. Exploration Management Plan SPC-3100001 May 2021, Version 2.



Appendix A
Authorisation Compliance Workbook Operator

13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Quaity (dust & s. diceide, transport)	Surface Water (Rivor, Creek, Artificial dams	Marine Waters (Bing Bong, marine sedima	Groundwater	Aquatic fauns (Fish ri	Vegetation & Rehabilitation (terres diversion & NOEF)	Waste (general, mine tallings)	Community (local indigenous & public)	Monitoring & Report	Score	Compliance Level		
SCHEDULE A Definitions														
1	In this document, unless the contrary intention appears:													Note that sub-conditions 1.a to 1.2 are not listed as they are all definitions and ar- unable to be audited for compliance.
nterpretation 2	In this document, unless the contrary intention appears:													Note that sub-conditions 2.a to 2.h are not listed as they are all interpretations a lare unable to be audited for correlance.
ioneral	Subject to any Conditions contained in the Act and this document, the												2021-2022 Bunner/Batine of Connectments and Artises (FAM) - Amonetic 90	Associated of the connectionals is covered under condition 1.6a
3	Operator must comply with the conventments and activities contained in the MMP including the implementation of all systems referred to in the MMP.										3	Part Compliance (High)	Isramy 2000 MMP (inclusing NOET Management Fran (NMF-Apporato C.) Section 5 of the Isramy 2000 MMP Apporad on NOET Design and Construction Guideline Islants ** 1986 comprehis are to be fill Ecular injector for the works. at the soleme of 40 ECT reviews and endorses in billing connect.** No ordered on instruction of the Islants injector for the NOET have been provided and this is considered paid compiled as they are a requirement of Appointin Ecul ** to MMP*.	Off: Propare annual as built factual reports for the INCEF as required by the MI
4	The Operator may only conduct, mener put actions is deriffed in the Mac parties the Marke sight only conditions contained the Mac the document and the Conditions commitments and systems contained in the Island.										4	Full Compliance	NO-202003 Primet to Claim Provides and From MeMBER MANAGEMENT RAW.  PRIMED Claim 2019 2019 15 10 10 10 10 10 10 10 10 10 10 10 10 10	The EMR also provides a summary of major operational activities that occurred during the reporting period and the Independent Monitor did not identify any inconsistent with the MMP.
S	Therms die is but developed and operated in American with the control lighter of the Control Protection and Goldwards). 1986 - The Control Protection and Goldwards of the 1986 - Tentrol Protection and Widelia Conservations AL 1979, and fine-flags AL 2021.										•	Full Compliance	NO SCHOOL STATE OF THE CONTROL OF AN OFFICE AND	Sucretic selections NM depth Act 1992 and System's to permit to intellect the energy association of the energy of the energy of the energy of the selection of the energy of the energy of the energy of the energy of the energy of the energy of the energy of the energy of the energy of the energy of the energy of the energy of the energy of the energy of the energy of the energy of the energy of the energy of the energy of purchase or protecting and requesting to and table. Completes on the Burbon energy designed discussed below 1997 to a table to condition 30.17 and 51 years below the energy of the
	The Operator must on 31 August 2021 and on each ambiersary of that, date (or such other date as nominated by the Operator and approved by the Ministry), review the approved MMP and if necessary, amend the MMP.										4	Full Compliance	EART 2005-2011, 31Aug31:  The Executive Summary of the DARR August 2021 says. Tin consideration of the results processed in this California Mark Dark Dear reviewed and it was determined that no spadates are currently required in order for MRMA's key environmental management objectives to confinite to be architect.	No ammendments to NWP. Planning to include similar statement related to revi of the approved MMP in the EMR 2001-2022.
7	The Operator must sobret quarterly all americemental monotoning data which has been continued than other pervisions data sufferishes. The valid source must be provised in the approved form (being a ME Earl transplant that can be provided on reapon() and include sides with a transplant that can be provided on reapon() and include sides sides and fails data for the following.											Refer to sub conditions		The Authorisation dated Subjection (In the heading privale) entyregises unimitation of data amount Authorisation has a footnets "See Schools D this Jose than this concidence in the Authorisation has a footnets" "See Schools D this document in validation in overlowmental models from graph amounts".  The 2012 12 2022 MBME feorimental Marketining Schools in Validation consisting which was a seen of the second of the s

uphur ns) srsial, srook.

orisation Compliance Workbook - Operator

Authorisation Co	mpliance Workbook - Operator	_						2					Evidence 2022	Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Oualiy (dust & sulphu		ores, a titoal dans) Marine Waters (Bing Bong, marine sedments)			Vegetation & Rehabilitation (terres trial diversion & NOEF)	Waste (general, mine rod tailings)	Community (local indigenous & public)			Compliance Level		
7.a	surface moder:		1			1				1	4	Full Compliance	Final Ladernoon world of 12021 fact - and 1554/pgi211 Final Ladernoon world of 12021 fact - and 1554/pgi211 Final Ladernoon world of 12021 fact - and 1544/pgi211 Final Ladernoon world of 12021 fact - and 1544/pgi211 Final Ladernoon world of 12021 fact - and 1544/pgi211 Final Ladernoon world of 12021 fact - and 1544/pgi211 Final Ladernoon world of 12022 fact - and 1544/pgi211 Final Ladernoon world of 12022 fact - and 1544/pgi211 Final Ladernoon world of 12022 fact - and 1544/pgi211 Final Ladernoon Final La	Small automation sent for CZ 2221 data. Added 15 Aug.2221 states "The Confidence select aug.4222 and selected
7.b	groundwater:				1					1	4	Full Compliance	Emile Submissions worth for CI 2021 data - dated 15May/2021 Firmid submissions may for CI 2021 data - dated 15May/2021 Firmid submissions may for CI 2021 data - dated 15May/2021 Firmid submissions may for CI 2021 data - dated 15May/2022 Firmid submissions may for CI 2021 data - dated 15May/2022 Firmid submissions may for CI 2022 data - dated 15May/2022 Firmid submissions may for CI 2022 data - dated 15May/2022 Firmid submissions may for CI 2022 data - dated 15May/2022 Firmid submissions may for CI 2022 data and the CI 2022 data submissions should that they were included and the required filtered mission were included and the required filtered mission were included and the required filtered mission were included.	Continence organization levels are not submitted and DITI advised they are not required.  Field results included 59M, pH, EC, tump, OSP and DO in the Q1 2022 data.
74	doc	1	1							1	3	Part Compliance (High)	201 202 USA (Contemental Montemental Monte	
7.d	sol;									1	N/A	Not Applicable		No soil sampling was submitted as it is no longer required.
7.e	sodiments;		1	1		1				1	4	Full Compliance	2021-3022 MBM Environmental Monitoring Schedule Email submission sent for CZ 2021 data - dated 16Aug3021 Annual Fluviel Sediment data has been provided for 20 and 21May 2021.	The operator advised "Please note that sediment samples are collected on an annual basis, and therefore results can only be submitted to the Department once per year. The latest sediment data is provided in the DITT Data Q2 2021,"
21	go. and	1	1							1	4	Full Compliance	The description on ordiff or 1007 page, dated 1540,00011  Final analysis and ordiff or 1007 page 1540,00011  Final analysis and final ordiff or 1007 page 1540,00011  Final analysis and final ordiff or 1007 page 1540,00011  Final analysis and final ordiff	The discharged value of the GLOST data data (14 August 14 August 1

Author is a firm Compilation Work book - Operator Considering Appects

Authorisation Co 13 Nov 2020 and 18 June 2021 Authorisation Condition No.	mpllance Workbook - Operator Condition/Requirement	Air Ouality (dast & sumbur	diceide, fransport)	Surface Water (Rivor, Creek, Artificial dams)	Marine Waters (Bing Bong, marine sedments)	Groundwater	Aquatic fauns (Fish river)	Vegetation & Rehabilitation (terros trial, diversion & NOEF)	Waste (general, mine rock, tallings)	Community (local Indigenous & public)	Monitoring & Reporting	Score	Compliance Level	Evidence 2022	Comments 2022
7-9	water transfers and discharges (restading dates, times and volumes).  From the date of authorization of this Constant date Management.			1							1	4	Full Compliance	2001 22 Wiles Ubstury Bioconia L. Lakes (Lostry 1007-22) Wiles (Lostry Bioconia L. Lakes (Lostry 1007-2007) Final Lambasson secondar (20 2021 died.—died. Michael 2007-2007) Final Lambasson secondar (20 2021 died.—died. Michael 2007-2007) Final Lambasson secondar (20 2021 died.—died. Michael 2007-2007) Final Lambasson secondar (20 2022 died.—died. Michael 2007-2007-2007) Final Lambasson secondar (20 2022 died.—died. Michael 2007-2007-2007-2007-2007-2007-2007-2007	No MOSF construction was finalized during the audit period. The Operator advisors
	Project, the Quoted must provide air is built for communication required for the following state of the contraction of the contraction required for contraction required in the contraction of the contraction of the contraction of the contraction of the contraction for the contraction fo										1	3	Part Compiliance (High)	"We find any Committed production to Golyge and Commission Mon-Appendix Delications and the State Office of Commission of Commis	indepressable in that the is built reports are required at the completion of a stage of the NOEF only. Following approval of the stages by the independent painst.  NOEF Management Plan Islates "At the completion of the work, as it will report will be produced that complete all the relovant proof that the construction was as per design, or where differences were present, how they were managed and only the design projections will all the retty be final works. These about reports are suffered to the produced only the produced will sell the retty that the construction with a retty the relovant produced and only the design projection will still be must by the final works. These about reports are
9	The Operator must submit on or before 31 August 2021 and on each anniversary of that disk for such other date is non-mixed by the Operator and approved by the Minister), an EMR for the previous year in the reporting period as agreed with the Department.										1	4	Full Compliance	Sighted unself from Operator to Regulator of EMR 2019-2020 submitted 31 August 2021. EMR for 2020-2021 was submitted 31 August 2021.	
Security and levy	The Operator must provide to the Minister a security of \$405, 116,668 in the form of cash or an unconditional bank guarantee prior to undertaking arm mining activities authorised by this Veriation of											4	Full Compliance	DETT database recording details of authorised projects including security amounts shows full payment of the requisited security amount.	The security provided to the Minister has increased from \$400,003,226 in Authorisation 13Nov/2020 to \$405,116,668 in Authorisation 18bun21.
	The security provided for under Condition 10 will be reassessed, and may be revised, following the submission, assessment and approval of an:												Refer to sub conditions		
11.a	independent third party assessment of the security by a qualified person approved by the Minister (also refer Condition 40):											N/A	Not Applicable		There was no requirement for independent third party assessment during the audit period. One was undertaken related to the Unplanned Closure Plan covered in condition 11.c.
11.b	amended MMP;											N/A	Not Applicable		Not triggerred as there were no amended MMPs in the audit period.
11.0	amendment to the Unplanned Cloure Plan.											4	Full Compliance	Jam's Operation to ISTT subject its Mothether flows Mere - Systand Unglemend Closure Raw and Independent Society Associated dated 31Aug/2021	An amendment to the Unglarend Classer Plan van schemited before the scale provision dark as easely because plan which will described on the Scale fine scale privacy for the scale privacy for the scale privacy for the scale privacy for the scale privacy for the scale privacy for the scale privacy for the van approved on May 2022 (socialist the scale privacy Contract Changel for excessing a fire your grader) and the classifier of tryberned Contract Changel for excessing a fire your grader and the class of the scale privacy for the scale privacy of the scale privacy power scale of the scale privacy power scales. Associated under the scale privacy power scales. Associated under the scale privacy power scales.

Authorisation Compliance Workbook - Operator Considering Appects

Authorisation Co	mpliance Workbook - Operator													
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	The state of the s	ur Quanty (dust exsulprior diceide, transport)		Marine Waters (Blng Bong, marine sedments)		Vegetation & Rehabilitation (terres trial, diversion & NOEF)	Waste (general, mine rook, lailings)	Community (local indigenous & public)			Compliance Level		Comments 2022
12	The revised security amount to be provided under Contident 10 is to be provided prior to crossing how meeting the contident to the provided prior to crossing how meeting the contident to the continent of the continent to the continent to the assention of shade, the Operator must provide the revised society the assention of shade the Operator must provide the revised society the assention of shade the Operator must provide the revised society the assention of shade the Operator must provide the revised society that the continent to the continent to the continent to the continent to the continent to the continent to the continent to the contin										4	Full Compliance	Found bilds share from: 5 Sign 51 K Right boundary cleaning signature 2021. Control Distantion a first 5 year 61 K Right boundary for size figure from 2021. Extend boundaries recording data of an Amoriand projects in cludding security amounts shown for projects and size of the requested security years of the first projects of the requested security years of in the form requested.	New sourchy bod operations out to 2020 Changed from invasil against to the Bed Monton waterful and 2011. In magine additional programs by the Operation and administration from the Monton of Monton on this is, appeared administration of the Department and Administration of the Monton of the Monton of the Administration of the New York of the Administration of the Administration of the Administration of the Monton of the Administration of the Administration of the Administration of the provided. The propriet device clearing on the New Administration (2021) exactly clear administration and the Administration of the Administration of the Monton of the Administration of the Administration of the Administration of the Monton of the Administration and the Administration of the Administration of the Administration of of Administration of the Administration of the Administration of Administration of Administration of Administration of Administration of Administration of Administration of Administratio
13	Each financial year, upon receipt of a written notice by the Minister as to the loxy payable for that financial year, the Operator must pay a loxy to the Minnig Ministraction fund of an amount calculated in accordance with the Act and as stated by the Minister in the notice.										4	Full Compliance	Informal Operator small subject FW: Information Request: Evidence of Levee Payment (2001) dated 27 hz-0022.  Thormal email dated 27 hz-0022 showed that the required levy (\$4,651,165.00) was paid on 2004g2021, before it was due.	The tax invoice showed that the lavy (\$4,051,165.00) was due 27Aug2021.
Overburden Minage Explanatory note:	The following conditions were indeed and in the previous variations, shand 15 August 2019 to inflict the intent of the thirty incommendations make by the IET DRA in the making of the seconcered proof to Signation Aday 2018. This IET DRA articulated an overactivity environmental objective to be achieved during operation of the Mirch to owns be hardwise distributed using operation of the Mirch to owns be hardwise distributed with one producted along the whole in eight in all at time from many calculations and the commendations in a owner challed product for the IEE of the project and two bown retained to achieve Exemption.										-			Explanatory note and therefore not audited.
14	The Operator must ensure activities related to the McArthur River Overburden Management Project are implemented in accordance with:											Refer to sub conditions		
14.a	disease amount commitment and subjected in the first forecast of the first forecast and subjected in the first forecast interest times of the first forecast in the first forecast foreca										3	Part Compliance (High)	263 TSSE The Association of Commissions and Association (See Aspossible). The Association of Commission is also also of the OSP (1997) commission provided in the Commission of the OSP (1997)	(Sh) as no extract and before they are provided in the Connectment Operator leaves within the 60 feet.
14.b	recommendations in the NT BPA Assessment Report 86 where they are approved under an MMP;										N/A	Not Applicable	NT EPA recommendations workbook The NT EPA recommendations audit of DiTT identified that the majority of the NT EPA recommendations have been transferred of firstly and all of the recommendations, to our year continue, are included in Conditions of the Authorisation.	Given the NT EPA recommendations audit of the Department identified that all NT EPA recommendations are included as conditions in the Authorisation, audit of this conditions is covered under other relevant Authorisation conditions.
14.c	if there is any inconsistency between the above documents, the most recent authorisation shall prevail to the extent of any inconsistency.										NA	Not Applicable		No inconsistency was found.
15	This Operator must provide virillan recisor to the Menteror and MEDAF Latters or proposes to shall the MAME mell West Mellon Observation Management Project sandar commitments, safequased or intigation management in Section of the Committee Section of the Committee of hashing the Committee Section of the Committee of the hashing the Committee Section of the Committee of the safety of the Committee of the Committee of the Administrative Procedures 1984.										N/A	Not Applicable		The Operator advised they have not triggered any activities that would require additional assessment in the audit period.
16	Within 18 months of the date of authorisation of the Overburden Management Project, unless otherwise agreed in writing by the Department, the Operator must submit a plan to the Department for leview, that:										NA	Not Applicable		Future item - Due 18 months from 13Nov2020  Operator has submitted the updated plan after the audit period.
16.a	Enabliss measurement of total loads of lead and zinc and is consistent with requirements of Condition 27;			1		1			1	1	N/A	Not Applicable		Future Item - Due 18 months from 13Nov2020 Operator has submitted the updated plan after the audit period.

Authorisation Co	ompliance Workbook - Operator													
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Quailty (dust & sulphur diceids, transport)	Surface Water (River, Creek, Artificial dams)	Marine Waters (Bing Bong, marine sediments)		Aquatic fauna (Fish river)	Vegetation & Rehabilitation (terres frial, diversion & NOEF)	Waste (general, mine rook, tailings)	Community (local indigenous & public)	Monitoring & Reporting		Compliance Level		Comments 2022
16.b	Countrillis and ensures armual loads of load and zinc discharged to the MACHTUR Short in future year; (bu) to June) do not exceed the loads discharged in 2017-2018 (as per Condition 68(e)) taking into account vessional variations in rainfall, and subject to future armual load calculations.		1			1			1	1	NA	Not Applicable		Future Ham - Due 18 months from 13Nov2020  Operator has submitted the updated plan after the audit period.
16.0	addresses recommendations and outcomes arising from audits of loads by the Independent Monitor;		1			-1			1	1	NA	Not Applicable		Future item - Due 18 months from 13Nov2020  Operator has submitted the updated plan after the audit period.
16.d	include sufficient datall to inform the development of monitoring and management measures (including but not limited to early warning alerts and intervention levels), as part of the site wide AMP (Condition 45):		1			1			1	1	NA	Not Applicable		Future (tem - Due 18 months from 13Nov2020 Operator has submitted the updated plan after the audit period.
16.0	once approved by the Department, be implemented by the Operator by the Operator.										NA	Not Applicable		Future item - Due 18 months from 13Nov2000  Operator has submitted the updated plan after the audit period.
17	Within 18 months date of authorisation of authorisation of the Overburden Management Project, the Operator music											Refer to sub conditions		Future item - Due 18 months from 13Nov2020  Operator has submitted the updated plan after the audit period.
17.a	submit a plan to the Department for neview, that shall include:		1			1				1	NA	Not Applicable		Future item - Due 18 months from 13Nov2020  Operator has submitted the updated plan after the audit period.
17.a.i	site-specific trigger values determined in accordance with Australian and New Zealand Guidelines for Fresh and Marine Water Quality, 2018 framework, incorporating ANEEOC (2000) guidelines, at appropriate monitoring locations, in accordance with Condition 27;		1			1			1	1	NA	Not Applicable		Future item - Due 18 months from 13Nov2020  Operator has submitted the updated plan after the audit period.
17.a.i	a commitment that creaks on the mine site to show long-term improving trends in water quality within 20 years after cessation of mining:		1			1			1	1	NA	Not Applicable		Future item - Due 18 months from 13Nov2020  Operator has submitted the updated plan after the audit period.
17.a.ii	methodology to calculate contaminant loads and contaminant concentrations entering creeks and the McArthur River using system modelling that must:		1			1				1	NA	Not Applicable		Future item - Due 18 months from 13Nov2020 Operator has submitted the updated plan after the audit period.
17 alia	use suitable site-specific data collected as part of Condition 26;		1			1				1	NA	Not Applicable		Future item - Due 18 months from 13Nov2020  Operator has submitted the updated plan after the audit period.
17.alib	be subject to review by the relevant independent panel;		1			1				1	NA	Not Applicable		Future item - Due 18 months from 13Nov2020  Operator has submitted the updated plan after the audit period.
17aHc	detail specific assumptions to be tested including but are not limited to:		1			1				1	NA	Not Applicable		Future item - Due 18 months from 13Nov2020 Operator has submitted the updated plan after the audit period.
17.allici	groundwater flow paths;				1					1	NA	Not Applicable		Future item - Due 18 months from 13Nov2020  Operator has submitted the updated plan after the audit period.
17 alii.cii	attenuation of metals from mine-derived wastes;		1		1	1		1		1	NA	Not Applicable		Future item - Due 18 months from 13Nov2020  Operator has submitted the updated plan after the audit period.
17.b	once approved by the Department, implement the plan;		1			1				1	NA	Not Applicable		Future item - Due 18 months from 13Nov2000  Operator has submitted the updated plan after the audit period.
17.c	incorporate the relevant findings from the plan into the AMP.		1			1				1	NA	Not Applicable		Future item - Due 18 months from 13Nov2020  Operator has submitted the updated plan after the audit period.
18	The Operator must provide a written response to the Department, if an independent inchriscial prain's, required under Centilizes 37, viceles of the models and modelling outputs, and the data collection programs that informed the model development at Condition 17(4)(0)) address recommendations for improvements. All relevant outputs must be used to inform and update the AMP.		1		1	1				1	N/A	Not Applicable		Future item as the panel has not been established. The Operator is in the process of assisting DETT with establishing the panels.
19	Every three (3) years from the date of authorisation of the Overburden Management Project, an independent environmental audit of the Quality Assistance (QA) and Quality Centrol (QC) procedures and waste nock identification and handling performance must be undertaken and:							1		1	NA	Not Applicable		This is due 13Nov23.  The wasterook handling procedures audit was conducted on 15 June and reporting is underway (after the audit period).
19.a	the results of the audit be provided within six (6) weeks to the Department and to the relevant independent panel:							1		1	N/A	Not Applicable		Not due in the audit period.
19.b	the Operator must provide a written response to the satisfaction of the Department where findings from the audit and review by the relevant panel includes matters that need to be addressed or areas for increment.							1		1	NA	Not Applicable		Not due in the audit period.
20	From date of surbirarisation of the Overburdon Management Project, now writes of the NoTE Foundation development (i) a visus at base level) that do not currently contain PAF waster must include a low permutability from of Com theircons and mealersum substantial ophysicallic conductivity of 1 x 10-0 metres per second above which future PAF, NAF and benign materials are to be stored.							1			4	Full Compliance	NAT Nest Register.  Permentality had for recults.  NOEF North East Alpha Stage Complete Doxign Report version 3 dated 23Feb2022.  1. Sxt 0 <sup>11</sup> was the largest permeability in the NEA Test Register so this is complient.	the Operator advised *Foundation CE, was developed in the Alpha stage during the reporting point, with all permaiding text exceeding the required specification of maximum saturated hydrautic conductivity of 1 x 10-9 metres per second.*

Authorisation Co	ompliance Workbook - Operator	- 1												
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement			Marine Waters (Bing Bong, marine sedments)			Vegetation & Rehabilitation (terrestrial, diversion & NOEF)	Waste (general, mine rook, tailings)	Community (local indigenous & public)			Compliance Level		
21	The Operator must provide funding and assist the Department to establish and operate an independent panel(s) of experts to advise on matters affecting the environmental performance of the NOEF, TSF and mine observe olamino.							1			4	Full Compliance		Operator advised that during the audit period there was no request from the DITT for funding or assistance. Operator continues liaking with DITT on the Draft Terms of Reference.
22	Within 12 months of data of authorisation of the Overburden Management Project, the Operator must obsert a report to the Department for rowley, detailing the results of releasest studies under taken to inform the requirements for implementation (including finalization of a NOEF groundwater seepage interception and recovery system that:				1						4	Full Compliance	A NOTE Interception Scheme Report Authorisation Condition 22 was submitted to DITT on 1386x/2021, which is on the dual date.	The Operator advised that at this stage no seepage is expected to report to Samey, Creak. This changes at the end of the partie. On this scale, the Operator proposed not to commence constitution activities for the interception trunch in the short- medium term.
22.a	commissinguity to the Berray Creak deversion shared and the Authorities Reserved.		1		1	1				1	4	Full Compliance	NoT disrepaired scholars delay of his design of continue 2 design 1 bits 2015.  NoT disrepaired scholars delay of the continue 2 design 1 bits delay of the continue 2 design 1 bits 2 design 2	insural bifMRI is also to implement corrective missurus (e.g., initiation of detailed design and installation of an intersegretic receivability plots to significant impacts on the Europy Creak Diservision Charmot, All further ground-based membrahing slob located between the Banney Creak Diservision Chained and Cipus PR voided to included in this TAMP to confirm the rate of recovery of the wader table following the ostation-tener of the Open PR Lake is as predicted:
22 b	achieves a recovering Yeard in the Barney Creek diversion channed and the old Mukethur Rever channel (at SWOol) water quality within 20 years of cessatten of mining:		1		1	1				1	4	Full Compliance	NOSE interception Scheme Report VCA Condition 22 dated 13 New2021.  Table 1 of the NOSE Interception Scheme Report states "As above, the interception scheme reced be ineffective within the specified time period, thesever, MRM is proposing to preferred and IAMPS overser with all interception scheme is implemented at inin appropriate time if required earlier than anticipated."	"The groundwater mentioning program and relevant TASP with build at a more appropriate time closer to cossation of mining specializes (and the recovery of groundwate How), in order to marke a recovering Year on making quality in the Berney Creek Diversion Charanol (Including at SWMs) within 20 years of cossation of mining."
22.0	Yacilitatos achieving requirements of Conditions 16 and 17.		1		1	1				1	4	Full Compliance	NOEF Interception Scheme Bupert VOA Condition 22 dated 13 Nov2021.  Table 1 of the NOEF Interception Scheme Report States 'As discribed, the interception scheme would be inelficated in the Note Treadlant Inters, however, the implementation of the TASP will not provent Conditions 16 and 17 from being addressed.	
23	Within 24 months of date of authorisation of the Overburden Management Project, the Operator must submit a NOEF goosynthetic liner cover system plan to the Department for review. The plan must:							1			NA	Not Applicable		Future item: Twenty-four months from 138lov2020.
23.a	outline a process (including timulines) to test and evaluate (i.e. criteria) the constructability and effectiveness of geosynthetic liner cover options including a geosynthetic liner /compacted clay layer combination.							1		1	NA	Not Applicable		Future Item: Twenty-four months from 1386x/2020.
23.b	include implementation of trials on rehabilitated stages of the NOEF;							1		1	NA	Not Applicable		Future item. Twenty-four months from 13Nov2020.
23.c	identify relevant performance parameters must be monitored, including but not limited to:							1		1	N/A	Not Applicable		Future Item. Twenty-four months from 13Nov2020.
23 c i 23 c i	slope stability during extreme events; over performance as a result of heat effects:							1		1	N/A N/A	Not Applicable Not Applicable		Future item. Twenty-four months from 13Nov2020. Future item. Twenty-four months from 13Nov2020.
23.C.H	tolerance of the geosynthetic liner to expected differential							1		1	N/A	Not Applicable		Future item. Twenty-four months from 13Nov2020.
23.c.iv	setfement; veracity of cover longevity predictions;							1		1	N/A	Not Applicable		Future Item. Twenty-four months from 13Nov2020.
23.c.v	likely long-term maintenance requirements.  Include reporting of trial results and monitoring outcomes:							1		1	N/A	Not Applicable Refer to sub		Future item. Twenty-four months from 13Nov2020.
23.d 23.d.i	within three years from the submission of the plan				_		$\vdash$	1	_	1	N/A	conditions Not Applicable		Future item. Twenty-four months from 13Nov2020.
23.61	overy three years threadler, to the relevant independent panel and the Community Reference Crosp for review, and shall be audited by the Independent Meellor. The Operator must provide a written response to the Department, if review from the relevant panels and Community Reference Crosp require matters to be addressed:							1		1	N/A	Not Applicable		Fature Item. Twenty-four months from 13Nex/2020.
23.d.II	must be used to inform the AMP and closure planning for the mine.							1		- 1	N/A	Not Applicable		Future Item. Twenty-four months from 13Nov2020.
23.e	The NOEF geosynthetic liner cover system plan, once approved by the Department, must be implemented by the Operator.							1		1	NA	Not Applicable		Future item: Twenty-four months from 13Nov2020.

Authorisation Co	mpliance Workbook - Operator	ž		<b>2</b> 2		S	ligi.	ğ		2			Evidence 2022	Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Quality (dust & su		Marine Waters (Bing Bong, marine sedmen			Vegetation & Rehabilitation (terrost diversion & NOEF)	Waste (general, mine tailings)	Community (local indigenous & public)			Compliance Level		
24	Within Five (5) years of the date of authorisation of the Overburden Management Project, the Operator must submit a strategy to the Department that details the long-term disposal management of failings into the mine pit void, submirriged under a suitable depth of pit water. The older must							1		1	NA	Not Applicable		Future Item. Five years from 13Nov2020.
24.a	include strategies on the tailings reprocessing and assessment of residual chemical contaminants that may likely impact on meeting the requirements of Condition 16;							1		1	N/A	Not Applicable		Future Item. Five years from 13Nov2020.
24.b	be reviewed by the relevant independent panel.  Once approved by the Department, the strategy developed in							1		1	N/A	Not Applicable		Future Item. Five years from 13Nov2020. Future Item. Condition trispered by condition 24, which is not until required until
25	accordance with Condition 24 must be used to develop a plan five (5) years prior to cessation of mining, for approval by the Department. Any requirement to vary the approved disposal strategy or plan must be:							1		1	NA	Not Applicable		flive years from 13Nov2020.
25.a	applied for in writing to the Minister:							1		1	N/A	Not Applicable		Future item. Condition triggered by condition 24, which is not until required until five years from 13Nov2020.
25.b	based on leading practice and site conditions;							1		1	N/A	Not Applicable		Future item. Condition triggered by condition 24, which is not until required until five years from 13Nov2020.
25.c	supported by the relovant independent panel:							1		1	N/A	Not Applicable		Future item. Condition triggered by condition 24, which is not until required until five years from 13Nov2020.
25.d	notified to the NT EPA in accordance with Condition 15.							1		1	N/A	Not Applicable		Future item. Condition triggered by condition 24, which is not until required until five years from 13Mm/2000
26	Within 12 menths of data of authentiation of the Overbackins Management Project, the Operator most critical and systemicia all available used of should efformation to submit a revioled valet monototropigal production washer and groundwalls of the Objectment production of the Operation of the Operation of impacts of mining activities on the environmental values and beneficial source of the MAVIthar Bover.		1			1				1	NA	Not Applicable	Same Cognosis to 1011 (adjoin 18th March from Mirroy, "Saminar of Ambrenstons 2007 Conditions, 18 a 5 and 18 and	Departs was must by Quester to SETT as time of each 940-pGCT strong MMA.  Interfrequency that the Department enteriors per investigate described confidence of 41  May 2022 for the Constitute Strong Set Recognition (Set Recognition 2)  May 2022 for the Constitute Strong Set Recognition (Set Recognition 2)  May 2022 for the Constitute Strong Set Recognition (Set Recognition 2)  Providely Acceptable the revisited due dail and 1 13 May first submission of filling Set Recognition (Set Recognition 2)  May 2022 for the Set Recognition (Set Recognition 2)  May 2022 for the Set Recognition (Set Recognition 2)  May 2022 for the Set Recognitio
27	The plan required under Condition 26 must:											Refer to sub conditions		
27.a	allow for assessment of compliance with Condition 16 and include sufficient detail to inform/develop/update the AMP:		1			1				1	N/A	Not Applicable		Due to time extension in condition 26, this condition is not applicable until 13May/2022, outside the audit period.
27.b	at a minimum:											Refer to sub		
27.b.i	quantify loads of lead and zinc entering the McArthur River each		1			1				1	N/A	Not Applicable		Due to time extension in condition 26, this condition is not applicable until 13May/2022, outside the audit period.
27.b.i	years, quantify impacts to water quality and trends ingroundwater to datermine that objectives and targets are being met, including the effectiveness of source-centrel to reduce leads to as low as is reasonably practicable:				1					1	NA	Not Applicable		Day to time stemior in condition 2s, this condition is not applicable until 13Mey/2022, outside the audit period.
27.b.ii	develop appropriate future trigger values for waterways on the mine site and the Mot thur fiber in accordance with the AMECO. Cuidelines. In the interim, the trigger values in the most current WDS. shall be used:		1			1				1	NA	Not Applicable		Due to time extension in condition 26, this condition is not applicable until 13May2022, outside the audit period.
27.c	be prepared in consultation with the NT EPA:		1		1					1	N/A	Not Applicable		Future item as discussed in condition 26. After the audit period, the Operator requested a further extension to this condition.
27.d	be prepared in consultation with the relevant independent panel:		1		1					1	NA	Not Applicable		No independent technical panels, required under Condition 21, have been set up.
27.a	once approved by the Department, be implemented by the Operator:		1		1					1	NA	Not Applicable		No approval from DETT had been received in the audit period.
27.1	be subject to consultation with the relevant independent panel in the event that the plans requires updating (e.g. to maintain the currency of the monitoring network):		1		1					1	NA	Not Applicable		No independent technical panels, required under Condition 21, have been set up.
27.g	ensure results of the program:		T									Refer to sub conditions		No approval from DETT had been received in the audit period.
27.g.i	are reported annually to the Department:		1		1					1	NA	Not Applicable		No approval from DETT had been received in the audit period.
27.g.i	are audited by the Independent Monitor every three years;		1	$\neg$	1					1	NA	Not Applicable		No approval from DETT had been received in the audit period.
27 g ii	be published on the Operator's website.		1		1					1	NA	Not Applicable		No approval from DITT had been received in the audit period.
28	Within 18 morths of data of suthercusion of the Overburden Management Project, the Operator must submit a resistent hand investigation program to the Operator for review that distallations the concentration of mine-derived containments of which thronic and calc impacts to be last of relevance to the McMirtar New system coor using recognition and accepted extraordisciplical testing, and		1			1					4	Full Compliance	etter Cynnrish to INTT udject für Condition 28 Submission – Ecoholicology Research, and Investigation Program dated 250-002201. Where INTT is Operative adject für Volk ACOP Condition 28 – Ecoholicology research and executigation program confirmed appeared. The Operative Submission de Ecoholicology Research and Investigation Program on 250-002201 and submission between the Ecoholicology Research and Investigation Program on 250-002201 and submission that the Condition Research and Investigation Program on 250-002201 and submission and Investigation Program on 250-002201 and Investigation Program on 250-00220	While this is a future item as it is not due until 18 months from 13 hout0000, as the Operator has submitted the Contencing Research and Investigation Program on 150x10001 this is considered compilient.

Author is a firm Compilation With thook - Operator Considering Appets

Authorisation Co 13 Nov 2020 and 18 June 2021 Authorisation Condition No.	operator  Condition/Requirement	Air Quality (dust & sulphur	diceide, transport) Surface Water (River,	Orees, with load carris) Marine Waters (Bing) Bong, marine sedments)	Groundwater	Aquatic fauna (Fish river)	Vegetation & Rehabilitation (terrestrial, diversion & NOEF)	Waste (general, mine rock, tallings)	Community (local indigenous & public)	Monitoring & Reporting	Score	Compliance Level	Evidence 2022	Comments 2022
28.a	On rounds of the purpose must be singulated with soften rounded purpose must be seen to the control of the seen of the purpose must be seen or the suppose of plans.		1			1				1	4	Full Compiliance	and Investigation Playman sheet 200,0221.  And Considerate Admitted Michael State Michael State Admitted State Michael Micha	Coprain to a controlled for Continuing Research and Innosity time the Controlled for Continuing Research and Innosity time to controlled complete.
28.b	the plan once approved by the Department must be implemented by the Operator.		1			1				1	NA	Not Applicable	Letter DTT to Operator subject Re. VOA 6559 Condition 28 – Ecotoxicology research and investigation program (approved after the audit period).	Ecotoxicology Research and Investigation Program was submitted on 25Oct2021. This was not approved by DRTT in the audit period. However, esimples of implementation include the WDL being updated to include SSTVs for Cobatt and Thailium.
29	Within 18 months of data of authorisation of the Overburden Management Project, the Operator must submit an aquatic ecosystem monitoring program to the Department for review that provides improved understanding of aquatic ecosystems in the Moderhur Riber from changing water flows, levels and quality, including available dry season habitalt. The program must:		1			1				1	NA	Not Applicable	Ernal Operator to DITT subject MRM   Aquatic Ecotogy Management Plan dated 13May/2022 (after the audit period).	Februre Nem. Within 18 months from 13 Nex2000.  Aquatic Ecology Monitoring Plan was submitted 13May/2022
29.a	assess impacts of the mine on water levels in refuge pools/waterholes, upstream and downstream of the mine, including in the MoArthur River diversion channel:		1			1				1	NA	Not Applicable		Future Item. Within 18 months from 13 Nov2020.  Aquatic Ecology Monitoring Plan was submitted 13May/2022
29.b	assess impacts of the mine on water quality in refuge pools/waterholes in the dry season:		1			1				1	NA	Not Applicable		Future Item. Within 18 months from 13 Nov2020.  Aquatic Ecology Monitoring Plan was submitted 13May/2022
29.0	assess impacts of the mine on the health of aquatic blota in the McArthur River using non-lethal sampling methods;		1			1				1	NA	Not Applicable		Future Islam. Within 18 months from 13 Nov2020.  Aquatic Ecology Monitoring Plan was submitted 13May/2022
29.6	be designed to be integrated with requirements of the AMP consistent with Condition 45;		,			1				1	NA	Not Applicable		Future (lam. Within 18 months from 13 Nov2020.  Aquatic Ecology Monitoring Plan was submitted 13May/2022
29.0	once approved by the Department, be implemented by the Operator.		1			1				1	NA	Not Applicable		Future item. Within 18 months from 13 Nov2000.  Aquatic Ecology Monitoring Plan was submitted 13May/2022
30	All atoms, No Capitals and conduct only accounted with the All products for the production float Act 1700 and overall ARA. However, the production of the All products and All								1	1	4	Full Compiliance	NO. 202021-19 when it Clu in header and the NAMEA SANGALARI RAW.  AND AND SANGALARI RAW AND	Suppose account to hope of the MCRA suppose provided any tip.  The MCRA suppose of the

Authorisation Co	mpliance Workbook - Operator										
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Quality (dust & sulphur diceide, transport)	Marine Waters (Bing Bong, marine sediments)		Vegetation & Rehabilitation (terrestrial, diversion & MOEF) Waste (general, mine rock, tallings)	Community (local indigenous & public)			Compliance Level		ments 2022
31	The Opportune makes of districts or exercise from the Online Technologies from the Opportune of the Opportune of Opportun					1	1	4	Full Compliance	Consolinations From Congress for Agricultural States of	propries administration of the development of the d
32	Within is morths of data of authorisation of the Covitardian Managament Project, the Operator must growthe a report to the Minister, and APPA or the Minister for Arts, Culture and Heritage (others relatives) that demonstrates the socialisation process undertaken or provide a plain to the Minister that datable consultation startinises and terminos to blantify and reagan with appropriate candidates and traditional common with an inforest in land that would be or maybeal affector by the Overbuicth Management Project.					1	1	4	Full Compliance	Catter Cannar Managar to Meloster for Primary Industry and Historics related to submission of a great from condition (and data dut enrealing on 1174/62020 - before the audit period). Cultur all Hieritage Managament Sakerholder Engagament Report 14Feb2021.	
33	When I's marker of all and authorisation of the Overtuzian designation of the Commission of the Commi	1				1	1	4	Full Compiliance	Latter NT EPA to Questare dated T TALOD Rei. Proposed order droxide mentering boation conditions of the Control	on (Recommendation 19 of Assessment Report 86) advises that "In
34	The air quality monitoring plan required under Condition 33 must include:								Refer to sub		
34.a	digitatine, kuntum, trapunya di malantina, Tagari akua nadi prodrigi commissioni sa kunungun darjancak api punkai dari quality sik is human husati suuhdusal thu manad kunu.	,				1	1	4	Full Compliance	The ACM Part Acade religions. In Letters, Support, of entiting and sparing and securities and securities. The Acid Part Securities and Proporting and securities and securities and the Acid Part Securities and Proporting and Securities and Securit	composate between certain agriculture in section 1.8 section on Figure 1. Louis In section 1.4 section 1.4 section 1.8 section 1.8 section on Figure 1.2 section 1.8 section 1.4 section
34 b	oxidence of consultation with the NT EPA to be provided at the time of the plan submission:	1				1	1	4	Full Compliance	Famil Operator to DelT1 subject DMAD 14 Updated AMP & ACADP (November 2021) dated 1386x0201. Latter NTEA to Operator dated 17 ALDO No Proposed solar disolate motificing bication (Recommendation 19 Accessment Report all Replace the audit profile). An article of the Commendation 19 Accessment Report and Report the Audit profile Management Plan & Air Coully Management Plan Sciencision dated 13 Recomber 2021.	

	,												Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Ouality (Obst & Sulpri diceide, transport)	Surface Water (Rivor, Creek, Artificial dams)	Marine Waters (Bing Bong, marine sediments)	Aquatic fauna (Tish river)	Vegetation & Rehabilitation (terrostria diversion & NOEF)	Waste (general, mine ro tailings)	Community (local indigenous & public)	Monitoring & Reporting		Compliance Level		
34.c	once approved by the Organization, be implemented by the Operator.	1						1	1	N/A	Not Applicable	2021 2021 Med Terre memorial kinnings (schools)  Franklanderssie und 1921 2021 des des deuts Heispelder  Franklanderssie und 1921 2021 des des deuts Heispelder  Franklanderssie und 1921 2021 des des deuts Heispelder  Franklanderssie und 1921 2022 des des deuts Heispelder  Franklanderssie und 1921 2022 des des deuts Heispelderssie und 1921 2022 deuts Heispelderssie und 1921 2022 des deuts Heispelderssie und 1921 2022 deuts Heispelderss	Approved mon obtained on 154,490222, within shall the houseling most. The version of the place instruction to condition 12 and finite to the condition had not continue to a condition 12 and drives the condition in a finite with the continue to the condition in a finite with the continue to the condition that the continue to the con
35	The results of the air quality plan for each reporting frequency must be:										Refer to sub		
35.a	made available on the Operator's website. Intillal monitoring results to be reported within 6 monitoring of the plant being accepted by the tob populariset or an alternative timeframe as agreed in writing with the Department.	1						1	1	4	Full Compliance	Sighbod read time data on Operator's website 21Sep21 and monthly consultant reports.	DITT advised "The air quality plan in question is the one submitted as part of the MAP on aircray 2000, and included in the AMP, and approved by Maristra Manison on 13 Nameber 2000". One the AMP that was submitted on 13Nov3021 is approved than that sell be the relevant document. Real time data is available to the public online (Dictaber 2021).
35.b	incorporated after relevant in the AMP.	1						1	1	4	Full Compilance	MARZOZI 2002 sector 3 since "The 100Ps detailed in the AMP link the key inconcentral single-sized by performance in deducts. The AMP and details be but callow the MARZOZI 2002 sector 3 since and the AMP and details be but callow the link between sector and employee contenting or 100Ps are assessed in the busin of their link of any the reporting ports, which is link and any sector of the analysis of the sized and proper in contral specific and within a link and any sector of the analysis of the analysis of the analysis of the analysis of the MARZOZI 2002 sector 3 sized by the analysis of the analysis of the analysis of the MARZOZI 2002 sector 3 sized by the analysis of the analysis of the analysis of the MARZOZI 2002 sector 3 sized by the analysis of the analysis of the analysis of the MARZOZI 2002 sector 3 sized by the analysis of the MARZOZI 2002 sector 3 sized by the MARZOZI 2002 sector 3 sized by MARZOZI 2002 sector 3 sized by the MARZOZI 2002 sector 3 sized by the MARZO	When no specificary rimsels in results of the ACM, The ACM medial Chanac 2014 results of the Commission of the Commissi
36	Within 24 months of dash of authorisation of the Overharden Management Project, the Operator must submit a monitoring and management plan to the Department for review that manages risks of motal bookly from human consumption of aquatic finance obtained from the McF with Revir. The plan must:		1		1			1	1	NA	Not Applicable		Future item. Within 24 months from 13 Nov2000.
36.a	determine if aquatic fauna obtained from any reach of the McArthur River, that may be impacted by the mine's operations, is safe to eat:		1		1			1	1	N/A	Not Applicable		Future Item. Within 24 months from 13 Nov2000.
36.b	include demonstrated evidence of consultation with NT EPA;		1		- 1			1	1	NA	Not Applicable		Future item. Within 24 months from 13 Nov2000. Future item. Within 24 months from 13 Nov2000.
36.c	detail public reporting of the monitoring results, including at appropriate locations in the Borroloola region;		1		-1			- 1	1	N/A	Not Applicable		
36.d	include provisions for implementation and maintenance of signage at waterways at the MRMs site in accordance with the requirements of Condition of 2 until the risk of contamination from consumption of this aquatic fis		1		1			1	1	NA	Not Applicable		Future Hem. Wilthin 24 months from 13 Nov2000.
36.0	once approved by the Department, be implemented by the Operator.		1		1			- 1	1	N/A	Not Applicable		Future item as the report is not approved by the DITT.
37	Within 24 months of date of authorisation of the Overburden Management Project, the Operator must submit a plain to the Department for review that outlines monitoring program for management of Largetooth Sawfish. The plain must:									NA	Not Applicable		Future Nem. Within 24 months from 13 Nov2000.
37.a	include a sampling strategy for Largetooth Sawfish that is non-lethal:	П			- 1				1	NA	Not Applicable		Future Item. Within 24 months from 13 Nov2000.
37.b	include dotats of parameters and critoria, from which the results could be used to define specific (measurable and time-bound) purformance indicators to abate a significant decline in Largetooth Sawfish movement;				1				1	NA	Not Applicable		Future Item. Within 24 months from 13 Nov2000.
37.c	include trigger levels for investigation and implementation of management measures:	$\neg$			- 1				1	N/A	Not Applicable		Future Item. Within 24 months from 13 Nov2020.
37.d	once approved by the Department, be implemented by the Operator.				1				1	NA	Not Applicable		Future Item as the report is not approved by the DITT.
38	Within six months following the establishment of the required panels and groups in accordance with Condition 21, the Operator must:										Refer to sub conditions		Future item. Panels and groups not set up.
38.a	develop environmental objectives for a Care and Maintenance Plan in consultation with the relevant Independent Panels, CRC, custodians and traditional owners; submit this to the Department for review.							1	1	NA	Not Applicable		Future item. Panels and groups not set up.
38.b	submit this to the Department for review.								1	N/A	Not Applicable		Future Item. Panels and groups not set up.

Authorisation Compliance Workbook - Operator

Authorisation Co	ompliance Workbook - Operator												
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement			Marine Waters (Bing Bong, marine sedments)		Vegetation & Rehabilitation (terrostrial, diversion & MOEF)	Waste (general, mine rock, tailings)	Community (local Indigenous & public)			Compliance Level		Comments 2022
39	Within five years of date of authorisation of the Overburden Management Project, the environmental objectives arising from Condition 38 must be used to develop a Care and Maintenance Plan in consultation with the Department.					1			1	NA	Not Applicable		Future Item. Within five years from 13 Nov2020.
40	The Operator must facilitate an independent third-party assessment of this security for rehabilitation of disturbances resulting from authorised activities in the approved MWP this is consistent with requirements under Conditions 10, 11 and 12, to this satisfaction of this Department, and every 3 years thereafter if the security his been re-calculated or adjusted.								1	NA	Not Applicable		Not triggered until 3 years after the 13Nex/2002.  However, indigeneint third-party assessments of the security have been done as part the evidence included for conditions 10 to 13.
41	The Operator, consistent with Condition 40, must:										Refer to sub		
41.a	commission a qualified person to review the security amount whose appointment is accepted by the Minister;								1	NA	Not Applicable		Not triggered bacieuse condition 40 ion't triggered until 3 years after the 13Nex/2020.  However, independent third-party assessments of the security have been done as per the evidence included for conditions 10 to 13.
41.b	ensors that the security is revioused and dishered to the Department within six months of acceptance of the qualified parton.								1	N/A	Not Applicable		plot this individual bit conditions 10 lost 13 lost 10
42	For every approved MMP and MMP amendment, the Operator must provide a revised copy of the approved document that removes corresponding to the approved document that removes corresponding to the approved to the control of the environmental section, and is suitable for publication on the Department's worksite, or provide written approval to make the correlative documents builded accessible.							1	1	N/A	Not Applicable	Ernal Ficen Operator to DRTT dated 7 action (in MBM - 2020 Mining Management Plan- Public Version Ernal Ficen Operator to DRTT dated 24 action (in MBM   2020 Mining Management Plan- Public Version.	adopted on Metalitic confirmed that the liceusy 2020 MAP with connectally sensitive information removed so the DETY substitute (Societied 25%pc) and 26.8002(2), Emilly provided between Operator and DETY show that the lineuary 2020 MAP including an overview and environmental section, with commercially sensitive information removed, was provided to the DETE.
43	The Operator must assist, as required, the Department to establish and operate a Community Reference Group (CRG).	İ						1		4	Full Compliance	Sighted tech working group minutes that has community reference group as an item.	
44	White Is the work of chief at Authoritation of the Construction Support Property Construction (Construction Construction Construction Construction Construction Construction Construction Property Construction Construction Construction Construction Property Construction Construction Construction Construction Industrial Construction Construction Construction Construction and Construction C		1		1				1	4	Full Compilance		The Good Price of the Conference of the Conferen
44.a	un outpus geometrille review and symbol of water mentering programs, so per of addressing Condition 26.		1		1				1	4	Full Compliance	Francisco (Landis Control Co	Stronger Rocci Contration and State will 18 months from 13 biologics. This board broad post and stronger and stronger and stronger and stronger and stronger and stronger and stronger and stronger and 500°C - Contration 100°C 110°C and 100°C an

		- 1													Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement		Air Quality (dust & sulph diceide, transport)	Surface Water (River, Creek, Artificial dams)	Marine Waters (Bing Bong, marine sedments)	Groundwater	Aquatic fauna (Fish river)	Vegetation & Rehabilitation (terres tria diversion & NOEF)	Waste (general, mine ro tailings)	Community (local indigenous & public)	Monitoring & Reporting	Score	Compliance Level	Small Squarfor to SH subject MARNER from Man 1 Variation of Authoristics (SH	
44 b	moralizing programs and management glains over considered and synthesized is a consephrate to motion, 'keel analysis'.			1			1				1	4	Full Compliance	Condition is 4 and 25 My/2012 (film and \$p rend but review).  All \$10.00 (2011).  The halogoned but bloom's confirms that the inagel aments of this condition are med by the APP's Wilde and fill \$1.	companied. The Quipon of Indiano Shari discussion in this Diffi shall in this registerment and uncited grown are as extincted from DTT. He was a present the control of the Control of Cont
44.0	bancarporated to the AAS			1			1				1	4	Full Compliance	Front Operator Park I Registrative from the Meet Programmer Authorisation (2007).  Registration of the Conference of the	The disposation to DTT object Machine has the Note 1 (window of administration of account and account account account and account acco
#5	Within 18 moreths of date of authorisation of the Overburden Management Project, the Operator must submit an AMP to the Department:										1	NA	Not Applicable		Future item. Within 18 months from 13 Nov2000.  Submitted to DEPWS as part of WDL requirement on 10ct2001 and was submitted to DETT 15Mar2002 (affer the audit certical).
45.a	The AMP must include the following key elements:												Refer to sub		
45.a.i	clear, measurable-environmental objectives for all significant environmental risks and potential impacts;										1	N/A	Not Applicable		Future item. Within 18 months from 13 Nev2000.  Submitted to DEPMS as part of WDL requirement on 10ct2001 and was submitted to DETT 13May2022 (after the audit period).
45.a.i	measureable performance indicators to show that objectives are on target to be met;  pre-determined triggers to warn of potential for performance.										1	N/A	Not Applicable		Future item. Within 18 months from 13 Nov2000.  Submitted to DEPWS as part of WDL requirement on 10ct2001 and was submitted to DEFWS as part of wDL requirement on 10ct2001 and was submitted to DEFT 15May2022 (within the audit period).  Future Item. Within 18 months from 13 Nov2000.
45.a.ii	indicators to be exceeded, as informed by monitoring.										1	NA	Not Applicable		Submitted to DEPWS as part of WDL requirement on 10x12021 and was submitted to DETT 13May2022 (after the audit period).
45.a.iv	realistic and achievable contingency interventions to maintain performance indicators if triggers are consistently exceeded:										1	N/A	Not Applicable		Future item. Within 18 months from 13 Nov2000.  Submitted to DEPWS as part of WDL requirement on 10ct2001 and was submitted to DRTT 13May/2022 (after the audit period).
45.av	clearly defined management measures/actions that are capable of being implemented in a timely way to meet performance indicators and environmental objectives;										1	NA	Not Applicable		Future item. Within 18 months from 13 Nov2000.  Submitted to DEPWS as part of WDL requirement on 10ct2001 and was submitted to DRTT 13May/2022 (after the audit period).
45.a.vi	monitoring in accondance with relevant liscommendations in NT EPA Assessment Report 86 to determine whether management measures are effective and to inform the need for adjustments to management measures or need for alternatives;										1	N/A	Not Applicable		Future Rem. Within 18 months from 13 Nov2020.  Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted to DETT 13May/2022 (after the audit period).
45 a.vii	a continual feedback system to inform appropriate actions to be initiated when triggered and environmental objectives are always being met;										1	NA	Not Applicable		Future item. Within 18 months from 13 Nev2000.  Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted to DETT 13May2022 (after the audit period).
45.avii	continual development of new management actions as required based on knowledge gained from experience at the site and elsewhere across industry.										1	N/A	Not Applicable		Future Item. Within 18 months from 13 Nov2000.  Submitted to DEPWS as part of WDL requirement on 10ct2001 and was submitted to DRTT 13May2002 (after the audit period).

thorisation Compliance Workbook - Operator

Authorisation Co	mpliance Workbook - Operator	=				J.					Evidence 2022	Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Quality (dust & sulpho dicelde, transport)	Marine Waters (Bing Bong, marine sedments)		Vegetation & Rehabilitation (terrestrial diversion & NOEF)	Waste (general, mine roc tailings)	Community (local indigenous & public)			Compliance Level		
45.b	The AMP must be reviewed by the Independent Monitor or an appropriately qualified, independent third party, and updated with inputs from the CRG (once established under Condition 43);							1	NA	Not Applicable		Future Item. Within 18 months from 13 Nov2COD.  Submitted to DEPWS as part of WDL requirement on 10ct2CO1 and was submitted to DETT 13May2CO2 (after the audit period).
45.c	all review findings and CRG input requirements are to be provided to the Department for approval.							1	NA	Not Applicable		Future item. Within 18 months from 13 Nov2000.  Submitted to DEPMS as part of WDL requirement on 10ct2001 and was submitted to DET 1384x/2007 (other this awdit native).
45	Unless agreed otherwise in writing by the Department, the AMP must:									Refer to sub conditions		Future Rem. Within 18 months from 13 Nov2000.  Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted to DETT 13May2002 (after the audit period).
46.a	clearly set out the required management objectives and performance indicators;							1	N/A	Not Applicable		Future Item. Within 18 months from 13 Nov2000.  Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted to DETT 13May2002 (after the audit period).
46.b	provide clarity on the triggers for changes to management actions, and responsibility and evidentiary basis for decision-making.							1	NA	Not Applicable		Future Item. Within 18 months from 13 Nov2000.  Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted to DETT 13May2002 (after the audit period).
46.c	establish the timeframe for initiation of certain actions if triggers are exceeded, including decisions to discontinue an activity and clarify responsibility and evidentiary basis for decision-making:							1	NA	Not Applicable		Future item. Within 18 months from 13 Nov2COD.  Submitted to DEPWS as part of WDL requirement on 10ct2C21 and was submitted to DETT 13May2CD2 (affor the audit period).
46.d	establish a process for adjusting triggers that includes the regulator;							1	N/A	Not Applicable		Future Item. Within 18 months from 13 Nov2COD.  Submitted to DEPWS as part of WDL requirement on 10ct2CO1 and was submitted to DETT 13May2CO2 (after the audit period).
46.e	establish transparent monitoring, reporting and review requirements:							1	N/A	Not Applicable		Future Item. Within 18 months from 13 Nov2COD.  Submitted to DEPWS as part of WDL requirement on 10ct2CO1 and was submitted to DETT 13May2CO2 (after the audit period).
46.1	establish processes to achieve transparency and stakeholder engagement in AMP design and implementation that includes NT EPA, DAWE and CRC;							1	NA	Not Applicable		Future item. Within 18 months from 13 Nov2000.  Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted to DETT 13May2022 (after the audit period).
46.g	set out the mechanism for periodic review by Independent Monitor, which must not exceed a frequency of every three years;							1	N/A	Not Applicable		Future Item. Within 18 months from 13 Nov2COD.  Submitted to DEPWS as part of WDL requirement on 10ct2C21 and was submitted to DETT 13May2CD2 (after the audit period).
46.h	be provided to the Department for re-approval in the event that any material changes are made to the AMP.							1	NA	Not Applicable		Future Item. Willhin 18 months from 13 Nov2COD.  Submitted to DEPWS as part of WDL requirement on 10ct2C21 and was submitted to DETT 13May2CD2 (after the audit period).
47	The Operator must provide written notice to the Minister and to the NE 9PA (under clause 14A of the Environmental Assessment Administrative Procedures 1944) where transfer indicate performance indicators and environmental objectives will not, or are untilluity to be, most by implementing the AMP.							1	N/A	Not Applicable		Will be surrourised in EMR.
Independent oversigh												
48	The Operator must appoint an Independent Certifying Engineer (ICE) to:									Refer to sub conditions		GBS: Structures currently under construction (e.g. north eastern Sump (NES), WMM wall and spillway, std) will be required to meet this condition, including the ICE to warrant and accept both the design and construction works and provide perfilled as constructed reports.
48.a	warest and accept from the design and construction works, without institution one repermissily.					1		1	2	Part Compliance (moderate)	"Blased on observations from regineering inspections, CHD site presence during construction and shronged preside of the construction reads of shronged president of CHD that the 15° Cell 2 Stage 7 Raise has been constructed to an appropriate standard, in line with the design intent."  No evidence was provided to demonstrate that the ICE warrants and accepts both the	from the Natu, with basis had be the CR of ord miles because and accept double in the handles of MSO content to the secretary and the legislation of the handles of MSO content to the MSO c

Authorisation Co	mpliance Workbook - Operator												
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Quality (dust & supbur	dicados, transport) Surface Water (Rivor, Greek, Artificial dams)	Marine Waters (Bing Bong, marine sediments)		Vegetation & Rehabilitation (terros trial, diversion & NOEF)	Waste (general, mine rock, tailings)	Community (focal indigenous & public)	Monitoring & Reporting		Compliance Level		Comments 2022
48.b	to proved storage of phone of commission when respect in the commission of the commission of the comm						1		1	2	Part Compliance (moderate)	have been warf of 2012. Morting construction through support pair 202 about 11:800-020.  202 of 12 per la Beau his live of 1202 in the section of the section of the cell through through the cell through through through the cell through	2022 stated "The ITP process for each construction for was utilised to document the general construction process to ensure the specification requirements were being mits. CHD, as the ICE, was able to review the works at each hold and witness point, approving there commencement of construction in the defined hold piloses, During this reporting partied, all relevant witness and hold points were reviewed and released.
48.c	ggravi o commounted of analyzion at defined held parts.						1		1	3	Part Compliance (High)	222 TJ P SALA JA P Ben William  The Review of DEET Monthly Commission through the Biport High 2702 dated 11 Lancott 20 TV of 13 Table 19 Pales 10 No. 10 In climate client by layer or were the facility Biport File 10 No. 10 No. 10 In climate client by layer or were the facility Biport File 10 No.	Fig. Bloom and FAST Manship construction Programs Super Fay 12522 Scales.  1. John Self 2019 in self-and deliveral generalized process reclaring control and process reclaring control and process reclaring self-and process. The self-and process reclaring self-and process reclaring self-and process reclaring self-and process reclaring self-and process and self-and p
48.d	approve any material changes to the design during communicative.						1		1	4	Full Compliance	Novel Review on PACE! Morrings Commissions frequency Report Pace! 2022 dated 15 subcopies. 10 of 25 signs; Palles in 18 of 18 cells micromission frequency reviews that date and RMINISIPOZE. Novel Review of MCE! Morrings Commissions frequency Report Pace! 2022 in sections 5.1 Model Tells Designs; Pacel Review of	
4 <u>8</u> .e	vorify any mentioning equipment's further installed or to be installed as appared the construction as specified in the resilicular database databases remains functional at the construction of the construction works.						1		1	4	Full Compliance	2021 [1] F. M. A. A. A. A. A. A. A. E. Sup (Dam sell-VIVE) "gyned (pims).  2021 [1] F. M. A. A. A. A. A. A. A. Sup (Dam sell-VIVE) "gyned (pims).  102 [1] F. A.	
48.e.i	in the event such equipment becomes non-functional, then replacement or an IOE approved alternative must be implemented by the Operator;						1		1	NA	Not Applicable		No equipment became non-functional.

Authorisation Co	ompliance Workbook - Operator												
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Quality (dust & supbur	dicade, Iransport) Surface Water (River,	Marine Waters (Bing Bong, marine sedments)		Vegetation & Rehabilitation (terrostrial, diversion & MOEF)	Waste (general, mine rock, tallings)	Community (local indigenous & public)			Compliance Level		
48.f	age on two rising if the Operator and his opposits on Operators project image produced requires an another processities, and group cit manage produced requires an another processities, and project image produced to the operation of the companion of the labelly for the project.						1		1	4	Full Compliance	Call Stugy in Stand Proposal for Construction Phases America 11 May 2011.  An Opposited in these solid foreigner so that and Test Construction referred to an Engineer of Energy are the Description of Energy are the Description of Energy are the Description of Energy and the Description of Energy and the Description of Energy and three the Description of Energy and the Energy and the Engineering Construction and Engineering Construction on Engineering Construction on Engineering Construction on Engineering Construction on Engineering Construction Engineering Constru	**NAME have regulated CPU spatials the construction report with three schoolspates recorded it is not because the processing the processing the borrowing or all recorded in the processing of the processing the processing of the property proposal provided, this demonstrates how MEM engaged GPG for the project.**
48.g	complete of constraints produce surfled "is constraint" constraints and the constraint of constraints and the constraints of constraints and constraints are constraints and constraints are constraints and constraints are constraints and constraints are constraints and c						1		1	3	Part Compliance (High)	IN Cast 1 Stays Parks to this 100 ALS in Commission between or search of the delication of the commission of the commiss	As Nor were very story of PGP contribution complaint in the analignment three is required to the Contribution of Special Contribution of Contribution Contributio
48.g.i	all the works undertaken;						1		1	NA	Not Applicable	TSF Cell 2 Stage 7 Raise to Rt. 10063 m Construction Report version 00 dated 02May2022 TSF Cell 1 Stage 5 - Raise to Rt. 10059 m Construction Report March 2022.	Eastern Perimeter Runoff Dam Construction Report DRAFT November 2021 Section 4 covers the "Description of Construction Works".
48.g.i	evidence of:										Refer to sub		
48.g.ii.a	hold-point sign-offs;	ш					1		1	4		TSF Cell 2 Stage 7 Raise to Rt. 10063 m Construction Report version 00 dated 02May2022 TSF Cell 1 Stage 5 - Raise to Rt. 10059 m Construction Report March 2022.	Eastern Perimeter Runoff Dam Construction Report DRAFT November 2021 Includes an appendix placeholder in the draft report.
48.g.ii.b	testing carried out (including but not limited to field tests, laboratory tests and statistical tests);						1		1	4	Full Compliance	TSF Cell 2 Stage 7 Raise to Rt. 10063 m Construction Report version 00 dated 02May2022 TSF Cell 1 Stage 5 - Raise to Rt. 10059 m Construction Report March 2022.	includes a discussion on testing and while relevant appendices are not provided there are placeholders in the draft report.
48 g ii c	acceptance criteria applied and compliance of the test results with the acceptance criteria:						1		1	4	Full Compliance	TSF Cell 2 Stage 7 Raise to Rt. 10063 m Construction Report version 00 dated 02May 2022 TSF Cell 1 Stage 5 - Raise to Rt. 10059 m Construction Report March 2022.	includes some clear discussions on meeting limits and specifications. There are placeholder appendices in the draft report.
48.g ild	where deviations to the plan have occurred, justification that demonstrates the design intent and performance of the structure has not been compromised.						1		1	4	Full Compliance	TSF Cell 2 Stage 7 Raise to Rt. 10063 m Construction Report version 00 dated 02May/2022 TSF Cell 1 Stage 5 - Raise to Rt. 10059 m Construction Report March 2022.	Eintern Perimeter Runoff Dam Construction Report DRAFT November 2021 Includes dissign changes in Section 2.6 of the draft report.
40	The Operands must ensure that the ICE Noble appropriate public and professional in Demonstructure to 2000 the Except of works associated with the scope of work curtifled.									4	Full Compliance	CET Enlayerised Configuration (Carlos of Carlos of Carlo	
50	The Operator must:										Refer to sub conditions		

13 Nov 2020 and 18 June	englatines Workscok. Operator  Conditions/Begulerment  Conditions/Begulerment  Conditions/Begulerment  Conditions/Begulerment  Conditions/Begulerment  Conditions/Begulerment  Conditions/Begulerment  Conditions/Begulerment	Air Quality (dust & suphur diceleb, transport)	Surface Water (Rvor, Creek, Artificial dams)	Marine Waters (Bing Bong, marine sedments)	Groundwater	Aquatic fauna (fish river)	Vegetation & Rehabilitation (terrestrial, diversion & NOEF)	Waste (general, mine rock, tallings)	Community (local indgenous & public)	Monitoring & Reporting	Score	Compliance Level	Evidence 2022    Indicatoring minors regional field being 2020 ereals completed 2011 streks, Devidencing process, regional field being 2020 ereals completed 2011 streks, Devidencing processers, Marian from grant publishments (2010) firefly to proceed a first field and process (2010) firefly	Comments 2022  That the structure for the struct
	ensure the ITRB:											Refer to sub	and the 132 Cell 2 Suggi / Holles to St. 10063 in Construction Report recents the status harnes for the ITRB members.	
50.b			_									conditions		
50.b.i	membership includes hadgenderd geotochrical, fallings, and groundwaler specialistic							1			N/A	Not Applicable	ITBB menting meases subject ITBB Menting 2002 works compilated, 2021 works. Operational improvements, Medicase Jame (pages) (Old palament, Gild James) (2014 Jam	Operator advised that there were no change, to the ITMS in the audit period.
Sūbii	men registry to achie or speciate of the TSI and any future medicines to in acity.							1			2	Part Compliance (moderate)	TWO CEST SIZES (AND THE NEW TO AND T	Diff househ the fill claimful for Sangh chapps and strang-secure of lambachine disconnectation and the update for Cell School and Cell Cell Cell Cell Cell Cell Cell Cel
50.b.iii	In required to meet within 90 yays, from commissionment of construction to show utiliziest time for review of subsequent modification to the TSF:							1			4	Full Compliance	3188 monthing menution subject II 1884 Montings 2002 works comprolled, 2021 works, Operational improvements, Montine Jurier princip (Life planning, CLISE) High 19914 conformance allowed May 2021 Earlier to this wast operating, 100 planning, 100 plannin	
50.c	provide details of the momentum of the ITEE panel and moding frequency to the Department for endorsement by the Department:							1		1	4	Full Compliance	Ernal Operator to Doparthment, 2002/2017 JAMID DRIB Maningra pain THIS.  THE HIBB members are Dr. Tarnis Wasser, Prof. Dadd Williams and Dr. Bruce Brown, which is considered with the individuals beload to the Train Operator to Department 2002/2017 MINET DRIB Debeting yell in THIS.  The Department admits of the Indigenished Northist in the 2003 audit that they had vordervood the members of the THISB and there have been no changes in the audit period.	
50.d	together with the ICE, provide a written response to the satisfaction of the Department, in the event that future review of the designs by independent experts require additional matters to be addressed;							1		1	NA	Not Applicable		Not applicable as review of the designs by independent experts has not occurred.

Authorisation Co	mpliance Workbook - Operator											
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Quality (dust & suitchur			Vegetation & Rehabilitation (terrestrial, diversion & NOEF)	Waste (general, mine rock, lailings)	Community (local indigenous & public)			Compliance Level		Comments 2022
50.e	once in Blanchon any future modification to the 16th or mining- control techniques and the studies. The modest, but a not least and the studies are of the studies. The modest, but a not leasted to					1		1	3	Part Compliance (High)	2013 2018 Bill Maurent Common Technical Pulsars 15 Cel 2 Sipp. 1  1974 1029 Taller Sin Kind Lein Christocher Bayer Sin Cel 2 Sipp. 1  1974 1029 Taller Sin Kind Lein Christocher Bayer Sin Lein Cell Sipp. 1  1021 1021 1021 1022 1022 1022 1022 1	MOM TO Ground by Report 1, separated to Neurone 2011 coults 3.1.3 of Graff 1, Separated 1, separated 1, separated 1, separated 2011 coults 3.1.3 of Graff 1, Neurone 1, separated 1, se
50.e.i	of the structure;					1		1	N/A	Not Applicable		been enjoying. Thesis stakes aim to confirm required buttons is geometry for CLM design and offer their area design and confirm confidence stakes. The studies for design have been designed as the studies of the studi
SOai	The 19 Cognitives, Memories and all well-building 2000) must regular the control of the control					1		1	3	Part Compliance (High)	"Of Specifics and Authorities Should price of the 2004 Accounts in the distant of the Conference of th	The Openitors and Mathematica Manual Series 6.2.1 Milliongs to their 1922 Commission of Commission
S1	general consider of the Section Review (see Section Review) and the Section Review (see Section Review) and the Section Review (see Section Review) are produced consider with the approach Review (see Section Review) and the Section Review (se			1		1			4	Refer to sub conditions	Tell COST Load 1991  145 COST Load 1990  145 C	The Copy and a should "the stage delay account for the requirement to the same variety was the long placed and see the 100 AM for their value from the section from the placed and the section of the declaration of the section of the section of the section of the section of the declaration of the section of the the condition for the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section o

Authorisation Compilation Workbook - Operator Considering Appeals 17

Authorisation Co 13 Nov 2020 and 18 June 2021 Authorisation	mpliance Workbook - Operator  Condition/Requirement	y (dust & sulphur ansport)	later (River, fridal dams)	aters (Bing ine sediments)	ater	una (fish river)	n & trion (terres trial) & NOEF)	neral, mine rock,	ty (local s & public)	g & Reporting	Score	Compliance Level	Evidence 2022	Comments 2022
Condition No.		Air Quait diceide, tr		Marine W Bong, mar			Vegetatio Rehabilita diversion	Waste (ge tallings)	Cammuni					
51.b	on a company data of the CPC (2012 for the previouslike) metatrial that considers the suggistration of certain 27 that shapes was marks suggested to the consideration of the c		1		1			1			4	Full Compliance	No. 38, 170 May 171, 175, 176  176, 176, 176, 176, 176, 176, 176	A for of the 10th command upon with community related to stage to 1990.0 to be confirmed in survey.
51.c	File in engineering the file of the control of the		1		1			1			4	Full Compiliance	IF 28.4 CODE 1985 (May 1997) (We have 18 1982) (1982) (May 1997) (We have 18 1984) (May 1997) (	The Bound PGET Marking controllers have prove larger May related to the controllers with Controllers and the Controllers and
Std	PRISCI to represent an electrical colinities in highly to der american. Provide con regisprillic control and colonities of control colonities, but must read to colonities of the colonities and colonities. But must read to colonities are colonities and the colonities. But must colonities are colonities and colonities are colonities. But must colonities are colonities and colonities are colonities and colonities. But must colonities are colonities and colonities are colonities and colonities are colonities. But must colonities are colonities are colonities and colonities are colonities are colonities and colonities are colonities are colonities and colonities are colorities are colonities are colo		1		1			1			4	Full Compilance	Seated Leaves (TIP) what It is CLA in recent and agreement the 2.0 m M/I E.  19. CLAS (200, 2016 Well in the 19. CLAS (200, 2016 Well E.  19. CLAS (200, 2016 Well in the 19. CLAS (200, 2016 Well E.  19. Well Indian of MCSI Marriery Connection from you Report Lay Seed of Decoursor  19. Well Indian of MCSI Marriery Connection from you Report Lay Seed of Decoursor  19. Port product Seed (2016 Well Exempt Leaves Seed (2016 Well Ex	ISS 2021 2022 at halles Areas hall 78 (8) as an entypeach Control fall.  The Book and CoST Methody Construction Purpose Regard May 7 Manusements have been and CoST Methody Construction Purpose Regard May 7 Manusements have been an extra for the storage unclear users for each to be of beinging fill or 1.05 (2.05) 2022 2022 2022 2022 2022 2022  1.05 (2.05) 2022 2022 2022 2022 2022  The Book and COST Methody Construction Purpose Regard May 6 (2.05) 2022 2022  The Book and COST Methody Construction Purpose Regard May 6 (2.05) 2022 2022  The Book and COST Methody Construction Purpose Regard May 6 (2.05) 2022  The Book and COST Methody Construction Purpose Regard May 6 (2.05) 2022  The Book and COST Method Method Purpose Regard May 6 (2.05) 2022  The Book and COST Method Method Regard Construction Cade Method Regard Method Regard Regard Construction Cade Method Regard Re

Authorisation Co	mpliance Workbook - Operator											
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement		Marine Waters (Bing Bong, marine sediments)		Vegetation & Rehabilitation (terrestrial, diversion & MOEF)	Waste (general, mine rook, tallings)	Community (local indigenous & public)			Compliance Level		Comments 2022
51.e	abection batters of agreement these was on making consistent or the state of br>original cannot face cycles.	1				1			4	Full Compliance	The CASA SECURITY AND WEST WAR 2017  TO ASSESS AND ASSE	From Boune 20 ACM Monthly Commission Programs Separating dates.  21 To ECC States Commission Programs Separating dates. 22 To ECC States Commission Production Security Conference on Technical Production and Commission Production Security Commission Security Commissi
51.1	the ICE wiffs the subdiffied of the PM placement methodology with respect to particle size significant and advection barriers:			1		1			4	Full Compliance	cater COES (Specialis subject like train Conference Inspiration COES).  Recognished Design from Conference And pass (Competits Design dated Design d	
51.g	creat-action of the NDDT stages, as defined in Condition S3 and S4 is undertaken in accordance with a walls AAPA conflicture.						1		4	Full Compliance	Sec. 202021 The Invests Guart Procedure and Green.  Paper Guart Schartschure 1964/21 to SCAT, Flor XEID,  Paper Guart Schartschure 1964/21 to SCAT, Flor XEID,  Paper Guart Schartschure 1964/21 to SCAT, Flor XEID,  Normal Guarten MANTHU Stark Mark SCE Haget Congelation.  Bernard Guarten MANTHU Stark Mark SCE Haget Congelation Intel <sup>®</sup> The Investment Guarten MANTHU Stark Mark SCE Haget Congelation Intel <sup>®</sup> The Investment And Control Manthu Stark Mark SCE Haget Congelation Intel <sup>®</sup> The Investment And Guarten Manthu Stark Mark SCE Haget Congelation Intel <sup>®</sup> The Investment Guarten Manthu Stark Mark SCE Haget Congelation Intel <sup>®</sup> The Investment Guarten Manthu Stark Mark SCE Haget Congelation Intel <sup>®</sup> The Investment Guarten Mark SCE Haget Congelation Intel <sup>®</sup> The Intel <sup>®</sup> The Investment Congelation Intel <sup>®</sup> The Intel <sup>®</sup> The Investment Intel <sup></sup>	The Cycles and shades "The height of the MCDE is to aginy unchanged data rap the processive of the 2011 to Agin . So and The MCDE is all and the MCDE and the MCD
51.h	design of the MDEF is flexible to accommodate changes, if required, to comply with archaeological site MRMA matters under Condition 31;						1		4	Full Compliance	January 2000 Mid9:  The MOET is already dissipred to leave the MBMA area undisturbed, if approval is not granted. An example of the dissips accommodating MBMA is that there is a temporary level in between the MDE and MBMA in plains in color approval is not distand to separate the property of the plain in the plain is not experient in an extraordisc plain in the plain is not only approved in an of distand to separate the plain in the plain in the plain in the plain is not plain.	
51.i	in the event that future review of the dissigns or as-built structure by independent experts require additional matters to be addressed, the Operator together with the ICE must provide a written response to the satisfaction of the Department:							1	N/A	Not Applicable		The Operator advised "M&M can confirm that there has been no independent export review of the NOEF designs or as-built structure during the audit period."
51.j	at mine closure, non-benign waste rock is encapsulated and fully contained within an engineered cover system consistent with the Overburden Management Project, or an alternative cover system endersed by the relevant Independent technical panels to the satisfaction of the Department.				1	1			NA	Not Applicable		Mine closure is not relevant to the audit period.
Construction of CWN	Them the date of authoritation of the Overhardon Management Project the Operator is approved to construct, operation and maintain hydiothours stages for permanent placement of Water Rock in the MOSE.  West A, B, C and D:					1			4	Full Compliance	SMB 2021-2022  SMB 2021-2022 TABLE 6: WASTE DUMPHISC DURING. THE REPORTING FEBOD shows waste dumping only at the appropriate business. Reciding 1,7 3 Met of abovem and 5-804 (SMB common and 6-804 (S	Compliance corred under condition 52:
52 b	CW (alpha, bravo and charlie):					1				- 1		Compliance scored under condition 52. Compliance scored under condition 52.
Authorisation Compila	nce Workbook - Operator Considering Aspects											

13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement  Colophand trans	Air Quality (dust & sulptur	Surface Water (River, Creek, Artificial dams)	Marine Waters (Bing Bong, marine sediments)	Groundwater	Aquatic fauna (Fish rivor)	Vegetation & Rehabilitation (terres rial, diversion & NOEF)	Waste (general, mine rock, tallings)	Community (local indigenous & public)	Monitoring & Reporting	Score	Compliance Level	Evidence 2002	Comments 2022
52.d 52.e	SE:		_	-			-	1				-		Compliance scored under condition 52. Compliance scored under condition 52.
52:1	NE.  Mit Operator must develop the NDIEF Stages defined in Condition 52 in accordance with Concupi designs presented in the approved MaliP.							1			4	Full Compliance	JAME 2021–2029.  JAME 2	Compliance control under consistion 52.  Compliance control under consistion 52.  Mile Operation abundance in the seasons the two-desires operated and consistency of the September of the Septem
	During construction of the NOEF, the Operator must ensure:											Refer to sub	"The CS stap was constructed as per the OMP BS methodology and consistent with the approved 2020 MAP, including the development of [-]" and "Affect classed approximately 61 in a within this NOEE area during the reporting period, and constructed approximately 62 or this NOEE area during the reporting period, and constructed approximately 62 or this Residence of the Section 100 of the Section 100 of the carried out in accordance with the literatory 2000 MAPP."	
54	engagement of the ICE consistent with Condition 48											conditions		Refer to condition 48 for further detail of compliance.
54.a								1		1	4	Full Compliance		
54.b	waste rock management requirements complies with Condition 51.							1			4	Full Compliance		Refer to condition 51 for further details of compliance.
Remaining Waste Roc	Management Fallities From the date of authorisation of the Overburden Management											Bufor to sub		
55	Project, temporary placement of non-benign waste is authorised for the following:											conditions		
55.a	EOEF (except for PAF (RE)):							1			NA	Not Applicable	EMR 2021 - 2022.  There is no reference to the EDEF in the EMR 2021-2022 (TABLE 6: WASTE DUMPING Inspense THE PREPARENCE OF SHOOT).	Not started. Scheduled for 2002/2003.
55.b	stockples on NOEF, SOEF and WOEF;							1			4	Full Compliance	EMR 2021 - 2022.  EMR 2021 - 2022 TABLE 6: WASTE DUMPING DURBING THE REPORTING PERIOD shows. 1.35 Mild alluvium and IS-NAF (H.Q.) on the NDEF stockpiles but no non-approved service into the notice of the notice o	Advised by the Operator that SOEF and WOEF are no longer active and there is no intention to reactivate. SOEF and WOEF are located within the mine lever wall. SOEF has a dedicated sump.
55.c	ROM Pad:  any other location approved by Department in writing.							1			4	Full Compliance	EMB 2021 - 2022.  EMB 2021 - 2022 section 2 - 4.3 states. "The WOEF will continue to be used as the ROM.  Shociple for consider feed materials.  A partial explanation of the ROM paid occurred during the reporting period as described in the interest 2020 feed.	ROM gad receives was to that is non-benign.  Operator advised the Independent Monitor that there are no other areas
55.d								1			NA	Not Applicable	non and - anda.	approved by the Department in writing. The Independent Monitor did not find any other areas of waste placement in the EMR 2021 - 2022.
56	The Operator must ensure that non-benign wastes temporarily placed outside of NOEF have:											Refer to sub conditions		
56.a	suitable water management structure (e.g. drains and sumps) are in place to contain and manage poor quality drainage in accordance with the approved MMP:		1					1			4	Full Compliance	2020/21 Amenual Site Water Basinon for the McArthur Sover Milno - Water balance Forecast report Tibec200. 2021/22 Amenual Site Water Balance for the McArthur Sover Milno - Water balance forecast report dated 10e:c021. Figure 2.1 in the 2020-2021 and 2021-2022 water balance forecast reports show the	The Operator advised "All ROMANIA area runoff continue to report to Vier- Duncies Dearn (VV OC) or Prists from (E) PP 9), Mill CSQ (Mill Concentrator runoff pond), Mill APP (Anti Pollucion Pond), Mill ORS (Old ROM Sump) or Mill OSD (Mill Old Stores Olam)."
56.b	installed water observation structures that allows suggregation of minuselistic distinguishment of minuselistic distinguishmen		1					1			4	Full Compliance	y lisionent water management ty systems. 1880-2027-2022.  2020/27: Areas SS Wilder Bellamon for the McArthur Bover Mine - Water balance  2020/27: Areas SS Wilder Bellamon for the McArthur Bover Mine - Water balance for  years distal of Dacid 27.  Areas SS Wilder SS Wilder Bellamon for the McArthur Bover Mine - Water balance forecase  Manual Management Plan   2004 pd and considered neion effected valor. The Motor Management Plan   2004 pd and considered neion effected valor. The Motor Management Plan discusses   Neutrino McCode Mine and from the World 2004 Plan.	BOM pad only during the audit period.  Site configuration and water management figures for BOM pad are Figure 2.1.
56.c	monitoring and management measures, in accordance with the AMP, are implemented to ensure environmental objectives defined in the approved MMP are satisfied;		1					1		1	4	Full Compliance	Operator advised that water is captured in the water management system and either breated before discharge offsite so included in monitoring program in AMP.	
56.d	non-benign wastes are removed and managed at cessation of mining in accordance with the approved MMP.							1			NA	Not Applicable		Future item as cessation of mining has not occurred.
56.e	in the event of unplanned closure, non-benign wastes are removed and managed in accordance with the approved MMP:						1	1			NA	Not Applicable		Future item as there have been no unplanned closures.
56.f Ore Processing and M	oversight provided by ICE as per Condition 48.							1			NA	Not Applicable		Condition 48 is referring to construction and not applicable to the ROM paid, which is the only place the Operaor advised any non-benign waste is temporarily placed outside of the NOEF.

Authorisation Compliance Workbook - Operator

Authorisation Co	ompliance Workbook - Operator													
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement  Service water measurement of solutions accounted with the last	Air Quality (dust & sulphur dioxide, transport)	Surface Water (River, Creek, Artificial dams)	Marine Waters (Bing Bong, marine sedments)	Groundwater	Aquatic fauna (Fish river)	Vegetation & Rehabilitation (terrestrial, diversion & NOEF)	Waste (general, mine rock, tallings)	Community (local indigenous & public)	Monitoring & Reporting	Score	Compliance Level	Evidence 2022	Comments 2022
57	filtration facility at the Mine must be suitably designed and constructed to contain a 100 year ASI rainfall event.		1								NA	Not Applicable		this has not proceeded at this stage.
58	From the date of authorisation of the Overburden Management Project, the Operator is authorised to expand the one-processing and associated milling and storage facilities in accordance with concepts and management systems detailed in the approved MMP including:										NA	Not Applicable		Future Item. Or e-processing and associated milling and stooge facilities are not proceeding at this stage.
58.a	ensuring the structures to be developed are suitably designed and conflucted to allow management of poor quality drainage in accordance with the Water Management Plan that is generated from the construction and future operation of the structures:		1								NA	Not Applicable		Future Item. Cre-processing and associated milling and storage facilities are not proceeding at this stage.
58.a.i	construction and development of Gypsum Plant;		- 1								N/A	Not Applicable		Future item. Gypsum Plant has not been constructed (planned for 2023).
58.48	construction and development of Caustic Facility;		1								4	Full Compliance	2020/27 Annual Site Water Bislanco for the MoLe thur Slever Milne - Water balanco forecast report 17 Dec 2007. Water Balanco for the MoLe thur Slever Milne - Water balanco forecast sport disked 10e 2021.  Figure 2.1 in the 2020-2021 and 2021-2022 water balanco forecast reports show the provisions water management systems.	Under construction. Located in the mill area and runoff from that area is contained and managed.
58.a.H	construction and development of Reagent Mixing Facility:		1								4	Full Compliance	Devices on some treat-galaxies and the second of the McPethar Slover Mine - Water balance forecast feeper 17 The-C000. 2007-122 Amend State Plater Balance for the McPethar Slover Mine - Water balance forecast report disked Tabe-2007. Figure 2.1 in the 2005-2007 and 2007-2002 water balance forecast reports show the yalaxies to water management systems.	Constructed. Located in the mill area and runoff from that area is contained and managed.
58.a.iv	construction and development of Copper Mud Facility;		1								4	Full Compliance	200021 Annual Size Water Balance for the McArthur Bover Mine - Water balance forecast report Tiboc.200. 2021/22 Annual Size Water Balance for the McArthur Bover Mine - Water balance forecast report dated Tiboc.2021. Figure 2.1 in the 2020-2021 and 2021-2022 water balance forecast reports show the	Under construction, Located in the mill area and nunoff from that area is contained and managed.
58.a.v	construction and development of Lead Concentrate Storage Facility:		1								N/A	Not Applicable	relievant water management systems.	Not constructed (going through approval - planned for 2023). If built, will be in the mill area and runoff from that area is contained and managed.
58.a.vi	expansion of the concentrate storage shed and use of external hardstand area:		1								NA	Not Applicable		Not constructed (under design and approval). If built, will be in the mill area and runoff from that area is contained and managed.
58.b	Wastes generated from the operation of the Cypsum Plant must be managed in accordance with Condition 63.							1			NA	Not Applicable		Future item. Gypsum Plant has not been constructed.
Water Management I 59	and Sior day. (Littliff the AMP (including Environmental Management Plans and sub- plans) is approved by the Department in writing, the Operator must prepare, review and include the following for each MAPP and where appropriate each MAVP amendment, a Water Management Plan which includes:										N/A	Not Applicable		Not triggered AMP was submitted with the January 2000 MMP and approved 13Nov2020. There have also been no MMPs in the audit period.
59.a	modelling of surface water at and around the Mine;		1							1	N/A	Not Applicable		Not triggered. AMP was submitted with the January 2020 MMP and approved 1380x2020. There have also been no MMPs in the audit period.
59.b	a whole of Mine-water balance which takes account of the modelling of surface water;		1		1					1	NA	Not Applicable		Not triggered. AMP was submitted with the January 2020 MMP and approved 13Nov2020. There have also been no MMPs in the audit period.
59.c	calibration of the modelling of surface water to confirm its accuracy;		1							1	NA	Not Applicable		Not triggered. AMP was submitted with the January 2020 MMP and approved 13Nov2020. There have also been no MMPs in the audit period.
59.d	a written plan detailing how water at the Mine will be managed for the for theoring wet season;		1		1					1	NA	Not Applicable		Not triggered. AMP was submitted with the January 2020 MMP and approved 13Nov2020. There have also been no MMPs in the audit period.
59.e	a plan of actions which will be undertaken to reduce the risk of any releases from AMD storage structures;		1							1	NA	Not Applicable		Not triggered. AMP was submitted with the January 2020 MMP and approved 13Nov2020. There have also been no MMPs in the audit period.
59.f	a plan of actions, including engineers' reporting schedules, which will be undertaken to ensure the structural integrity of all AMD storage structures;		1							1	NA	Not Applicable		Not triggered. AMP was submitted with the January 2020 MMP and approved 13Nov2020. There have also been no MMPs in the audit period.
59.g	a plan of actions which will be undertaken to ensure seepage from AND storage structures is minimised including, where required, timelities for repairing diamaged or installing new seepage management infrastructure.		1		1					1	NA	Not Applicable		Not triggered. AMP was submitted with the Jinuary 2020 MMP and approved 13Nov2020. There have also been no MMPs in the audit period.

13 Nov 2020 and 18 June	impliance Workbook - Operator  Condition/Requirement		Air Quality (dust & sulphur diceide, transport)	Surface Water (Rivor, Creek, Artificial dams)	Marine Waters (Bing Bong, marine sedments)	Groundwater	Aquatic fauna (Tish river)	Vegetation & Rehabilitation (terres trial, diversion & NOEF)	Waste (general, mine rock, tallings)	Community (local indigenous & public)	Monitoring & Reporting	Score	Compliance Level	Evidence: 2002	Comments 2002
60	land water and witchion must be under hallow in accordance with the land water and the second secon			1								4	Full Compliance	Jamin Cymorin to OCPVPS Salger. 1889 (1) Water Caracteristics License Application Bing Bings and et (14/2022).  Franchesiant of the Caracteristics of this globing properties of the Caracteristics of the Bing Bings and the Caracteristics of the Bing Bings and the Caracteristics of the Bings and t	Conting Inching The Linear permits the existince of 51 requilities per your Miny of groundwater prince 10.1 March 2021. May of groundwater prince 10.1 March 2021. May of groundwater of the Continue of th
60.a	activities involving disturbance must not commence until required studies and/or trials to inform future design, construction and/or operation, as detailed in the approved MMP, are completed:			1							1	NA	Not Applicable		The only relevant works in the audit period are related to groundwater extraction from an existing borefield at Bing Bong Loading Facility.
60.b	works are conducted in accordance with a valid AAPA certificate;			- 1						1		4	Full Compliance	AAPA C92-91 Loading Facility - West Island - 1992.	The only relevant works in the audit period are related to groundwater extraction from an existing borefield at Bing Bong Loading Facility.
60.c	detailed designs, where nominated in the approved MMP, are developed and implemented in consultation with required experts, including but not limited to ecology, engineering and any other experts as appropriate:			1							1	NA	Not Applicable		The only relevant works in the audit period are related to groundwater entraction from an existing borefield at Bing Bong Loading Facility.
60.d	regular inspections and maintenance are undertaken to ensure design objectives continue to be satisfied.			- 1							1	N/A	Not Applicable		The only relevant works in the audit period are related to groundwater extraction from an existing borefield at Bing Bong Loading Facility.
61	The Operator must complete translocation of the Purplis-crown Fairy When in accondiscious with the approved MRP, prior to commencement of works on the Clid McArthur Rover Channel plug.							1				4	Full Compliance	\$10.00 2017-2022 Executive Summary states "Key environmental activities conducted during the reporting provide included:  - Successful completion of the furgier covened fairy Ween translocation, with dominant makes formal five translocation of the furgier covened fairy Ween translocation, with dominant mariphs successful covening seasons."  - Provided the Conference of	
62	The Operator must erect and maintain warning signage that:													January 2022 sign inspection audit.	
62.a	is permanent and weatherproof:	П								1		4	conditions Full Compliance	Warning Signage Inspection - January 2022 (memo dated 1Feb2022).  Warning Signage Inspection - January 2022 photographs show the warning signage appairs stury and permanent in ealure. Where signs require maintenance the memo jackies that will be undestablen in the dry season.	
62.b	contains specific wording agreed to by the Chief Health Officer of the Northern Territory:									1		4	Full Compliance	Letter dated 04Feb2015 to Chief Health Officer from Operator.  Letter dated 04Feb2015 to Chief Health Officer from Operator advising of the agreed year ding to be used on signage.	
62.c													conditions		
62.c.i	at appropriate distances and frequency along the waterway:  as a minimum at all access points, including but not limited to									1		4	Full Compliance	Warning Signage Inspection - January 2022 (mamo dated 1Feb2022).  Signage appears to be installed at appropriate distances and frequency based on the  Warning Signage Inspection - January 2022.  Warning Signage Inspection - January 2022 (mamo dated 1Feb2022).	
62 c.ii	crossings, wehicle tracks and walking tracks.									1		4		Warring Signage Inspection—alexalry 2002 (Interno dalled TricC002).  Signage appears to be located at all access points, including but not limited to crossings, vehicle tracks and walking tracks based on aerial photography and the Warring Signage Impaction—laneary 2002.	
62.c.iii	along the length of:												Refer to sub conditions		
62 c Ha	Barney Creek downstream to its junction with the McArthur River:									1		4	Full Compliance	Warning Signage Inspection - January 2022 (minro dated 1f-65/0022)  This sign could not be identified in the photo on the Warning Signage Inspection - January 2022 and had the text "Location 40 – Good, overgrown vegetation surrounding it."	
62.clib	Barney Creek upstream to a point a short distance upstream of where the Carpentaria Highway crosses Barney Creek;									1		4	Full Compliance	Warning Signage Inspection - January 2022 (memo dated 1Feb2022)  Warning Signage Inspection - January 2022 (memo dated 1Feb2023) viewed confirming in access signage is in place in all locations (refer locations 7 and 8).	
62 c. II.c	Surprise Creek to approximately the location of SW29;									1		4	Full Compliance	Warning Signage Inspection - January 2002 (namo dataset Fisc2002).  Operator Warning Signage Inspection - January 2002 photos viewed confirming no access signage is no piace in all bostiers. Localism 44 is the approximate localism of SW29 (with 43 and 43 also relevant.	

Authorisation Co	ompliance Workbook - Operator												
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Quality (dust & sulphur diccide, Iransport)		Marine Waters (Blng Bong, marine sedments)		Vegetation & Rehabilitation (terrestrial, diversion & NOEF)	Waste (general, mine rock, tallings)	Community (local indigenous & public)			Compliance Level		
	Bing Bong shipping channel and in the immediate area surrounding the shipping channel and the swing basin.											Screen shot of Environmental Obligations Register ID#47350 Warning Signage Inspection - January 2022 (memo dated 1Feb2022)	OBS: Warning signage on the Nathan River Resources loading facility boundary fenceline should be crected as operational activities recommenced in 2021.
62.cliid	, ,,,							1		3	Part Compliance (High)	Warning Signage Inspection—Instanty 2022 showed signage is located at each land unity point to the BBET, which surround the waster accoss Honeover, there was no oxidation of singuipa along the singuing of the subgeny of home and in the immediate area surrounding the subgeny claimsal and singuipation. The surrounding this subgeny claimsal and singuipation substances are shown in terms of a screen shed of the Operation Visit Amenage yester recluding an action in place to discuss the impracticality with OTT with a revised due date of 14,923/27.	Of I. Correspond with DITT about the intent of this condition and specifically the impracticality of locating signaps along this length of the shipping channel and in the investibility areas surrounding this shipping channel and sering bein.
63	Wastes generated from operation of the Water Treatment Plant and										Refer to sub		
	OypsumPtant must be disposed: In accordance with concepts and management systems detailed in the										conditions		Future item. Water treatment plant has not been operational during the audit
63.a	approved MMP, ensuring  brisk for the normanest risensel of Consum Plant and Water						1			N/A	Not Applicable		period and the appears plant is not constructed (planted for 2003).  Future item Water treatment filed has not been overational during the audit
63.8.1	Treatment Plant wastes must be undertaken to inform final material placement:						1			N/A	Not Applicable		period and the gypsum plant is not constructed (planned for 2023)."
63ai	the LTRB or an approved qualified and experienced independent third party endorse the waste disposal strategy, if the wastes are to be placed in the TSF; or						1			N/A	Not Applicable		Future item. Water treatment plant has not been operational during the audit period and the gypium plant is not constructed (planned for 2023).
63.a.ii	the ICE or an approved qualified and experienced independent third party endorse the waste disposal strategy, if the wastes are to be placed in the NOEF.						1		1	N/A	Not Applicable		Future item. Water treatment plant has not been operational during the audit period and the gypsum plant is not constructed (planned for 2023).
64	The change shadow for the challenge of passing a district members as the change of th		1							4	Full Compliance	Some and Sarring Magnetic 221.  Some and Sarring Magnetic 242.  Some and Sarring Magnetic 242.  Some Analysis of the Parketing Magnetic 242.  The Sarring Magnetic Plant Sarring Analysis of the Sarring Magnetic 242.  The Sarring Magnetic Plant Sarring Analysis of the Sarring Magnetic 242.  The Sarring Magnetic Plant Sarring Analysis of the Sarring Magnetic 242.  The Sarring Magnetic Plant Sarring Analysis of the Sarring Magnetic 242.  The Sarring Magnetic Plant Sarring Analysis of the Sarring Magnetic 242.  The Sarring Magnetic Plant Sarring Analysis of the Sarring Magnetic 242.  The Sarring Magnetic Plant Sarring Magnetic Plant Sarring Magnetic 242.  The Sarring Magnetic Plant Sarring Magnetic 242.  The Sarring Magnetic Plant Sarring Magnetic 242.  The Sarring Magnetic Plant Sarring Magnetic Plant Sarring Magnetic 242.  The Sarring Magnetic Plant S	Appealm CAST (AST GOT only and Commission Auditories Science 4.6.3 Series).  Appealm CAST (AST GOT only and Commission Auditories Science 4.6.3 Series).  Appealm CAST (AST CAST CAST CAST CAST CAST CAST CAST C
64.a	Southern Purineter Runoff Dam (SPROD) – Includes the footprint proviocally attributed to the Southern Purineter Sediment Runoff Dam;		1							4	Full Compliance	Dams and Surpey Register 2021.  Dams and Surpey Register 2022.  Water bullers are Surpey Register 2022.  Water bullers are Surpey Register 2022.  Water bullers recolding for the MAddribut River Mine in support of the 2021/1/2 west  waters TMP9 detailed 2000x102/1/2.  Perspectable 41 loads morethly during the audit period as obcumented in the Dams and  Surpey Registers. There is a TARPO for this storage.	The Dams and Sungs Register 2022 did note "Fixor is apposed on the North West data to liming missionement and businely" in August 2021 but the action had not been marked as complete in the spreadsheet.
64.b	South East Perimeter Numoff Dam (SEPROD):		1							4	Full Compliance	Same and Surpe (logister 2021)  Dams and Surpe) (logister 2022)  Each chartical linguistic modes of the surper sur	The Dam and Sungs Register 2022 did notive vegetation requiring removal from August and October 2021 but the action had not been marked as complete in the spreadsheat.
64.0	Wisstern-Purimeter Runoff Dam (WPRCD):  Eastern Purimeter Runoff Dam (SPRCD):		1							4	Full Compliance	Dams and Surpp (logister 2021) Dams and Surpp (logister 2022) Water bulance mendating for the Mulchthur Blaver Mine in support of the 2021/22 west season "Like" dated 2020x2021. Imported at least mendathly during the audit period as documented in the Dams and Surpp. Register. There is a Talke for this storage.  Dams and Surpp. Register 2021.	The Dams and Sumps Register 2022 did note? "Evoling remains on the wastern continued and support of the profit length crack for length profit and under a did not limit Delinage Infrastructure has been distribuyed and its blooked. Elver is base-hing toward water level (in proceedings and mass ingellent sitalings," in July 2021 but the action had not been marked as complete in this spreadth-mark. [The Dams and Sumps Report 2022 did note? "continual from hair creek creations."]
b4.d	Labom интерево якинов ком диноСО);		1							4	Full Compliance	Dams and Surpes Regulate 2021.  Dams and Surpes Regulate 2022.  Water balance recolating for the Moderthur Riser Mine in support of the 2021/72 west asserts DMP disease 2020xx1027.  Impacted at least morethly during the audit partial as documented in the Dams and Surpes Regulater. There is a TARP of this storage.	The Dems and Sumps Regular 2022 did note 'probinital line' loar, circle Crisicing, and cracking around covering and cracking around covering and conscious bornomics' is September 2021 but the action had not been marked as complete in the spreadshoot.
					_								

Authorisation Co	mpliance Workbook - Operator											Comments 2022
and 18 June	Condition/Requirement		Surface Water (Rivo Greek, Artifidal dam	Marine Waters (Bin Bong, marine sedim		Vegetation & Rehabilitation (terre diversion & NOEF)	Waste (general, min tailings)	Community (local indigenous & public)		Compliance Level		
64.0	Central West A Sump (CWAS):		1						4	Full Compliance	Surface Water Monitoring Annual Report 2021-22.	This sump has been removed from the Authorisation issued SMay2022. However, it was included in the Surface Water Report with three ASW samples in the audit period. The Operator advised "CWAS was discommissioned in June 2021".
64.1	Central West C Sump (CWCS):		1						4	Full Compliance	Surface Native Monitoring Areas (Report 2021-22.  Makine Managament Fless March 2021.  Makine Managament Fless March 2021.  Makine Managament Fless March 2021.  Dams and Surpsy Rogister 2021.  Dams and Surpsy Rogister 2022.  Removed from the Variation SMAy(2022. Inspected all load monthly during the audit provided and counterfold in this Dams and Surpsy Rogister 2022.	This sump has been removed from the Authorisation issued SMay2002. However, it was included in this Surface Water Roport with 30 ASM samples in the audit particle.  The Operator advised "CWCS was decommissioned in June 2022 (offer the audit particle) in the Dama and Sumps register it is called "Challel Sumps".
64.g	Arti-Pollution Pand (APP);		1						4	Full Compliance	Dams and Surppi Rigistra 2021: Dams and Surppi Rigistra 2020: Dams and Surppi Rigistra 2021:	The Dams and Sumps Register 2022 did note some issues from August 2021 and Discentive 2021 with the actions not recorded as complete in the spreadsheet. Noting name change to Mill APP.
64h	Concentrator Runoff Pond (CRP):		1						4	Full Compliance	Dams and Surryo Register 2021.  Dams and Surryo Register 2021.  Dams and Surryo Register 2022.  Market belance medium for the Moderflux Bleer Mine in support of the 2021/22 well passers 1249 dated 2006/2021.  Impacted monthly with the exception of November 2021 during the audit period as documented in the Dams and Surryo Register. There is a TARP for this storage.	The Dams and Sumps Register 2022 did note an issue from December 2021 But the actions had not been marked as compilete in the sgreadd-heet.  Noting name change to Mill CIP.
64.1	Van Duncer's Den (VDD):		1						4	Full Compliance	Jams and Surge Register 2021.  Dams and Surge Register 2022.  Walser bullerce modelling for the Modethur River Mine in support of the 2021/22 wet season 1369 dieted 2000x2021.  Proported at Nata monthly during the audit period as documented in the Dams and	
64.j	Puters Pond (PP):		1						4	Full Compliance	Surrou Resister. There is a TARP for this storace.  Dams and Surps (Alignate 2021) Dams and Surps (Alignate 2021) Dams and Surps (Alignate 2022) Canobinized Impeciation. Duam Inspection Pales Pond 16Feb2022. Water balance medalling for the Mucharium Riser Mine in support of the 2021/22 west journal TARP dated 2006-2021. Impacted at the action monthly during the audit period as documented in the Dams and	
64.k	Like Archer (LA):		1						4	Full Compliance	Surgo, Riegister. There is a TARP for this storage.  Dams and Surgo Register. 2021.  Dams and Surgo Register. 2022.  Part of the 2022 register of the 2022 register.  Part of the 2022 register.  Perspective at Mean End Medical Part of the Surgo.  Perspective at Mean End Medical Part of the Surgo.  Perspective Person. 2022.  Dams and Surgon Register. There is 1 RAPP for this Storage.	
64.1	Old Storus Dam (OSD):		1						4	Full Compliance	pourps seguents: Interior as I seed for the Storage.  Maker Management Plan Table 8.  Has a HDPE liner as listed in Table 8 of the Water Management Plan.	The Operator advised "The MIII Old Stores Dam, is actually a small Smix Smisurp. A pump was removed from the sump over the Dry Sasson. This is the only recent history of malentanes for this valent stratega, as it has been dry for some time now. MRM will seek to have it removed from the VoA in the next amendment."
64.m	Pand 2 (P2):		1						4	Full Compliance	Dams and Surreps Register 2021.  Dams and Surreps Register 2022.  Dams and Surreps Register 2022.  Dams and Surreps Register 2022.  Market bulance modeling for the Modelflux River Mine in support of the 2021/22 wet season. 1989 dated 2006/2021.  Inspected at least morethly during the audit period documented in the Dams and Surreps.  Registers. These is 1989 for this storage.	
64.n	Control East 1 Sump (CE1S):		1						4	Full Compliance	Mailar storage infrastructure maister is disided 2010-47/2021 (before the audit period). Encladed in the Water storae maister is disided 2010-47/2021 (before the sault period) including dially visual inspections by the operation crew and the Operator solvined it was discessissioned in May 2021.	This sump has been removed from the Authorisation issued SMIry2022.
64.0	East Drain Sump (EDS):		1						4	Full Compliance	Water Management Flan Table 8. This 97 ML sump is Bibliod as having no liner in Table 8 of the Water Management Plan.	The Open can advised that "forms" impactions of this sump is not conducted dus- to the frequency of substituting rows actions, and stated "no plans to time the EDS as it will score be reglaced by a limit outraction will."  The Operator advised that the deviatining or over do an impaction of all the lines at their start of every raining, which includes an informal drive by of sumps.

	riginate with room - uperator  Condition/Requirement	and the state of t	diceide, transport)		Marine Waters (Bing Bong, marine sedments)		Vegetation & Rehabilitation (terns trial, diversion & NOEF)	Waste (general, mine rook, allings)	Community (local indigenous & public)		Compliance Level		
64 p	West D Sump (WDS):			1						4	Full Compliance	Dams and Surpe Register 2021.  Dams and Surpe Register 2022.  Water Management Flum Table or  Inspected at load mentifying the audit period documented in the Dams and Surpe,  Register. Near a MOPE form as foliad in Table 6 of the Water Management Plan.	
64.q	Mine Infrastructure Area Sump (MAS);			1						4	Full Compliance	Dams and Surpe Rigister 2021.  Dams and Surpe Rigister 2022.  Water Management Fluer Tables e.  Hard Management Fluer Tables e.  Impocted at loast morethy during the audit period documented in the Dams and Surpes Rigister. He an a HOME fluer as foliad in Table 6 of the Water Management Plan.	
64.1	West A Sump (WAS):			1						4	Full Compliance	Water Maragement Plan Table B. Surface Water Montoring Annual Report 2021-22. Has a HIDPE films as listed in Table 8 of the Water Management Plan. Surface Water Montoring Annual Report 2021-21 table 4.2 lists 23.60W samples in the audit period.	The Operator advised that "Formal" respections of this sump is not conducted du- to the frequency of dewalkining crew activities.
64.5	North East Sump (MES):			1						4	Full Compliance	Dams and Surgo Register 2022. Water Management Plan Taible 8. This 10 M. Surgo is listed as having a COL linud with plans for a BGM liner in Table 8 of the Water Management Plan. Listed is not built in Documber 2021 in the Dams and Sumps Register. Impacted at least receiving all of the Management Plan.	This sump has been remained as NOEF North East Alpha Sump (NEAS) from the Authorisation issued SMay/2022.
64.1	North West Sump (NWS);			1						N/A	Not Applicable	Water Management Plan Figure 16a.  Water Management Plan Figure 16a advises "this storage has not yet been developed".	This storage is listed as planned/under construction in the Water Management Plan dated May 2022.
64.u	NE Stilling Basin (NESB):			1						NA	Not Applicable	Water Management Plan Figure 16a.  Water Management Plan Figure 16a advises "this storage has not yet been developed".	This storage is listed as planned/under construction in the Water Management Plan dated May2022. It is yet to be constructed.
64.v	Contral East Alpha Sump (CEAS):			1						N/A	Not Applicable	Dams and Sumps Register 2021. Dams and Sumps Register 2022.	This sump has been removed from the Authorisation issued SMay2002.  The Dams and Sumps Registers indicate CEAS did not exist in the audit period (it was mined out).
64.w	Central East Brave Sump (CEBS):			1						4	Full Compliance	Dams and Surpp Register 2021: Dams and Surpp Register 2022: Water Management Plan Tables 8: Following construction in January 2022 It was inspected at least monthly during the audit provide documental in the Dams and Surpp Registers. Not liner as CCI, (purrent) and BCM (planned) in Tables 8 of the Water Management Plan.	
64.x	South Stilling Basin (SSB):			1						N/A	Not Applicable		The Operator advised that this storage structure does not exist in the previous audit period and it is listed as planned/under construction in the Water Management Plan dated May2022.
64.y	South Overburden Emplacement Facility Sump (SOEF Sump);			1						4	Full Compliance	Dams and Surpes Register 2021.  Dams and Surpes Register 2022. Water Management Fluen Table o.  Inspected menerothy during the audit period as documented in the Dams and Surrep.  Register. Has a Heffel Ener as Bioted in Table 6 of the Water Management Plan.	
64.2	Low-grade Sump (LCS):			1						N/A	Not Applicable	Water Management Plan Figure 16a. Water Management Plan Figure 16a advises "this storage has not yet been developed".	This storage structure has not been developed in the audit period.
64.88	Rice Paddles Pond (899);			1						NA	Not Applicable	Water Management Plan Figure 16a.  Water Management Plan Figure 16a advises "this storage has not yet been developed".	This sump has been removed from the Authorisation issued SMay2022. This storage structure has not been developed in the audit period.

Authorisation Co	mpliance Workbook - Operator												
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Quality (dust & sulphur		Marine Waters (Bing Bons, marine sediments)		Vegetation & Rehabilitation (terres trial, diversion & NOEF)	Waste (general, mine rock, tallings)	Community (local Indigenous & public)			Compliance Level		Comments 2022
64.bb	ding long Sin Recell Provid 1 (MEGET)		,	1						4	Full Compliance	Internant Management Natural Bergin (assist) and policy in color place of presents (2020).  Bergin (A. 1997) and the present of the present o	Annual May 2017, 2022 TABPS for Being Being stangas was next provided.  Children's 2017, 2022 TABPS for Being Being stangas was next provided.  Child TABPS for Being being provider indexent to the 2022-2022 audit period will be required for the 2023 audit.
64.cc	Bing Bong Mai Bunell Fund 2 (BBSBP2)		1	1						4	Full Compliance	Anisoment Management Para Bing Beng Landsang Lan	Water and own at the sale layer good and as facility from 3 2 in Sunface Water Manifolings (Section 1) and the sale of the sal
64.dd	Bing Bung See Rusself Fund 3 (SBSSPT)		1	1						4	Full Compliance	Intercented Management I have layer look assistant place layer looks and proceeding proceeding proceeding proceeding proceeding proceeding proceeding and pr	Nation colored by an Bing Bing Serface Record Forest 3 in Surface Water Membershory  Amendmental Report 2021 1-2022  Foreign 2021 1/2022 19895 for Bing Bing storages was not provided.
65	The Operator must not transfer water to or discharge water from any water storage structure until:										Refer to sub conditions	With annual report 31Augh202. PRO -2700035 Wasto Dechange Procedure. Alcehora Reve Mine Valant Management Plan (May 2022 after audit period) Weedly Water Quality Review 10.4 11 Apr 20.2 2011-22 Wasto Micharge Records 8, Louis Tracking	
65.a	water quality analysis. has been received and interpreted by the Operator:		1						1	4	Full Compliance	District Management Van 1849 2022 des na seals period although them was sere in the made priode.  Bernard periode.  Bernard Van 1849 and	

13 Nov 2020 and 18 June	regulation Workstook - Operator  Condition (Negalement  rough confer he water suitable for the decisions having any other research confers he water suitable for the decisions having any other research confers on bandler or decisions and water of the head of	Anna of the Control o	dicelde, transport)	Surface Water (River, Creek, Artificial dams)	Marine Waters (Bing Bong, marine sedments)	Groundwater	Aquatic fauna (fish river)	Vegetation & Rehabilitation (terrestrial, diversion & NOEF)	Waste (general, mine rock, tallings)	Community (local indigenous & public)	Monitoring & Reporting	Score 4	Compliance Level	Condense: 2022  Testar Management Pany May 2222 after audit partial although their was sen in the scale partial although their was sen in the scale partial although their was sen in the scale partial by March Leading Sensor the 1 Act Leading Vision and the scale partial and their sensor of the scale to 1 Act Leading Vision and the scale partial and their formation	Comments 2022
66	The Operator is authorised to undertake works to release water from WMD to Little Barney Creek in accordance with previous approvals as defined in Schedule B.			1								N/A	Not Applicable	ACCEPTANT OF DESIGN BUT SECURITY.	Schodule Birchuldul an MMP amendment to construct the additional discharge point. Construction is complain.  OBS: As construction of works to reliaise water from WMD to Little Barney Crook is complain. CRT consider removing this condition.
ស	From the date of authoritation of this Contradent Management (Project, and revisions, and authoritation the Management (Project, ander revisions, authoritation may be found project), Authoritation falses, briefles, and an advantage of the contradent date; and a second project for the contradent date of the contradent da			1								4	Full Compliance	2001.27 Work Unknown Broom 6. Easts Trocking Mar 2007. 2022 Mar 2027. 2027. Easts 1. Tabilism ** Basic Surface Agreements y 207 Ms. was released from the administed discharge leaviness period may be reported greened. This included reported market from the Market Surface Marke	Model have Character Channel Clustering Prizer is, yell to be constructed
68	The Operator must:												Refer to sub conditions		
68.a	ensure all offsite water discharges are undertaken in accordance with a valid WDL;			1								4	Full Compliance	2021-22 Waste Discharge Ricords & Loads Tracking. WDL 174 Annual Monitoring Report 2021-2022.	The WOL audit for the period 1May/2021 to 3DApr/2022 found that offsite water discharges were undertaken in accordance with the WOL.
62.b	-dry visions eather for childs dicharge from the WEX, approved period.			1								4	Full Compiliance	Constitution Conference to College 1986 Mill Reconstruct 2015/CO CONSTITUTION CONTRIBUTION CONTR	Email from Department to Operator subject RE MRM November 2020 VOA Conditions SP and 68 dated 30Nov2020 stated "1 have discussed this with the
68.c	interpretation open at distance could require a special to a part of the activity in the Operator's Aenual Environmental Moley Buport:			1							1	4	Full Compliance	MAN Mate A. One-women cognitistical was Man Montherpolyport 2012; 23. Monther Man Man Man and Billing Manifest (and Sayan Man Man Man Man Man Man Man Man Man M	

Authorisation Co	empliance Workbook - Operator												Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement			Marine Waters (Bing Bong, marine sedments)		Vegetation & Rehabilitation (terres trial, diversion & NOEF)	Waste (general, mine rock tallings)	Community (local indigenous & public)			Compliance Level		
68.d	entain begriffermen of the activity in term of the officiences, an insegment tool.	٠	1						1	4	Full Compilance	Bill Miller & Horizontercoprofit fac Neils Miller Region 2017/2 Multitude Merch Land Billing Billing Aller Versich Mad 2016/2 Miller State Miller State (1994) Aller State (1994) Aller State (1994) Aller State Miller State (1994) Aller State (1994) Aller State (1994) Aller State Miller State (1994) Aller State (1994) Aller State (1994) Aller State Miller State (1994) Aller State (1994) Aller State (1994) Aller State Miller State (1994) Aller State (1994) Aller State Miller Stat	In addition to the findings and commentations of the selected and involutions growing in the contract of the c
68.0	by 30 June 2020, characterise total loads of mine-derived conteminants from all source inputs for the 2017-2018 period consistent with Condition 16.b), unless otherwise agreed in writing by the Department.		1						1	4	Full Compliance	Email from Operator to Department subject M694   Variation of Authorisation Condition (39c); 2017-2018 Mine-Derived Loads dissel 6 May 2000. 200508 M696 OPIR, Condition 39 mine-derived loads. Attachment A - 2017-18 Mine Derived Analyte Loads Assessment.	Consider this condition obsolete.
69	The Operator must in relation to the WMD release point to Little Barney Creek undertake:										Refer to sub conditions		
69.a	release activity that minimises boolsed ensistes, and stillines suitable orange dissipation after law greater than thrus (i.e.g. rock basis) and be monitored daily during release overets:		1							4	Full Compliance	MMD Distance here Checkells (greatables) reproduced 2021-2022.  Mind Distance here Checkell (greatables) (gre	
69 b	remediation in the over of unaccoptable ensire occurring at the Carpental telliphone, outsilet youther to be sufficient on the Department of Intilization. Planning and Logistics and the Department of Intilization. Planning and Logistics and the Department.		1							N/A	Not Applicable	Mann Width's Open dare subject followed or Utilit Barray Coals geometryle: Jackstein Harb, Gedel H. Lad 2021.  Herval LDM Schleien-August and College from 2018 to 2017 covering uportness and submissment of the Copies and Harby consequency large harbonic solders and after each was submissment of the Copies and Harby covering large harbonic solders and offer each was submissment of the Copies and Harby Copies and Harby Copies and Harby Copies and Harby Copies purceraging characteristic sold and the Copies and Harby Copies and Harby Copies purceraging characteristic sold and the Copies and Harby Copies and Harby Copies purceraging characteristics and Harby Copies and Harby Copies purceraging characteristics and Harby Copies purceraging characteristics and Harby Copies purceraging characteristics purceraging	The Operator advised "The corresponding of unacceptation receives was understated and Compression in Spiriture of Spiriture (Spiriture) and spiriture (Spiriture) and As custified in Section 4.4.7 of the 2021/12/5 serfects Water Mandering Report (SMM, 2022). It the to receive see measure for the vestings of the Little Berney Chant Custed or Committee Spiriture) and the Committee Spiriture (Spiriture) and Chant Custed (Spiriture) and Spiriture) and Spiriture (Spiriture) and Chant Custed (Spiriture) and Spiriture) and Spiriture (Spiriture) and Chant Custed (Spiriture) and Spiriture) and Chant Custed (Spiriture) and Spiriture) and Spiriture (Spiriture) and Spiriture) and Spiriture (Spiriture) and Spiriture) and Spiriture (Spiriture) and Spiriture) and Spiriture
69.0	a cross-action profile survey immediately up-stream and down- toxism of the Cappendria Highway crossing, prior to and following each west solotox:		1						1	4	Full Compliance	Marce 1986 to Cyperator valgied Browne of Little Barney Oreak geomorphic humacriani face dated 11 Jul 2022.  Armad LIDAR between August and October from 2018 to 2021 covering upstream and downstream of the Carpenta's Hayeye crossing fund therefore before and after cache- teriority was related in mean 1996 to Operation Supplex Operations (International Section Section 2018 International Section Section 2018 International Section Section 2018 International Section Section 2018 International Section Sectin Section Section Section Section Section Section Section Section	
69.4	each net count quartification of any specification through to cook impossible gain Landin of this by documental gain a minimum proprietable gain Landin of this by documental gain a minimum relation. Bits Good fails achieved, for example, using a destine servey for disreasy system features for the country, using a destine servey the disreasy system features for the country, using a destine servey to disreasy system features for the country, using a destine servey to disreasy system features for the country of any disreasy Devictors using a complaint (fight gain, with the resulting image executing all an appropriating source given for a 2.5.1.5.1.6 mg.)		1						1	4	Full Compliance	More Widel for Sparter single Neuer of Life Berry Crea perception.  More Widel for Sparter single Neuer of Life Berry Crea perception.  More Widel for Sparter single Sparter single Sparter of Life Berry Crea percepting of Life Sparter single Spar	
69.0	missaure and record flow duration, flow rate and volume of all water released from WMID into LITTLE Blanney Creek:		1						1	4	Full Compliance	2021-22 Waste Discharge Records & Leads Tracking.  The 2021-22 Waste Discharge Records & Leads Tracking includes the flow duration, average flow and as volume based on the flow duration and average flow. This meets the requirements of this condition.	

Authorisation Co	mpliance Workbook - Operator													
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	The state of the s	Air Quanty (Oust & supmur dicelde, transport)		Marine Waters (Bing Bong, marine sedments)		Vegetation & Rehabilitation (terrestrial, diversion & NOEF)	Waste (general, mine rock, tailings)	Community (local Indigenous & public)			Compliance Level		
1.09	ensure all ordennos of continuous focus in Little Barray Cross dating the lample of the disalasy system belinese MBDs cissue outful and Little Barray Cross Diversion Charmalis available for impaction:			1						1	4	Full Compliance	Fund Coprate to BCHT subject 1996(1) variation of Authorisation 500°C continues to Continues from a trible region of subject 1996(1) variation of Authorisation 500°C continues 60°C Continues from a trible silvery Covid sides 141400522 count 600°G Continues 60°C Continues from a trible silvery Covid sides 141400522 count 500°C continues 60°C Continues from 1997 (1) variation 50°C continues 60°C continues 60°C MCD Globuson Feet Covid 20°C covid continues 60°C continues 60°C MCD Globuson Feet Covid 20°C covid covi	
69.3	mun to surface adar monthing victable for the zelloh solubuk-1950, ektornel assaulter farefactigar amenta se solubuk-1950, ektornel assaulter farefactigar amenta se solubuk-1950, ektornel assaulter farefactigar solubuk-1950, ektornel assaulter farefactigar			1						1	4	Full Compliance	WMD Rolease Point Checklist 2021-2022. WDL 174 Annual Membering Report 2001-2022. WBL 174 Annual Membering Report 2001-2022. WBM Water & Environment report Surface Water Membering Report 2001/22. McArthur	WARE Makes where Chanked 2017 2022 states "1990 by 1990 of access and very constructive the control of the con
69.gi	Field parameters must, also be measured daily during water release from WMD into Little Barney:			1						1	4	Full Compliance	ABBAT für kommenstalt Menterine jahndala 2021-2022 MAMD Ralassen Perlin Deutskirt 2021-3022 2021-22 Wisste Discharge Riccords & Loads Tracking 2021-22 Wisste Discharge Riccords & Loads Tracking Indicates that discharges occurred 2021-22 Wisste Discharge Riccords & Loads Tracking Indicates that discharges occurred 2021-22 Wisste Discharge Riccords & Loads Tracking Indicates that discharges occurred 2021-2022 Wisste Discharge Riccords & Loads Tracking Indicates that discharges consumed 2021-2022 Wisste Discharge Riccords & Loads Tracking Indicates that discharges coursed 2021-2022 Wisste Discharge Riccords & Loads Tracking Indicates that discharges coursed 2021-2022 Wisste Discharge Riccords & Loads Tracking Indicates Tracking	
69.g.i	The unifice unit mattering endyinul subs must reduce their their before and critical from and critical from the control of their control of th			1						1	3	Part Compliance (High)	Modified recovered and hostoring Schools 2021 2022 2022 2022 2022 2022 2022 202	Net Of this low prepared in it Opports the subdivision the low and left he audic prints.  (In this low of change yards to provide the complete analytical value (i.e., and the control of change yards to provide the complete analytical value (i.e., and the control of change yards to provide the control of change yards (i.e., and the control of change yards of change yards of change yards) to the reconstruction of the provide yards of the provide yards (i.e., yards) and the section of any reddy (i.e., the reconstruction of the provide yards) and the section of the provide yards (i.e., yards) and the section of the provide yards (i.e., yards) and the provide yards (i.e., yards) and yards (i.e., ya
69 g.ii	The surface water monitoring be continued for a fur there two weeks following completion of the relation activities for the season or until field parameters have returned to baseline levels:			1						1	4	Full Compliance	Mildle fairs incommental Monitoring Sphododus 2021-2022. MIMDl bissous Freiter Charlos 2021-2022. 2021-22 Waste Stickheir gei Recent Sa. Losali Tinadaling. 2021-2021-202 Waste Stickheir gei Recent Sa. Losali Tinadaling. 2021-22 Waste Stickheir gei Recent Sa. Losali Tinadaling redicates that dischaeges connered. 25 to 27 January 2022 and 30 to 31 allaruary 2022 freen WMOI 89. The Operation advised "There was no floors, to MOM were sundied to do ton wooks of penalting suffer advisional Time was no floors, to MOM were sundied to do ton wooks of penalting suffer advisage Carlos and Foreign Science States."	
69.h	Measure total tasks of analysis (including lead and 2nd) from all controlled discharge activities entering MeM-Purt Rileur at Double SWOs or an alternate bcastion as agreed by the Department;			1						1	4	Full Compliance	2291 - 2291 CO (ITT late), Freat.  Frent immediated subject 2007/200005 Freat Begord dated 49 620021.  From all main subject ENV2000000 Freat Begord dated 49 620021.  Analytical results for 30000 for 28 and 31 is a 20021 cellulade short listed and 21 inc. and other mainfress executive for two microsofties po 22011 - 2200 CMT Data; Freat The situate secretarial with borror for that time period in discussed reliable the voltance in condition 64 g it.	

Authorisation Co	mpliance Workbook - Operator													
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement			farine Waters (Bing ong, marine sedments)			egetation & chabilitation (terrestrial, lversion & NOEF)	Vaste (general, mine rock, silings)	ommunity (local ndigenous & public)			Compliance Level		Comments 2022
69.1	Interpret the data acquired as part of the activity and its effectiveness, and report in the Operator's Annual EMR in accordance with Condition 9.	40		2 8	- 0		280	>=	0.2	1	4	Full Compliance	WBM Water & Environment report Surface Water Monitoring Bisport 2001722, McArthur Bow Milks and Bing Bost placeting Facility reminion 5 dated 504a;p3252.  SNR 2021-2022.  SNR 2021-2022 section 4.1.3 and the WBM/Water & Environment report Surface Water Monitoring Bisport 10221/202 interpret and report all data and results.  ENR 2021-2022 Section Surmany statutor 'Blasted on WBM's 'New volve of surface water.	
89.1										·	•	·	point 2012 - 2022 caccions Summing Visiolis backet on words i visiolot de same awar quality inventioning alla backerson i May 2014 and 20 April 2022. UMA continua to implammat illactivo contribuis harrians of harrians of harrians of the contribuisment receiving vasiers and a brillian operations. The review concluded that the bamilitatio and is and community visition of this Modrithus Bover continue to be protected from potential main derived impacts."	
70	The Operator is authorised to undertake water management trial in accordance with:											Refer to sub conditions		Future item. No trials have occurred.
	concepts detailed in the approved MMP, ensuring the trial is designed													Future item. No trials have occurred.
70.a	to manage and control all impacted surface water runoff in accordance with the Water Management Plan:		1								N/A	Not Applicable		
70.a.i	Irrigation of Treated Water - Open Woodland Irrigation:		1								NA	Not Applicable		Future item. No trials have occurred.
70.a.ii 70.a.ii	Irrigation of Treated Water – Phytoremediation; Lowering of surface water elevations – Evapotranspiration;		1 1								N/A N/A	Not Applicable Not Applicable		Future item. No trials have occurred. Future item. No trials have occurred.
	Sulfate Treatment System – Passive engineered wetland:	_									NIA		Indicators of Biogenic Water Treatment Processes WATER MANAGEMENT DAM dated	The Operator advised "Passive engineered wetland trials have not been completed
70.a.iv	Sulfate Treatment System - Active Bioreactor:		1								N/A	Not Applicable	15Dec2020, V.1 (before audit period)	because the Water Management Dam is already functioning as a passive water treatment wetland." The Operator advised "The addition of a potassium permanganate stage to the
70.av			1								NA	Not Applicable		gyptum plant means that the design, evaluation and construction of a pilot active bionactor is a lower priority. Initial design and evaluation for the active bionactor is expected to be initiated in 2023.
70.6	Detailed dissigns, where nominated in the approved MMP, are developed in accordance with the concepts outlined in the approved MMP, and ordersoid by relevant independent third party, prior to construction. At the conduction of the trials in Condition 70, the Operator must apply		1								N/A	Not Applicable		Future item. There were no relevant designs in the audit period.  Future item. No trials have occurred.
21	in writing to the Department for approval of full-scale implementation.		1							1	N/A	Not Applicable		
72	Water management using the Centre Pivot Irrigator is authorised:											Refer to sub conditions		Centre Pivot Irrigator was not in use in the audit period (is yet to be relocated to mine levee). It was decommissioned several years ago. Not operated in the 2020, 2021 or 2022 audit periods.
72.a	within the Mine Levee in accordance with concept previously approved, as defined in Schedule B:		1								N/A	Not Applicable		Centre Plied Irrigator was not in use in the audit period (is yet to be relocated to mine leviel). Not operated in the 2020, 2021 or 2022 audit periods.
72.b	adjacent to the TSF in accordance with concept presented in the approved MMP:		1								NA	Not Applicable		Centre Plint Irrigator was not in use in the audit period (is yet to be relocated to mine levee). Not operated in the 2020, 2021 or 2022 audit periods.
72.c	to be configured to maximise evaporation and minimise surface spray drift, surface runoff and infiltration into underlying natural soils.		1								N/A	Not Applicable		Centre Pivot Irrigator was not in use in the audit period (is yet to be relocated to mine levee). Not operated in the 2020, 2021 or 2022 audit periods.
Perimeter Run-Off Da 73	ms - S9600, SEP000, WERDO and EPROD The Operator is approved to develop SPROD and SEPROD in accordance with relevant documents defined in Schedule 8:		1								N/A	Not Applicable		Operator advised that SPROD and SEPROD were in use in the audit period but were constructed orior to the audit period.
74	The Operator is authorised to complete works to construct EPROD and WF900 in accordance with following:											Refer to sub		
	WHXXD in accordance with following:											Stater to sub		
74.a												conditions		
74.a.i	as previously approved and defined in Schedule B, ensuring that only benign material be used in the construction of the western embankment walt:		1								4	Full Compliance	Eastern Perimeter Runoff Dam Construction Report daked November 2021.  Eastern Perimeter Runoff Dam Construction Report Section 3 Embarkment Materials and Borrow Areas states in Table 3-1 the material requirements and it all indicated benign material.	
74.b	WPROD:											Refer to sub		
-	CWNOEF and NOEF West D Amendment, as defined in Schedule B	-				-	-	-		-	-	conditions	Western Perimeter Runoff Dam Construction and Commissioning Report	Completed before the audit period.
74.a.i	and		1								N/A	Not Applicable	(37649_Western PAF Runoff Dam As-Constructed Report_GHD_Rev0_170714). WPROD was completed in 2017.	WFROD was completed in July 2017 (before the audit period commenced) and independent Monitor sighted a completion report dated 14/u/2017.
74.a.i	WP9CO and Western Surface Water Management Design Update (CHD Memo), as defined in Schedule B.		1								N/A	Not Applicable	Nisistan Perimeter Runoff Dien Construction and Commissioning Report (37449_Western PAF Runoff Dien As-Constructed Report_GHD_RevO_170714). WP90D eas completed in 2017.	Completed before the audit period.  WPROD was completed in July 2017 (before the audit period commerced) and Independent Monitor sighted a completion report dated 1 4/4/2017.
75	The Operator must construct EFROD and WFROD in accordance with the following regime in the event groundwater dewatering is necessary:											Refer to sub conditions		The Operator advised "no groundwater deveatering was required for either WPROD or EPROD".
75.a	six hourly monitoring of field parameters for the first 24 hours of devalering. Should parameters not stabilise during the first 24 hours then six hourly monitoring must continue until stabilisation has occurred to versions. Cognitor Considering Research		1		1					1	NA	Not Applicable		The Operator advised "no groundwater dewatering was required for either WPROD or EPROD".
www.manori.compila	or securious - operator community Aspects													

13 Nov 2020 and 18 June	mpliance Workbook - Operator Condition/Requirement	Vir Quality (dust & sulphur lice(de, transport)	urface Water (River, reek, Artificial dams)	Aarine Waters (Bing long, marine sediments)	Sroundwater	oquatic fauna (Tish river)	regetation & cerus trial, cerus trial, liversion & NOEF)	Vaste (general, mine rock, allings)	community (local ndgenous & public)	Annitoring & Reporting	Score	Compliance Level	Evidence 2002	Comments 2022
75.b	field parameters must be taken daily following the first 24 hour period. Should parameters change more than 20% then the frequency must increase to every 12 hours until parameters have stablised:		1	2 10	1		0 20 0	Ĺ		1	NA	Not Applicable		The Operator advised "no groundwater deveatoring was required for either WPROD or EPROD".
75.c	field parameters must include pH, specific electrical conductivity (SEC), temperature, REDOX and dissolved oxygen;		1		1					1	NA	Not Applicable		The Operator advised "no groundwater dewatering was required for either WYROD or EPROD".
75.d	water samples must be taken and analysed at the commencement of dewatering at the end of the first 24 hours, and then weekly sampling and analysis of dewatering water for the remainder of the construction:		1		1					1	NA	Not Applicable		The Operator advised "no groundwater dewatering was required for either WPROD or EPROD":
75.e	additional sampling and analysis must be undertaken if there is a substantial change in field parameters (approximately 30%):		1		1					1	NA	Not Applicable		The Operator advised "no groundwater dewatering was required for either WPROD or EPROD".
75.f	analysis must include: specific electrical conductivity (SEC), major ions (Ca, K, Mg, Na, Cl, CO3, HCO3 and SO4), Al, As, Cd, Co, Cu, Fe, Mn, Ni, Pb, Se and Zr;		1		1					1	NA	Not Applicable		The Operator advised "no groundwater dewatering was required for either WPROD or EPROD".
75.g	field parameters and samples for analysis must be taken from the dewatering source, not the receiving storage;		1		- 1					1	NA	Not Applicable		The Operator advised "no groundwater dewatering was required for either WPROD or EPROD".
75.h	if flow meters fall, then dewatering must cease until they are repaired or replaced:		1		- 1					1	N/A	Not Applicable		The Operator advised "no groundwater dewatering was required for either WYROD or EPROD".
75.1	field water quality parameters, flow meter volumes and laboratory analysis must be submitted to Department on a monthly basis;		1		1					1	NA	Not Applicable		The Operator advised "no groundwater dewatering was required for either WPROD or EPROD".
75.j	any indication of fracturing and/or caverns (Karstification/dissolution features) must be recorded during logging along with water strikes and estimated yields during drilling:		1		1					1	NA	Not Applicable		The Operator advised "no groundwater dewatering was required for either WPROD or EPROD".
75.k	Construction report is relating 0.4 and 0.5 data enters and by the 1.5' must be provided by the beginner top for its other personation and operating from the other personations and operation within 30 days of construction being complaind.									1	N/A	Not Applicable		Constitute 73 was this subcondition (including Tail) are M.A. in there was no ob- dimenting.  Diff awards that he invent of automation 73 k. in for the submission of constructions report with the 20 days of construction compatibility. Interpretative of whether dissurances in the countried. The construction is not first stages of disouthpring the 1990-Construction report.  25.5 If the inventor of the construction is the first stages of disouthpring the Construction report.
	From the date of authorisation of the Overburden Management Project, tailings must be managed in accordance with the following:											Refer to sub conditions		
76.a	budigeosted only in Cell 1, Cell 2 or combined Cell 1 and Cell 2:							1			4	Full Compliance	MARK 15F Charterin's Report - March 2021 to May 2021.  MARK 15F Charterin's Report - Nav 2021 to May 2021.  MARK 15F Charterin's Report - Nav 2021 to Mayar 2021.  MARK 15F Charterin's Report - September to Reventue's 2021.  MARK 15F Charterin's Report - Reventue's 2021 - March 2022.  Review of the quarteriny reports relevant for the majority of the audit period (i.e. the report that covers Age 2022 is not available) shows that tailings were deposited in Cult 1 and (ii.e.) and (iii.e.).	
76.b	ary construction of tailings lift, as approved in Condition 79, be reviewed and endorsed by independent oversight requirements in Condition 48 and 50 or an alternative independent qualified and experienced third party approved by the Department in writing:							1					Rufer to compliance scored in conditions 48 and 50.	Bufer to compliance scored in conditions 48 and 50.
76.c	construction of the TSF lifts is undertaken in accordance with a valid AAPA certificate:							1			4	Full Compliance	Aboriginal Cultural Heritage Management Plan version 1.1 dated 14 June 2022.  Aboriginal Cultural Heritage Management Plan advises that C2004/083 Variation to C2004/013 D89/199-90/1015.1 is in place for the TSF.	
76.d	To 19 Segaph interception funds in fully operatorally and of December 2000.							1			4	Full Compliance	SMOTH SEARCH by Specific and Search security of Specific and Spec	This friedge-point former was alreading by Rodynater for 1 <sup>th</sup> the construction of the Augustus Cost Interface to the cost of cost of the Augustus Cost Interface of the Cost Interface and Cost Interface

Authorisation Co	mpliance Workbook - Operator											
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Quaity (dust & sulphur dioxide, transport)	Marine Waters (Bing Bong, marine sedments)		Vegetation & Rehabilitation (terres Fial, diversion & NOEF)	Waste (general, mine rock, tallings)	Community (local indigenous & public)			Compliance Level		Comments 2022
76.0	In the overift that future review of the design or as-built shructure by independent experts require additional matters to be addressed, the Operator longsther with the ICE must provide a written response that justifies the existing design or proposes an alternate design to the satisfaction of the Department.					1		1	NA	Not Applicable	The Operator advised TAMM 195 Civil Engineer has confirmed that during the reporting portion, no dissip interpretace concretion once any design admissible or skied. "However, design changes at the request of MMM were approved by the ICE. There were no design changes at the request of independent experts.	
ISE Cell 1 and 2 Const	From the date of authorisation of the Overbraden Management Project, the Operator is approved to develop TSF Cell 1 , Cell 2 and Cembined Cell 1 and 2 lifts in accordance with:					1			4	Full Compliance	MBM TSF Quarterly Report - March 2021 to May 2021. MBM TSF Quarterly Report - America 2021 to August 2021. MBM TSF Quarterly Report - September 10 November 2021. MBM TSF Quarterly Report - September 10 November 2021. MBM TSF Quarterly Report - December 2021 - March 2022. Chry the TSF Call 2 IRTs were developed in the audit period based on the quarterly reports	
77.a	McAirmar Benr Menny Py Ltt. Tailreg. Storage Frailing. Octope Dovelagment – Life of Minn Plan. May 2011, as differed in Schendale B.					1			4	Full Compliance	invary 2018 MPP  warry 2018 MPP provided in Special of Meet Per values 1, 12(4) MPH for 5 to 10 F (FF SCH MPR [CD, 2017) is provided in Special of the Supplementary SMO ES and provided in Special of the SMO of	Mith respect to the descreamy ballment that III stages hought in the Authoritation and the produce disciple (cel 2 stage), which allow the health allowed the Commission of the Commission of the health allowed the Commission of the Commission of the low sufficiency on those the Authoritation regulated.
77.b	the approved MMP for the following stages:									Refer to sub conditions		
77.b.ii	Cell 1 Raise 4 – 10,056.0 mRL:					1			N/A	Not Applicable		Historic item. Works completed before the audit period.
77.b.ii	Cell 1 Raise 5 – 10,059.0 mRL:					1			NA	Not Applicable		Historic Item. Works completed before the audit period.
77.b.ii	Cell 2 Raise 6 - 10,061.0 mRL:					1			N/A	Not Applicable		Historic Item. Works completed before the audit period.
77.b.iv	Cel 2 Manu 7 - 10 (Sel 3 mill)					1			4	Full Compliance	Mod 17 Security Super- Security Super- Security Super- Super- Security Super- Security Super- super- Security Super- Security Super- super- Security Super- super- Security Super- Security Super- super- Security Super- sur- Security Super- Security Security	ISBM MY Guarden's legact is selected to the contract 2011 under it 19 (Ed.)
77.b.v	Combined Cell 1 and 2 Rake 1 – 10,062.6 m/R;					1			N/A	Not Applicable		NUA due to lift heights no longer being consistent with approved dissign.  With respect to the descreancy between the lift stages/height in the Authorisation and the approved design for cell 2 stage.), which is above this height all early, I'll arisked "Delegate descided formal record of descrepancy on files sufficient." - no change to Authorisation required.
77.b.vi	Combined Cell 1 and 2 Raise 2 – 10,063.8 mRE;					1			N/A	Not Applicable		N/A due to lift heights no longer being consistent with approved design.  With respect to the descreancy between the lift stages/heights in the Authorisation and the approved design for cell 2 stage 7, which is above this height already, EV and Authorisation and the cond of discrepancy on files sufficient - no change to Authorisation required.
77.bvii	Combined Cell 1 and 2 Rake 3 – 10,065.0 m/R;					1			N/A	Not Applicable		NUA due to lift heights no longer being consistent with approved dissign.  With respect to the descreancy between the lift stages height in the Authorisation and the approved design for cell 2 stags. J. which is above this height all leady. IN IT advised "Delegate design for cell 2 stags.) A which is above this height all leady. IN IT advised "Delegate designed format record of discrepancy on files sufficient" - no charge to Authorization required.
77.b.vii	Combined Cell 1 and 2 Raise 4 – 10,066.2 mRL;					1			N/A	Not Applicable		No works undertaken.

Authorisation Co 13 Nov 2020 and 18 June 2021 Authorisation Condition No.	impliance Workbook - Operator  Condition/Requirement	Ar Quality (dust & sulphur	Surface Water (River, Creek Artificial dams)	Marine Waters (Bing Bong, marine sediments)	Groundwater	Aquatic fauns (fish river)	Vegetation & Rehabilitation (terres tial, diversion & NOEF)	Waste (general, mine rock, tailings)	Community (local indigenous & public)	Monitoring & Reporting	Score	Compliance Level	Evidence 2022	Comments 2022
77.b.x	Combined Cell 1 and 2 Raise 6 – 10,068.6 mRt.							1			N/A			No works undertaken.
	Combined Cell 1 and 2 Raise 7 – 10.069.8 m/st.											Not Applicable		No works undertaken.
77.b.xi	Combined Cell 1 and 2 Raise 8 – 10,00 v.a.misc.							1			N/A	Not Applicable		Movembrushin
77.b.nli								1			N/A	Not Applicable		
77.b.xiii	Combined Cell 1 and 2 Raise 9 – 10,072.2 mRL:							- 1			N/A	Not Applicable		No works undertaken.
77.b.siv	Combined Cell 1 and 2 Raise 10 – 10,073.4 mRL;							1			N/A	Not Applicable		No works undertaken.
77.b.w	Combined Cell 1 and 2 Raise 11 – 10,074.6 mRt;							1			N/A	Not Applicable		No works undertaken.
77.b.mi	Combined Cell 1 and 2 Raise 12 – 10,075.8 mRt;							1			N/A	Not Applicable		No works undertaken.
77.b.xxii	Combined Cell 1 and 2 Raise 13 – 10,077.0 mRt;							1			N/A	Not Applicable		No works undertaken.
77.b.xviii	Combined Cell 1 and 2 Raise 14 – 10,078.0 mRt.							1			N/A	Not Applicable		No works undertaken.
78 TSE Managormere	For each IF. The Operator must ensure detiletide design follow the approved Mochine New Minnigh "pt. 114 (miles, Storage Tacitly Rasing General Specification for Design and Construction: with oversight provided by the ICE consistent with Condition 48.							1			NA	Not Applicable		Not applicable as no dissign reports were bound in the audit period.  TSF cell 2 Staps 7 - Raise 19-58, 1005-th Detailed Dissign Report states "Commetric guarantenies for the proposal cell 2 Staps 7 - Raise are given in Table 2-3 and are consistent with the currently approved TSF LOM Film and the General Specification for Design and Community (approved TSF LOM Film and the General specification for Design and Community).
39	The Operation must operate and medition the TSP in accordance with prevention of the death TST Operations Manifestures and Surveillance, mental, emiliting.							1			4	Full Compliance	[Julips States] a failty - Operation, Malanierus and Sarvellance MM VI Custini ja kiport - Operation 2011 - Manch 2012 VI Custini ja kiport - Operation 2011 - Manch 2013 VI Custini ja kiport - Operation 2011 - Manch 2013 VI Custini ja kiport - Operation 2011 - Manch 2013 VI Custini States - Sarvella 2013 VI Custini States - Sarvella 2013 VI Custini States - Sarvella 2013 VI Custini States - Vi Custini States - Sarvella 2013 VI Custini States - Vi Custini States	[19 CMS Manut status in lieu 8.2 - 17 (Smill Operating Vieranders Visitation behalf up along the print of earl of an observed. The Operation and American Smill operation of the observed of the Operation of the Operation of the Operation Figure 3 - 22 of the Obdit Manual aid skip with a density largest range of 50 - 55 %, consideration has Model Millings, Sterage Foolilly Chartlerly Report Exploration 2021 - Nevertein 2021.
79.a	no discharge of water into the TSF unless											Refer to sub conditions		
79.a.i	It is not contained within the fallings shrown which is at normal operational stury densities, or							1			4		ISSU 1971 Carelany Inject - More 2021 to May 2021 MOST 1971 Carelany Inject - More 2021 to May 2021 MOST 1971 Carelany Inject - Systemate State Most office 2021 MOST 1971 Carelany Inject - Systemate 2021 MOST 2021 Carelany Inject - Systemate 2021 MOST 2021 Carelany Inject - Systemate 2021 MOST 2021 Carelany Inject - Systemate 2021 - November 2021 was MOST 2021 Carelany Inject - Systemate 2021 - November 2021 was and a systemate 2021 Carelany Inject - Systemate 2021 - November 2021 was and a systemate 2021 Carelany Inject - Systemate 2021 - November 2021 was and a systemate 2021 Carelany Inject - Systemate 2021 - November 2021 was and a systemate 2021 Carelany Inject - Systemate 2021 MOST 2021 MOS	
79.68	It is endorsed by the TRB;							1			4	Full Compliance	MidMITIB Document Comment Tracking Register VExis Blood Water 20-10-02_Final Operator advised YEXX discharge-caused on 26 Jans 2021, no further discharge was completed nor planned. Evidence provided is endorsement from the ITIBS for PEXX water transfer to TSF.*	
79.b	all falling are displaced ask animity to allow yraper beaching and dying believes deposition cycles.							1			4	Full Compiliance	MOST DE CAMPON PAPER 1 MARS 2021 TO MAN (2021) MOST DE CAMPON PAPER 1 MARS 2021 TO MAN (2021) MOST DE CAMPON PAPER 1 MARS 2021 MOST DE CAMPON PAPER 2021 MOST DE CAMPON	

Authorisation Co	ompliance Workbook - Operator												
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Quality (dust & sulphur diceide, transport)	Surface Water (Rivor, Greek, Artificial dams)	Marine Waters (Bing Bong, marine sediments)		Vegetation & Rehabilitation (terrestrial, diversion & NOEF)	Waste (general, mine rook: tailings)	Community (local indigenous & public)			Compliance Level		Comments 2022
79.c	surface work evoks are markationed in the 30° such that they do net- come into confact with the embedment informat walks.		1				1			4	Full Compiliance	(19) Extracts - Industries Imposition (mm 2019/2012).  1) Extracts - Industries Imposition (mm 2019/2012).  1) Extracts - Industries Imm 2019/2012 (mm 2019/2012).  1) Extracts - Industries Imm 2019/2012 (mm 2019/2012).  1) Cold Manual Levin Carl 1 - Industries Imm 2019/2012 (mm 2019/2012).  1) Cold Manual Levin Carl 1 - Industries Imm 2019/2012 (mm 2019/2012).  1) Assert Anderson Carl 1 - Industries Imm 2019/2012 (mm 2019/2012).  1) Assert Carl Annual Carl 1 - Industries Imm 2019/2012 (mm 2019/2012).  1) Assert Carl Annual Carl 1 - Industries Imm 2019/2012 (mm 2019/2012).  1) Assert Carl Annual Carl 1 - Industries Imm 2019/2012 (mm 2019/2012).  2) Assert Carl Annual Carl 1 - Industries Imm 2019/2012 (mm 2019/2012).  2) Assert Carl 2 - Industries Imm 2019/2019/2012.  3) Assert Carl 2 - Industries Imm 2019/2012.  4) Assert Carl 2 - Industries Imm 2019/2012.  5) Assert Carl 2 - Industries Imm 2019/2012.  5) Assert Carl 2 - Industries Imm 2019/2012.  5) Assert Carl 2 - Industries Imm 2019/2012.  6) Assert Carl 2 - Industri	(the Operator achieved. The 15's made is weak as membrated via remote interests) included the Operator achieved the 1586 LTS For extending the Company to the particular the Company of
79.d	phratic soften is managed to send compromising the integrity of the ordinatescent.									4	Full Compliance	Lange Barry and Jan Coperative. Maintenance and Eurolitece Manual Principles and Indiana Mandal Principles and Indiana Manual Principles and Indiana Manual	
80	The Operator must provide quarterly to the Minister a written status ingort on the seepard and management of seepage from the TSF, including the following:		1		1		1		1	4	Full Compliance	Famil Operator to Bill Tudget LMMM   195 Charterly Report   March 2011 In Mary 2021 Family Operator Aug 11. Famil Operator to Bill Tudget LMMM   195 Charterly Report   June 2021 to August 2022   Famil Operator SID (1950)   1950   1950   1950   1950   1950   1950   1950   Dark Garden Sid March 2001   1950   1950   1950   1950   1950   1950   1950   Dark Garden Sid March 2001   1950   1950   1950   1950   1950   1950   1950   Dark Garden Sid March 2001   1950   1950   1950   1950   1950   Dark Garden Sid March 2001   1950   1950   1950   1950   1950   Dark Garden Sid March 2001   1950   1950   1950   1950   Dark Garden Sid March 2001   1950   1950   1950   Dark Garden Sid March 2001   1950   1950   Dark Garden Sid March 2001   1950   1950   Dark Garden Sid March 2001   Dark Garden Sid March 2001   1950   Dark Garden Sid March 2001   Dark Gar	The Open are uter-that a Documber 2021 - Mact 7: 2522 guarterly report [reshold Obcomber 2021 of Estivaty 2022) to light the reporting with the clouding year. This was discussed with DET at a TMC modifing and acceptately DET.
90.a	water books in the Edf:		1				1		1	4	Full Compliance	SAMISTY Country by Specific September 20 Newmorks 2221.  MARI Fallow Showing A Country Specific September 2021 - Newmorks 2221.  MARI Fallow Showing A cells (Souring A Specific September 2021 - Newmorks 2221 - Newmorks 222	

Authorisation Co	ompliance Workbook - Operator												
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement			Marine Waters (Bing Bong, marine sediments)		Vegetation & Rehabilitation (terres trial, diversion & NOEF)	Waste (general, mine rock, tailings)	Community (local indigenous & public)			Compliance Level		Comments 2022
82b	of more tray distributed with the coupup (relating periodical and environmental anomalogy) periodical and environmental anomalogy		1		1				1	4	Full Compliance	Model For County Inspect - Name 2 (2011 Inspect 2012)  Model For C	Seages from the Call 3 Spikesy Seage (She spikesy Select accessed on the Call 2. Spikesy Featility Called Seal and an 4 the Selection of the option general con- lege of the Called Seal Seal Seal Seal Seal Seal Seal Seal
80.c	floor cable of each seep.		1		1		1		1	4	Full Compliance	SIGHT ST CAMPA SIGHT 1-MAPS 2017 IN May 20	SSM Target States yet a SSF Quarter by Speed September 2027 - Resource 2027 Contract 2.2.2 data. "Scriptor place speed September 2027 - Resource 2027 Contract 2.2.2 data." Scriptor place yet speed SSF Quarter by States 2027 SSF QUARTER SSF QUA
80.d	idiactions undertaken during the quarter associated with this sospage and management of failings:		1		1		1		1	4	Full Compliance	MMM 195 Counterly Report 1-March 2201 to May 2021 MMM 195 Counterly Report 1-March 2201 to May 2021 MMM 195 Counterly Report 1-September to Revember 2021 MMM 195 Counterly Report 1-September to Revember 2021 MMM 195 Counterly Report 1-Describer 2021 "March 2022 Matchesed 8. 155 Recommendation in this various and Action Register of the MMM 195 Astachesed 8. 155 Recommendation in this various and Action Register of the MMM 195 Causterly Report 1-Describer 2021 - March 2022 recludes the actions undertaken in the quarter.	Attachment 6: 158 faccommendation instruction and Action Register of the MMAL SC Countries (Register). Counterle 2013 - 146th 7022 includes the oricitors that were due March 7022 but were for exception. Office faccommendation instruction and Action legister whosel for actional countries in the 15F Recommendation instruction and Action legister whosel for actions of action for the due date. Where actions are not compliant by the due date stating "overdate" action that "Accessing all oricinos coince of shading in the 15F Recommendation Instruction and Action Register may prove height.
80.a	all actions planned for the neal quarter associated with sepage and management of Talling.		1		1		1		1	4	Full Compliance	MARCH TO Custarity Report - Morth 2021 to May 2021 MARCH TO Custarity Report - Morth 2021 to May 2021 MARCH TO Custarity Report - Amount 2011 Anguage 2021 MARCH TO Custarity Report - Decorates 2021 - March 2022 MARCH TO Custarity Report - Decorates 2021 - March 2022 MARCH TO Custarity Report - Decorates 2021 - March 2022 MARCH TO Custarity Report - Decorates 2021 - March 2022 MARCH TO Custarity Report - September 2021 MARCH 2023 MARCH TO Custarity Report - September 2021 MARCH 2023 MARCH 20	
Geochemical, Geoteci	and and hydrocological Assessments and Investigation Drilling. (Inv Operator is authorised to undertable Drilling Investigations as outlined in relevant approved plans defined in Schedule B and approved MMP, ensuring adherence to industry best practice:				1					4	Full Compliance	EM8 2021-2022 EM8 2021-2022 states. "All drilling during the reporting puriod was undertaken in accordance with the January 2020 MMV."	

	Workbook - Operator  Condition/Requirement	Air Quality (dust & sulphur dioxide, transport)	Surface Water (River, Creek, Artificial dams)	Marine Waters (Blng Bong, marine sedments)	Groundwater	Aquatic fauna (fish river)	Vegetation & Rehabilitation (terres trial, diversion & NOEF)	Waste (general, mine rock, tailings)	Community (local indigenous & public)	Monitoring & Reporting	Score	Compliance Level	Evidence 2002	Comments 2022
81.1	mother to delet coupled for each red diversimation and guarantees				1			1		1	4	Full Compliance	MARTION 2022 data "An Elling during the reputing print due under Hallen in New York (1997) and "An Elling during the reputing print due under Hallen in Hall and "An Ellin during the Control of the Co	LBA 2013 2013 calls with 4.1 Facehoral animament Deling control of the control o
81.8	to characterise available construction and rehabilitation materials, available within the Mine Lovee Wall (including the pit) and areas surrounding the TSF and NOEF;						1			1	4	Full Compliance	EMR 2021-3052.  EMR 2021-3052 states "All drilling during the reporting period was undertaken in accordance with the January 2000 MMP."	
81.iii	to enable geochemical assessment of the overburden emplacement facility and underlying sediments;				1			1		1	4	Full Compliance	EMR 2021-2022.  EMR 2021-2022 states "All drilling during the reporting period was undertaken in accordance with the January 2000 MMP."	
81.hv	to obtain hybric quotogo in information associated with pile inflows, groundwater leps in list to be underly count of an air insulation of additional monitoring bones to inform site management.				1					1	4	Full Compliance	ISAN 2017-2022.  SERVICE AND	
82	The Cign after must ensure the distributions from the distribution from the distribution of the consistency						1				4	Full Compliance	Fairs and Notangamon Pan RV 170000 189, 2211 years 2 2011 HORDICOLOGOUS (DISSILING AND FILE COMPANY) 2011 HORDICOLOGOUS (DISSI	completed on an existing drillpad at the Teena Prospect. This hole remains open
83	Our sex includes data from the diffing most taking and adultation to the Advancer on request and reporting in the Operator's DMR.									1	3	Part Compliance (High)	18-202-13 (2017) Appendix A. 2013-1012 Dissipation of the Company	Noncepacin are made in health precident the Minister for characterisation and months with 1992 and 199
84	All documentation relating to the investigations undertaken is to be made available to the Department on request.				1			1		1	NA	Not Applicable		No request was made by the Department for documentation related to the investigations.

13 Nov 2020 and 18 June	impliance: Workbook: - Operator  Condition/Requirement   Ar Quality (dist & sufebur	diceide, transport)	Surface Water (River, Creek, Artificial dams)	Marine Waters (Bing Bong, marine sediments)	Groundwater	Aquatic fauna (Fish river)	Vegetation & Rehabilitation (terres trial, diversion & NOEF)	Waste (general, mine rook, tailings)	Community (local indigenous & public)	Monitoring & Reporting	Score	Compliance Level	Evidence 2022	Comments 20022	
85 Employation	the proposed adjustment of total socially adjustments required under Condition 11, are provided in the immultipliarend Closure Pilan report to the substaction of the Department.							1				4	Full Compliance	DOST HYBROCICLOCOCK DISTLINE, AND FIELD CAMPANICK Usins "Shabilitation of the tump pils inviked their stages:  1. Downlaring of the sump pils and deployated go nor quality water. Water was disposed or their dost-parked was with probate grant on sold of shability and and 2. Demonstrated and disposal of shability profilers: and 1. Entiting of excessible has analysed of ground. To minimize diskurbanco, the pils were trified using the displaying scarce and material."	
86	The Operator must ensure that:												Refer to sub conditions		
86.3	works are undertaken in accordance with management systems detailed in the approved MM-P:											4	Full Compliance	2011 Coding D Silley (HLD BHOW) vervan 1.156/2020  All Austoneser 3. 400.00 C. Sed all Durench D Silley Opposit DSM File 166.0000428  Block Logian of Association C. 400.00 C. Sed all Durench D Silley Opposit DSM File 166.0000428  Block Logian of Association Codinging Connectant DSM LHD CE HEBY, 2010's and March 2022.  Block DSM 2020.00 C. Sed all S	Lineary 2020/MSP 1284; "Chileving the competition of the diliting organ and print to the net issued," in Michinection with the survice placed and backfilled with Chile MIT Competed ground with the legisled with Chile MIT Competed ground with the legisled support and the object of the legisled survice with the legisled support and the legisled survice with the legisled survice and the distinguishment and contribution survice with the legisled survice with the legisled survice with the legisled survice with the legisled survive with t
86.b	an environmental management plan is in place that addresses:												Refer to sub conditions		
BADI	demail au and storage (r.g. hydrocatons, a dilangillubs).								1			4	Full Compliance	Na Association (1, 1822) E. K. statistismost Dissiparity and Eric R. 60000000.  The design of the design perform of 1, 200000000000000000000000000000000000	
85.b.ii	orose and selever control			1								4	Full Compliance	Equipment (management (management) (manageme	Scotch 1.13 of his Equipment Management Principle Travelly to Barriery and Control Scotch 1.13 of his Equipment Management Principle Travelly and the Mindreg and and th
86.b.ii	dark		1									4	Full Compliance	Special Residence (1997, 1997,	Socion 3.3 of the Egistation Management Plan up, "Cartrick to meminise artherin duci".

Authorisation Co	mpliance Workbook - Operator										
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Quality (dust & sulphur	creek, Artificial dams) Marine Waters (Bing Bong, marine sedments)		Vegetation & Rehabilitation (terrestrial, diversion & NOEF)	Waste (general, mine rock, tailings)	Community (local Indigenous & public)		Compliance Level		Comments 2022
86 b. lv	seculated risks common for explanation works:							4	Full Compiliance	Equation Management Park VS-100001 May 221. Version 2. Management Park VS-100001 May 222. Version 2. May 222. May 222. Version 2. May 222.	The are control for when who common has because the histograms of the department of
86.c	rehabilitation is undertaken for locations not needed for further use;				1			N/A	Not Applicable	The Operator advised Their triggered. The 11 did thicks correptated in 2021 are within the Miles Levoo Wild and final stage footpast. According to the Experiation Management plan these holes don't require rehabilitation as the lund will be disturbed as part of future git shage developments. One dismortal fines was completed on an existing diffusion and for final prospect. This hole remains open and the driftpast still developed, as it is required for additional opinion of milestics.	
86.d	a rehabilitation report including details regarding the status of dishutance rehabilitated drift heles and the basis for the proposed adjustment of bulks occurryly in accordance with Conditions 10, 11 and 12, so the satisfaction of the Department.				1			N/A	Not Applicable	The Operator advised *Not Yiggared. The 13 driffholes completed in 2021 are within the Mine is one Will and final-stage footprint. According to the Exploration Management plan these behind both region in rehibilitions in the behind soll bed better bette approximate from Stage developments. One claimon frole was completed on an existing diffligat at the Tenna Prospect. The host remains open and this driftipad still developed, as it is required for additional exploration diffiledes.	
Non-mineral Waste M 87	Properties ( The Operator is authorised to complete works to prepare and construct a Constrained Waste Facility (CWF) for management of general, contaminated and putrescible wastes, in accordance with:								Refer to sub conditions		CWF has not been constructed. The operator currently investigating needs and priorities for this and other infrastructure at the same location.
87.a	concept designs presented in the document entitled McArthur River Mine Mining Minagement Plan Amendment, January 2019, as defined in Schedule B. ensuring detailed designs:					1		N/A	Not Applicable		CWF has not been constructed. The operator currently investigating needs and priorities for this and other infrastucture at the same location.
87.a.i	follow the approved concepts for the facility (including 100 year ARE flood immunity, CCL and protective armour, drainage works and biosecurity control):					1		N/A	Not Applicable		CWF has not been constructed. The operator currently investigating needs and priorities for this and other infrastructure at the same location.
87.a.i	the structure design and construction is undertaken in accordance with independent oversight consistent with Conditions 48 and 50;					1		NA	Not Applicable		CWF has not been constructed. The operator currently investigating needs and priorities for this and other infrastructure at the same location.
87 a II	include allowances for the installation of an adequate number of monitoring bores at suitable locations to monitor the environmental performance of the structure unithrespect to containning scopping. Those monitoring locations must be integrated and reported within the site-wide water monitoring requirements.			1		1		N/A	Not Applicable		CWF has not been constructed. The operator currently investigating needs and priorities for this and other infrastructure at this same location.
88	The Operator must ensure the non-mineral waste facility, landfill or equivalent previously in use is rehabilitated following approval by the Department of a rehabilitation plan.					1		N/A	Not Applicable		Future Item. Still is use.
Ruhabilitation Trials 89	The Operator is authorised to undertake the following rehabilitation trials, in accordance with concepts defined in relevant documents in Schedule B and the approved MMP:								Refer to sub conditions		In addition to the trials specifically listed in this condition, EMR 2021-2022 SECTION 2.4.3 discusses the NOSE surps-Scale West AB Rehabilitation Irial. As the condition does not state these are the only approved trials this is considered compilant.
89.a	Construction Test Pads (CIP) on NOEF West stage:				1	1		N/A	Not Applicable	EMR 2021-2022  EMR 2021-2022 Sectoin 2.4.4.1 states "This trial was effectively completed in the 2020/2021 reporting period".	Was completed in the previous audit period.

13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Quality (dust & suphur	dicados, transport) Surface Water (Rivor, Greek, Artificial dams)	Marine Waters (Bing Bong, marine sedments)		Vegetation & Rehabilitation (terrestrial, diversion & NOEF)	Waste (general, mine rock, tailings)	Community (local indigenous & public)			Compliance Level		Comments 2022
89.b	PMISS Collams Grover System for formance on MESS Southhead stage.					1	1			4	Full Compliance	isolary 2010-08-09. MEXECT 2012. MEXECT 2012	barriers. PAF (RE) was selected for the cover system trial because it represents the
89.c	Mine Levee revegetation.					1	1			NA	Not Applicable		The Operator advised that this trial will not be proceeding. A trial has been identified as not required and the Operator intends to monitor the revegetation on the NOEF itself (i.e. rather than doing a trial on the love
90	The Operator must ensure all contaminated runoff is contained and managed within the water management circuit and as detailed in the Water Management Plan.		1							4	Full Compliance	EMR 2021-2022.  Trials are all on the NOEF that drains to the water management system.	The Operator advised that the NOEF rehab trial area runoff all drains to within the on site water management system.
Bing Bong Loading Fa	Dredging activities at the Bing Bong Port Facility are authorised, subject to:										Refer to sub conditions		
91.a	submission to the department of a Dredging and Dredge Spoil Management Plan;			1						N/A	Not Applicable	Surface Water Monitoring Armual Report 2021–22 (EMR: Appendix O). Surface Water Monitoring Armual Report 2021–22 states "Dredging was last completed in 2013."	No driesting his occurring in the audit period. Submission of a Driesting and briedge Spoth Management Plan is expected in O4 2022. Driedging is articipated in 2022.  Dredging was undertaken by Nathan Stev Rissources in the audit period under accrowsh not related to the Oceanior.
91.b	approval of the Plan by the Department prior to commencement of disadging.			1						NA	Not Applicable	Surface Water Monitoring Annual Report 2021-22 (EMR-Appendix O): Surface Water Monitoring Annual Report 2021-22 states "Dredging was list completed in 2013."	Japprovsis not related to the Operator.
92	Color than Infrareduction (Infrareduction of the McArthur River Mine site (including 88LF) must be undertaken in accordance with requirements in Schedule D and reported as part of Condition 9.								1	4	Full Compliance	EMR.2021-2022	EMR 2021 - 2022 does include BBLF. Additional evidence is provided under the individual conditions from Schedule D.
Adaptive Minageme	Within 12 months of the date of authorisation of the Overburden Management Project, the Operator must submit a revised AMP as required under Conditions 45.								1	4	Full Compliance	Letter DTT to Operator subject Re: MRM Amended Adaptive Management Plan (November 2021) confirmed approval.	The Operator submitted two iterations of the AMP as stated below, which complies with the 12-month timeframe under Condition 93:  * Amended AMP (version: 31 March 2021, AMP-Q) and supporting information—submitted 15 in an 2021.
	The revised AMP must:										Refer to sub		Amended AMP (version: 1 October 2021, AMP-D) and supporting information - submitted 13 November 2021.
94 9	address the comments from the Independent Monitor or independent third party review of the draft AMP and ensuring									4	conditions Full Compliance	Letter DITT to Operator subject Re: MRM Amended Adaptive Management Plan (November 2021) confirmed approval.	Condition 45 is not required until 18 months from 13Nov2020 (13May2002) so was not required in the audit period.
	compliance with Condition 45; be consistent with the AMP required under the Waste Management and Pollution Control Act 1998 and Environment Protection and									-	Tartarparte	The AMP is the same document that is submitted to DEPWS under the WDL although some appendixes (e.g., Ruhabilitation Flori) are not relevant to the WDL and therefore no	Submitted to DEPWS as part of WDL requirement on 1 Oct2021 and was submitted
94.b	Biodiversity Conservation Act 1999;									4	Full Compliance	submitted to DEPWS. The AMP is therefore consistent (although appendices submitted are not identical) and compliant with the requirements of this condition.	OBS: Reference in this condition to Wikste Management and Pollution Control Act 1998 should be Water Act 1992.
94.c	be reviewed by a Department approved independent third-party at the discretion of the Minister;									N/A	Not Applicable		The Minister did not require a review by a Department approved independent third-party in the audit period.
94.d	be approved by the Minister:									N/A	Not Applicable	Letter DITT to Operator subject Re: MRM Amended Adaptive Management Plan (November 2021) confirmed approval.	
94.0	once approved, be implemented in full.									N/A	Not Applicable	provinces Aug 1 (corn in page door.  Emmi stamission for Operator to DETT (Mohr) (DETT Data CE) dated 1980x2021.  Eather DETT to Operator subject the 1886 Amended Adaptive Management Plan (November 2021) (confirmed approval after the audit portiod).	Fordance of Implementation already is evident as stated in the email submission Operator to DTT (MRM, IDTT Data CLT) alsed 1786-2021 "The frequency of Linuxis sodement reapping at FSDs, 1579 and FSD bits been beneated to quarterly, as required under Level 2 to 6 the fluxels endment TARP outlined in Table 8 of the Adaptive Management Files (Schotz 2021 version). Favails ediment results from September 2021 have been provided: "

Authorisation Compliance Workbook - Operator

Authorisation Co	ompliance Workbook - Operator													
		ā												Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	vir Quality (dust & sufp	indice, iransport) urface Water (River, mak, fertificial dams)	Aarine Waters (Bing long, marine sedment			fegetation & tehabilitation (terres tri liversion & NOEF)	Vaste (general, mine n ailings)	ommunity (local ndigenous & public)			Compliance Level		
95	Any material changes to the AMP required by Condition 94 must be re- approved by the Minister.				Ĭ	Ì	ن يا ر	_		Ĺ	4	Full Compliance	The Operator has submitted multiple AMPs to DITT and is yet to receive approval.	The AMP submitted as part of the OMP submission was approved 13Nov2000. Subsequent versions have not been approved by DITT at the time of the audit. However, they have been submitted by the Operator for approval by DITT.
Mine Closure	From the date of authorisation of the Overburden Management													Future item. No MMPs in the audit period.
96	Project, the Operator must submit an updated Mine Closure Plan with each MMP that builds upon the closure concepts defined in the Overburden Management Project.						1				NA	Not Applicable		
97	The Mine Closure Plan required under Condition 96 must:											Refer to sub conditions		Future item. No MMPs in the audit period so the trigger for the Mine Closure Plan has not occurred.
97.a	detail how key mine domains will be rehabilitated to achieve the Overburden Management Project closure objectives:						- 1				N/A	Not Applicable		Future item. No MMPs in the audit period so the trigger for the Mine Closure Plan has not corrurted
97.b	address outcomes of the reviews by independent technical and closure panels in accordance with Condition 21 with respect to mine closure.						1				N/A	Not Applicable		Future item. No MMPs in the audit period so the trigger for the Mine Closure Plan has not occurred.
97.0	incorporate relevant outcomes from rehabilitation trials defined in						1				Mille	Not Applicable		Future item. No MMPs in the audit period so the trigger for the Mine Closure Plan
98	Condition 8%.  Five years prior to the planned closure of the mine, the Operator must						-					Refer to sub		has not occurred.  Future item. Mine dosure more than 5 years away.
98.4	finalise the Mine Closure Plan required under Condition 96:						1				N/A	conditions Not Applicable		Future item. Mine closure more than 5 years away.
98.6	submit to the Department the plan for approval by the Minister;						-1				N/A	Not Applicable		Future item. Mine closure more than 5 years away.
98.c Unplanned Mine Clos	following approval, the Mine Closure Plan must be implemented by the Operator in full.						-1				N/A	Not Applicable		Future Item. Mine closure more than 5 years away.
99	From the date of authorisation of the Coverturden Management Project, the Operator much areasily senset to the Oppartment an Unplanned Mine Closure Plan on or before 31 August, starting 2021, to the Department, which is accompanied by a related security or Simula.						1				4	Full Compliance	Final Operator to DTI Subject MMD J 2022 Unplanned Choure Plan and Society Accessment dated Publication.  The email from Operator to DTI included the following that meet the requirements of this condition.  The challenge 1-Mode than Blown Mine 2-0022 Unplanned Closure Plan (the 2022 USP)   Inclosure 2 - Mode than Blown Mine Society Calculation 2022.	
100	The Operator must comply with the clauses pertaining to it in SCHEDULE C - INDEPENDENT MONITORING ASSESSMENT CONDITIONS.									1	NA	Not Applicable		Assessed through individual conditions in Schedule C.
Schedule C - 1	In the Monitoring Association of Confliction The purpose of the NAAP than River Mine – Independent Monitoring Associated Conditions* is to establish and set out the operational sequirements for an independent monitoring association of the previous monitoring or formation of this Mine.											-		Commontary only.
Schedule C -2	These Conditions may be cited as the "McArthur River Mine - Independent Monitoring Assessment Conditions".													Communitary only.
Schedule C -3	The purpose of these Conditions is to establish and set out the operational requirements for an independent monitoring assessment of the environmental performance of the Mine.													These Independent Monitor conditions are not relevant to the Operator.
Schedule C-4	The Department will engage an Independent Monitor to undertake the independent monitoring assessment.													These Independent Monitor conditions are not relevant to the Operator.
Schedule C-5	The Operator and the Department acknowledge that this independent monitoring assessment is in addition to their respective obligations and statutory responsibilities in relation to the Mine.									1	4	Full Compliance		The Operator has perticipated in the Independent Monitor assessment in addition to their respective obligations and statutory responsibilities.
Schedule C -6	The Independent Monitor will:													These Independent Monitor conditions are not relevant to the Operator.
Schedule C-6.a	monitor the environmental performance of the Mine by reviewing:											-		These Independent Monitor conditions are not relevant to the Operator.
Schedule C-6.a.i	environmental assessments and monitoring activities undertaken by the Operator; and											-		These Independent Monitor conditions are not relevant to the Operator.
Schedule C -6.a.ii	environmental assessments and audits undertaken by the Department: and											-		These Independent Monitor conditions are not relevant to the Operator.
Schedule C -6.b	report to the Operator and the Department any urgent issues requiring investigation and reporting.											-		These Independent Monitor conditions are not relevant to the Operator.
Schedule C -7	The Independent Monitor will not review:													These Independent Monitor conditions are not relevant to the Operator.
Schedule C - 7.a	Mine safety; or													These Independent Monitor conditions are not relevant to the Operator.
Schedule C - 7.b	social issues arising from the operation of the Mine in the McArthur River Boolon.											-		These Independent Monitor conditions are not relevant to the Operator.
Schedule C -8	The Department will engage an Independent Monitor in accordance with its procurement processes.													These Independent Monitor conditions are not relevant to the Operator.
Schedule C-9	with his procurement processes.  (The Intelogenation Members may be (incedure of preference):  a. an environmental or mining agency in another jurisdiction in a  Australia: ce  b. university having the necessary expertise: or  c. an environmental consultant have the necessary expertise, prelevant experience and the necessary resources.													These independent Monitor conditions are not relevant to the Operator.

Authorisation Co	empliance Workbook - Operator	1											
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	See a se	Air Quarty (Oust & Supe diceide, transport)	Creek, Artificial dams)	Marine Waters (Bing Bong, marine sedments		Vegetation & Rehabilitation (terrestric diversion & NOEF)	Waste (general, mine ro tailings)	Community (local indigenous & public)			Compliance Level	
Schedule C -10	Prior to advertising a tender seeking to engage an Independent Moreitor, the Department must provide the Operator with a copy of the proposed tender documentation, including:												These Independent Monitor conditions are not relevant to the Operator.
Schedule C-10.a	the Conditions of tendering: and											-	These Independent Monitor conditions are not relevant to the Operator.
Schedule C -10.b	the scope of services; and											-	These Independent Monitor conditions are not relevant to the Operator.
Schedule C-10.c	the assessment criteria; and											-	These Independent Monitor conditions are not relevant to the Operator.
Schodule C -10.d	the Conditions of contract.												These Independent Monitor conditions are not relevant to the Operator.
Schedule C -11	The Operator may, within 14 days of receiving the proposed bonder to the Operator may consider the proposed documentation to the Operational and the Operational must consider any comments provided by the Operator on the proposed documentation prior to above thing the bonder.									1	NA	Not Applicable	Engagement of the Independent Monitor occurred before the audit period.
Schedule C-12	The Oparitment must provide the Community with an opportunity to provide submissions on the organizment of the Independent Monitor and the Department must consider any submissions provided by the Community on the organizment of the Independent Monitor prior to advertising the Index.												These independent Monitor conditions are not relevant to the Operator.
Schedule C -13	The terms of engagement of the Independent Monitor may include the following:												These Independent Monitor conditions are not relevant to the Operator.
Schedule C -13.a	a period of engagement between three and five years;											-	These Independent Monitor conditions are not relevant to the Operator.
Schedule C -13.b	a statement acknowledging that the Operator is responsible for the costs of the Independent Monitor;												These Independent Monitor conditions are not relevant to the Operator.
Schedule C -13.c	a warranty by the Independent Monitor that it will:											-	These Independent Monitor conditions are not relevant to the Operator.
Schedule C -13 c i	act independently of the Department, the Operator, the Minister and any other person; and											-	These Independent Monitor conditions are not relevant to the Operator.
Schedule C -13 c ii	act honestly, reasonably and with the degree of professional care, knowledge, experience, skill and diligence which may reasonably be expected; and											-	These independent Monitor conditions are not relevant to the Operator.
Schedule C -13.c.iii	act within the time prescribed under these Conditions, the terms of engagement, or where no time is prescribed, within a reasonable time; and											-	These independent Monitor conditions are not relevant to the Operator.
Schedule C -13.c.iv	immediately notify the Department in writing upon becoming aware of the existence or possibility of a conflict of interest;											-	These independent Monitor conditions are not relevant to the Operator.
Schedule C-13 d	an obligation on the Independent Monitor to keep all information provided to the Independent Monitor confidential.											-	These Independent Monitor conditions are not relevant to the Operator.
Schedule C -14	If the Independent Monitor requires an indemnity, the Operator must enter into a binding agreement providing a reciprocal indemnity to the Department.									1	NA	Not Applicable	The Independent Monitor did not require an indemnity.
Schedule C -15	The Department must notify the Operator of the appointment of the independent Monitor and must provide the Operator with a copy of the terms of engagement.												These Independent Monitor conditions are not relevant to the Operator.
Schedule C -16	The Operator and the Department must not interfere or attempt to influence the Independent Monitor in its assessment of environmental performance under these Conditions.									1	4	Full Compliance	The Operator has not interfered or attempted to influence the Independent Meritor.
Schedule C -17	The Operator and the Department must each:											Refer to sub conditions	Provided for context of the subconditions.
Schedule C-17.a	cooperate with the Independent Monitor; and									1	4	Full Compliance	The Independent Monitor confirms that the Operator cooperated with the Independent Monitor.
Schedule C -17.b	provide all necessary information and documents within their possession, custody or control to the Independent Monitor; and									1	4	Full Compliance	The Independent Monitor confirms that the Operator provided all necessary information and documents within their possession, custody or control.
Schedule C-17.c	procure for the Independent Monitor access to such premises owned, leased, or licensed by it as may be reasonably necessary,									1	NA	Not Applicable	No site visits were requested by the Independent Monitor in the audit period. A site visit was undertaken in June 2022, after the audit period.
Schedule C -17.d	to enable the Independent Monitor to undertake its assessment of environmental performance under these Conditions.									1	4	Full Compliance	The Independent Monitor confirms that the Operator enabled the Independent Monitor to undertake their assessment.
Schedule C -18	The Independent Monitor must engage with the Operator, the Department and the Community in undertaking the independent monitoring assessment.												Not included as there is no requirement for the Operator. This is an Independent Monitor requirement only.
Schedule C - 19	If the Independent Monitor identifies an issue it considers requires urgent investigation and reporting:									1		Refer to sub conditions	The Independent Monitor did not identify any issue it considered required urgent investigation and reporting during the audit period.
Schedule C-19.a	the Independent Monitor must advise the Operator and the Department of the issue as soon as practicable and may include recommendations as to action to be taken; and												Not included as there is no requirement for the Operator.
Schedule C-19.b	the Operator must consider the advice, and any recommendations, from the tridependent Monitor and notify the Department and the Independent Monitor of the action the Operator proposes to take; and									1	NA	Not Applicable	The Independent Monitor did not identify any issue it considered required urgent investigation and reporting during the audit period.

Authorisation Co	empliance Workbook - Operator	١.											
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	ratty (dust & sulphur e, transport)		e Waters (Bing marine sedments)		ation & ditation (terrestrial, lon & NOEF)					Compliance Level		Comments 2022
		Air O. diccéd	Surfac	Marin Bong,	Aquat	Veget Rehak divers	Waste	Comm	Monit				
Schedule C-19.c	the Department may, where appropriate, advise the Operator and the Independent Monitor of action the Department proposes to take; and												Not included as there is no requirement for the Operator.
Schedule C-19.d	the Independent Monitor may provide further advice to the Operator, and where appropriate the Department, regarding the proposed action and the Operator and the Department must consider the further advice; and								1	NA	Not Applicable		The Independent Monitor did not identify any kisse it considered required urgent investigation and reporting during the audit period.
Schedule C-19.e	If, after providing further advice, the Independent Monitor is not satisfied with the proposed action, the Independent Monitor may notify the Operator and the Department of the Independent Monitor's intention to undertake its own investigation and report; and												Not included as there is no requirement for the Operator.
Schedule C - 19.f	the Operator and the Department must facilitate the Independent Monitor's investigation and report.								1	NA	Not Applicable		The Independent Monitor did not identify any issue it considered required urgent investigation and reporting during the audit period.
Schedule C-20	The independent monitoring assessment is to be conducted, where practical, in a manner that complements the existing annual environmental assessment and audit processes undertaken by the Operator and the Department.										Refer to sub conditions		Not included as there is no requirement for the Operator. This is an Independent Monitor requirement only.
Schedule C -21	The Independent Monitor must prepare and provide a report:										Refer to sub conditions		Not included as there is no requirement for the Operator. This is an Independent Monitor requirement only.
Schedule C-21.a Schedule C-21.b	annually to the Minister to assist with the review of the Mining Management Plan; and on request by the Minister.												Not included as there is no requirement for the Operator.  Not included as there is no requirement for the Operator.
Schedule C-21.b	on request by the Minister.  The Minister must provide a report received from the Independent Monitor to the Operator and the Department within 14 days of receiving the report.										Refer to sub conditions		Not included as there is no requirement for the Operator.  Not included as there is no requirement for the Operator.
Schedule C -23	The Independent Monitor must prepare an additional report in a form suitable for distribution to the Community.										Refer to sub conditions		Not included as there is no requirement for the Operator.
Schedule C-24	The Operator and the Department admonships that the report from the Independent Monitor will be made publicly available (including publication on an appropriate) internet stell and may include data used in the preparation of the report.							1	1	4	Full Compliance	Independent Monther Report (JEFAR) make publish yawakale by pooling on DET i website (viewoed by Independent Monther on 1 Aut.2022).  https://mdx.utry.nt.gov.au/publications/immining-aind-anergy/public-anvivoremental- reports/immining/imcurthur-two-rindependent-meritalr	Full copies of the AEPAR 2021 and appendixes (passed date) and ARIC (summary report) are published on the DCIT valentable.  The correspondence from the Minister for Mining and Industry to the Operator achieve that documents would be uploaded to the inharmet and DCIT's and the Operator is expense to the correspondence did not false concerns.
Schedule C -25	Prior to being made publicly available, the Minister must request from the Operator and the Department any comments on the Independent Monter's report. Such comments must be provided within 26 days of the Minister's request and must be made publicly available with the independent Monitor's report.								1	4	Full Compliance	The Independent Monitor checked the DITT website and confirms the documents are there.	Baquest from the Militate on 28Mac2022 and response from Operator on SAgr2022 and BNT 20Agr2022 were within 28 days from the request.
Schedule C-26	the Operator acknowledges that it is responsible for all costs of the independent mentioning assessment other than those costs directly artificulable to those elements of the independent mentioning assessment associated with Condition 21 (bi) which are the responsibility of the Department.								1	4	Full Compliance		The Operator has paid the DTT invoices.
Schedule C -27	The Department may provide to the Operator, from time to time, a notice setting out amounts due and payable under the terms of the engagement of the Independent Monitor.												Mot included as there is no requirement for the Operator.
Schedule C-28	The Operator must pay an amount notified in accordance with Condition 27 within seven (7) days of receiving such notice.								1	4	Full Compliance	The operator made payment against CRTT involces consistent with NTC procurement timeframes.	DTT advised there have been no issues with payment.  OBS: DTT invoices require payment in a month rather than within seven days or receipt as stated in this condition.
Schedule C -29	If the Operator disputes a notice provided by the Department under Condition 27:										Refer to sub conditions		Provided for context of the subconditions.
Schedule C-29 a	the Operator must pay the amount specified in the notice in accordance with Condition 28; and								1	N/A	Not Applicable		The Independent Monitor is not aware of any disputes in the audit period.
Schodulo C - 29.b	the Operator must notify the Department in writing within 14 days of receiving the notice, setting out the reasons why the Operator disputes the notice; and								1	NA	Not Applicable		The Independent Monitor is not aware of any disputes in the audit period.
Schodule C-29.c	the Chief Executive of the Operator and the Chief Executive of the Department must meet within five (5) working days to resolve the dispute.								1	NA	Not Applicable		The Independent Monitor is not aware of any disputes in the audit period.
Schedule C-30	If there is a dispute lotter has a dispute mentioned in Condition 29 between the Operator and the Department on to any marker of the programment of a vary marker of the programment of the work of the Condition (by "Dispute"), the part of their Condition (by "Dispute"), the part of their Condition of the Subpate has almost part of the "Dispute and the Chair Executive of the Operator, the Chair Executive of the Department and the Indisputed Monitor must meet within five (b) working days to resolve the Dispute.								1	NA	Not Applicable		The Independent Monitor is not aware of any disputes in the audit puriod.
Schedule C-31	If the Chief Executive of the Operator, the Chief Executive of the Department and the Independent Monitor are cutable to resolve a Dispute within ten (19) working days of meeting in accordance with Condition 30, the Operator and the Department may agree to the appointment of an independent party to assist in the resolution of the Dispute.								1	N/A	Not Applicable		The Independent Monitor is not aware of any disputes in the audit paried.

Authorisation Co	mpliance Workbook - Operator	_					.2					Puidence 2022	Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Ouality (dust & sulphu	arcecos, transport) Surface Water (Rivor, Sreek, Artificial dams)	Marine Waters (Bing Bong, marine sediments)		Vegetation & Rehabilitation (terres Vial. Jiversion & NOEF)	Waste (general, mine rod: tallings)	Community (local indigenous & public)			Compliance Level		
Schedule C -32	If, within five (5) working days of either the Operator or the Oppartment memerishing a person to be the inappendent party, no agreement is reached as to who is to be appointed as the inappendent party, either the Operator, the Oppartment or both may refer the matter to the President of the Law Society of the Northern Territory.								1	NA	Not Applicable		The Independent Monitor is not aware of any disputes in the audit period.
Schedule C-33	The President of the Law Society Northern Territory may nominate a person to be the independent party and the parties to the Dispute are bound to accept the appointment of that person.								1	NA	Not Applicable		The Independent Monitor is not aware of any disputes in the audit period.
Schedule C-34	The role of the independent party is to assist in negotiating a resolution of the Dispute and the independent party cannot make a decision that is binding on either the Operator or the Department.								1	NA	Not Applicable		The Independent Monitor is not aware of any disputes in the audit period.
Schedule C-35	The Operator and the Department must make available to the independent party all materials requisited by it and must provide the independent party with all other materials relevant to the Dispute.								1	NA	Not Applicable		The Independent Monitor is not aware of any disputes in the audit period.
Schedule C -36	The Operator and the Department must:										Refer to sub conditions		Provided for context of the subconditions.
Schedule C - 36.a	Bear their own costs of resolving the Dispute under this Condition; and								1	N/A	Not Applicable		The Independent Monitor is not aware of any disputes in the audit period.
Schedule C - 36.b	Bear equally the costs of any independent party engaged.								1	NA	Not Applicable		The Independent Monitor is not aware of any disputes in the audit period.
SCHEDULE D - ENVIRO	NMENTAL MONITORING AND MANAGEMENT												
Schedule D - 1	If the Operator establishes a new surface water monitoring location, a written notice of the location (in GDA 94 format) and nature of the monitoring must be given to the Department within 30 days of its establishment.		1						1	4	Full Compliance	EMR 2021 2022.	The Operator advised they have not established any new surface water monitoring locations and none were identified in the EMR 2001-20222.
Schedule D - 2	The Operator must maintain continuous monitoring having regard to:		1							4	Full Compliance	SW Laggers Master:  Continuous menitoring was not successful in the 2021 to 2022 was seison.  Data was retrieved for SW20 to February only and USCS (SW10) would not connect so there is no data and SW30 did not have an CC Logger installed.	
Schedule D - 2 a	devices installed at the following locations:										Refer to sub		
Schedule D - 2.a.i	SW29 (upstream Surprise Creek outside the zone of influence of TSF):		1						1	4	conditions Full Compliance	SW Loggers Misster. Gauging Station Register v2.	Data was retrieved for EC to Feb 2022.
Schodule D - 2 a.ii	SCSS (Surprise Creek gauge station between the TSF and the Mine):		1						1	4	Full Compliance	A logger was installed at 980°C to measure EC.  Styl Coggers Matter: Cauging Station Register v2. Cauging Station Register v2. A logger was installed at SCCS (1980°C) to measure EC.	SW02 (SCGS) Data was retrioved for EC for the wet season.
Schedule D - 2 a iii	SW30 (upstream Emu Creek);		1						1	N/A	Not Applicable	SN Loggers Maker. Cauging Station Register v2. Surface Water Membershiring Armual Report 2021-22. Surface Water Membersing Armual Report 2021-22 states. "There were no recorded flows st the Erms Clock control membersing location over the reporting period."	
Schedule D - 2.a lv	USCS (upstream at the McArthur librar gauge station);		1						1	4	Full Compliance	SW Laggers Master. Causping Station Register v.2. Causping Station bulse_Envirolitys_Export. A lagger was installed at USCS (SW10) to measure EC.	SWT0 (USCS) logger was installed but did not connect.  The or face water logger at SWT0 falled, however the side is also serviced by the payings station remail at this teaches a such electrical conductivity was still recorded over the 2021/22 well sealings.
Schedule D - 2.a.v	BCCS (upstream at the Barney Creek gauge station);		1						1	4	Full Compliance	SW Loggers Mister. Gauging Station Register v2.  A logger was installed at BCCS (SWO4) to measure EC.	SW04 (BCCS) Data was retrieved for EC for the wet season.
Schedule D - 2.a.vi	SW12 (immediately downstream of the Mine capturing outflow from Erns Creek, Barney Creek, drainage lines from SPRDD, Old McVirthur Rever Channel and the McVerthur Rever diversion channel but before the Clyde Store Joins the McX+thur Rever channel):		1						1	4	Full Compliance	SW Loggers Master. Gauging Station Register v2. A logger was installed at SW12 to measure EC.	Data was retrieved for EC for the west suascen.
Schedule D - 2.b	devices must at a minimum measure electrical conductivity, and may measure additional parameters such as ph;		1						1	4	Full Compliance	SW Loggers Master. Gauging Station Register v2. Devices that measure EC were installed at the required locations.	
Schedule D - 2.c	the Operator must from 30 August 2017 Include data from these devices in data submission under Condition 7 of Schedule A.		1						1	4	Full Compliance	Email submission Operator to DITT (M894   DITT Data C2) dated 16Aug/2021 2107 - 2109 DITT Data Continuous data, where available, was supplied by the Operator.	
Schedule D - 3	From the date of authorisation of the Overburden Management Project the Operator must install and manage the following gauging stations at: for Workshoot - Operator Considering Appects										Refer to sub conditions		

	mpliance Workbook - Operator  Condition/Requirement	Air Quality (dast & subbur	diceide, transport)		Marine Waters (Bing Bong, marine sediments)		Vegetation & Rehabilitation (terres trial, diversion & NOEF)	Waste (general, mine rock, tallings)	Community (local indigenous & public)			Compliance Level		
Schedule D - 3.a	fmu Guak			1						1	3	Part Compliance (High)	Some Wilder 1. Song and M. Continues and the send self size play in our serve equipment learner for the size play of the size of an interest to the size play of the size play	Operator and could large years included taggers. In these scatters in the Sections As an an in pairs in solid large paigning below. But the section of the seal of seal was an in pairs in solid large paigning below. But the seal of seal and the seal of the seal of seal of the seal of seal of the seal of seal of the seal of the seal proceeds each to the large diving seal on the seal of the seal of the seal parties seal on the seal parties seal contact and the seal parties seal contact and the seal parties seal contact and the seal parties br>parties seal parties parties parties parties parties parties parties
Schedule D - 3 b	Cyple liter.			1						1	3	Part Compliance (High)	Amon MBAIL Operated IC Continuous surface under data quality amar amonquelly common data of Adaptics 2.22 data agrees Amarian Service 1.22 data (agrees Amarian Service 1.22 dat	Special will also they have installed legacy in three bootstam in the interior. Here are in global both which we puping statement. Both of the is not remourated in more lively spic in temperature from the same for send resident purposes. The same from the same from the same from the warring curves as stated in the best will the Specialist of Commons series was designed to the same from the same statement of the Commons series when the same send in the same as sent to use in the same send to the same send to the same series and the same send to the same send to the same send to the same send to same send to the same send to same send to the same send to same same send to same send to same send to same send to same send to same send to same same send to same same send to same same send to same send
301000000-4	The Operator must ensure groundwater monitoring bores and within 6th beres are constituted, maintained and decommissioned in complaince with the document entitled Minimum construction requirements for water bores in Australia published by the National Uniform Drillars Uniming Operatines for the dedition, February 2012 or a current variation of the document <sup>1</sup> 0, In this regard:					1				1	4	Full Compliance	DOI 1 HISTOCICECTICATE DISELLATION AND HELD CHAMPHICAN  2021 HYDROCECTICATICATE DISELLATION AND HELD CHAMPHICAN  2021 HYDROCECTICATICATICATICATICATICATICATICATICATIC	No mention of the groundwater monitoring bones and extraction bones being maintained or decorrensistated in accordance with the Minimum contribution requirements for waste bones in Justicella published by the National Uniform Drifters Liceroring Committee. However, the Operator advised there has been no decorresistensing or maintainance in the audit period.
Schedule D - 4.a	construction logs and bore location coordinates in CDA 94 format must be available to the Minister on request and provided to the Minister annually in the EMR:					1				1	4	Full Compliance	2021 HYDROCEDLOGICAL DISILLING AND FIELD CAMPAIGN For the five bores drilled in the audit period, bore coordinates in CDA 94 format are in Table 3-1 of the 2021 HYDROCEDLOGICAL DISILLING AND FIELD CAMPAIGN.	The Operator advised that there were no requests by the Minister in the audit period.
Schedule D - 4 b	logs of marrierance activities must be kept available to the Minister on requisit:					1				1	N/A	Not Applicable	Final Laborators were for CO 2019 dais - death MacAgo27 Final Laborators were for CO 2019 dais - death MacAgo27 Final Laborators were for CO 2019 dais - death MacAgo27 Final Laborators were for CO 2019 dais - death MacAgo27 Final Laborators were for CO 2019 dais - death MacAgo27 Final Laborators were for CO 2019 dais - death MacAgo27 Final Laborator dais - death MacAgo27	Inscipence and what that there were no requests for logs of maintenance acciding by the Mexicol may be assist provided by the Mexicol may be assisted by the Mexicol may be a set of the Mexicol may b
Schedule D - 4.c	logs of bore-decorrensistening activities must be kept and avoilable to the Meinter correspont and reported in the Operator's Annual Edit.					1				1	4	Full Compliance	2:10. 212 ENT Data 2021 HINDROCENSOCAL DEBLUING AND FIELD CAMPAIGN 2021 HINDROCENSOCAL DEBLUING AND FIELD CAMPAIGN 5MR 2020 - 2021 Appendix T - 2020 Hydrogeological Drilling and Field Campaign report in Appendix F - Documentiscience of Consultational Management (See 2020)21. 2021 HINDROCENSOCAL DEBLUING AND FIELD CAMPAIGN States 'No monitoring brows were decommissioned during the 2021/22 monitoring period.	The Operator advised that there were no requests by the Minister in the audit parties.
Schedule D - S	The Operator must take appropriate action to reduce the risk to mining spearators associated with here had, on the adjusting paterial property by martizing in Chalchan Area and managing levelucit. As appropriate in comunication with the Chief Veternary Officer.								1		4	Full Compliance	2018-2019 cattle management plan was submitted in the January 2020 MMP, which was not approved until 139/2020.  BAD 2021-2020 in BAD 50 Stated The total 11 cattle moders were under taken during the region of the cattle of the region of the	pilot and that they have a new BARS accredited helicopter provider.  The Operator advised that Stations undertake monitoring with any outhanisation.
Schedule D - 6	From the date of authorisation of the Overburden Management Project the Operator must undertake monitoring in accordance with the following Emironmental Management Plans approved in the MMP:											Refer to sub conditions		

	mpliance Workbook - Operator	_												Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Quaity (dust & sulphu diceide, transport)		Marine Waters (Bing Bong, marine sedments)			Vegetation & Rehabilitation (terres Fial, diversion & NOEF)	Waste (general, mine rook tailings)	Community (local Indigenous & public)			Compliance Level		
Schedule D - 6.a	Dust Management Plan:	1								1	NA	Not Applicable		Ehere was no plan with this name in the approved MMP and therefore this subcondition is considered NA. DITT has updated the Authorisation to remove reference to a Dust Management Plan. The Air Quality Management Plan is the relevant plan for dust management.
Schodule D - 6. b	Water Management Peter - turface maker groundwater and Stated southwests.		1		1					1	3	Part Compilance (High)	East standministre worder 12 (2027 stags - dated Modg/2017 Final standministre worder 10 (2027 stags - dated Modg/2017 Final Modg/2017 stags - dated Modg/2017 stags - dated Modg/2017 Final Modg/2017 stags - dated Final Modg/2017 stags - dated Final Modg/2017 Final Modg/2017 stags - dated Final Final Modg/2017 stags - dated Final Final Modg/2017 stags - dated Final Final Modg/2017 stags - dated Final Modg/2017 stags - dated Final Fin	Sean nextfills.  Social Consider applicing the Waler Management Plan amough once TABPs are related for executive 31 kg to did to find and seat season.  Of Update management plans in staticts the regions relating to admining CNTI selent a part of the glant cannot be implemented.  Of Early Parkins Management Plan and Mantening Schedulin up to did in terms of memoring discontraction of an architecture of the part of the parkins of the part of the parkins of the parki
Schedule D - 6.c	An Country	1								1	3	Part Compliance (High)	Would be Month and Committee of the Comm	On the press process that a specified agreement agreement for distractive continues or go. COLD COLD BROOMER or gains and the Couldly following- person of the COLD BROOMER or gains and the Couldly following- Plant to acknowledge access is not available at all three.
Schedule D - 6.d	Vegetation and terrestrial fauna:						1			1	N/A	Not Applicable		There is no plan with this name in the approved MMP and therefore this subcondition is considered N/A. The SMay/2022 Authorisation removes Vegetation and berestrial fluena as a plan and new states Rehabilitation Management Plan and Water Management Plan.
Schedule D - 6.e	Aquitic faunic					1				1	NA	Not Applicable		There is no plan with this name in the approved MMP and therefore this subcondition is considered N/A. The SMay/2022 Authorisation removes aquatic fauma as a plan and now states Rehabilitation Management Plan and Water Management Plan.
Schedule D - 6.f	Horitage and sacred sites.								1	1	N/A	Not Applicable		There is no plan with this name in the approved MMP and therefore this subcondition is considered NMP, Reference to a Heritage and sacred sites plan has been removed from the Shity/2022 Authoritication.  The Operator advised that this is regulated outside of the Authorisation.

Authorisation Co	ompliance Workbook - Operator												
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Air Quality (dust & supprur		Marine Waters (Bing Marine Waters (Bing Bong, marine sediments)		Vegetation & Rehabilitation (terres trial, diversion & NOEF)	Waste (general, mine rock, tailings)	Community (local Indigenous & public)			Compliance Level		Comments 2022
	Any required material charges is the Environmental Management Plans membersed in Condition of this Schedule must be approved by the Department in writing.								1	N/A	Not Applicable	Ernal Operator to DITT subject MRMA   Updated Environmental Management Plans dated 2014/00/21.  Tooling that the wording of the condition refers only to the Environmental Management Plans multimoid in Condition. A unit the AMP in ord included in this condition will the Authorisation view in the Beautify price! Therefore, the Operator is demonstrated account in submitting that changed Environmental Management Plans to BITT.	The Operator advised that changes made if required by CEPNS would be made in the management plan and substituted to 100. The Ceptrator provided the latest Rehabilitation Management Plan 2021-23 and BBEF Plan advised Morto 2021 that were substituted to 011 this have 2021. The Operator besided "Notion 2021 that were substituted to 011 this have 2021. The Operator advised "All Plan material changes to the IDPA" is condition to 61th other or advised changes to the IDPA is condition to 61th other advised changes the IDPA is conditioned to 100 that the updated ANP already provided were made claring the audit particular.
Schedule D - 8	For the purposes of managing chemicals and flammable or combustible liquids, the Operator must:										Refer to sub conditions		
Schedule D - 8.a	Other and Thesia Manageland, the terminal, these scholarines, game, and constructing the control of the control								1	4	conditions  Full Compliance	"Will art am AVI VICTO Compares Notes in the AVI	No Gyarte and Andre Three his between from and venetic and firmenship are constructed being during an about and some pass and proven the construction of the construct
Schedule D - 8.b	include bulk storage tanks and associated infrastructure on a maintenance schedule which conforms with the current Australian Standard where such is applicable, and the laws of the Northern Territory.								1	4	Full Compliance	Screen shot of Work orders for Dissel Tank (MRM1100TK001) monthy inspections.	
Schedule D - 8.c	actuals regular integrity incling to ensure laws of containment or failure of fault storage traffic shows not occur.		1		1				1	4	Full Compliance	MET 31627 AND 23 MAY EXCELLENGES ENGELTION ABOUT 27 MET 27 MET 31 MAY EXCELLENGES ENGELTION ABOUT 27 MET 27	

Authorisation Condition No.	Condition/Requirement	Govername/General	Non-mineral Waste Management	Open PII/Underground Workings	Tailings Storage Facility	Water Management an Storages	Overburden Emplacem: Facilities	Exploration	Waterways (including river diversion)	Bing Bong Loading Fadil	Score	Compliance Level		
SCHEDULE A Definitions	In this document, unless the contrary intention appears:													Note that sub-conditions 1 a to 1.2 are not listed as they are all definitions and are largely to be audited for compliance.
interpretation 2	In this document, unless the contrary intention appears:													Note that sub-conditions 2 a to 2 h are not listed as they are all interpretations and are unable to be audited for compliance.
General 3	Subject to any Conditions confaund in the Act and this document, the Operator must comply with the commitment and subvivides contained in the Made Policiating the implementation of all systems referred to in the MADP.	1									3	Part Compliance (High)	(2011) 1923 Discrimination of commissions and change (2014) regions in invariance (2014) Discrimination (2014) Measurement (1904) Augustin (1) Section 5.1 ft in invary (2015) Mile Puppines (1905) Though and connection (Subdission 1904). The contraction of the contraction of the contraction of the contraction of complication of the contraction of the contraction of the contraction of the contraction of 1904 Contraction and contraction in being contract.  **Reconstructed of contraction in buyer are conformed of Approach Contraction of Contractions of the contraction of the contraction of the contraction of contracting and contraction in buyer are conformed of Approach Contraction.	
	The Operator may only conduct memory activities is writted on the Made which the Made salight on you condition contention in the left, the document and the Conditions commitments and systems contained in the Made.	1									4	Full Compliance	TWO 22000 I From the Claim Fronder and Grown MANNIC MARGACINET FAMILY PROFESCED Claimary 2014 TO STREAM TO THE MARGACINET AND APPROXECT DO IN- Special Column of Districtures From To Stage 2015 to 1054/pc201 to 10	The EMR also provides a summary of major operational activities that occurred during the reporting period and the Independent Monitor did not identify any inconsistent with the MMP.
s	Therew die his build designed and granded in a curdance with some of the control	1									4	Full Compliance	No. 2020 201 201 American Committee (NAME AND	Secret is selected to Miller AT 1992 and opposed that purely is series of the selecting an operation of selection (Sec. 1992) and opposed to the selection of the selection (Sec. 1992) and the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of the selection of ACM 2002 2002 Section (Sec. 1994) and the selection of purchase to principle operating secret disc. "Completes with further learning designed selected disc. AT 1994 is included as constitute 30. 21 and 11g. learning designed selected disc. AT 1994 is included as constitute 30. 21 and 11g. learning designed selected disc. AT 1994 is included as constitute 30. 21 and 11g. ACM 2002 Section (Section 2002) and 11g. ACM 2003 Section 20
Mining management (	The Operator must on 31 August 2021 and on each ambiversary of that date (or such other date as nominated by the Operator and approved by the Minister), review the approved MMP and if nacessary, amend the MMP.	1									4	Full Compliance	EMR 2008-2001; 3Mag21.  The Executive Summary of the EMR August 2021 says "In consideration of the results presented in this EMR, the MMP has been reviewed and it used determined that no updates are currently required in order for MMR s key anvironmental management disjectives to continue to be architect."	No ammondments to MAP Planning to include similar statement related to review of the approved MAP in the EMR 2021-2022.
7	The Operator most submit quartery at an enconvention monotoning data which has been outlined since the provision data submission. The data submissions are provided in the paper outlined from planty and MS Excel breakship that can be provided in request) and criticals lateratories provided no request) and criticals lateratory and field data for the following:											Refer to sub conditions		The Authors Active death 55My 2022 (felt with a wall provide only require activement of this amount for the Authors and the Active of the Acti

orisation Compliance Workbook - Operator

13 Nov 2020 and 18 June	mpliance Workbook - Operator  Condition/Requirement	Governance/General	Non-mineral Waste Management	Open PII/Underground Workings	Tallings Storage Facility	Water Management and Storages	Overburden Emplaosment Facilities	Exploration	Waterways (including river diversion)	Bing Bong Leading Facility	Score	Compliance Level	Evidence 2022	Comments 2022
7a		1				1			1		4	Full Compliance	Earth all Americans service CO 2001 data - Select \$4,44,90011 from all Americans and CO 2001 data - Select \$4,44,90011 from all Americans and CO 2001 data - Select \$1,900,0001 from all Americans and CO 2002 data - Select \$1,900,0001 from all Americans service CO 1,900 data - Select \$1,900,0001 from all Americans services CO 1,900 data - Select \$1,900,0001 from all Americans services and CO 1,900 data - Select \$1,900,0001 from all Americans services and CO 1,900,0001 from all Am	continuous, usukin quality membratives qualited by Conditions 2, Schodul Co of the continuous continuous quality and produced by Conditions 2, Schodul Co of the school continuous continuous quality and produced visits 2017 3 Schodul Paul Blancy producible or reside 3, School continuous continuous continuous continuous continuous producible or reside 3,000 SCHO (School continuous continuous continuous continuous continuous producible or reside 3,000 SCHOOL continuous continuous continuous bases producible continuous scalar quality producibing continuous continuous bases produced produ
7.6	groundwaler:	1									4	Full Compliance	Email subrevision result for C1 2021 disks - dated 15May2021 final subrevision result for 2022 disks - dated 15May2021 final subrevision result for 2022 disks - dated 15May2021 final subrevision result for C1 2021 disks - dated 15May2021 for a date of C1 2022 disks - dated 15May2021 (builded the saudt period) 5pct disks for final subrevision result for C1 2022 disks subrevision showed that they were included and the required filtered metals were included in the analysis state.	Contribuces of groundworker levels are not submerfilled and DITT advised they are not required.  Field resulfs included SWB, pth. EC, temp, 089° and DO in the GT 2022 data.
7.5.	662	1									3	Part Compliance (High)	200 2021 William Grammontal Montanty School 2021 2021 March	
7.d	sol;	1									N/A	Not Applicable		No soil sampling was submitted as it is no longer required.
7.e	sodiments:	1							1		4	Full Compliance	2021-3022 MBM Environmental Monitoring Schedule Email submission sent for OZ 2021 data - dated 16Aug2021 Annual Fluxiel Sediment data has been provided for 20 and 21May 2021.	The operator advised "Please note that sediment samples are collected on an annual basis, and therefore results can only be submitted to the Department once per year. The latest sediment data is provided in the DITT Data CZ 2021."
и	go, est	1									4	Full Compliance	Gradual advancement for CO 2007 alone, sheet Intelligent Telligrams and Commission and Commissio	Front advancement on the Co. 2015 class. Ballet Indusports can be the Co. 2015 class. Ballet Indusports can be the Co. 2015 class class can be considered by the Co. 2015 class clas

Authorisation Co	mpliance Workbook - Operator										
13 Nov 2020 and 18 June 2021 Authorisation Condition No.			Den PI/Underground Norkings			Waterways (including river diversion)	Bing Bong Loading Facility	Score	Compliance Level		
7.g	water framelies and discharges (including dates, time, and volumes)	1						4	Full Compliance	2011-22 Week Discharge Norm & Links In Caraty Hand Schemen and Links In Caraty Hand Schemen and Links In Caraty Hand Schemen and Links In Caraty Hand Landers Landers Links In Caraty Hand Landers Links In Caraty Hand Landers Landers Links In Caraty Hand Landers Landers Landers Links Hand Landers Landers Links In Caraty Hand Landers Landers Landers Landers Hand Landers Landers Landers Landers Hand Landers Landers Landers Hand Landers Hand Landers Landers Landers Hand Landers Landers Hand Landers Hand Landers Landers Hand La	
	Tigon the data of a Mandradees of the Overhale to Management (Tigon the Control of the Overhale to Management (Tigon the Overhale to Managemen	1						3	Part Compliance (High)	away 2002/06.  The State of Counter of Joseph and Construction (MAP. Appendix I).  With Limit of Counter of Joseph and Construction (MAP. Appendix I).  With Limit of State of Counter of Joseph and Construction (MAP. Appendix I).  With Limit of Counter of Limit of Limit of State of Limit of	This section does not include a specific list of structures that require an as built report. Nowever the requirement is related to the specific NOSF LOM Stages. These are listed in Section 4.2.3.3 of the Jan 2000 MMP, and include: - West - Central West - - Viscot Misses - - - Viscot Misses - - br>- br>- - - - - - - - - -
	The Operator must submit on or before 31 August 2021 and on each anniversary of that date (or such other date as nominated by the Operator and approved by the Minister), an DNR for the previous year in the reporting period as agreed with the Department.	1						4	Full Compliance	Sighted email from Operator to Regulator of EMR 2019-2020 submitted 31 August 2021. EMR for 2020-2021 was submitted 31 August 2021.	
	The Operator must provide to the Minister a security of \$405, 116,668 in the form of cash or an unconditional bank guarantee prior to undertak ins are mining activities authorised by this Veriation of	1						4	Full Compliance	DITT database recording details of authorised projects including security amounts shows full payment of the requested security amount.	The security provided to the Minster has increased from \$400,003,226 in Aurhotisation 13Nov2020 to \$405,116,668 in Authorisation 18Jun21.
11	The security provided for under Condition 10 will be reassessed, and may be reused, following the submission, assessment and approval of lat:								Refer to sub conditions		
11.a	independent third party assessment of the security by a qualified parson approved by the Minister (also refer Condition 40):	1						N/A	Not Applicable		There was no requirement for independent third party assessment during the audit period. One was undertaken related to the Unplanned Closure Plan covered in condition 11.c.
11.b	amended MMP:	1	П					N/A	Not Applicable		Not triggerred as there were no amended MMPs in the audit period.
11.0	amendment to the Unplanted Cloure Plan.	1						4	Full Compliance	Unite Operator to CTT Custors file. Modernia files of Mos Epidode Unplanned Clinice. Plan and Indigenized Society Association of dated 31Aug/2021.	An amendment to the Uniquienced Course Plans was submitted before the used provided and as a result for severally shaped in the Authoritation on Malacott () the audit print d). He audit print d). An amendment to the Uniquienced Course Plans was submitted in August 2021 () the audit print d) and was agreemed and SMp 2022 (souther the audit print), Operated Charged of Supervision & May 2022 (souther the audit print), Operated Charged Fourised Sample and Section () and of Operation of Uniquient and Section () and of Operation of Uniquient and Section () and Section

Authorisation Co	ompliance Workbook - Operator										
13 Nov 2020 and 18 June 2021 Authorisation Condition No.			Dpen PII/Underground Norkings			Waterways (including river diversion)		Score	Compliance Level		Comments 2022
12	The reveal accountly amount to be provided under Contident (16 to bit provided prior to creative mode flushbases, considerable to the continued prior to creative mode for the continued prior the southern of disable the Operation must provide the reveal sound to the Continued to the Continued to the Continued to Manual	1						4	Full Compliance	Control Challance Front - Stage 3 Mr Reg hastonating valence place interest 2011.  Channel Challance Front - Stage 1 Mr Reg hastonating valence 2011.  Chill Gallance recording data of authorised project in building scarlly amounts shown full payment of the requested issuerly amount in the form regarded.  Description of the requested issuerly amount in the form regarded.	Now sourchy to discounters on at to 2022 Charged from enround against to con- bination uses selected of 250 the response addition county piemetric by the form of the control of the control of the control of the control of the form enround access on the finding to works, and the control of the control of the form enround access on the finding of the control of the control of the finding of the
	to the levy payable for that financial year, the Operator must pay a levy to the Mining Remediation Fund of an amount calculated in accordance with the Act and as stated by the Minister in the notice.	1						4	Full Compliance	internal uperator small support vir internation sequence evaluation to Level Payment. (002) disease 22 Januari022. Informal email dated 27/kin/0022 showed that the required key (54,051,165.00) was pair on 20Aug0021, before it was due.	
	the following conditions were fundable of the previous variables, dated 15 August 2019 to reflect the intend of the thirty recommendations make by the NE (154 in the making of the tell Assessment Report to Equition day 2018. It flows TEP As inclusive an overacting environmental objective to be achieved using separation of the Mine to environ the hardwise darked with one production of the Mine to environ the hardwise darked the production of the Mine to environ the hardwise MACPetra Nove is productived and only whole largeth at all times from the restand unique.							-			Equivalency rolls and therefore not audited.
14	The Operator must ensure activities related to the McArthur River Overburden Management Project are implemented in accordance with:								Refer to sub conditions		
54.0	all new security commissions and subjected in the first formation of the commission	1			1			3	Part Compliance (High)	2011 2021 Described of Commissions of Active (SAM - Appendix).  Maccrillation via described and Stud GHE General provided in No.  Mode Department of Active and Student in No. 1001 Commissions of Commis	
14.b	recommendations in the NT EPA Assessment Report 86 where they are approved under an MMP;	1			1			N/A	Not Applicable	MEDA recommendations workbook The NIT PDA recommendations audit of DTT identified that the majority of the NIT EPA recommendations have been transferred delectly and all of the recommendations, to varying uniterts, are included in Conditions of the Authorisation.	Given the NT EPA recommendations audit of this Department islandfied that all NT EPA recommendations are included as conditions in the Authorisation, audit of this condition is covered under other relevant Authorisation conditions.
14.c	if there is any inconsistency between the above documents, the most recent authorisation shall prevail to the extent of any inconsistency.	1			1			N/A	Not Applicable		No inconsistency was found.
15	has Operater must provide written entice to the Messater and MEPAF, at alters or propose to shall the McMart Bient Men Construction Management Project and/or commitments, subquarts or mitigation monitorists in the immonitarial impact Solaments in such a manner that the environmental significance of the action may have changed, in accordance with Clause 14 Act of the Environmental Accessment of Act of the Action may have changed, in accordance with Clause 14 Act of the Environmental Accessment.	1			1			N/A	Not Applicable		The Operator advised they have not triggered any activities that would require additional assessment in the audit period.
16	Within 18 months of the date of authorisation of the Overburden Management Project, unless otherwise agreed in unling by the Department, the Operator must submit a plan to the Department for soview, that:					1		N/A	Not Applicable		Future item - Due 18 months from 13Nov2000  Operator has submitted the updated plan after the audit period.  Future item - Due 18 months from 13Nov2000
16.a	Enables measurement of total loads of lead and zerc and is consistent with requirements of Condition 27;					1		N/A	Not Applicable		Pullure Ikem - Due 18 months from 1.3Nov2020  Operator has submitted the updated plan after the audit period.

Authorisation Co	mpliance Workbook - Operator													
13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Governance/General	Non-mineral Waste Management	Open PII/Underground Workings	Tallings Storage Facility	Water Management and Storages	Overburden Emplacement Facilities	Exploration	Waterways (induding river diversion)	Bing Bong Loading Faoility	Score	Compliance Level	Evidence 2022	Comments 2022
16.b	the McArthur River in future years (July to June) do not exceed the loads discharged in 2017-2018 (as per Condition 68(e)) taking into account seasonal variations in rainfall, and subject to future annual load calculations:								1		N/A	Not Applicable		Operator has submitted the updated plan after the audit period.
16.0	addresses recommendations and outcomes arising from audits of loads by the Independent Monitor;								1		N/A	Not Applicable		Future Item - Due 18 months from 13Nov2000  Operator has submitted the updated plan after the audit period.
16.d	Include sufficient detail to inform the development of monitoring and management measures (including but not limited to early warning alor'ts and intervention levels), as part of the site wide AMP (Condition 45):								1		N/A	Not Applicable		Future item - Due 18 months from 13Nov2000  Operator has submitted the updated plan after the audit period.
16.e	once approved by the Department, be implemented by the Operator by the Operator.								1		N/A	Not Applicable		Future liters - Due 18 months from 13Nov2000  Goerator has submitted the updated plan after the audit period.
17	Within 18 months date of authorisation of authorisation of the Overburden Management Project, the Operator must:											Refer to sub conditions		Future item - Due 18 months from 13Nov2020  Operator has submitted the updated plan after the audit period.
17.a	submit a plan to the Department for review, that shall include:								1		N/A	Not Applicable		Future Item - Due 18 months from 13Nov2000  Operator has submitted the updated plan after the audit period.
17.a.i	site-specific trigger values determined in accordance with Australian and New Zealand Guidelines for Fresh and Marrise Water Quality, 2018 firement, incorporating ANECC (2003) guidelines, as appropriate monitoring locations, in accordance with Condition 27;								1		N/A	Not Applicable		Future litem - Due 18 months from 13Nov2020  Operator has submitted the updated plan after the audit period.
17.a.i	a commitment that creaks on the mine site to show long-term improving trends in water quality within 20 years after cessation of mining:								1		N/A	Not Applicable		Future item - Due 18 months from 13Nov2000  Goerator has submitted the updated plan after the audit period.
17.a.ii	methodology to calculate contaminant loads and contaminant concentrations entering creeks and the McArthur River using system modelling that must:								1		N/A	Not Applicable		Future Item - Due 18 months from 13Nov2000  Operator has submitted the updated plan after the audit period.
17 alia	use suitable site-specific data collected as part of Condition 26;								1		N/A	Not Applicable		Future Item - Due 18 months from 13Nov2000  Operator has submitted the updated plan after the audit period.
17.aliib	be subject to review by the relevant independent panel;								1		N/A	Not Applicable		Future Item - Due 18 months from 13Nov2020  Operator has submitted the updated plan after the audit period.
17aile	distail specific assumptions to be tested including but are not limited to:								1		N/A	Not Applicable		Future item - Due 18 months from 1 Shov2000  Operator has submitted the updated plan after the audit period.
17.allici	groundwater flow paths;								1		N/A	Not Applicable		Future item - Due 18 months from 13Nov2000  Operator has submitted the updated plan after the audit period.
17.aliicii	attenuation of metals from mine-derived was tes:				1		1		1		N/A	Not Applicable		Future Item - Due 18 months from 13Nov2000  Concreter has submitted the undated rate offer the audit period.
17.b	once approved by the Department, implement the plan:	1							1		N/A	Not Applicable		Future item - Due 18 months from 13Nov2000  Operator has submitted the updated plan after the audit period.
17.c	incorporate the relevant findings from the plan into the AMP.	1									N/A	Not Applicable		Future Item - Due 18 months from 13Nov2000  Operator has submitted the updated plan after the audit period.
18	The Operator must provide a written reoponse to the Department, if an independent technical panels, required under Condition 21, review of the models and mobiling outputs, and the data collection programs that informed the model development at Condition 17 (4)(4)) address commerciations for reprovements. All relevant outputs must be sould to inform and update the AMP.		1		1		1				N/A	Not Applicable		Operator has scorround the operator para all the abusing person.  Operator is not the process of a substitution of the operator is in the process of assisting OTT with establishing the panels.
19	Every three (2) years from the date of authorisation of the Overburdon Management Project, an independent environmental audit of the Quality Assumance (DA) and Quality Osterio (DC) procedures and wiste rock identification and handling performance must be undertaken and:	1					1				N/A	Not Applicable		This is class 13Nov23.  The woole reck handling procedures audit was conducted on 15 June and reporting is underway (after the audit period).
19:a	the results of the audit be provided within six (6) weeks to the Department and to the relevant independent panel:	1					- 1				N/A	Not Applicable		Not due in the audit period.
19.6	the Operator must provide a written response to the satisfaction of the Department where findings from the audit and review by the relevant panel includes matters that need to be addressed or areas for improvement.	1					1				N/A	Not Applicable		Not due in the audit period.
20	Fore date of authorisation of the Overburdon Management Project, but writes of the Month of the Month of the Management (a. rains at bits level) that do not currently contain PAF wastes must include a bee parmacially filter of Q. Dar Holmons and maintern scharafied hydraulic conductively of 1 x 10-1 markes per second above which flatter PAF, NAF and beingin malerials are to be steed.						1				4	Full Compliance	NEA First Register.  Wormstallify self-results.  NDEF Ren'th East Alpha Stage Complete Design Report version 3 dated 23Feb2022.  1.5x10 <sup>-11</sup> was the largest permaskility in the NEA Test Register so this is compilant.	The Operator article Transition CD, was developed in RE Alpha stage during the reporting particle, with all permoitability tests exceeding the required specification of maximum suburated hydraudic conductivity of 1 a 10-9 mitres per second.

									~				
13 Nov 2020 and 18 June 2021 Authorisation Condition No.				Open PII/Underground Workings				Waterways (including river diversion)	Bing Bong Loading Facilit		Compliance Level		
21	The Operator must provide funding and assist the Department to establish and operato an independent panel(s) of experts to advise on matters affecting the environmental performance of the NOEF, TSF and mine closure planning.	1			1		1			4	Full Compliance		Operator advised that during the audit period there was no request from the DITT for funding or assistance. Operator continues liaking with DITT on the Draft Terms of Roference.
22	Within 12 months of date of authorisation of the Overtunden Managament Project, I no Epirator must submit a report to the Department for review, detailing the results of relicions studies undertaken to inform the requirements for implementation (including finalization) of a NOEF groundwater seepage interception and recovery system that:						1			4	Full Compliance	ANDEF Intercoglion Scheme Report Authorisation Condition 22 was submitted to DRTT on 13/Nov/2021, which is on the dua date.	The Operation advised that at this stage no scopage is expected to report to Birmsy. Creak. This changes at the end of the pliff or On this lasts the Operator proposed not to commence construction activities for the inforception trench in the short-modeum term.
22.a	contain seegage to the Berray Creat discress in harmed and the Machine Reser.							1		4	Full Compliance	Gold Interception School Register Author Martin Continue 2 dated 12 bits 2021.  See School Register Author Martin Continue 2 dated 12 bits 2021.  See School Register Author Martin Continue 2 dated 12 bits 2021.  See School Register Author Martin Continue 2 dated 12 bits 2021.  See School Register Author Martin Continue 2 dated 12 bits 2 dated 12 bi	incurs MRDA, and, but to implement common few minutes on Eq. particular of disable of the Medical December of the Common few many continues of the many count for work of the Common few many count for work of the Common few many countries and common few many countries and common few many countries and countrie
22 b	achieves a recovering treat in the Barney Cresk diversion channel and the old Mule thus Channel (at SW00) water quality within 20 years of cessation of mining:							1		4	Full Compliance	NOET introception Scheme Neport VDA Condition 27 dated 13 Nov2027.  Libbo 1 of the NOET interception Scheme Neport state. "As above, the interception scheme would be intellictative within the specified time period, however, NOEM is an appropriate time of the process of the specified state period, however, the replanment of an appropriate time if required earlier than introjusted."	"The groundwater menitoring program and relevant" ARP will be updated at a more appropriate limit chees to consistent on dimining operations, light the records of groundwater levels), in order to ensure a recovering trend in water quality in the Barrary Creek Diversion Charrard (including at 59/00) within 20 years of consistent of mining."
22.0	Facilitates achieving requirements of Conditions 16 and 17.							1		4	Full Compliance	NOEF Interception Scheme Report VOA Condition 22 dated 13 Nov2021.  Table 1 of the NOEF Interception Scheme Report Votes 'As described, the interception scheme loughor Vales 'As described, the interception scheme would be intelligible in the Noet-redistant lens however, the implementation of the TASP will not prevent Conditions 16 and 17 from being addressed:	
23	Within 24 months of date of authorisation of the Overburden Management Project, the Operator must submit a NOEF goosynthetic liner cover system plan to the Department for review. The plan must:						1			N/A	Not Applicable		Future Item. Twenty-four months from 13Nov2020.
23.a	outline a process (including timelines) to test and evaluate (i.e. criteria) the constructability and effectiveness of geosynthetic liner cover options including a geosynthetic liner /compacted clay layer combination:						1			N/A	Not Applicable		Euture Item. Twenty-four months from 13Nov/2020.
23.b	include implementation of trials on rehabilitated stages of the NOEF:						- 1			N/A	Not Applicable		Future item. Twenty-four months from 13Nov2020.
23.c	identify relevant performance parameters must be monitored, including but not limited to:						- 1			N/A	Not Applicable		Future item. Twenty-four months from 13Nov2020.
23.c.i	slope stability during extreme events:						- 1			N/A	Not Applicable		Future item. Twenty-four months from 13Nov2020.
23.c.ii	cover performance as a result of heat effects: tolerance of the secondhetic liner to expected differential		-	=			1			N/A	Not Applicable		Future item. Twenty-four months from 13Nov2020. Future item. Twenty-four months from 13Nov2020.
23.c.iii	settlement;						- 1			N/A N/A	Not Applicable		
23.c.iv 23.c.v	veracity of cover longevity predictions: Bioly long-term maintenance requirements.		-	+	-	-	1			N/A N/A	Not Applicable Not Applicable		Future Item. Twenty-four months from 13Nov2020. Future Item. Twenty-four months from 13Nov2020.
23.d	Include reporting of trial results and monitoring outcomes:						1				Refer to sub conditions		
23.d.i	within three years from the submission of the plan:		-	+	-		1			N/A	Not Applicable		Future item. Twenty-four months from 13Nov2020.
23.6.8	every three years thereafter, to the relevant independent panel and the Community Mericence Cross for review, and shall be audited by the independent Menitor. The Operator must provide a written response to the Department, if review from the relevant panels and Community Reference Croup require matters to be addressed:						1			N/A	Not Applicable		Future item. Twenty-four months from 13Nov2020.
23.d.ii	must be used to inform the AMP and closure planning for the mine.	1					1			N/A	Not Applicable		Future item. Twenty-four months from 13Nov2020.
23 a	The NOEF geosynthetic liner cover system plan, once approved by the	1	-	+			1			M/A	Not Applicable		Future item. Twenty-four months from 13Nov2020.
23.0	Department, must be implemented by the Operator.	- 1		_				 		NA	-vot Appacació		<u> </u>

Authorisation Compliance Workbook - Operator

Authorisation Co	mpliance Workbook - Operator					2	ž		ži.			Evidence 2022	Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.			Non-mineral Waste Management	Dpen PII/Underground Norkings			Overburden Emplacem Facilities	Waterways (including river diversion)			Compliance Level		
24	Within five (S) years of the date of authorisation of the Overburden Management Project, the Operator must submit a strategy to the Department that details the long-time disposal miningement of allings into the mine pit void, submiringed under a suitable depth of pit water. The elian must.	1		1	1					N/A	Not Applicable		Future likim. Five years from 13Nov2000.
24.a	include strategies on the tailings reprocessing and assessment of residual chemical contaminants that may likely impact on meeting the requirements of Condition 16:	1			1					N/A	Not Applicable		Future item. Five years from 13Nov2020.
24.b	be reviewed by the relevant independent panel.	1			1					N/A	Not Applicable		Future item. Five years from 13Nov2020.
25	Once approved by the Department, the strategy developed in accordance with Condition 24 must be used to develop a plain five (5) years prior to execution of mining, for approvail by the Department. Any requirement to vary the approved disposal strategy or plain must be:	1								N/A	Not Applicable		Future Rem. Condition triggered by condition 24, which is not until required until five years from 13Nov2020.
25.a	applied for in writing to the Minister:	1								N/A	Not Applicable		Future item. Condition triggered by condition 24, which is not until required until five years from 13Nov2020.
25.b	based on leading practice and site conditions;	1								N/A	Not Applicable		Future item. Condition triggered by condition 24, which is not until required until five years from 13Nov2020.
25.c	supported by the relevant independent panel:	1								N/A	Not Applicable		Future item. Condition triggered by condition 24, which is not until required until five years from 13Nov2020.
25.d	notified to the NT EPA in accordance with Condition 15.	1								N/A	Not Applicable		Future item. Condition triggered by condition 24, which is not until required until five years from 13Nov2020.
	Within 12 months of data of authentiation of the Orvetzedom Management Project of Decorate must calcined and systemics and available used of shouse of exhomation in southern a revision's water months region of the control of the southern and an advantage months region of the control of the control of the control of properties of the control of the control of the control of projects of mining all relians on the environmental vision and benefitied uses of the MAARTure Shore.	1						1		N/A	Not Applicable	Clark Operator to 10111 (adjust 18: McAhron Steve Mellay - Foreinson of Authorisation Conference of Authorisation Conference on Conference of Authorisation Conference on	Request van makels frycherste to GIT in is latter daniel 14-legefül 11 kmarty 1868. Marty regesch 18 früh für genitemt derforum her versich andersonste darf 13 km/s 2022 in hir Carellan 2-19 Wale in Management (Fran. 1846) von der versichen 1846 von der versichen 1846 von der versichen 1846 von der versichen 1846 von derforum 1846 von der versichen 1846 von der ve
27	The plan required under Condition 26 must:										Rufer to sub conditions		
27.a	allow for assessment of compliance with Condition 16 and include sufficient detail to inform/develop/update the AMP;	1						- 1		N/A	Not Applicable		Due to time extension in condition 26, this condition is not applicable until 13May2022, outside the audit period.
27.b	at a minimum:										Refer to sub conditions		
27.b.i	quantify loads of lead and zinc entering the McArthur River each year;							- 1		N/A	Not Applicable		Due to time extension in condition 26, this condition is not applicable until 13May2022, outside the audit period.
27.b.ii	quantify impacts to water quality and trends in groundwater to determine that objectives and targets are being mat, including the effectiveness of source control to reduce loads to as low as is reasonably practicable:							1		N/A	Not Applicable		Due to time extension in condition 26, this condition is not applicable until 13May/2022, outside the audit puriod.
27.b.ii	develop appropriate future trigger values for waterways on the mine sto and the Modrither River in accordance with the AMZECC Cuidelines. In the interim, the trigger values in the most current WDL shall be used:							1		N/A	Not Applicable		Due to time estimation in condition 26, this condition is not applicable until 13May/2022, outside the audit pariod.
27.c	be prepared in consultation with the NT EPA:	1						- 1		N/A	Not Applicable		Future item as discussed in condition 26. After the audit period, the Operator requested a further extension to this condition.
27.d	be prepared in consultation with the relevant independent panel;	1						1		N/A	Not Applicable		No independent technical panels, required under Condition 21, have been set up.
27.0	once approved by the Department, be implemented by the Operator:	1						1		N/A	Not Applicable		No approval from DTT had been received in the audit period.
27.1	be subject to consultation with the relevant independent panel in the event that the plans requires updating (e.g. to maintain the currency of the monitoring network);	1						1		N/A	Not Applicable		No independent technical panels, required under Condition 21, have been set up.
27.g	ensure results of the program:										Refer to sub conditions		No approval from DITT had been received in the audit period.
27.g.i	are reported annually to the Department;	1						1		N/A	Not Applicable		No approval from DLTT had been received in the audit period.
27.g ii	are audited by the Independent Monitor every three years:	1						1		N/A	Not Applicable		No approval from DTT had been received in the audit period.
27.g.ii	be published on the Operator's website.	1						1		N/A	Not Applicable		No approval from DETT had been received in the audit period.
28	Within 18 morths of data of authorisation of the Overburden Management Project, the Operator must submit a resistant and investigation people mit to the Operator for eview that establishes the concentration of mine-derived contaminants at which chronic and acide impacts to black of relevance to the McVPMs (Peor legister occur eating recognised and accepted eco-tradictiogical testing, and:	1						1		4	Full Compliance	Lather Operation to ST Trudgets Bit. Chardiston 35 Submission – Esotosicology Research and mendigation by program data (2002/000). The chardist of the Chardiston State of th	While this is a future item is it is not due until 18 most his from 13Nov2000, as the Operator has substituted the Costocology Bosarch and Investigation Program on 250ct2001 this is considered compilant.

Authorisation Co	ompliance Workbook - Operator										
13 Nov 2020 and 18 June 2021 Authorisation Condition No.			Open PII/Underground Workings			Waterways (including river diversion)		Score	Compliance Level		Comments 2022
28.3	The rounds of this program must be resignated with other missed program must be registered by the control of th	1				1		4	Full Compliance	Uniform Control (1971) Assign the Condition 28 delarmates: Continuous (Seasons) Control (1971) Assign the Condition 28 delarmates (Seasons) Assign the Cond	(Make the x is flact them is to of about 01 in moth her. The Chicoco, or in Chicago, and the chicago, and the chicago, and the chicago, and the 2000000000000000000000000000000000000
28.b	the plain once approved by the Department must be implemented by the Operator.	1				1		N/A	Not Applicable	Setter (ETT to Operator subject Nr. VDA 0009 Condition 28 – Ecotoxicology research and investigation program (upproved after the audit period).	Ecotoxicology Research and Investigation Program was submitted on 25Oct2021. This was not approved by DITT in the audit period. However, examples of implamentation include the WDL being updated to include SSTVs for Cobat
29	Althin is the moreth of sake of suthernation of the Dunkturden Management Project, the Operator must submit an aquatic ecosystem monitoring program to the Department for review that provides improved understanding of aquatic ecosystems in the McVethur River from changing swafer flows, lowks and quality, including available dry season hubbial. The program must:	1				1		N/A	Not Applicable	Email Operator to DITT subject MMH   Aquatic Ecology Management Plan dated 13May/2022 (after the audit period).	Future Nam. Within 18 manths from 13 Nov2020.  Aquatic Ecology Monitoring Plan was submitted 13May/0022
29.0	assess impacts of the mine on water levels in refuge pook/waterholes, upstream and downstream of the mine, including in the McArthur filter diversion channel;					1		N/A	Not Applicable		Future item. Within 18 months from 13 Nov2020.  Aquatic Ecology Monitoring Plan was submitted 13Mey2022
29.b	assess impacts of the mine on water quality in refuge pools/waterholes in the dry season;					1		N/A	Not Applicable		Future Item. Within 18 months from 13 Nov2020.  Aquatic Ecology Monitoring Plan was submitted 13May2022
29.0	assess impacts of the mine on the health of aquatic biota in the McArthur River using non-lethal sampling methods:					1		N/A	Not Applicable		Future Item. Within 16 months from 13 Nov2020.  Aquatic Ecology Monitoring Plan was submitted 13May2022
29.d	be designed to be integrated with requirements of the AMP consistent with Condition 45:					1		N/A	Not Applicable		Future Rem. Within 16 months from 13 Nov2000.  Aquatic Ecology Monitoring Plan was submitted 13May2022
29.0	once approved by the Department, be implemented by the Operator.					1		N/A	Not Applicable		Future item. Within 18 months from 13 Nov2020.  Aquatic Ecology Monitoring Plan was submitted 13Mey2022
30	All attems, See Opposed must consider seeks the commont with the most of the common of the common of the common of the common of the common of the common of the common of the common of the common of the Dischard, but not be result to 100°T height must strong, and washes (Included that the common of the common of the common of the Manusco, Included and Common of the common of the common of the Manusco, Included and Common of the common of the common of the Manusco, Included and Common of the Common of the Common of the Manusco, Included and Common of the Common of the Common of the Manusco, Included and Common of the Common of the Common of the Manusco, Included and Common of the Common of the Manusco, Included and Common of the Common of the Manusco, Included and br>Manusco, Included Manusco, Included Manu	1			1			4	Full Compliance	The Committee of the Co	The Government and the Section of the Section Section of the Section S

Authorisation Co	ompliance Workbook - Operator												
									*				Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.			Von-mineral Waste Vanagement	Dpen PII/Underground Norkings				Naterways (including iver diversion)	sing Bong Leading Faoi	Score	Compliance Level		
31	The Speak or and self-backs or ever such which self-principles and self-backs are self-backs as self	1				1	6			4	Full Compliance	Control Contro	This Speaker which the ground distribution primer devices an understand proport MAM.  IMPROVED 2002 Technicus on underplacing signs 31 of where the MICH has been formed to the MICH and the MICH and the MICH has been proported to the MICH and understand statistics are compared and in a compared to the MICH and understand statistics are surrough and place it is a compared to the MICH and understand statistics are surrough and place it is a compared to the MICH and understand statistics are surrough and place it is a compared to the MICH and understand statistics are surrough and place it is a compared to the MICH and understand statistics are surrough and compared to the MICH and understand statistics are surrough and compared to the MICH and understand statistics are compared t
32	Within is methy of date of authorisation of the Construction Management Project. He Coprated menage rowide a report to the Mension, and ARPA or the Mension for Art. Culture are all rheitage (whether relavation) that demonstrates the socialistic proposed understaten or provide aplies to the Mension that date consultation and the state of the state br>state stat	1				1				4	Full Compliance	Latter Carear Managar to Minister for Primary Including and Thornices calabel to submissions of a region of the condition free details for emailed on 1% e8/2020 - bufore the world portiol, Cultural Hurillage Management Subuholation Engagement Report 14% e8/2021.	
33	Without 1 member of class of authernations of the Overturales Management Project product must divelope the mode obsequence and cubest for the project project project project project project project project under disease emissions at an appropriate location soliton for south and writibles recorptors, delimented in correlations with NI IDA.	1				1				4	Full Compliance	Earl Operate in BTT stages WSSI T (packed AMPR ACMP December 227) stated 1992-201. A contract of the Contract	location (Incorrementation 19 of Assessment Report 18), Jurisies that "In- connclusion, I consider that the proposed enterturing leadines papers to be consistent with the nature and inform of Biocommentation 19 of Assessment Report 18, provided but it ments the requirement of ASPADE 35000 1, 12001: Matthook in its supplies and analysis of artifacts are - Part 1.1 class to stilling a monitoring squaptum and other released Partial and Starties. Methods from partial and the stilling of the stilling and analysis of artifacts are - Part 1.1 class to stilling air monitoring squaptum and other released Partial and Starties. Methods required 3500.4 1-10015:
34	The air quality monitoring plan required under Condition 33 must include:										Refer to sub conditions		
34.a	Signifina. Nacións. Tropany of mobility figure values and proporting commenter in temporary protection and quality risk to human haafth capable of the moneyal spound quality risk to human haafth capable of the moneyal source.	1				1				4	Full Compliance	An County (In American County of Technology (In American County) (In Ame	The believes of better confirm disposes in extent of A Lordon or Egyptic Andreas or Technical Control or Sediment of A Lordon or Sediment or Sediment of A Lordon or Sediment
34.b	existence of consultation with the NT EPA to be provided at the time of the plan submission;	1				1				4	Full Compliance	Tanal Operator to DTT subject MMM. I Updated AMP & ACMM (Nevember 2021) disted: 15th/2002021.  Latter NT DPA to Operator dated 17 JAZOP De: Proposed self-ed desides monitoring location (Decommendation 19 of Associatoris Report and Jazop Berler in the authoristics). Latter Operator to DTT subject RE: Mort from Elever Mining — Adoption Management Plan & AF Coulty Management Plan Submission dated 11 November 2021.	

							- ≥				Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.			Open PII/Underground Workings			Waterways (including river diversion)	Bing Bong Loading Fadili	Score	Compliance Level		
34.c	once approved by the Department, be irrejemented by the Operator.	1			1			N/A	Not Applicable	2017 2022 WHINE Americans to Montaining Schedule Line and Levenbourne and Ex. 2027 Alles a. deed 1944(2021) Genal Levenbourne unit for 2027 Alles a. deed 1944(2021) Genal Levenbourne unit for 2027 Alles a. deed 1944(2021) Genal Levenbourne unit for 2027 Alles a. deed 1944(2021) Levenbourne unit for 2027 Alles a. deed 2027 Alles a. d	Approved more obligancies of SAuguidia. A more has also proved for written of the patients of conditions. It and these of the condition, had not become approved by DET in the audit provide in this condition, is all care inten- ted. The conditions is all care intented in the conditions are supported by the conditions in the con- sistent of the patient of the supported by the conditions in the con- sistent of the patient of the supported by the conditions of the conditions of the conditions in the conditions of the supported by March Indian on 11 to become 2000 of the high patients of the supported by March Indian in a 11 to become 2000 of the high patients of the supported by March Indian in the conditions of the supported by March Indian in the condition of the supported by March Indian Ind
35	The results of the air quality plan for each reporting frequency must be:								Refer to sub conditions		
35.a	made available on the Operator's website. Initial monitoring results to be reported within 6 ments of the plan being accepted by the Operations of on all administrative timeframe as agreed in writing with the Department.	1			1			4	Full Compliance	Sugniced real time data on Operator's website 215s-p21 and monthly consultaer reports.	DITT advised "The air quality plan in question is the one submitted as part of the MMP on aircray 2020, and included in the AMP, and approved by Minister Makeison on 13 Movember 2020". Once hACMP that was submitted on 13Nov3CQ1 is approved then that will be the relevant document. Breal time data is available to the public critine (October 2021).
35.b	incorporated where relevant in the AAAP	1			1			4	Full Compliance	IAM 2011 2022 unition 3 sions "The TAPPA doubled in the ARP lies the lay and some reading disputies to perform any advantage TAPPA doubled the business. The ARP doubled the business of the Cappe of	Mole nor specificary oriental services of the ACMS 10 to ACM 10 th ACM and COlonia 2014.  ACM 10 th ACMS 10 th
36	Within 24 months of data of authorisation of the Overturdion Management Project, the Operator most select an emotivaries emission of the Operator of the Computer of the management plan to the Department for review that manages risks of motal stackly from harman consumption of aquatic fauna obtained from the McArthur Blow. The plan must:					1		N/A	Not Applicable		Future Born. Williain 24 months from 13 Nov2000.
36.a	distormine if aquatic fauna obtained from any reach of the McArthur River, that may be impacted by the mine's operations, is safe to eat:					1		N/A	Not Applicable		Future Itim. Within 24 months from 13 Nov2020.
36.b	include demonstrated evidence of consultation with NTEPA: detail public reporting of the monitoring results, including at					1		N/A	Not Applicable		Future item: Within 24 months from 13 Nov2020.  Future item: Within 24 months from 13 Nov2020.
36.c	appropriate locations in the Borroloola region: include provisions for implementation and maintenance of signage at waterways at the MRM site in accordance with the requirements of					1		N/A	Not Applicable		Future item. Within 24 months from 13 Nov2020.
36.d	Condition 62 until the risk of contamination from consumption of this aquatic fauna is demonstrated to be acceptable by the Department;					1		N/A	Not Applicable		
36.e	once approved by the Department, be implemented by the Operator.	1				1		N/A	Not Applicable		Future item as the report is not approved by the DITT.
37	Within 24 months of date of authorisation of the Overburden Management Project, the Operator must submit a plan to the Department for review that outlines monitoring program for management of targetooth Sawfaith. The plan must:					1		N/A	Not Applicable		Future Itim. Within 24 months from 13 Nov2020.
37.a	include a sampling strategy for Largetooth Sawlish that is non-lethal:					1		N/A	Not Applicable		Future item. Within 24 months from 13 Nov2020.
37.b	include dotals of parameters and critoria, from which the results could be used to define specific (measurable and time-bound) parformance indicators to abate a significant decline in Largetooth Sawfish movement:					1		N/A	Not Applicable		Future islam. Within 24 months from 13 Nov2000.
37.c	include trigger levels for investigation and implementation of management measures:					1		N/A	Not Applicable		Future Item. Within 24 months from 13 Nov2020.
37.d	once approved by the Department, be implemented by the Operator.					1		N/A	Not Applicable		Future item as the report is not approved by the DTT.
38	Within six months following the establishment of the required panels and groups in accordance with Condition 21, the Operator must:								Refer to sub conditions		Future item. Panels and groups not set up.
38.a	develop environmental objectives for a Care and Maintenance Plan in consultation with the relevant Independent Panels, CRC, custodians and traditional owners;	1						N/A	Not Applicable		Future item. Panels and groups not set up.
38.b	submit this to the Department for review.	1						N/A	Not Applicable		Future item. Panels and groups not set up.

uthorisation Compliance Workbook - Operator

Authorisation Co													
13 Nov 2020 and 18 June 2021 Authorisation Condition No.			Non-mineral Waste Management	Open PII/Underground Workings		Overburden Emplacement Facilities	Waterways (induding river diversion)	Bing Bong Loading Facility	So		Compliance Level		
39	Within five years of date of authorisation of the Overburden Management Project, the environmental objectives arising from Condition 38 must be used to develop a Care and Maintenance Plan in consultation with the Department.	1							N	e/A	Not Applicable		Future Item. Within five years from 13 Nov2000.
42	The Operator must facilitate an independent third-party assissment of this security for rehabilitation of disturbances resulting from authorised activities in the approved MAP that is consistent with requirements under Conditions 10, 11 and 12, to the satisfaction of the Department, and every 3 years thereafter if the security has been re-calculated or adjusted.	1							N	4/A I	Not Applicable		Not triggered until 3 years after the 13Nov2000.  However, independent third-purty association of the security have been done as par the evidence included for conditions 10 to 13.
41	The Operator, consistent with Condition 40, must:										Refer to sub		
41.a	commission a qualified person to review the socurity amount whose appointment is accepted by the Minister;	1							N	4/A	conditions Not Applicable		Not triggered because condition 40 isn't triggered until 3 years after the 1380e/2020.  However, independent third-party assessments of the security have been done as per the evidence included for conditions 10 to 13.
41.b	onsure that the security is reviewed and dathered to the Department within six months of acceptance of the qualified person.	1							N	4/A I	Not Applicable		Not triggered because condition 40 kert triggered until 3 years after the 13kev/20th.  However, independent third party associations for the security have been done as per the verbinon tectual for condition. Yo to 12.  SOS SOTT may consist changing the wording of this condition if responsed of the qualified perior to surdertake the independent third party association of the qualified perior to surdertake the independent third party association of the security is not required.
42	for every approved MMP and MMP amendment, the Operator must provide a revised copy of the approved document that removes commercially sensitive information, includes an overview and anvironmental section, and is suitable for publication on the Department's vectorie, or provide written approval to make the complete documents publish accessible.	1							N	4/A	Mat Amelicakio	Email form Operator to DKTT dated 73u/DD Riv MRM - 2020 Mining Management Plan - Public Vension  Email from Operator to DKTT dated 24Jun/20 8x MRM   2020 Mining Management Plan - Public Vension.	adapted on Meroitic confirmed that the literaty 2020 MMP with corresponds count bio information removed is on the DTTs veibble (Decided 25%pc) and 26.60.02(2). Emails provided between Operator and DTT show that the lanuary 2020 MMP including an overview and aim/competital sociation, with commercially sensitive information removed, was provided to the DTT.
43	The Operator must assist, as required, the Department to establish and operate a Community Reference Group (CRG).	1								4 F	ull Compliance	Sighted tech working group minutes that has community reference group as an item.	
44	Table 11 leaves for date of authorization of the Contradion (  Table 12 leaves for the Contradion (  Table 1	1								4 f	Full Compliance	Compliance of Anna Polycopic (Jam and provinches Indoord)  Anna Compliance (Jam and Jam and Ja	The Company of the Co
44.a	we adjuly specialistic review and yighthout of water revoluting program. In pirt of addressing Condition 2s.	1					1			4 F		Sead Speakers (1977) segent before from the Very Lynamium of Anthronium 1997- 1990 (1974) and the Sead Speakers (1974) and the Sead	Allowage for Condition and as well the mode in term 1 the 2002 of the based programs.  The Opening and the Condition is the 100 fill this requirement and an experiment and the Condition is the 100 fill this requirement and an experiment and the Condition is the Condition of

13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Regularement  Genocition has all months ng data calcular durker winous montholog programs and management plans was considered and	Governamo:/General	Non-mineral Waste Management	Open PII/Underground Workings	Tallings Storage Facility	Water Management and Storages	Overburden Emplaosment Facilities	Exploration	Waterways (including river diversion)	Bing Bong Loading Facility	Score	Compliance Level	[coal (greater to 1011 calgest MAPINE like to Mos ) Variation of Authorisation 1959-   Coadinos 44 date 28Ay2022 (film and provide but viewer)	Comments 2022    Williamy http://www.comments.com/scores/s
44.b	syntheoloid (i) is conceptual till models, it and analysis)	1							1		4		(MR 2000 2007). The independent Monitor confirms that the requirements of this condition are met by the AMP, VMSP and DAR.	Each Operator in IDIT Tradject Machine Valver Many 1 Variation As Americans 1000 Constitutes of dest publication 2014 (2014) and 1000 2021 Environmental Memberrup Supert SAMO on 13 August 2021 [1]. The LBM provides a symbol on 61 on commonation entering programs insplanment and sometimes of the commonation of the commonation of the commonation of the commonation of the consistency of the commonation of the consistency of the commonation of the commonation of the consistency of the commonation of the consistency of the commonation o
44.0	becomposed in the AAP.	1							1		4		Transferred Performance (Performance Performance) (Performance Performance) (Performance) (Performan	All Conjugation Confusion in the data with Harmonic New TU Stack/2015. The bases produced associated and produced in the Staff-Link Star Inspectation and starting confusion and the staff Link Star Inspectation and the land and produced and the staff Link Star Inspectation and Americanian (2005 - Confusion of the American Star Inspectation of the Star Inspectation (2005 - Confusion of the American Star Inspectation of the Star Inspectation (2005 - Confusion of the American Star Inspectation of the Star Inspectation of the Star Inspectation of the Inspecta
45	Management Project, the Operator must submit an AMP to the Department:	1									N/A	Not Applicable		Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted to DET 13Mey2022 (after the audit period).
45.a	The AMP must include the following key elements:											Refer to sub conditions		
45.a.i	clear, measurable environmental objectives for all significant environmental risks and potential impacts;	1									N/A	Not Applicable		Future Bern. Within 18 months from 13 Nov2020.  Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted to DEIT 13Mey/2022 (after the audit period).  Future Bern Within 25 months Conn. 13 Mey/2020.
45.a.i	measureable performance indicators to show that objectives are on target to be melt; pre-determined triggers to warm of potential for performance	1									N/A	Not Applicable		trabure laten. Within 18 months from 13 Nov.2020.  Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted to DETT 13Mey/2022 (after the audit period).  Future liters. Within 18 months from 13 Nov.2020.
45.a.ii	indicators to be exceeded, as informed by monitoring:  realistic and achievable contingency interventions to maintain	1									N/A	Not Applicable		Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted to DETT 13May/2022 (after the audit period).  Future litem. Within 18 months from 13 Nov2020.
45.a.iv	performance indicators if triggers are consistently exceeded:	1									N/A	Not Applicable		Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted to DITT 13May/2022 (offer the audit period).  Future liken. Within 18 months from 13 Nov2020.
45.av	county delinear management managements records that are capable or being implemented in a timely way to meet performance indicators and environmental objectives; monitoring in accordance with relevant flecommendations in NT	1									N/A	Not Applicable		Submitted to DEPWS as part of WDL requirement on 10ct/021 and was submitted to DEPWS as part of WDL requirement on 10ct/021 and was submitted to DEPT 15May/022 (After the audit pariod). Future librar, WBM 18 months (norm 13 Mov2020.
45.a.vi	EPA Assessment Report 86 to determine whether management measures are effective and to inform the need for adjustments to management measures or need for alternatives;	1									N/A	Not Applicable		Submitted to DEPWS as part of WDL requirement on 1Oct2021 and was submitted to DITT 13May2022 (after the audit period).
45.a.vii	a continual feedback system to inform appropriate actions to be initiated when triggered and environmental objectives are always being met;	1									N/A	Not Applicable		Future Born. Within 18 months from 13 Nov2020.  Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted to DEIT 13Mey/2022 (after the audit paried).  Future Born. Within 18 months from 13 Nov2020.
45.avii	continual divelopment of new management actions as required based on knowledge-gained from experience at the site and elsewhere across industry.	1									N/A	Not Applicable		Future item. Within 18 months from 13 Nov2000.  Submitted to DEPWS as part of WDL requirement on 1Oct2001 and was submitted to DITT 13May2022 (after the audit period).

orisation Compliance Workbook - Operator

Authorisation Co	mpliance Workbook - Operator										Evidence 2022	Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.			Open PII/Underground Workings			Waterways (including river diversion)	Bing Bong Leading Facility	Sx		Compliance Level		
45.b	The AMP must be reviewed by the Independent Monitor or an appropriately qualified, independent third party, and updated with inputs from the CRG (once established under Condition 43):	1							N/A	Not Applicable		Future Isom. Within 18 months from 13 Nov2020.  Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted to DEFT 13Nex2022 (after the audit period).
45.c	all review findings and CIG input requirements are to be provided to the Department for approval.	1							N/A	Not Applicable		Future item. Within 18 months from 13 Nov2020.  Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted to DEFT 13Mar/2022 (after the audit period).
46	Unless agreed otherwise in writing by the Department, the AMP must:									Refer to sub conditions		Future (laim. Within 18 months from 13 Nov2020).  Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted to DITT 13Ms/2022 (after the lasts period).
46.a	clearly set out the required management objectives and performance indicators:	1							N/A	Not Applicable		Future item. Within 18 months from 13 Nov2000. Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted
46.b	provide clarity on the triggers for changes to management actions, and responsibility and evidentiary basis for decision-making:	1							N/A	Not Applicable		to DITT 13Mby2022 (after the audit period). Future liters. Within 18 months from 13 Nov2020. Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted
46.0	establish the timeframe for initiation of certain actions if triggers are exceeded, including decisions to discontinue an activity and clarify responsibility and evidentiary basis for decision-making:	1							N/A	Not Applicable		to DITT 13May2022 (after the audit period). Future liters. Within 18 months from 13 Nov2000. Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted
46.d	establish a process for adjusting triggers that includes the regulator;	1							N/A	Not Applicable		Iso DITT 13Mey/2022 (uffer the audit paried).  Future Rem. Within 18 months from 13 Nov.2020.  Submitted to DEPWS as part of the requirement on 10ct2021 and was submitted to DEPWS as part of the requirement on 10ct2021 and was submitted to DEPWS as part of the audit paried).
46.0	establish transparent monitoring, reporting and review requirements;	1							N/A	Not Applicable		Future item. Within 18 months from 13 Nov2000. Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted
46.f	establish processes to achieve transparency and stakeholder engagement in AMP design and implementation that includes NT EPA, DAWE and CRC.	1							N/A	Not Applicable		Iso DITT 13Mey/2022 (uffer the audit paried).  Future IBMey/2022 (uffer the audit paried).  Submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to DEPWS as part of WIOL requirement on 10ct2021 and was submitted to 10ct2021 and wa
46.g	set out the mechanism for periodic review by Independent Monitor, which must not exceed a frequency of every three years;	1							N/A	Not Applicable		Future item. Within 18 months from 13 Nov2000.  Submitted to DEPWS as part of WDL requirement on 10ct2021 and was submitted
46.h	be provided to the Department for re-approval in the event that any material changes are made to the AMP.	1							N/A	Not Applicable		to DITT 13May/2022 (after the audit period). Future liters. Within 18 months from 13 Nov/2020. Submitted to DEPWS as part of WDL requirement on 1Oct/2021 and was submitted.
47	The Operator must provide written notice to the Minister and to the NI PPA (under clause 14A of the Environmental Assessment Administrative Procedures 1944) where it rends indicate performence indicators and environmental ebjectives will not, or are unlikely to be, must by implementing the AAMP.	1							N/A	Not Applicable		to DITT 13May2022 (offer the audit period). Will be summarised in EMR:
Independent oversigh Appointment of 1°F												
48	The Operator must appoint an Independent Certifying Engineer (ICE) to:									Refer to sub conditions		OBS: Structures curriently under construction (e.g. north eastern Sump (NSS), WMD wall and spillway, set) will be required to meet this condition, including the ICE to warrant and accept both the design and construction works and provide our titled as constructed reports.
48.0	weret red accept birth he biogs and conductor work, without irreduces no reopensably.  Whether the control of t	1		1	1				2	Part Compliance (moderate)	THE 2 TO ME THE BOTH TO COLD IN CONCESSION IN PART OF THE WIND THE WIND THE WIND IN THE WIND IN THE WIND THE WIND IN THE WIND THE WIND IN	The Court of the C

13 Nov 2020 and 18 June 2021 Authorisation Condition No.			Non-mineral Waste Management	Open P11/Underground Workings		Water Management and Storages	Overburden Emplacement Facilities	Exploration	Waterways (including river diversion)	Bing Bong Loading Facility	Score	Compliance Level		Comments 2022
48.b	le promot dans y di plane del construction de version regular di Pro- letta del Construction de la construct	1			1		1				2	Part Compliance (moderate)	New Security Collect Students Control Counter Security Security Collect Security Collect Security Collect Security Collect Security Collect Security Security Collect Security Security Collect S	2023 stated "The ITP process for each construction for was utilised to document the general construction process to ensure the specification requirements were being mar. CHD, as the ICE, was able to review the works at each hold and witness point, approving her e-commencement of construction as the defined held points, buring this reporting period, all relevant witness and hold points were reviewed and released.
42.c	approve o communicated of control vibro A diffred held pank.	1					1				3	Part Compliance (High)	222 IJ E MA, JUly Then Wife He have been of DEI Month of Contribution Progress Report April 2202 dated TSLA-2022 IV Call Taby The Manich M. 1001 in climate sizes has been of more of Dei Month of Manich Man	under presentation, makelet authority being regionment and absorbed being of the property of t
42.d	approve any material changes to the design during construction	1			1		1				4	Full Compliance	New Riseward ADEE! Mortrifly Commissions Programs Report Any 12022 dated 15 base(2017). New 26 base 26 base 16 based Commissions Commissions Annual Access	
48.e	vorily any membrang coppresents/stucture installed or to be installed as part of the controllance as specified in the relocated statistic designs remains functional at the conclusion of the construction works.	1			1		1				4		2021 J.D.*P. A.J. A.A. M. A.M. A. Samp Darm with WWP - Symma (Bines).  A.J. Une with WWO because and 170 feet a 18  The Cast 2 Samp - Reads to 81. 10054 in moleculation Report variants 00 dated 2004ay022  Landstelland of processions as part of the NDEF Foundation Vibra's is included on the relationship of processionship of the NDEF of the N	
48.e.i	in the event such equipment becomes non-functional, then replacement or an ICE approved alternative must be implemented by the Operator;	1			1		1				N/A	Not Applicable		No equipment became non-functional:

13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Regulerment  spran in writing is the Operator with to appear on Operator's project an Operator's project in Annual Production and the Operator of Annual Inspectation, and	Govername/General	Non-mineral Waste Management	Open PII/Underground Workings	Tailings Storage Facility	Water Management and Storages	Overburden Emplaosment Facilities	Exploration	Waterways (Induding river diversion)	Bing Bong Loading Facility	Score	Compliance Level	Cod 2 Storp 7 Ratus Proposal for Constitution Phase Sorvices 17 May 2021	MAN to respect of the pate to construct upon an increase decaying
48.f	igio in mrifugi that this coin end derwish the ICL's exponsibility or likelity for the project.	1			1		1				4	Full Compliance	The Operator of here a Resident Engineer on six and the LC (pennitrees confirmed to a Engineer of Rescribe part in the workt. The latest Engineer is explored to the depart and language and the property of the workt. The latest Engineer's explored to the depart and language and the property of the latest Engineer's explored to the depart and worktook property of the Engineer's explored to the depart and the engineer's explored to the depart and the engineer's explored to the engineer's explored to the engineer's explored to CAC 20 tops. The property of the engineer's explored to the engineer's proportionation and explored configuration of the construction works to be one constructed on confirmation construction. The engineer's explored and the engineer's the Industrial Engineer's depart and explored and the property exclored by the order to the CAC 20 to the engineer's property exclored by exclored to the Engineer's explored and the engineer's the Engineer's property exclored and the engineer's the engineer's exclored and the engineer's the engineer's exclored and the engineer's the engineer's exclored and the engineer's the engineer's the engineer's exclored and the engineer's the engineer's	
48.g	-exceptation of consisting provide surfleaf "w convisitabil" control and surfleaf "w convisitabil" control and surfleaf	1			1						3	Part Compliance (High)	TWO AT SIZE THAN THE SIZE AT COMMISSION Report research Generic MADINE (1995). The SIZE AT COMMISSION Report research Generic MADINE (1995). The SIZE AT COMMISSION CONTRIBUTION REPORT AND COMMISSION REPORT AND COMMISSION OF THE SIZE AT COMMISSION OF TH	All both care are visigned of 60°C consideration completed in the said grant three immediates are income to the said control for the control c
48.g.i	all the works undertaken;	1			1		1				N/A	Not Applicable	TSF Cell 2 Stage 7 Raise to Rt. 10063 m Construction Report version 00 dated 00May/2022 TSF Cell 1 Stage 5 - Raise to Rt. 10069 m Construction Report March 2022.	Eastern Perimeter Kunoff Dam Construction Report DRAFT November 2021 Section 4 covers the "Description of Construction Works".
48.g i	evidence of:											Refer to sub		
48.g.ii.a	hold-point sign-offs;	1			1		1				4	Full Compliance	TSF Cell 2 Stage 7 Raise to 9E 10063 m Construction Report version 60 dated 629May2022 TSF Cell 1 Stage 5 - Raise to RL 10059 m Construction Report March 2022.	Eastern Perimeter Runoff Dam Construction Report DRAFT November 2021 Includes an appendix placeholder in the draft report.
48 g li b	testing carried out (including but not limited to field tests, laboratory tests and statistical tests);	1			1		1				4	Full Compliance	TSF Cell 2 Stage 7 Raise to Rt. 10063 m Construction Report version 00 dated 02May/2022 TSF Cell 1 Stage 5 - Raise to Rt. 10059 m Construction Report March 2022.	includes a discussion on testing and white relevant appendices are not provided there are placeholders in the draft report.
48.g.i.c	acceptance criteria applied and compliance of the test results with the acceptance criteria;	1			1		1				4	Full Compliance	TSF Cell 2 Stage 7 Raise to Rt. 10065 m Construction Report version 60 dated 02May/2022 TSF Cell 1 Stage 5 - Raise to Rt. 10059 m Construction Report March 2022.	includes some clear discussions on meeting limits and specifications. There are placeholder appendices in the draft report.
48.g.il.d	where deviations to the plan have occurred, justification that demonstrates the design intent and performance of the structure has not been compromised.	1			1		1				4	Full Compliance	TSF Cell 2 Stage 7 Raise to Rt. 10063 m Construction Report version CO dated COMAy2022 TSF Cell 1 Stage 5 - Raise to Rt. 10069 m Construction Report March 2022.	Eastern Perimeter Runoff Dam Construction Report DRAFT November 2021 includes design changes in Section 2.6 of the draft report.
49	The Operative must ensure that the ICE Stable appropriate public and professional informative must not come the except of works associated with the except of work cort find.	1									4	Full Compliance	EXET Independent Certifying Engine Real Progrand for Amore Model The Work Bloom Fig. (1) to Bloom 2007 (1) 1992 A 1990 (2) 600 Fil (1) 1990 (2) 19	
50	The Operator must:											Refer to sub conditions		

											Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.		Non-mineral Waste Management	Open PII/Underground Workings		Overburden Emplacemer Facilities	Waterways (induding river diversion)		Score	Compliance Level		
50.a	convene an advisory board (Independent Fallings Review Board or 11180):			1				N/A	TOTAL PROPERTY.	(188 monthly membes subject 1188 Monthing 2000 works complained, 2021 works, Operational improvement. Moditum-time planting. (10.64 pairings (16.14) H1994 conference oldinot Beg 2021 (10.64 to 1914 assign (10.64 pairings (16.14) H1994 price 40.2 pairing (16.14) to 18.14 (16.14) to 1914 (16.14) to 1914 (16.14) to 1914 (16.14) price 40.2 pairing (16.14) to 1914 (16.14) to 1914 (16.14) to 1914 (16.14) to 1914 (16.14) which has 1188 did not meet in the audit puriod, they did meet just before the audit puriod and the 192 Cut 2 Stage 1 Raine loss (10.03 in Constitution Report retains the same names for the 1188 members.	The Iffeld and membrane subspace was period. The Operator advised that the most proved TIBR meeting was on 8Apr 2021 following review/underscenned of the Culi 2 Dags 2 dissign.
50.b	ensure the ITRB:								Refer to sub conditions		
Sübi	membership includes independent postochnical, tallings, and groundwaler-specialistic.			1				N/A	Not Applicable	TIBE mattery memors unjust TIBE Marting 2000 works complaint, 2021 works, Operational improvements. Adultus—Improvement, Obligationing CIDEA (PSH4 conformance shalled May 2021 (Solid not the audit portion). ID Cold 2 Stage): Place 8 10 (2005 of Controlling Blood and 2006), particulture. ID Cold 2 Stage; Place 8 10 (2005 of Controlling Blood and 2006), particulture. Operation advised that the Bores were not changes to the TIBE in the audit portiod, which is supported by the meeting mirriads he mercits before the audit point of and the 105 Cold 2009. Operation advised to the Cold 2009 of Controlling Blood and the cold 2009 of Controlling PSH 2009. Operation advised to the Controlling Blood of Controlling Blood of the morth his fire the audit privide.	Operator advised that there were no changes to the (156 in the audit puriod.
Sühii	ment regularly budwie on operation of the ToF and any future- ment future to the delign.			1				2	Part Compliance (modirate)	"Wide 2 Says "Dates the 100th coloration shaper about 24th polysomer and	Sit house his Millestaded IVS away dropp and many award when claim dropped and the special strains and when claim dropped and the special IVS did Showel
50.b.ii	is required to medi within 92 days from communicament of construction to blow sufficient time for review of subsequent modification to the 132:			1				4	Full Compliance	TIME menting minutes subject ITIME Menting 2000 works complained, 2021 works, Operational improvements. Meditude—the implicing, 10.06 paining, 61.061 H7914 conformance dated May 2021 global minutes and paining. 10.04 paining 61.061 H7914 part 62.04 2019; Time 58.0 10.0561 commonter implicit dated 2Mely/2022 (filter audit particit). The ITIME mit on 94.pr.2021, which is within 90 object of when the Operator advised the TSI Clad 2 Stage 7 Railes to 81, 1006.3 in commenced construction on 1.24pr.2021.	
50.c	provide details of the members of the ITEB panel and meeting frequency to the Department for endorsoment by the Department.			1				4	Full Compliance	Enail Operator to Department SDOCIDT 1 Med DPB Making with TIBS. The TIBS members are the Tarries Westerv, Prof. Death Williams and Dr. Broce Brown, which is consistent with the individuals based in the first Operator to Department SDOCIDT 10 Med DPB Modeling with TIBS. The Department advantable in Indigenous Modeline to the Control of the SDOCIDE 10 Med DPB Modeling with TIBS. The Department advantable Indigenous Modeline the SDOCIDE 2 Med Tibs Prof. Department advantable in Indigenous Modeline Tibs 2000 out 2011 Med DPB Modeline SDOCIDE 2 Med Post Department advantable in Indigenous Modeline Tibs 2000 out 2011 Med DPB Modeline Tibs 2000 out 2011 Med DPB Modeline Tibs 2011 Med DPB Model	
50.d	together with the ICE, provide a written response to the satisfaction of the Department, in the event that future review of the dissigns by independent experts require additional matters to be addressed;			1				N/A	Not Applicable		Not applicable as review of the designs by independent experts has not occurred:

13 Nov 2020 and 18 June 2021 Authorisation Condition No.		Non-mineral Waste Management	Open Pit/Underground Workings		Water Management and Storages	Overburden Emplacement Facilities	Exploration	Waterways (including river diversion)	Bing Bong Loading Facility	Score	Compliance Level		
50.a	ensure III Billia and medification to the TVP in writing control and an extra an extra and an extra and an extra and an extra and an extra and an extra and an extra and an extra a			1						3	Part Compliance (High)	23. D. 20 (III.S) Counter Chemist Feeding Feed (20 A) 2 (tags).  John Spering Feed (20 A) 2 (tags) 2 (	invalled, Commissioner Des understand bild bei Sperie Hill Hollway 2021.  The Company 2022 - The Company 202
50 e.i	Studies and/or trials to reform future construction und/or operation of the structure:			1						N/A	Not Applicable		The Operator artises of Curity the sead provid LIME SE LIMES is Stated to be the original flow site of Limes and the Limes and the Limes are serviced for the house used LLL sear EMAC methodologies to assess 15° statelly p. Shear are coprised and TIS devicement as we can be used by the TIS departed and when the farm partial and the Mark SE and the Limes are compared to the Limes and the Limes partial and that if there were physical trials they would be endorsed by THE UTIL and TIS devicement to the Limes are compared to the Limes and the Limes and partial and the Limes are compared to the Limes and the Limes are compared to partial and the Limes are compared to the Limes are compared to partial and the Limes are compared to provide the Limes and the Limes are compared to the Limes ar
Soni	The 19 Cognitive, Melitineurs and June 1906 many in 1907 and 1907			1						3	Part Compliance (High)	The Special result in the Control of	winderment must be approved by the Biopomble Enginer, and artisk assessment complished in accordance with the Biol. Management Procedure, IROL-1900CDC LT dissemed necessary, charges may need to be approved by the IROL-1900CDC LT dissemed necessary, charges may need to be approved by the IROL-1900CDC LT dissement necessary, charges may need to be approved by the IROL-1900CDC LT disseption of the IROL-1900CDC LT disseption to the IROL-1900CDC LT
51	From the date of authorisation Non-benign Waste is to be permanently placed consistent with the approved MMP:										Refer to sub conditions		
51.a	above the Top you All Enablesch including international advantage on production measures are provided combandly in the approach flower individual in the approach flower individual including an international individual international individual					1				4	Full Compliance	MA COSE (MASS 1) THE MASS COSE (MASS 1) THE MASS COSE (MASS 1) THE MASS COSE (MASS COSE	The Country of the Co

Authorisation Co	ompliance Workbook - Operator											
13 Nov 2020 and 18 June 2021 Authorisation Condition No.		Non-mineral Waste Management	Open PII/Underground Workings		Overburden Emplaosment Facilities	Waterways (induding river diversion)		Sca		Compliance Level		Comments 2022
51.b	on a compaction day free (PCL) or the personnalisty material that individually the chainst places of Confidence 2 that days be sensible, so the chain places on Confidence 2 that days be invariable with the Confidence 2 that chainst a chain of Confidence 2000 places are chained by the Confidence 2000 places and of Confidence 2000 places are chained by the Confidence 2000 places and the Confidence 2000 places are chained by the Confidence 2000 plac				1			4	4	Full Compliance	IAA, 20,179  AAA,	Accord for this homeward-great with commitments related to stage to 10900 to be continued as survey.
51.4	761 in compared in this hypothesis to the compared to the comp				1			4	4	Full Compliance	The CALL COST LAYER CRIME IS A 15 COST LAYER CRIME IN A 15 COST LAYER CRIME IS A 15 COST LAYER CRIME IN A 15 COST LAYER C	The Book and CROS Marriery, Consiste some Present Report R
Sta	PRISC) we replace an editional clash in this region to derensees.  The region is required in the region to defensely substitution, but must not a class of the region to defensely substitution, but must not a class and a single prior interviet for factories.  The region is region to defense the region of the r				1			4	4	Full Compliance	Production and Production Trick Association and agreement the 2 Data Mill Ed.  19 (2.5.4) (2.6.5) A SEC 200 A Mill Ed.  19 (2.5.4) (2.6.5) A Mill Ed.  19 (2.5.4) (2.6.5) A Mill Ed.  19 (2.5.4) (2.6.5) A Mill Ed.  10 (2.5.4) (2.6.5) A Mill Ed.  10 (2.5.4) (2.6.5) A Mill Ed.  10 (2.5.4) A Mill Ed.	MAZEZEZ SZEZ ZA TAMBER - KANN HAT HE REG AN EARLY REGULAR TO CONTROL TO CONTR

Authorisation Co												Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.		Non-mineral Waste Management	Dpen PII/Underground Norkings		Overburden Emplaoament Facilities	Waterways (including river diversion)	Bing Bong Loading Facility	So		Compliance Level		Comments 2022
51.e	sekschichterer of gegrepsin Statens and entates condition seeks and the seeks of the seeks of the seeks of seeks and the seeks of the seeks of seeks and the seeks of seeks of the seeks of seeks of the seeks of seeks of the seeks of seeks o				1				4	Full Compliance	IN CAST ACCES AND ACCES ON THE CONTROL OF THE CONTR	Note those and Cold Markely Control scale to the years larger May goals of the Markel
51.1	The ICE wiffies the substititing of the PMP placement methodology with respect to particle size suggestion and advection barriers:				1				4	Full Compliance	Links CED Six Operator usigles filter Prince Devotration Engineering Filter (Prince) (1967).  International Engineering Centre Filter Agin (Agin Sept. Centre) (1967) (1967).  Filter Centre Ce	
51.g	construction of the ISSS stages, an efficient in Condition S3 and S4 is undertaken in accordance with a world AAPA confliction.				1				4	Full Compliance	The 2000 STATE of the Procedure of the Common of the Commo	The Cyazara achieved The heapth of the NCE II is neighy surcharged density the property of \$2.75 to \$1.96 (\$1.00). The New Management (\$1.00) and neigh per property of \$1.00 (\$1.00) and \$1.0
51.h	design of the MDEF is fluxible to accommodate changes, if required, to comply with archaeological site MRMA matters under Condition 31;				1				4	Full Compliance	January 2000 MMP.  The NDCF is already designed to leave the MSMM area unabloated, if approval is not granted. An exemption of the design accommodating MSMM is that there is a temporary leave in between the NDCF and MSMM in plains in one approval in not observed to approve the notion of the NDCF and MSMM in plains in one approval in not observed to approve the notion of the NDCF and MSMM in plains in one approval in not observed to approve the notion of the NDCF and MSMMM in the NDCF and NDCF	
51.i	in the event that future review of the designs or as-built structure by independent experts require additional matters to be addressed, the Operator togother with the EC must provide a written response to the satisfaction of the Department:				1			N	4/A	Not Applicable		The Operator advised "MRM can confirm that there has been no independent expert review of the NOEF designs or as-built structure during the audit period."
51.j	at mine dosure, one-bongs waster rock is encappulated and fully contained within an engineered cover system consistent with the Overburden Management Project, or an alternative cover system endorsed by the relevant Independent technical panels to the satisfaction of the Department.				1			N	4/A	Not Applicable		Mine closure is not relevant to the audit period.
52	From the dubt of lastherisation of the Overburden Management Project, the Operator is approved to construct, operate and maintain the following stages for permanent placement of Waste Nock in the MOSE:				1				4	Full Compliance	ISMR 2011-2022.  BMR 2011-2022 TABLE 6- WASTE DURMYING DURRING THE REPORTING PERIOD shows waste damping only at the approved locations, including 1-3 5 M of allabutum and IS-ANF (vil) on the NDES Tablopia forthis is temporary and therefore no relixwant to this correlation), EMR 2011-2022 Section 2-4.2 also only included approved locations.	
52.a 52.b	West A, B, C and D: CW (alpha, bravo and charlie):				1					-		Compliance scored under condition 52. Compliance scored under condition 52.
Authorisation Compila	nce Workbook - Operator Considering Domains							_				personal and a state of the sta

Authorisation Compliance Workhook - Operator

Authorisation Co														
Authorisation Condition No.	Condition/Requirement	Governanze/General	Non-mineral Waste Management	Open PII/Underground Workings	Tailings Storage Facility	Water Management and Storages	Overburden Emplacement Facilities	Exploration	Waterways (including river diversion)	Bing Bong Leading Facility	Score	Compliance Level	EVIDENCE AUZ	Comments 2002    Complains correductor condition 52
52.d	G: (april and bravo):						-							Compliance scored under condition 52.
52.e	NW;						- 1							Compliance scored under condition 52.
52.1	-MC.  Not-present manufacturing the MORT Stages defined in Condition 33 in accordance on Condition 33 in accordance and Concept design participated in the approach MOP.	1					1				4	Full Compliance	Land 2013 1 2015 March Land Agen Listage Complete Design Propert version 3 diseded 25 in abiditized 10° LOSAL CORE March Land Agen Listage Complete Design Propert version 3 diseded 25° in abiditized 10° LOSAL CORE MARCH LAND AGEN LAND	Complexes contributes condition 3.  The Special scales with residence provided for Condition 51, the Programs shared residence by evidence provided for Condition 51, the Programs shared residence for the Special scales of the respect files in the presented of the Special scales of the Programs of the Special scale of the presented case and and the condition of Special Special scales in the Special Special scale of the Special Special scales of the Special Sp
54	During construction of the NOEF, the Operator must ensure:											Refer to sub	·	
54												conditions		
54.a	engagement of the ICE consistent with Condition 48: waste rock management requirements complies with Condition 51.						1				4	Full Compliance		Rufer to condition 48 for further detail of compliance.
54.b							1				- 4	Full Compliance		Marie ID CARDIENTS FOR THE SHARE OF COMPANIES.
Remaining Waste Roo	Ministerness Exitation From the date of authorisation of the Overburden Ministerness													
55	Project, temporary placement of non-benign waste is authorised for the following:											Refer to sub conditions		
55.a	EDEF (except for PAF (RE)):						1				N/A	Not Applicable	EMR 2021 - 2022.  There is no reference to the EOEF in the EMR 2021-2022 (TABLE 6: WASTE DUMPING DUBING THE REPORTING PERSON.	Not started. Scheduled for 2022/2023.
55.b	stockpiles on NOEF, SOEF and WOEF;						1				4	Full Compliance	EMR 2021 - 2022.  EMR 2021 - 2022 TABLE 6: WASTE DUMPING DURING THE REPORTING PEBIOD shows.  1.35 Mr of allavium and LS NAF (HC) on the NOEF stockpiles but no non-approved stockpiles.	Advised by the Operator that SOEF and WOEF are no longer active and there is no intention to reactivate. SOEF and WOEF are located within the mine leves wall. SOEF has a dedicated sump.
55.c	ROM Pad:  any other location approved by Department in writing.						1				4	Full Compliance	DMR 2001 - 2002.  BMR 2007 - 2002 section 2.4.3 states: "The WOEF will continue to be used as the IRDM stockpile for crushler feed materials.  A part all explanation of the IRDM paid occurred during the reporting period as described in CMR 2007 100.00.	ROM pad receives waste that is non-benign.  Operator advised the Independent Monitor that there are no other areas.
55.d							1				N/A	Not Applicable	ENW JULY - JULY.	approved by the Department in writing. The Independent Monitor did not find any other areas of waste placement in the EMR 2021 - 2022.
56	The Operator must ensure that non-benign wastes temporarily placed outside of NOEF have:											Refer to sub		
56.a	outstated WREP there: satisfields water reagagement structure (e.g. drains and sumpn) are in plicot to contain and manage poor quality drainage in accordance with the approved MMP-					1	1				4	conditions Full Compliance	2020/27 Annual Site Water Balance for the MoArthur Rover Mine - Water balance forecast report 17 Dec/2020. 2021/22 Annual Site Water Balance for the MoArthur Rover Mine - Water balance forecast report disaled 10bc/2021. Figure 2.1 in the 2020-2021 and 2021-2022 water balance forecast reports show the relevant water management systems.	The Operator advised "All ROMANIE area runoff continue to report to Van- Duncins Dom (DP VICO) or Petes Pond (DP PP), Mild CSP (Mild Concentrator runoff pond, Mild AP (Anni Palation Pond), Mild ORS (Clid ROM Sump) or Mill OSD (Mild Clid Stones Dunit)."
56.b	installed water diversion structures that allows segregation of minualistic did always from non-minu affected drainage;					1	1				4	Full Compliance	IAMR 2017-10022. 2007-17 Annual State Whater Malance for the MAN-than flower ManeWater balance for excess report 17 Dec.2002. 2007-172 Annual State Malance for the MAN-than flover ManeWater balance for excess report dated that-2012. Whater Management Plan 2004 My and all connidered mines afficient desirer. The Water Management Plan discusses structures that decided such from the WOTEP 500AP Min.	RDM paid only during the audit period. Site configuration and water management figures for RDM paid are Figure 2.1.
56.0	monitoring and management measures, in accordance with the AMP, are implemented to ensure environmental objectives defined in the approved MMP are satisfied:						1				4	Full Compliance	Operator advised that water is captured in the water management system and either treated before discharge of fisite so included in monitoring program in AMP.	
56.d	non-benign wastes are removed and managed at cessation of mining						1				N/A	Net Amelicable		Future item as cessation of mining has not occurred.
56.0	in accordance with the approved MMP: in the event of unplanned closure, non-benign wastes are removed and managed in accordance with the approved MMP:						1				N/A	Not Applicable		Future item as there have been no unplanned closures.
56.f	oversight provided by ICE as per Condition 48.						1				N/A	Not Applicable		Condition 48 is referring to construction and not applicable to the ROM pad, which is the only place the Opinaor advised any non-benign waste is temporarily placed outside of the NOEF.
Ore Processing and N	fling													

A service of the Co												
Authorisation Co												Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.			Jon-mineral Waste Asnagement	pen PII/Underground Vorkings			Vaterways (induding Iver diversion)	ling Bong Loading Facility	Score	Compliance Level		
57	Surface water management infrastructure associated with the lead filtration facility at the Mine must be suitably designed and constructed to contain a 100 year ARI rainfall event.	1		ř	1		ĺ		N/A	Not Applicable		Future item. January 2000 MMP mentioned as future work. Operator advised that this has not proceeded at this stage.
58	From the date of authorisation of the Overburden Management Project, the Operator is authorised to expand the one processing and associated milling and storage facilities in accordance with concepts and management systems detailed in the approved MMP including:	1							N/A	Not Applicable		Future Item: One processing and associated milling and stooge facilities are not proceeding at this stage.
58.a	ensuring the structures to be developed are suitably designed and constructed to allow management of poor quality drainage in accordance with the Water Management Plan that is generated from the construction and future operation of the structures:	1							N/A	Not Applicable		Future liter. Ore processing and associated milling and storage facilities are not proceeding at this stage.
58.a.i	construction and development of Gypsum Plant;	1							N/A	Not Applicable		Future item. Gypsum Plant has not been constructed (planned for 2023).
Stat	construction and development of Caustic Facility;	1							4	Full Compliance	2002/21 Annual State Water Balance for the Mulkrithur Bover Mine - Water balance forecast report Tabe/2002. 2021/22 Annual State Water Balance for the Mulkrithur Bover Mine - Water balance forecast report dated 10xx2021. Figure 2.7 in the 2020-2021 and 2021-2022 water balance forecast reports show the	Under construction, Localed in the mill area and runoff from that area is contained and managed.
58.4.11	construction and development of Reagert Mixing Facility:	1							4	Full Compliance	relovant water management systems. 2002(1) Remail SW Water Balance for the Mod that River Milne - Water balance forecast report 17(bit-2010). 2017(22) Remail SW Water Balance for the Mod that River Milne - Water balance forecast report dailed 10(ac)201.  Figure 2.1 in the 2002-2013 and 2007-2020 water balance forecast reports show the relovant water management systems.	Constructed Located in the mill area and runoff from that area is contained and managed.
58.a.lv	construction and development of Copper Mud Facility:	1							4	Full Compliance	2002/17 Annual Site Water Balance for the Mothshare River Mitter - Vallater balance for concent report Type-2020.  2021/12 Annual Site Water Balance for the Mothshare River Mitter - Water balance for occur open claded 1004/2021.  Egypt 2.1 in the 2020-2021 and 2021-2022 water balance for excess reports show the reviework water management volume.	Under construction, Localist din the mill area and runoff from that area is contained and managed.
58.a.v	construction and development of Lead Concentrate Storage Facility:	1							N/A	Not Applicable		Not constructed (going through approval - planned for 2023). If built, will be in the mill area and runoff from that area is contained and managed.
58.a.vi	expansion of the concentrate storage shed and use of external hardstand area:	1							N/A	Not Applicable		Not constructed (under design and approval). If built, will be in the mill area and runoff from that area is contained and managed.
58.b	Wastes generated from the operation of the Gypsum Plant must be managed in accordance with Condition 63.	1							N/A	Not Applicable		Future Item. Gypsum Plant has not been constructed.
Water Management a	of Stockholl Until the AMP (including Environmental Management Plans and sub- plaint) is approved by the Department in writing, the Operator must prepare, review and include the following for each MMP and where appropriate such MMP arrendment, a Water Management Plan which includes:				1		1		N/A	Not Applicable		Net Higgered. AMP was submitted with the January 2020 MMP and approved 13Nex 2020. There have also been no MMPs in the audit period.
59.a	modeling of surface water at and around the Mine:				1				N/A	Not Applicable		Mot triggered. AMP was submitted with the January 2020 MMP and approved 13Nov2020. There have also been no MMPs in the audit period.
59.b	a whole of Mine water balance which takes account of the modelling of surface water;				1				N/A	Not Applicable		Not triggered. AMP was submitted with the January 2000 MMP and approved 13Nov2020. There have also been no MMPs in the audit period.
59.0	calibration of the modelling of surface water to confirm its accuracy:				1				N/A	Not Applicable		Not triggered. AMP was submitted with the January 2000 MMP and approved 13Nov2020. There have also been no MMPs in the audit period.
59.d	a written plan detailing how water at the Mine will be managed for the forthcoming wet season;				1				N/A	Not Applicable		Not triggered. AMP was submitted with the January 2000 MMP and approved 13Nox2020. There have also been no MMPs in the audit period.
59.e	a plan of actions which will be undertaken to reduce the risk of any releases from AMD storage structures;				1				N/A	Not Applicable		Not triggered. AMP was submitted with the January 2000 MMP and approved 13Nov2020. There have also been no MMPs in the audit period.
59.f	a plan of actions, including engineers' reporting schedules, which will be undertaken to ensure the structural integrity of all AMD storage structures;				1				N/A	Not Applicable		Not triggered. AMP was submitted with the January 2000 MMP and approved 13Nox2020. There have also been no MMPs in the audit period.
59.g	a plan of actions which will be undertaken to ensure seepage from AAD storage structures is minimised including, where required, timelines for repairing damaged or installing new seepage management infristructure.				1				N/A	Not Applicable		Not triggered. AMP was submitted with the lanuary 2000 MMP and approved 13Nov2020. There have also been no AMPs in the audit period.

13 Nov 2020 and 18 June	emplained Workbook. Operator  Condition/Ring/rement  From the deep of a throughout of the Control to the Management  From the deep of a throughout of the Control to the Management  From the deep of a throughout of the Control to the Management  From the deep of a throughout of the Control to the Management  From the deep of a throughout of the Control to the Management  From the deep of a throughout of the Control to the Management  From the Management of the Management  From the Management of the Management  From the Management of the Management  From the Management  F	Governance/General	Non-mineral Waste Management	Open PII/ Underground Workings	Tailings Storage Facility	Water Management and Storages	Overburden Emplacement Fadirties	Exploration	Waterways (including river diversion)	Bing Bong Loading Facility	Score 4	Compliance Level	Evidence 2022  Linux Operator to 1911 E Mahme the Many Application to select a procedure.  14th COCCET.  Linux Operator AUTON Salpest MMM 1 Ward for the best to procedure a procedure of the control of	Comments 2002  The Comments 2002  The Comments about 1 to per composition with the X-SM delimited a granulation of the X-SM delimited as granulation of a color force to write a side requirement as MRM 1 to give per conte
	activities involving disturbance must not commence until required studies and/or trials to inform future design, construction and/or												140:C027 and required by Tabol022 but the BBEF Scorce was not greated until 742;722.72. The Options advised that the agreement was variety advised from the requisitor that for transformal activities, therein submitted the application is sufficient for compliance and the suck supported by the email DEPWS to Operator subject PW: MBM   Water Extraction License Application - Open PII.	The Operator applied for a Mine Site Water Estruction Licence and Bing Bong Loading Facility Water Estruction Licence.  The only relevant works in the audit period are related to groundwater extraction from an existing bor effect at Bing Bong Loading Facility.
60.a	operation, as detailed in the approved MMP, are completed:					1					N/A	Not Applicable		
60.b	works are conducted in accordance with a valid AAPA certificate;	1				1					4	Full Compliance	AAPA C92-91 Loading Facility - West Island - 1992.	The only relevant works in the audit period are related to groundwater extraction from an existing borefield at Bing Bong Loading Facility.
60.c	distalled designs, where nominated in the approved MMP, are disveloped and implemented in consultation with required experts, including but not limited to ecology, engineering and any other experts as appropriate;					1					N/A	Not Applicable		The only relevant works in the audit period are reliated to groundwater extraction from an existing borefield at Bing Bong Loading Facility.
60.6	regular inspections and maintenance are undertaken to ensure design objectives continue to be satisfied.					- 1					N/A	Not Applicable		The only relevant works in the audit period are related to groundwater extraction from an existing borefield at Bing Bong Loading Facility.
61	This Operator must compilete translations of the Purplis-crown Fairy Wilson in accondiscious with the approved MuRP prior to commencement of works on the Clid McArthur Rover Channel plug.	1									4	Full Compliance	BMR 2017-2022 BMR 2017-2022 Executive Summary states "Key environmental activities conducted during the reporting period included: *Successful completion of the Psychic crowned Fairly Wenn translocation, with dominant makes form all the instructuating organs defending territories and multiple successful treading seasons:	
62	The Operator must erect and maintain warning signage that:											Refer to sub	The translocation of the Purple-crown Fairy Wren is a success story.  January 2002 sign inspection audit.	
	is permanent and weatherproof:											conditions	Warning Signage Inspection - January 2002 (memo dated 1Feb0022).	
62.a									1		4	Full Compliance	Warning Signage Inspection - January 2022 photographs show the warning signage appears stardy and perminent in mature. Where signs require maintenance the memo advices that well be understaken in the dry season.  Letter dated 04-500215 to Chief Health Officer from Operator.	
62 b	contains specific wording agreed to by the Chief Health Officer of the Northern Territory:								1		4	Full Compliance	Letter dated OR-eb2015 to Chief Health Officer from Operator advising of the agreed updfing to be used on signage.	
62.0	is located:											conditions		
62.c.i	at appropriate distances and frequency along the waterway.								1		4	Full Compliance	Wilaming Signage Inspection - January 2002 (memo dated 1Feb0022).  Signage appears to be installed at appropriate distances and frequency based on the Wilaming Signage Inspection - January 2002.	
62.c.ii	as a minimum at all access points, including but not limited to crossings, wehicle tracks and waiting tracks.								1		4	Full Compliance	Warming Signage Inspection - January 2022 (memo dated 1Feb022).  Signage appears to be located at all access points, including but not limited to crossings, white's tracks and walking tracks based on aerial photography and the Warning Signage Inspection - January 2022.	
62.c.iii	along the length of:											Refer to sub conditions		
62 c III a	Barney Creek downs tream to its junction with the McArthur River;								1		4	Full Compliance	Warning Signage Inspection - January 2022 (memo dated 1Feb0022)  This sign could not be identified in the photo on the Warning Signage Inspection - January 2022 and had the text "Location 40 - Good, overgrown vegetation surrounding it."	
62.clib	Barney Creek upstream to a point a short distance upstream of where the Carpentaria Highway crosses Barney Creek;								1		4	Full Compliance	Warning Signage Inspection - January 2002 (memo dated 1Feb0022)  Warning Signage Inspection - January 2002 (memo dated 1Feb0022) viewed confirming no access signage is in place in all locations (refer locations 7 and 8).	
62 c. II.c	Surprise Creak to approximately the location of SW29;								1		4	Full Compliance	Warning Signage Impection: Junuary 2002 (International 1Feb.2022).  Closerable Warning Signage Impection: Junuary 2002 photos viewed confirming no access signage in place in all locations. Location 44 is the approximate location of SW29 (suith 43 and 42 also relevant.	

1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	uthorisation Compliance V	- Workbook - Operator													
Service depth optiops gloves about and the sample body.  2 Service depth optiops gloves about and the sample body.  3 Part Completes.  4 Part Completes.  4 Part Completes.  4 Part Completes.  5 Service to the sample gloves and complete and a service depth of the sample gloves and complete and a service depth of the sample gloves and the sample gloves.  4 Service to the sample gloves and the sa				Non-mineral Waste Management	Dpen PII/Underground Workings				Overburden Emplacement Facilities	Waterways (including river diversion)	Bing Bong Loading Facility		Compliance Level		
A CLEAR 1 1 2 1 2 2 1 2 2 1 2 2 2 2 2 2 2 2 2	Bing Bong	ong shipping channel and in the immediate area										$\neg$		Screen shot of Environmental Obligations Register ID#47350	OSS: Warning signage on the Nathan River Resources loading facility boundary functions should be erected as operational activities recommenced in 2021.
Segment files that the injuried of the state of the injuried of the state of the injuried of the state of the injuried of the	62.ciiid									1	1	3	(High)	Warning Signage Impaction - January 2022 showed signage is located at each land entry point to the BEET, which surround the water acces. However, there was no evidence of signage along the landing of the shopping chained and in the immediate area surrounding the shipping chained and sering basin. Evidence was shown in terms of a screen shot of the Operator's risk manager systems becausing an action in police ordinance the impacticality with DITI with a revised due date the operations.	OT: Correspond with DTT dought the instead of this condition and specifically the impactically of locality spages along the length of the shipping-channel and in the introduced area surrounding the shipping-channel and sening bases.
### Add of Companies of Companies and Compan															
Southern Name and Southern Nam	in accordance	ance with concepts and management systems detailed in the		1								N/A	Not Applicable		Future item. Water treatment plant has not been operational during the audit period and the gypsum plant is not constructed (planned for 2023).
4 Part Company Country	63.a.i trials for th freatment placement	r the permanent disposal of Cypsum Plant and Water ent Plant wastes must be undertaken to inform final material ent:		1								N/A	Not Applicable		Future item. Water treatment plant has not been operational during the audit period and the gypsum plant is not constructed (planned for 2023).
But and produced in the control of t	63.a.ii third party be placed in	arty endorse the waste disposal strategy, if the wastes are to ad in the TSF; or		1		-1						N/A	Not Applicable		Future item. Water treatment plant has not been operational during the audit period and the gypsum plant is not constructed (planned for 2023).
Mich much take independent control of the company of the following and the company of the compan	63.a.iii party endo placed in th	ndorse the waste disposal strategy, if the wastes are to be in the NOEF.		1					-1			N/A	Not Applicable		Future item. Water treatment plant has not been operational during the audit period and the gypsum plant is not constructed (planned for 2023).
Source sharing shaped 2002. One would be placed 2002 on the shaped 2002 of the state of the state of the shaped 2002 of the sha	AAAO must be in minima to as of the minima to minima to me.	Lie despetic constructed and removability the Copyclett by Commission of the Copyclett of Copyc	1				1	1			1	4	Full Compliance	Chem and Limited (Septime 2022). When A segment (2)	Appeared CERT ACT Follows and Commission Calabonics (CERT A.S. Supp.  Appeared CERT ACT Follows and Commission CeRT ACT ACT ACT ACT ACT ACT ACT ACT ACT AC
Adult 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	proviously at Dans; 64.a	y attributed to the Southern Perimeter Sediment Runoff					1	1				4	Full Compliance	Dams and Surrays Roughster 2002.  What has based modeling for the Model that Rever Mine in support of the 2021/22 west season TMSP dated 2000x2021.  Interpretable takes it monthly during the audit period as documented in the Dams and Surrays Registers. There is a TMSP for this storage.	The Dams and Sumps Register 2022 did noto: "Feor is apposed on the North West due to linking misplacement and bunching" in August 2021 but the action had not been marked as complete in the spreadsheet.
Website Printed Burd Date (IMPICO)  In the Company of the Section of the Company of the Company of the Section of the Company of the Section		t Purimeter Runoff Dam (SERROD);					1	1				4	Full Compliance	Dams and Sumps Register 2022. Gostechnical Imperation - SPRIOD 300ct2021. Water balance modelling for the NGA thur River Mine in support of the 2021/22 wet season TARP dated 200cc2021. Inspected all seld monthly during the audit period as documented in the Dams and	The Dams and Sumps Register 2022 did note vegetation requiring removal from August and October 2021 but the action had not been marked as complete in the spreadsheet.
	64.c						1	1				4	Full Compliance	Dams and Surreys Repisitor 2003: Dams and Surreys Repisitor 2002: White balances modelling for the McAP that River Miles in support of the 2001/1/2 west season TMPS death 2000bc 2007. English of the Miles and Miles and Miles and Surreys Repisitors in the Dams and Surreys Registers. There is a TAMP for this straige.	The Dams and Sumps Register 2022 did note? The Dams greater on the seatern cred near calver. 29 Smell length credit should give marketing reastern size credit near short 29 Smell length credit should give marketing reastern side of land Drainage infrastructure has been distroyed and is blocked. Liner is bunching toward market level (mark pooling) and has significant stainage. "In July 2021 but the action had not been marked as complete in this spread-third."
Darms and Surveys Roughter 2022. and cracking a round commiss and to contri		ormeter trunoff Dam (EPIIOD):					1	1				4	Full Compliance	Water balance modelling for the McArthur River Mine in support of the 2021/22 wet season TARP dated 20Dec2021.  Irrspected at least monthly during the audit period as documented in the Dams and	The Dams and Sumps Regular 2022 dat note "potential timer tast," creat cracking and cracking practice doments pad to continue to monitor. In Suptember 2021 but the action had not been marked as compilite in the spreadshear.

Authorisation Co	mpliance Workbook - Operator	70		punc	olity	nt and	osment	Ē	Facility			Evidence 2022	Comments 2022
and 18 June 2021 Authorisation Condition No.			Non-mineral Wast Management	Open PII/Undergro Workings			Overburden Empla Facilities	Waterways (Includ river diversion)			Compliance Level		
64.0	Control West A Sump (CWAS):					1				4	Full Compliance	Surface Water Monitoring Annual Report 2021-22.	This sump has been removed from the Authorisation issued SMay2022. However, it was included in the Surface Water Report with three ASW samples in the audit period. The Operator advised "CWAS was decommissioned in June 2021".
64.1	Cantral West C Sump (CWCS);					1				4	Full Compliance	Surface Wilder Monitoring Areas Wilder 1221-22 Walter Minagement Plan May 2021 Walter Minagement Plan May 2022 Dams and Surps (Applied 2021; Removed from the Variation SMA) 2022; Inspected at least morthly during the audit provided and consented in the Dums and Surps (Applied 202).	This sump has been removed from the Authorisation issued 5May2022. However, it was included in the Sunface Wainfr Report with 30 ASM samples in the audit partial.  The Operator advised "CNCS was deconvenished in Jane 2022 (after the audit puriod), in the Dams ans Sumps register it is called "Charlie Sumps."
64.g	Artil Pollution Pond (APP);					1				4	Full Compliance	Demin and Surreys bigitine 2021: Dem and Surreys bigitine 2021: Dem and Surreys bigitine 2022: Dem and Surreys bigitine 2022	The Dams and Sumps Register 2022 did note some issues from August 2021 and Docember 2021 with the actions not recorded as complete in the spreadsheet. Moting name change to Mill APP.
64h	Concentrator Runoff Pend (CRP):					1				4	Full Compliance	Dams and Surryo Rogisher 2021: Dams and Surryo Rogisher 2021: Dams and Surryo Rogisher 2022: Walker balance medialing for the McArthur River Mine in support of the 2021/1/22 evet season TAMP dated 2004/2/22: Intopicion more thy with the exception of November 2021 during the audit period as discurrented in the Dams and Surryo Rogisters. There is a TAMP for this isotrage.	The Darm and Sumps Register 2022 did note an issue from December 2021 but the actions had not been marked as complete in the spreadsheet. Noting name change to Mill C69.
64.1	Van Duncan's Dam (VIDI):					1				4	Full Compliance	Sams and Surrey Register 2021.  Dams and Surrey Register 2022.  Water balance modelling for the Mulif thur River Mine in support of the 2021/22 west  season TARP disted 2000x2021.  Inspectived it last monthly during the audit period as documented in the Dams and	
64.j	Pulses Pond (PP):					1				4	Full Compliance	Surros Rosiotists. There is a 1869 for this shrase.  Dams and Surrop Rosiotist 2021.  Dams and Surrop Rosiotist 2022.  Dams and Surrop Rosiotist 2022.  Cactachesistal Impedion. Dum Inspection Police Pond 16Feb2022.  Water balance modelling for the Multi-Plant Riever Mine in support of the 2021/22 wed season TAMP dated 2000x2021.  Inspected at least monthly during the audit period as documented in the Dams and	
64.8	Like Archer (LA):					1				4	Full Compliance	Surge Slogisturs: There is a 1889 for this storage.  Claims and Surges, Slogistir 2021.  Claims and Surges, Slogistir 2022.  Claims and Surges an	
64.1	Old Stores Dam (OSD):					1				4	Full Compliance	Secrets segistrats. I have on a lever for this storage.  Water Management Pilan Table 8.  Has a HDPE timer as listed in Table 8 of the Water Management Pilan.	The Operator advised "The MIII Old Stories Dam, is actually a small Sen x Sen sump. A pump was removed from the sump over the Dry Season. This is this only recent history of melantenance for this suiter storage, as it has been dry for some time now. Milith will seek to have it removed from the VoA in the next amendment."
64.m	Pend 2 (P2);					1				4	Full Compliance	Dams and Sumps Register 2021: Dams and Sumps Register 2022: Dams Register 2022: Dams Register 2022: Dams Register 2022: Dams and Sumps Register 2022: Dams a	
64.n	Control East 1 Sump (CE1S):					1				4	Full Compliance	Walars storage infrastructure master in 5 dated 2004-0.2021 (before the audit period) Included in the Walars storage infrastructure shador list dated 30/54/2021 (before the audit period) including daily visual inepactions by the operation crew and the Operator advised it was decomissioned in May 2021.	(This sump has been removed from the Authorisation issued SNay,2022.
64.0	East Drain Sump (603):					1				4	Full Compliance	Water Management Plan Fable B. This 97 ML sump is listed as having no liner in Table 8 of the Water Management Plan.	The Operator advised that "Serrer" inspections of this sure is not conducted data to the frequency of data watering row actions and stated "no glass to limit the EEO as it will soon be replaced by a limit and extraction well."  The Operator advised that the deviatering crow do an inspection of all the lines at this start of every swell, which includes an informal drive by of sureps.

Authorisation Co											
							è				Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.			Open P11/Undenground Norkings			Naterways (including iver diversion)	Bing Bong Loading Faci	Score	Compliance Level		
	West D Sump (WDS):	Ŭ		- "						Dams and Sumps Register 2021. Dams and Sumps Register 2022.	
64.p				1				4	Full Compliance	Diams and Surrys Nogolie 2022. Water Management Hear Table 8. Inspected at least monthly during the audit period documented in the Dams and Surrys Registers. Has a HDPE liner as fisted in Table 8 of the Water Management Plan.	
	Mine Infrastructure Area Sump (MIAS):									Dams and Sumps Register 2021. Dams and Sumps Register 2022.	
64.q				1				4	Full Compliance	Validate Management Plan Table 8.  Inspected at least monthly during the audit period documented in the Dams and Sumps Registers. Has a HDPE liner as listed in Table 8 of the Water Management Plan.	
	West A Sump (WAS):		$\vdash$							Water Management Plan Table 8.	The Operator advised that "formal" inspections of this sump is not conducted due
64.1				1				4	Full Compliance	Surface Water Monitoring Annual Report 2021-22. Has a HDPE liner as listed in Table 8 of the Water Management Plan. Surface Water Monitoring Annual Report 2021-22 table 4.2 lists 23 ASW samples in the audit period.	to the frequency of dewatering crew activities.
	North East Sump (NES):									Dams and Sumps Register 2022. Water Management Plan Table 8.	This sump has been renamed as NOEF North East Alpha Sump (NEAS) from the Authorisation issued SMay2002.
64.5				1				4	Full Compliance	This 10 ML sump is kind as having a CCL lined with plans for a BGM liner in Table 8 of the Water Management Plan.  Listed as not built in December 2001 in the Dams and Sumps Register. Irreported at least	Page No. Name of Strange Code 2.
										monthly after that or listed as empty.	
64.1	North West Sump (NWS):			1				N/A	Not Applicable	Wilder Management Plan Figure 16a. Wilder Management Plan Figure 16a advises "this storage has not yet been developed".	This storage is listed as planned/under construction in the Water Management Plan dated May2002.
64.u	NE Stilling Basin (NESB):			1				N/A	Not Applicable	Wilder Management Plan Figure 16a. Wilder Management Plan Figure 16a advises "this storage has not yet been developed".	This storage is listed as planned/under construction in the Water Management Plan dated May2002. It is yet to be constructed.
	Central East Alpha Sump (CEAS):									Dams and Sumps Register 2021.	This sump has been removed from the Authorisation issued 5May2022.
64.0	Central East Bravo Sumo (CBBS):			1				N/A	Not Applicable	Dams and Sumps Rogister 2022.  Dams and Sumps Rogister 2021.	The Dams and Sumps Registers indicate CEAS did not exist in the audit period (it was mined out).  This sump is listed as not built until January 2002 and was empty in March and
	Contract and an area of the contract of the co									Dams and Surps Register 1022 - Dams and Surps Register 1022 - Water Management Plan Table 8.	April 2022.
64.w				1				4	Full Compliance	Following construction in January 2002 it was inspected at least monthly during the audit period documented in the Dams and Sumps Registers. Has liner as CCL (current) and BGM (planned) in Table 8 of the Water Management Plan.	
64 x	South Stilling Basin (SSB):			1				N/A	Not Applicable		The Operator advived that this storage structure does not exist in the previous audit period and it is listed as planned/under construction in the Water Management Plan dated May 2002.
64.y	South Overburden Erryllacement Facility Surry (SOEF Surry):			1				4	Full Compliance	Dams and Surpes Register 2027: Dams and Surpes Register 2022. Wilder Managament Plant Tables 2 Wilder Managament Plant Tables 2 Register 2 Regi	
64.2	Love-grade Sump (LGS):			1				N/A	Not Applicable	Water Management Plan Figure 16a.  Water Management Plan Figure 16a advises "this storage has not yet been developed".	This storage structure has not been developed in the audit period.
64.00	Rice Paddies Pand (999);			1				N/A	Not Applicable	Wilder Management Plan Figure 16a. Wilder Management Plan Figure 16a advises. "this storage has not yet been developed".	This sump has been removed from the Authorisation issued SMay/2022. This storage structure has not been developed in the audit period.

13 Nov 2020 and 18 June	mpliance Workbook - Operator  Condition/Requirement	Governanos/General	Non-mineral Waste Management	Open PII/Underground Workings	Tallings Storage Facility	Water Management and Storages	Overburden Emplacement Facilities	Exploration	Waterways (induding river diversion)	Bing Bong Loading Facility	Score	Compliance Level	Evidence 2022	Comments 2022
642b	анд шид зая вижно годи и дошог (у					1				1	4	Full Compliance	Bing Bong Loading Facility Site Runoff Pond Wet Season TARPs.  Surface Water Monitoring Annual Report 2021-22 (EMR – Appendix C).	Avenual Paper 2017-22.  Selection 2017-1022 TAMPS for firing thongs transpare was not provided.  2017-1048 for firing long greater relevant to the 2022-2022 audit period will be required for the 2023 audit.
64.00	Bing Bung Sala Runell Favor 2 (1886992)					1				1	4	Full Compliance	Concernment Management From Rein () Being Louding Author (Australia Approvide 2002227.  Billion () Louding Australia () Louding Austral	Aerwall Report 2021 - 22.  Saldence 2021 - 1,0022 TAMPS for Bing Bings storages was not provided.
64.dd	Bing Bung Sele Russell Faved 3 (BBSBPS)					1				1	4	Full Compliance	Concernment Value of the State	Nation colored to a Bing lighting Serfaces Bussell' Freed 3 in Surface Water Membraning Parties (2012) Constraint Servan (2012) Constraint Servan (2012) Constraint Servan (2012) Constraint Servan (2012) Constraint Serva
65	The Operator must not transfer water to or discharge water from any water storage structure until:  water storage shructure until:  water quality analysis has been received and interpreted by the											Refer to sub conditions	WKE, smout report 13 Mag/2022.  960-2020035 Water Dicknape Providure.  960-2020035 Water Dicknape Providure.  960-2020035 Water Build Providure.  960-2020035 Water Build Providure.  960-202003-2020-2020-2020-2020-2020-2020-	
65.a	Operator:					1					4	Full Compliance	and provide )  White Management Plan science 1.0.8.11 April 2022  White Management Plan science 1.0.4.11 April 2022  White Management Plan science 1.4.4.11 April 2022  White Management Plan science 1.4.4.11	

Authorisation Co	mpliance Workbook - Operator											
13 Nov 2020 and 18 June 2021 Authorisation Condition No.			Non-mineral Waste Management	Open PII/Underground Workings		Overburden Emplacement Facilities	Waterways (including river diversion)	Bing Bong Loading Facility	Score	Compliance Level		Comments 2022
65.b	results confirm the water is suitable for the dischardion, having regard to the requirement of this document, the approved MMP and any other relocant restrictions on transfer or discharge of water within or from the MMs.				1				4	Full Compliance	Water Meaning-more Tries May 2022 after a soil provid although there was one in the anding provide.  Water Management Tries May 100 at 11 April 2022 and 100 at 10	
	The Operator is authorised to undertake vents to release water from WMD to Little learnly Creek in accordance with provious approvels as defined in Schedule B.				1		1		N/A	Not Applicable		Schedule Binducted an MMP amendment to construct the additional discharge point Construction is complete.  OBS-As construction of works to release water from WMAD to Little Barney Creek is complete, DUTI consider removing this condition.
67	From the date of a destination of the Outstands Management (Process that date of the Outstands Management (Process date of these of the Outstands Management (Process date of the Outstands Management (Process date) and the Outstands Management (Process date) and the Outstands Management (Process date of the Outstands Management (Process date) (Proces				1		1		4	Full Compliance	220.7.2 Wind Scholary Broad & Links (Acting) (MA 2021-2022) (MA 20	MACHINE River Dissersion Channel Discharge Puter 8, yet to be constructed.
68	The Operator must:									Refer to sub conditions		
68.a	ensure all offsite water discharges are undertaken in accordance with a valid WDL;	1			1		1		4	Full Compliance	2021-22 Waste Discharge Records & Loads Tracking. WDL 174 Annual Monitoring Report 2021-2022.	The WDL audit for the period 1Mey/021 to 30Apr 2022 found that offsite water discharges were undertaken in accordance with the WDL.
óšb	cety relaxes author for chills discharge from the 600, approved peak.				1		1		4	Full Compliance	The contract to things are studied in the Contract 2019 of March 2019 of	correspondence fund tiern Operator to Operatories Supplict MSM (November 2000 VOX Architects) with 6 detail of Policy OSC Lander (1997 Vivil Inseignet MSM (November 2000 VOX Architects) with 6 detail of Policy OSC Lander (1997 Vivil Inseignet MSM (November 2000 VOX Architects) with 6 detail of Policy OSC Lander (1997 VIVII Inseignet MSM (November 2000 VOX Architects) with 6 detail of Policy OSC Lander (1997 VIVII Inseignet VIV
68.c	integrant and report all distanced routils against as part of the suchely in the Operator's Aerusal Environmental Money Beport				1		1		4	Full Compliance	With Water a framework upon facilities that Membrany light 2212 (27,5 Membran) from Man and thing light procession of Membran 2015 (19) (19) (19) (19) (19) (19) (19) (19)	

13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Governance/General	Non-mineral Waste Management	Open PII/Underground Workings	Tallings Storage Facility	Water Management and Storages	Overburden Emplacement Facilities	Exploration	Waterways (including river diversion)	Bing Bong Loading Facility	Score	Compliance Level	Evidence 2022	Comments 2022
68.d	as a management tool:					1			1		4	Full Compliance	Bow the use of the Shapes casting facility relative size of shall Shapes 22 Mar 2019 2022.  MAR 2019 2022 And Shapes 2022 And	In addition to the fulley and incommendation of the sheld-and involved programs and the sheld of the sheld and involved programs provided profession and involved programs are to an excession of the sheld of the sh
68.0	by 30 June 2020, characterise total loads of mine-derived contaminants from all source inputs for the 2017-2018 period consistent with Condition 16.b), unless otherwise agreed in writing by the Department.					1			1		4	Full Compliance	Email from Operator to Department subject MRM   Variation of Authorisation Condition (38d; 2017-2018 Mine-Durland Loads disted 8 May 2020. 205568 MRM DRPR, Condition 3 mine-derived loads. Attachment A - 2017-18 Mine Durland Analytic Loads Assessment.	Consider this condition obsolete.
69	The Operator must in relation to the WMD release point to Little Barney Creek undertake:											Refer to sub conditions		
69.3	release at Living that menimens backed encores, and at Bles suitable or encores and these suitable or encored discharge has speaded structures (e.g. reck basin) and be monitored daily during release events:					1			1		4	Full Compliance	MAD Blasson Free Checklist groundships throughout 2013-2022.  2012-12 While Dischaus Blasson & Louis & Lincolla, 2013-2022.  John Shen Shen Shen Shen Shen Shen Shen Sh	
69 b	remediation in the overoid unaccognition ensisten occurring at the Cognotation infraground volunt to place the sealization of the Department of Indiana Sucrium. Planning and Legistics and the Department.					1			1		N/A	Not Applicable	More WRIV to Openior subject felower of LISB laveny Onet generopits, description for the Committee of Lisb laveny Onet generopits, description for the Committee of Lisb laven of Lisb	The Operator achieved "The immediation of neutropathic review was understand as the immediation of the Comprehensial regiment by spring and president process."  As coalined in Section 4.4.7 of the 2021/22 Surface Witter Maniferency Report (1968), 2021; Till, till the tree receiver was maked with the vestory of the less thereopy Construction of the vestory of the less thereopy Construction of the Vestory of the less thereopy Construction of the Vestor short investory of the Construction of the Vestor short investory of the Construction of the Vestor short investory of the Vestor short or vestory of the Vestor of the Vestor short of the Vestor of the Ves
69.0	a cross-action profile survey immediately up-stream and down- stream of the Carpentaria Highway crossing, prior to and following each well season:					1			1		4	Full Compliance	Moreo WMM to Operator subject flowless of Little Barrey Creak geomorphic disasteristics disability of 11 Little 222.  Annual LiDAR between August and October from 2018 to 2021 covering upstream and downstream of the Casperatar's Repays processing lend therefore before and after each re- sourced view included in more WMM to Operator subject flowless of Little Barrey Code, geomorphic Characteristics (Figure 22, Oross sections for the same timeframes are included Figures 4 and 3).	
69.4	coch met schane quaetification of any spirituant changes to cross, year the control of the cont					1			1		4	Full Compliance	Morevielde Die Quater ziglich Neuer d. Hills Herry Chris permerpte.  Merro Old Hill Gegenter ziglich Neuer d. Hill Berry Chris permerpte.  Merro Old Hill Quater ziglich Geste der Ulffil Berry Chris permerpte.  Merro Old Hill Quater ziglich Geste der Ulfil Berry Chris gemeinstelle des piechte bestellt bei zich der Stelle des geste der Stelle des geste der Stelle geste der ziglich geste der ziglich geste der ziglich geste der ziglich geste des geste der ziglich geste ziglich	
69.0	measure and record flow duration, flow rate and volume of all water released from WMID into Little Banney Creek;					1			1		4	Full Compliance	2021-22 Waste Discharge Records & Loads Tracking.  The 2021-22 Waste Discharge Records & Loads Tracking includes the flow duration, average flow rule and a volume based on the flow duration and average flow. This mosts the requirements of this condition.	

thorisation Compliance Workbook - Operator

											Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.		Non-mineral Waste Management	Open PII/Underground Workings		Overburden Emplaosmen Facilities	Waterways (including river diversion)	ı	Score	Compliance Level		
1.06	ensura al oxistence of continuous from Intilla Barray Cross along the larged of the distange, system between Wide Stakes coulds and Ulffel Barray Cross. Diversion Churnollis available for impection:			1		1		4	Full Compliance	Intel Operate to Del 11 sulport BMR01 Verwistens of Authorisation 9000 Conditions 9000 conditi	
ыя	mane har utder sadar mentaming shedak di hir ha kiliki Johan Stiff, without a manusul for alerticipa prameira sa shedak 1950, without manusul for alerticipa prameira sa shekalif in Stiff, all menemanyanan hirologi and Stiff, and alerticipa sadar			1		1		4	Full Compliance	Mich for invariant Montainey Scholaus 2017-2029  Mich Steine have changed by the Steine Stein	mot analologic during days when releases occurred.  20% to the susset ground his surprise, and excellent year understates at 1903, and 5000 is a sea of property year understates at 1903, and 5000s as required by the condition. However, if 59000 is used then approved for that would be required from DCTT.
69.g.i	Field parameters must also be measured dially during-eather release from WMD lebb LIBs Barney;			1		1		4	Full Compliance	1880 Elevironiminal Monthioring Schooland 2017-15022 1880 Elevironiminal Monthioring Schooland 2017-15022 2017-127 White Discharge Rosend & Loosals Fracking Indicates that discharges occurred 2017-127 White Discharge Rosend & Loosals Fracking 2017-127 White Discharge Rosend & Loosals Fracking 2017-127 White Discharge Rosend 2017-127 Whi	
69:g\$	The surface autin meetining analytical suche meet include throllows, borron and clotted.			1		1		3	Part Compliance (High)	Main frameworth Montering Scholack 2012 2022 2022 2022 2022 2022 2022 202	Side. In the record of being reads to provide the complex analytical sets is a best biolizationary beautiful as a regularization sealing, when set in a section liberatory) and the regulator should be solved of any multility to mean of the monitoring condition.
69.g.ii	The surface water monitor rep is continued for a fur there two weaks following completion of the reliaves calcifes for the season or until field parameters have returned to baseline levels:			1		1		4	Full Compliance	MMD files recommental Micrositering Schools 2021-2022.  Will Dislause Perior Lines (2021-2022.  2021-27 Whosis Discharge Roberts A. Gloads Tracking.  2021-27 Whosis Discharge Roberts A. Gloads Tracking Indicates that discharges occurred 25 to 27 Barrary 2022 and 30 to 31 Barrary 2022 from WMD 8P.  The Operation addiced "There was no flow, so MMD were unable to do two weeks of readings after decidency occurred for the visions".	
69.h	Moscare total bank of analyses (including seed and anot from all controlled discharge activities controlling Markharg Relev at boustion SWIG- or an alternative location as agreed by the Department:			1		1		4	Full Compliance	2209 - 2205 GTT Orac, Freat.  Intrinsif email sudject DNV200005 Final Report dated of exb001.  Intrinsif email sudject DNV200005 Final Report dated of exb001.  Analytical recursion for SNV00 for 28 and 31 and 2022 emails total shead and zinc and other analytics energe for texton exceeding to 2010 - 2020 INT Data. (Final: The last own associated with borson for that finis period is discussed related to evidence in correlation 67 g. E.	

Authorisation Co	mpliance Workbook - Operator													
2021 Authorisation									2 0					
			<u> </u>	<u>€</u> &					§ §					
			5 5	동동										
	Interpret the data acquired as part of the activity and its effectiveness.	Ö	žΣ	03	_2	3 %	02	۵	3 €				WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur	
	and report in the Operator's Annual EMR in accordance with Condition 9												River Mine and Bing Bong Loading Facility revision 5 dated 30Aug/2022. FAMP 2021, 2022	
	Consister V.													
													EMR 2021-2022 section 4.1.3 and the WildM Water & Environment report Surface Water Monitoring Report 2021/22 interpret and report all data and results.	
69.1						1			1		4	Full Compliance	EMR 2021-2022 Executive Summary states "Based on WRM's review of surface water	
													quality monitoring data between 1 May 2021 and 30 April 2022, MRM continue to implement effective controls to minimise the risk of environmental harm of downstream	
													receiving waters due to Mine operations. The review concluded that the beneficial uses and community values of the McArthur River continue to be protected from potential	
													mine derived impacts."	
70	The Operator is authorised to undertake water management trial in accordance with:											Refer to sub conditions		Future item. No trials have occurred.
70.a	concepts detailed in the approved MMP, ensuring the trial is designed to manage and control all impacted surface water runoff in					-1					N/A	Not Applicable		Future item. No trials have occurred.
	accordance with the Water Management Plan:					- '					N/A N/A			
70.a.i 70.a.i	Irrigation of Treated Water - Open Woodland Irrigation: Irrigation of Treated Water - Phytoremediation;					1 1					N/A N/A	Not Applicable Not Applicable		Future Item. No triels have occurred. Future Item. No triels have occurred.
70.a.ii	Lowering of surface water elevations – Evapotranspiration: Sulfate Treatment System – Passive engineered wetland;					- 1					N/A	Not Applicable	Indicators of Biopenic Water Treatment Processes WATER MANAGEMENT DAM dated	Future item. No trials have occurred.  The Operator advised "Passive engineered wetland trials have not been complete.
70.a.iv				1		-1					N/A	Not Applicable	15Dec2020, V.1 (before audit period)	because the Water Management Dam is already functioning as a passive water treatment welfarer."
	Sulfate Treatment System – Active Bioreactor:													The Operator advised "The addition of a potassium permanganate stage to the
70.av						1					N/A	Not Applicable		gypsum plant means that the design, evaluation and construction of a pilot active bioreactor is a lower priority. Initial design and evaluation for the active bioreacto
														is expected to be initiated in 2023. "
	Detailed designs, where nominated in the approved MMP, are developed in accordance with the concepts outlined in the approved													Future Item. There were no relevant designs in the audit period.
70.b	MMP, and endorsed by relevant independent third party, prior to					- 1					N/A	Not Applicable		
	At the conclusion of the trials in Condition 70, the Operator must apply													Future item. No trials have occurred.
71	in writing to the Department for approval of full-scale implementation.					- 1					N/A	Not Applicable		
72	Water management using the Centre Pivot Irrigator is authorised:											Refer to sub		Centre Pivot Irrigator was not in use in the audit period (is yet to be relocated to mine loves). It was decommissioned several years ago. Not operated in the 2020,
	within the Mine Levee in accordance with concept previously											conditions		2021 or 2022 audit periods. Centre Pivot Irrigator was not in use in the audit period fis set to be relocated to
72.a	approved, as defined in Schedule B:					- 1					N/A	Not Applicable		mine levee). Not operated in the 2020, 2021 or 2022 audit periods.
	adjacent to the TSF in accordance with concept presented in the													Centre Pivot Irrigator was not in use in the audit period (is yet to be relocated to
72.b	approved MMP:					- 1					N/A	Not Applicable		mine lovee). Not operated in the 2000, 2021 or 2022 audit periods.
72.0	to be configured to maximise evaporation and minimise surface spray drift, surface runoff and infiltration into underlying natural soils.					1					N/A	Not Applicable		Centre Pivot Irrigator was not in use in the audit period (is yet to be relocated to mine level). Not operated in the 2000, 2021 or 2022 audit periods.
Perimeter Run-Off Di	ms - SPROD, SEPROD, WPROD and EPROD													
73	The Operator is approved to develop SPROD and SEPROD in accordance with relevant documents defined in Schedule B:					1					N/A	Not Applicable		Operator advised that SPROD and SEPROD were in use in the audit period but were constructed prior to the audit period.
74	The Operator is authorised to complete works to construct EPROD and WF900 in accordance with following:											Refer to sub conditions		WHI CONTINUED IN TO THE MADE PRINCE
74.0	EPIGD:											Refer to sub		
	as previously approved and defined in Schedule B, ensuring that only		_	+	_			-			-	conditions	Eastern Perimeter Runoff Dam Construction Report dated November 2021.	
74.a.i	binign material be used in the construction of the western embankment wall:			1		1					4	Full Compliance	Eastern Perimeter Runoff Dam Construction Report Section 3 Embankment Materials and	
						'					- 1		Borrow Areas states in Table 3-1 the material requirements and it all indicated benign material	
74.b	WPROD:			1								Refer to sub	(Harrison Landson Land	
	CWNOEF and NOEF West D Amendment, as defined in Schedule B:		_	+	_			_				conditions	Western Perimeter Runoff Dam Construction and Commissioning Report	Completed before the audit period.
74.a.i	and			1		1					N/A	Not Applicable	(37649_Western PAF Runoff Dam As-Constructed Report_GHD_Rev0_170714). WPROD was completed in 2017.	WPROD was completed in July 2017 (before the audit period commenced) and
												.,		Independent Monitor sighted a completion report dated 14Jul2017.
	WPRCD and Wistern Surface Water Management Design Update (CHD Memo), as defined in Schedule B.												Wistern Perimeter Runoff Dam Construction and Commissioning Report (\$7649, Wistern PAF Runoff Dam As-Constructed Report, GHD, ResQ_170714). WPROD	Completed before the audit period.
74.a.i	(CAL) system), as desirate in schedule B.					1					N/A	Not Applicable	(37649_Wistern PAF Nunoff Dam As-Constructed Report_GHD_RevO_170714). WPROD was completed in 2017.	WPROD was completed in July 2017 (before the audit period commenced) and
				1										Independent Monitor sighted a completion report dated 14Jul2017.
75	The Operator must construct EPROD and WPROD in accordance with the following regime in the event groundwater dewatering is											Refer to sub		The Operator advised "no groundwater dewatering was required for either 1899/00 or FRMOD"
.,	necessary: six hourly monitoring of field parameters for the first 24 hours of											conditions		The Operator advised "no groundwater dewatering was required for either
75.0	dewatering. Should parameters not stabilise during the first 24 hours			1		1					M/A	Net Amelicable		The Operator advised "no groundwater deviatering was required for either WPROD or EPROD".
	then six hourly monitoring must continue until stabilisation has occurred: ox viorablesk - Operator Considering Domains													
www.hatton.compila	or measure - operator considering portians													

Authorisation Co	ompliance Workbook - Operator											F (4) 2020	0
13 Nov 2020 and 18 June 2021 Authorisation Condition No.			Non-mineral Waste Management	Open PII/Underground Workings			Overburden Emplacement Facilities	Waterways (including river diversion)	Bing Bong Loading Facility		Compliance Level		Comments 2022
75.b	field parameters must be taken daily following the first 24 hour paried. Should parameters change more than 20% then the frequency must increase to every 12 hours until parameters have stabilised.					1				N/A	Not Applicable		The Operator advised "no groundwater deviatoring was required for either WPROD or EPROD".
75.c	field parameters must include pH, specific electrical conductivity (SEC), temperature, REDOX and dissolved oxygen:					- 1				N/A	Not Applicable		The Operator advised "no groundwater dewatering was required for either WPROD or EPROD".
75.d	water samples must be taken and analysed at the commencement of dewatering at the end of the first 24 hours, and then weekly sampling and analysis of dewatering water for the remainder of the construction:					1				N/A	Not Applicable		The Operator advised "no groundwater dewatering was required for either WPROD or EPROD".
75.e	additional sampling and analysis must be undertaken if there is a substantial change in field parameters (approximately 30%):					- 1				N/A	Not Applicable		The Operator advised "no groundwater dewatering was required for either WPROD or EPROD".
75.1	analysis must include: specific electrical conductivity (SEC), major ioms (Ca, K, Mg, Na, Cl, COS, HCOS and SO4), Al, As, Cd, Co, Cu, Fe, Mn, Ni, Pb, So and Zrr,					1				N/A	Not Applicable		The Operator advised "no groundwater devaluring was required for either WPROD or EPROD".
75.g	field parameters and samples for analysis must be taken from the dewatering source, not the receiving storage;					- 1				N/A	Not Applicable		The Operator advised "no groundwater dewatering was required for either WPROD or EPROD".
75.h	if flow meters fall, then dewatering must cause until they are repaired or replaced:					-1				N/A	Not Applicable		The Operator advised "no groundwater dewatering was required for either WFROD or EPROD".
75.1	field water quality parameters, flow meter volumes and laboratory analysis must be submitted to Department on a monthly basis:					1				N/A	Not Applicable		The Operator advised "no groundwater dewatering was required for either WPROD or EPROD".
75.j	any indication of fracturing and/or coverns (Kastification/dissolution features) must be recorded during logging along with water strikes and estimated yields during drilling.					1				N/A	Not Applicable		The Operator advised "no groundwater dessituring was required for either WPROD or EPROD".
75.k	Construction reports including OA and CC data windows obly the IET must be provided to the Department prior to commencement of oper aftern within 30 days of cornstruction being correlated.					1				N/A	Not Applicable		Constitute 7 and its subconditions (including 793), are NVA as There was no consistency.  2017 Included this the intent of subcondition 792 is for the subcinitional.  2017 Included this think included a subcondition of the subcinition comparison, interspective of subclamber devices which subcondition the subcondition comparison, interspective of subclamber devices and the committee in it in the final stages of devolvaging the inflored controlled committee in it in the final stages of devolvaging the inflored controlled committee in it is the final stages of devolvaging the inflored controlled controlled in the final stages of devolvaging the inflored controlled controlled in the final stages and the subcondition of 2018. If the inflored the controlled is not controlled in the subcondition of 2018 of the inflored the inflored the subcondition of 2018 of the inflored the inflor
Tailings storage facility	From the date of authorisation of the Overburden Management Project, tallings must be managed in accordance with the following:										Refer to sub conditions		
76.a	be deposited only in Citi 1, Citi 2 or combined Citi 1 and Citi 2:				1					4	Full Compliance	1866: 15° Countryly Risport - March 2021 to May 2021.  Midd 15° Countryl Risport - See 2021 to No. 2022 to May 2021.  1868: 15° Countryl Risport - See 2021 to No. 2022 to March 2021.  1868: 15° Countryl Risport - See 2022 to March 2022.  Blookes of the quarterly Risport - Risport for the majority of the audit parted (i.e. the risport that Countryl Risport - Availability Hows that failings were deposited in Cult 1 are Country (i.e. Country Risport 2022) in not availability Hows that failings were deposited in Cult 1 are Country (i.e. Country Risport 2022) in not availability Hows that failings were deposited in Cult 1 are Country (i.e. Country Risport 2022) in not availability Hows that failings were deposited in Cult 1 are Country (i.e. Country Risport 2022).	
76.b	lary construction of tailings lift, as approved in Condition 79. be reviewed and endorsale by independent oversight requirements in Condition 48 and 50 or an alternative independent qualified and experienced third party approved by the Department in writing:				1							Rufer to compiliance scored in conditions 48 and 50.	Rufer to compliance scered in conditions 48 and 50.
76.c	construction of the TSF lifts is undertaken in accordance with a valid AAPA certificate:	1			1					4	Full Compliance	Aboriginal Cultural Heritage Management Plan version 1.1 dated 14 June 2022.  Aboriginal Cultural Heritage Management Plan advisos that C2004/083 Variation to C2004/013 089/199-90/1015.1 is in place for the TSF.	
76.d	the 19 Secupor interception Trench h. Indig operational by end of Discontine 2000.				1					4	Full Compliance	SEAT D'ÉCAUTION (Page 12) Septembre 11 Neutronite 2000 (Jackier Na sea) prompt.  That Is suppende heavit seul Mar Med Ny Liu A. Marcha 100 Selle seul de la prompt.  Character 100 Selle seul 100 Selle s	This badgement Merzier was administ by the Genetic Plus The Construction of the Aprilance Case Internation From these cases pages of Stocenter 2020: Constition in Control Case Cases (Stocenter 2020: Constition in Control Cases (Stocenter 2020: Cases) of the Cases (Stocenter 2020: Cases) Constition in Control Cases (Stocenter 2020: Cases) Control Cases (Stocenter 2020: Cases) Cases (Stocenter 20

13 Nov 2020 and 18 June 2021 Authorisation Condition No.		Non-mineral Waste Management	Open PII/Underground Workings		Water Management and Storages	Overburden Emplacement Facilities	Exploration	Waterways (including river diversion)	Bing Bong Leading Facility		Compliance Level		
76.e SFCell 1 and 2 Constr	in the overnt that future review of the dissigns or as-built shrucher by independent experts require additional matters to be addressed, the Operator together with the ICE must provide a written response that justifies the existing dissign or proposes an alternate design to the satisfaction of the Department.			1						N/A	Not Applicable	The Operator adviced 1968AT 195 Civil Engineer has confirmed that during he report ing princing, not single-inhappes concurred new ore vary design admittables raised. "However, design changes at the request of M6M were approved by the LCE. There were no design changes at the request of independent caparts.	
	Them the date of authorisation of the Overburden Management Project, the Operator is approved to develop TSF Cell 1, Cell 2 and Combined Cell 1 and 2 Mfs in accordance with:			1						4	Full Compliance	1888 IS Counted by Royer - Month 2011 to May 2021 M600 IS Counted by Royer - May 2021 to May 2021 M600 IS Counted by Royer - Say 2021 to May 2021 M600 IS Counted by Royer - Say Exhibit to Rownwhat 2021 M600 IS Counted by Royer - Rownwhat 2021	
77.a	McArthur Bieser Menny Phys 12, Tiallego, Storage Seeling, Chologo Dovologoment – Life of Mines Plans, May 2017, as defined in Schedules B.			1						4	Full Compliance	Jacoby 2004/MPS  Jacoby 2004/MPS (1994) A Section of the Personal Annual Members in 197 (197  London 2004, 2007, 2007, 2009, 2004, 2004, 2004, 2004, 2004, 2007, 2	With request to the discrease; believes the lift Stage-Neight in New Authorstation and Heavy and disaptive of 22 city, which is allow the Neight hopiful areasy, OTT advisors' Shappins because for man record of discrepancy on the Sufficient - the Chappins to Advision-Selfer regulated.
77.b	the approved MMP for the following stages:										Refer to sub conditions		
77.b.ii	Cell 1 Raise 4 – 10,056.0 mRL;			1						N/A	Not Applicable		Historic item. Works completed before the audit period.
77.b.i	Cell 1 Raise 5 – 10,059.0 mRL;			1						N/A	Not Applicable		Historic item. Works completed before the audit period.
77.b.ii	Cell 2 Raise 6 - 10.061.0 mRL:			1						N/A	Not Applicable		Historic item. Works completed before the audit period.
77.b.iv	Colf 2 Sales 7 - 15 (58.3 5 mile.			1						4	Full Compliance	SIGN TS Grantiny Report - Nation 2011 Study 2012  SIGN TS Grantiny Report - Nation 2011 Study 2012  SIGN TS Grantiny Report - National 2012 Study 2012  SIGN TS Grantiny Report - National 2012 Study 2012  SIGN TS Grantiny Report - National 2012  SIGN TS Granting Report - National 201	SEAT TO CALL'S Prignation (Section 2014). Sequence 2021 section 1.9 To 10.2 Sequence 2021 section 1.9 To 10.2 Sequence 2021 section 2.9 Sequence 2.
77.b.v				1						N/A	Not Applicable		With respect to the discreancy between the lift stages/halpits in the Authorisation and the approved design for cell 2 stage 7, which is above this halpit already, for advised "beligate decided formal record of discrepancy on file sufficient - no change to Authorisation required.
77.b.vi	Combined Call 1 and 2 Seise 2 – 10,063.8 mSE;			1						N/A	Not Applicable		NAA due to lift heights no longer being consistent with approved designs.  With respect to the discreamcy between the lift stages/heights in the Authorisation and the approved design for cell 2-stage 7, which is above this height areaugh. O'll advised "Delegate decided fermal record of discrepancy on file sufficient - no change to Authorisation required.
77.b.vii	Combined Cell 1 and 2 Raise 3 – 10,065.0 mRs;			1						N/A	Not Applicable		NUA due to lift heights no longer being consistent with approved designs. With respect to the discreancy between the lift stages/heights in the Authorisation and the approved design for cell 2-stage 7, which is above this happit alreade, DIT advised "Delegate cell design for many record of discrepancy on file sufficient - no change to Authorisation required.
22 h viii	Combined Cell 1 and 2 Raise 4 - 10.066.2 mRL:			- 1						N/A	Not Applicable		No works undertaken.

13 Nov 2020 and 18 June	impliance Workbook - Operator  Condition/Requirement	Governanz/General	Non-mineral Waste Management	Open PII/Underground Workings	Tallings Storage Facility	Water Management and Storages	Overburden Emplaosment Facilities	Exploration	Waterways (including river diversion)	Bing Bong Loading Facility	Score	Compliance Level	Evidence 2022	Comments 2022
77.b.x	Combined Cell 1 and 2 Raise 6 – 10,068.6 mRL;				1						N/A			No works undertaken.
	Combined Cell 1 and 2 Raise 7 – 10.069.8 mR:											Not Applicable		No works undertaken.
77.b.si	Combined Cell 1 and 2 Raise 8 – 10,014 o mRs.				1						N/A	Not Applicable		
77.b.nli					- 1						N/A	Not Applicable		No works undertaken.
77.b.xiii	Combined Cell 1 and 2 Raise 9 – 10,072.2 mRL:				- 1						N/A	Not Applicable		No works undertaken.
77.b.xiv	Combined Cell 1 and 2 Raise 10 – 10,073.4 mRL;				- 1						N/A	Not Applicable		No works undertaken.
77.b.er	Combined Cell 1 and 2 Raise 11 – 10,074.6 mRL;				1						N/A	Not Applicable		No works undertaken.
77.b.mi	Combined Cell 1 and 2 Raise 12 – 10,075.8 mRt;				1						N/A	Not Applicable		No works undertaken.
77.b.xxii	Combined Cell 1 and 2 Raise 13 – 10,077.0 mRt;				1						N/A	Not Applicable		No works undertaken.
77.b.xviii	Combined Cell 1 and 2 Raise 14 – 10,078.0 mRL				- 1						N/A	Not Applicable		No works undertaken.
	For each IT. the Operator must ensure detailed designs, follow the approved Mo-LPM stown Memira by Tst Lillings Storage Facility Raining General Specification for Design and Construction: with oversight provided by the ICE consistent with Condition 48.				1						N/A	Not Applicable		Not applicable as no dissign reports were issued in the audit puried.  155 Gald S Jauge 7 - Raise to 84, 1005-th Detailed Design Report states "Goometric grammetrs for the proposal of did Stage 7 raise are genom in Table 3-2 and are consistent with this currently approved TSF LOM Plan and the General Specification for Design and Construction" (before the audit puriod).
	The Operator must operate and maintain the TSF in accordance with the most up-to-date TSF Operations Maintenance and Surveillance												Tailings Storage Facility – Operations, Maintenance and Surveillance Minual (version 6 - draft).	TSF OMS Manual states in Table 8-2 – TSF Critical Operating Parameters: "Maintain the tailings density from the mill at or above 55%." The Operator advised that an
70	menual enuring				1						4	Full Compliance	1860 TST Granterly Report - Docember 2022 - March 2022 - 1970 Gold Marchia in Color S. J. Salline Ref Were-Versile h. sp. s deft für strikent "Update föllerening fall Stage S contributions, call 218ge? contribution." Bere hen not Somma freuerweisen der 1970 Schiss avon 318,00020.  The Operator anknort "The OLOS Marchians spellinder October 2021: honover, further membenstelle serv organis in selected during the Marchia perior for feeting."  The operator anknort "The OLOS Marchians spellinder October 2021: honover, further membenstelle serv organis in selected during the Marchiang for the feeting."  The operator of the Color Marchians of the OLOS Marchians and the Color Marchians of the Color Ma	deministrative verier had occurred in the OLAS Manual Sciolan 7.1, Table 8-10 and Figure 7-2 of the OLAS Manual and greyn the advantage large arrang of 20-5 and Figure 7-2 of the OLAS Manual and greyn the advantage large arrang of 20-5 and Commission with the IMEN Tablesy Storage Facility Quarterly Report Supplementar 2021 – Thomstellar 2021.
79.a	no discharge of water into the TSF unless											Refer to sub		
77.0	it is water contained within the Tailings stream which is at normal											conditions	MRM TSF Quarterly Report - March 2021 to May 2021	
79.a.i	operational sharry densities; or				1						4	Full Compliance	MARI TSI Custarry Sispert - Anno 2021 to An April 2021  MARI TSI Custarry Sispert - Legislander Information 2021  MARI TSI Custarry Sispert - Legislander Information 2021  MARI Talings Daving yard. Edity Custarry Sispert Tesperation 2021 - Monombas 2021 - Anno Mari Tsi Custarry Sispert Tsigeration 2021 - Monombas 2021 - Anno Mari Tsi Custarry Sispert Sispe	
	It is endorsed by the iTRB;												MRM ITRE Document Comment Tracking Register-Phos Bleed Water-20-10-02_Final	
Plai					1						4	Full Compliance	Operator advised "PECX discharge cased on 26 June 2021, no further discharge was completed nor planned. Evidence provided is endorsement from the ITRB for PECX water transfer to TSE."	
79.b	all Talling, are depended sub-arrially to allow proper baseching and dying Dimension dependition cycles.				1						4	Full Compliance	Most 19 January Supert. News 2011 Instity 2011 Most 19 January Supert. News 2011 Instity 2011 Most 19 January Supert. Supert 2011 Most 19 January Supert 2011 Most 2	

Authorisation Co											
							ı				Comments 2022
and 18 June 2021 Authorisation Condition No.			Open P11/Undergr Workings			Waterways (indu river diversion)		Score	Compliance Level		
79.2	suffice what two the ser markation of the DSF such that they do not come into contact with the embandment internal walls:			1				4	Full Compliance	IS domain—Subset Inspection (mm.) 24(9):202.2  Whomein: Subset Inspection (mm.) 24(9):202.2  Whomein: Subset Inspection (mm.) 24(9):202.2  Manual Purious Inspection (mm.) 24(9):202.2  Manual Purious Inspection (mm.) 24(9):202.2  Manual Purious III. 1 (Mm.) 24(9):202.2  Manual Puriou	
79.d	phratic surface in managed to send compromising the integrity of the refuserous.			1				4	Full Compliance	The pit Story (1997) and 1997 operation. Maintenance and Services Medical Section 1997 of 1997	
	The Operator must provide quarterly to the Minister a written status region or the support on the superior and miningement of suppage from the 15°, including the following:	1		1				4	Full Compliance	(final Operate to BTT subject MSML) TS Countryly Report   March 2011 MsMc) 20	of December 2021 to February 2022) to align their reporting with the calendar
80.a	water books in the 135°.			1				4	Full Compliance	1868 ID SI Customy largers: September to Neurotez 2011.  Men 19 Countries journels: Describer 2011.  Men 1869 ID Countries journels: 2011.  Men 2	

Authorisation Co												Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.		Non-mineral Waste Management	Open PII/Underground Workings		Overburden Emplacemen Facilities		Waterways (including river diversion)	Bing Bong Loading Facility		Compliance Level		
82 b	all monitoring data accounted with the unsuperfortunding positionization and or extremental interesting (in			1					4	Full Compliance	MoS 179 Curve hipport - More 2021 To May 2021  MoS 179 Curve hipport - More 2021 To May 2021  MoS 179 Curve hipport - More 2021  MoS 179 Curve hipport - More 2021  MoS 179 Curve hipport - More 2022  MoS 179 Curve hipport - More 2022  Most 179 Curve hipport - Most 179 Curve hipport - More 2022  Most 179 Curve hipport - Most 179 Most 179 Curve hipport - More 2022  Most 179 Curve hipport - Most 179 Most 179 Curve hipport - More 2022  Most 179 Curve hipport - Most 179 Most 179 Curve hipport - Most 179 Most 179  Most 179 Curve hipport - Most 179 Most 179  Most 179 Curve hipport - Most 179 Most 179  Most 179 Curve hipport - Most 179 Most 179  Most 179 Curve hipport - Most 179  Most 179 Curve hipport - Most 179  Most 179 Curve hipport - Most 179  Most 1	loogue) in the Cod 22 pillage, legal they design by the complete or should be completed or the Cod 22 pillage, legal to the Cod 22 pillage, legal to the Cod 22 pillage policy and the Cod
80.c	flow raise of each soogs			1					4	Full Compliance	1860 179 January Inspert - March 2021 1984 (2021) 1860 179 January Inspert - March 2021 1984 (2021) 1861 179 January Inspert - Discontine 2021 1861 179 Ja	SIGMI fallings billings frailing Sustaining Special registrates 2621 - Shorostee 2622 - Shorostee 2621 - Sho
80.d	all actions understand nature gifter quarter associated with the seepage and management of likelings:			1					4	Full Compliance	1868 ITS Countryl Space 1- March 2011 to May 2021 MARK ITS Countryl Space 1- Ame 2021 to May 2021 MARK ITS Countryl Space 1- September to November 2021 MARK ITS Countryl Space 1- September to November 2021 MARK ITS Countryl Space 1- September to November 2021 MARK ITS Countryl Space 1- September 2022 MARK-ITS Countryl Space 1- November 2022 MARK-ITS Countryl Space 1- November 2022 1- March 2022 includes the actions undertaken in the quarties.	Attachment B: 159 Recommendation instruction and Action Register of the MMM .  TO Count prising period, December 2021 - March 2022 includes how action that work do ab March 2022 to be one incomplete.  The period of the period
80.a	all actions planned for the road quarter associated with segnage and management of Tallargs.  The segment of Tallargs are segment of Tallargs and the segment of Tallargs and the segment of tallargs and the segment of			1					4	Full Compliance	JAMAD STE Country (spect - March, 2021 to Maley 2021)  MARK TO Country (spect - Specimen In Selection 2021  MARK TO Country (spect - Specimen In Selection 2021  MARK TO Country (spect - December 2021 - March 2022  AMAZENERAL STE STEEL AND ASSESSED ASSESSE	
81	The Operator in authorised to undertake Drilling Investigations as outlined in relevant approved plans defined in Schedule 8 and approved MMP, ensuring adherence to industry best practice:					1			4	Full Compliance	EMR 2021-2022.  BMR 2021-2022 states "All drilling during the reporting period was undertaken in accordance with the January 2020 MMP."	

lin on geoch	erdar to collect sweppen for weak-root characterisation and exchensed and period an adoptive.	9	N	8	Ĭ,	N S	62	ă	<u>≩</u> €	Bir				
								1			4	Full Compliance	MAGNET SETZION AND MAGNET SETZIO	IASSESSESSESSESSESSESSESSESSESSESSESSESSE
avait	o characterise available construction and rehabilitation materials validate within the Mine Lovee Walf (including the pit) and areas urrounding the TSF and MOEF;							1			4	Full Compliance	EMR 2021-2032.  EMR 2021-2032 states "All drilling during the reporting period was undertaken in accordance with the January 2030 MMP."	
	o enable geochemical assessment of the overburden emplacement acility and underlying sediments;							1			4	Full Compliance	EMR 2021-2022.  EMR 2021-2022 states "All drilling during the reporting period was undertaken in accordance with the lanuary 2020 MMP."	
grou	ocklani hydrogodogici informatine nisociated with pir inflows, roundwaler inputs fibe undergogrand und antisstatistion of ddftcnd monitoring bores to inform site management.							1			4	Full Compliance	ISAN 2013 1502 LINEAR DELIVERATION OF THE DEMAPMICAN LINEAR THE OWNER DELIVERATION OF THE DEMAPMICAN LINEAR THE OWNER DELIVERATION OF THE DEMAPMICAN LINEAR DELIVERATION OF THE DELIVERATION OF THE DEMAPMICAN LINEAR DELIVERATION OF THE DELIVERATI	
The Option of the Control of the Con	Ciperation mad immure the distilution one from these thing and six congress activities are reducibilized consistent with industry best cities.							1			4	Full Compliance	Good Distance of the Confidence of the Confidenc	completed on an existing drillpad at the Teena Prospect. This hole remains open
Charac the Mi	was that undoes dated from the self-litting most be shapt and a multiple to Minimizer on request and reported in that Operator's 15ME.							1			3	Part Compliance (High)	ISA 2011-1322 PRINTEGICAL COLOR CHILLING AND PRITED COMPACIAL UNIX 2011-2012-2014 Appenda A - 2011-2012 Tribing language UNIX 2011-2012-2014 Appenda A - 2011-2012 Tribing language UNIX 2011-2012-2014 Appenda A - 2011-2012 Tribing language UNIX 2011-2014-2014 Appenda A - 2011-2014 Appen	Nanagasi na makii hi haadii paredi han ha Masha far chuucushulan adenton ha diliga 20 keskala chuucushulan dala ha rapharaton di Big in ha 13.6.
84 All doc made	documentation relating to the investigations undertaken is to be ide available to the Department on request.	1						1			N/A	Not Applicable		No request was made by the Department for documentation related to the investigations.

Authorisation Co	ompliance Workbook - Operator													
13 Nov 2020 and 18 June 2021 Authorisation Condition No.				pen PII/Underground /orkings					/aterways (including ver diversion)		Score	Compliance Level		Comments 2022
85	On completion of the involugation the disturbances are to be inhabilitation in accordance with the approved field? and the basis for hyperspectual against of fischle early algorithms frequired leader consistent of the control of the control of the control of the control of the control of the control of the appart to the satisfaction of the Department.	9	22	0 5	pr	50	0 11	1	s t	8	4	Full Compliance	2011 HISTOCIC COCKL DRILLING AND RELD CAMPAIGN. 2011 HISTOCIC CACCULA DRILLING AND RELD CAMPAIGN. 2011 HISTOCIC CACCULA DRILLING AND RELD CAMPAIGN. 2011 HISTOCIC CACCULATION CACCULATION. 2011 HISTOCIC CACCULATION CACCULATION. 2011 HISTOCIC CACCULATION. 2011 HISTOC	
Exploration 85	The Operator must ensure that:											Refer to sub		
85.3	works are undertaken in accordance with management systems detailed in the approved 6460°.							1			4	conditions  Full Compliance	281 Coding Ording (CL08968) Version 1, 15-020-202.  283 Assessment 1, 82-21 ft and Standard Shirtly Register MEER 6 684 0000438 and 275-2602.  284 ASSESSMENT 1, 82-21 ft and Standard Shirtly Register MEER 6 184 0000438 and 275-2602.  285 ASSESSMENT 1, 82-21 ft and 185 ASSESSMENT 1, 82-22 ft and 185 ASSESSMENT 1, 82-21 ft and 185 ASSESSMENT	super y 2015 ANP 1 Mars. Y Tokaning his procession of the difficient program and rest to the host of some of this colors will be record pulpage and healthchick with clue fill. Compacing process will be report, with thockplich beposit and registration present on the force and our  The Copacing product the signat VIBLAC shocks his his all the hazands and controls associated with the 2011 Dearmond and fill diffilling program. A Dear 2015 Castledge primiting in the 2011 Character and fill diffilling program.  Page 2011 Castledge primiting histophysical did note some box of Vitrasting Were Passember experiment.
86.b	an environmental management plan is in place that addresses:							1				Refer to sub conditions		
86 b.i	dhemist are and storage (i.g. trydiscustoms, ar dilling fluids).							1			4	Full Compliance	This Association (J. M. 2021 Kes of biometric Biology in Septem Media Fee Mc 00000001).  The Contract Management President (Septem Media M	
85.b.ii	ersous and safement control							1			4	Full Compliance	Equation to Management Plan Sci 2 (2000) May 22(2). Version 2, Management Plan Sci 2 (2000) May 22(2). Version 2, Management Plan Sci 2 (2000) May 22(2). Version 2, Management Plan Sci 2 (2000) May 22(2). Version 2 (2000) May	year tarses to contain will found must have not whater, underwork and drilling bulb, consultained during all sufficient real principles of the property of the control of
86.b.N	dack							1			4	Full Compliance	Extraction Management Fair 19: 10:1000 May 2011, voxino 2.  Man Assumenter. M. 2014 of an internet for line year BMFF IP SE 00:000123 and 22 in page 2011 and 20	Scrion 11.2 of the Egine atten Management Plan usy. "Cost rick to moveme extra me disc".

Authorisation Co	mpliance Workbook - Operator												
Authorisation co								-					
13 Nov 2020 and 18 June 2021 Authorisation Condition No.		Non-mineral Waste Management	Open PII/Underground Workings		Overburden Emplacemer Facilities		Waterways (including river diversion)	Bing Bong Loading Faoilit	s		Compliance Level		
86.b.iv	associated risks comment for application works:					1				4	Full Compliance	[Section Management Plan 26: 500000 Mag 221; Various2.]  Section Management Plan 26: 500000 Mag 221; Various2.  Section Management Plan 26: 500000 Mag 222; Various2.  Section Management Regular Agricultural Dissippation (Association Management Plan 26: 500000 Mag 222; Various2.)  Section Management Regular Agricultural Dissippation (Association Management Plan 26: 500000 Mag 222; Various2.)  Section Management Plan 26: 50000 Mag 222; Various2.  Section Management Plan 26: 500000 Mag 222; Various2.  Section Management Plan 26: 50000 Mag 222; Various2.  Section Management Plan 26: 500000 000000000000000000000000000000	(These accounts for wines after commons has haded to be figure as the support Plan.)  The median of makes a that of being as AMA registereds in the lease contact of makes a that of being as AMA registereds in the account of the problem. The least of the support of the particular of the particular support of the support of the support of the support of the support of the support of the support of the support of the support of the support of the support of the support of support of su
86.c	rehabilitation is undertaken for locations not needed for further use:					1				N/A	Not Applicable	The Operator adviced Theol triggered. The 11-dil Bibliot correlated in 2021 are within the Mise Leven Wall and find stage footings. According to the Experization Munagement plant these holes don't require inhabilitation as the land will be disturbed as part of future pit stage disvelopments. One discreted holes was complisated on an outsing distilluation. The Tenna Nepolact. This hole internal holes was complisated on an outsing distilluation of the Tenna Nepolact. Bibliot holes hole internal copin and the difficult still developed, as it is required for additional explosition of difficults.	
86.d	a rehabilitation report including details regarding the status of disharbance rehabilitated drill heles and the lases for the proposed adjustment of basis sourcely is accordance with Conditions 10, 11 and 12, to the satisfaction of the Department.					1				N/A	Not Applicable	The Operator adviced Theol triggered. The 11-dil Bibliot correlated in 2021 are within the Miles Leven Wall and find study for footing. According to the Experitation Munagement plant those holes don't require inhabilitation as the land will be disturbed as part of future pit stage disvelopments. One discreted help wise complished on an ossisting displayed into High Proposit. This hole internals open and the drilipsed still developed, as it is required for additional explanation of Bibliotics.	
Non-mineral Waste N													
87	The Operator is authorised to complete works to prepare and construct a Centralised Waste Facility (CMF) for management of general, contaminated and putrescible wastes, in accordance with:										Refer to sub conditions		CWF has not been constructed. The operator currently investigating needs and priorities for this and other infrastucture at the same location.
87.a	concept designs presented in the document entitled McArthur River Mine Mining Management Plan Amendment, January 2019, as defined in Schedule B, ensuring detailed designs:	1								N/A	Not Applicable		CWF has not been constructed. The operator currently investigating needs and priorities for this and other infrastucture at the same location.
87.a.i	follow the approved concepts for the facility (including 100 year ARI flood immunity, CCL and protective armour, drainage works and biosecurity control):	1								N/A	Not Applicable		CWF has not been constructed. The operator currently investigating needs and priorities for this and other infrastucture at the same location.
87.a.i	the structure design and construction is undertaken in accordance with independent oversight consistent with Conditions 48 and 50:	- 1								N/A	Not Applicable		CWF has not been constructed. The operator currently investigating needs and priorities for this and other infrastructure at the same location.
87.a.ii	include allowances for the installation of an adequate number of monitoring borns at valuable locations for nomine? the emirrorimental performance of the structure with respect to contaminant seepage. Those membrang locations must be indeptated and reported within the site-wide water monitoring requirements.	1								N/A	Not Applicable		CWF has not been constructed. The operator currently investigating needs and priorities for this and other infrastructure at the same location.
£8 Rithibilitation Trials	The Operator must ensure the non-mineral waste facility, landfill or equivalent previously in use is rehabilitated following approval by the Department of a rehabilitation plan.	1								N/A	Not Applicable		Future Item, Still in use.
	The Operator is authorised to undertake the following rehabilitation												In addition to the trials specifically listed in this condition, EMR 2021-2022
89	trials, in accordance with concepts defined in relevant documents in Schedule B and the approved MMP:										Refer to sub conditions		SECTION 2.4.4.3 discusses the NOEF Large-Scale West AB Rehabilitation Trial. As the condition does not state these are the only approved trials this is considered compilant.
89.a	Construction Test Pads (CIP) on NOEF West stage:				1					N/A	Not Applicable	EMR 2001-2002.  EMR 2001-2002 Section 2.4.4.1 states "This trial was effectively completed in the 2000/2001 reporting period".	Was completed in the previous audit period.
									_			I	

13 Nov 2020 and 18 June			fon-mineral Waste fanagement	pen PIV Underground Vorkings		Vater Management and torages			Vaterways (including wer diversion)	ing Bong Leading Facility	Score	Compliance Level		Comments 2022
89 b	190 (SE) Coll and Grover Typesin frust Immanse and MGM Sephispas. Stage.	3			-	> 0	1	3	* 2		4	Full Compliance	Journey 2004/00/6  MAZIOS 2022 - 2022  MAZIOS 2024 - 2024	the effectiveness of both the wet season cover and the low-air-permeability barriers. PAF (RE) was selected for the cover system trial because it represents the
39.0	Mine Levee revegetation.			1							N/A	Not Applicable		The Operator advised that this trial will not be proceeding. A trial has been identified as not required and the Operator intends to monitor the revegetation on the NOEF isself (i.e. rather than doing a trial on the leve
90	The Operator must ensure all contaminated runoff is contained and managed within the water management circuit and as detailed in the Water Management Plan.			1			1				4	Full Compliance	EMR 2021-2022.  Trials are all on the NOEF that drains to the water management system.	The Operator advised that the NOEF rehab trial area runoff all drains to within the on site water management system.
Bing Bong Loading Fac	Hsy Dredging activities at the Bing Bong Port Facility are authorised, subject											Refer to sub		
91	to: submission to the department of a Dredging and Dredge Spoil											conditions	Surface Water Monitoring Annual Report 2021-22 (EMR – Appendix C).	No dredging has occurring in the audit period. Submission of a Dredging and
91.a	Management Plan:									1	N/A	Not Applicable	Surface Water Monitoring Annual Report 2021-22 states "Dredging was last completed in 2013."	Dredge Spoil Management Plan is expected in Q4 2022. Dredging is anticipated in
91.b	approval of the Plan by the Department prior to commencement of dredging.									1	N/A	Not Applicable	Surface Water Monitoring Annual Report 2021-22 (EMR – Appendix Cl).  Surface Water Monitoring Annual Report 2021-22 states "Dredging was last completed in 2013."	
	Environmental monitoring for the McArthur River Mine site (including 88LF) must be undertaken in accordance with requirements in Schedule D and reported as part of Condition 9.	1									4	Full Compliance	EMR 2021-2022	EMR 2021 - 2022 does include BBLF. Additional evidence is provided under the individual conditions from Schedule D.
Adaptive Miniegemen	Within 12 months of the date of authorization of the Overburden Management Project, the Operator must submit a revised AMP as required under Conditions 45.	1									4	Full Compliance	Latter DTT to Operator subject its: MMM Americal Adaptive Management Plan (November 2021) confirmed approval.	[The Operator submitted two Birations of the AMP as statud below, which complies with the 12-month trends are under Condition 92:  *Amended AMP (wrister: 31 Mach 2021, AMP-C) and supporting information -  submitted 22 Jane 2021 10 caches 2021, AMP-D) and supporting information- submitted 12 Jane 2021 10 caches 2021, AMP-D) and supporting information- submitted 13 Superhard 2021.
94	The revised AMP must:											Refer to sub conditions		
94.a	address the comments from the Independent Monitor or independent third party review of the draft AMP and ensuring compliance with Condition 45;	1									4	Full Compliance	Letter DITT to Operator subject Nr: MRM Amended Adaptive Management Plan (November 2021) confirmed approval.	Condition 45 is not required until 18 months from 13Nov2020 (13May2022) so was not required in the audit period.
94.b	be consistent with the AMP required under the Waste Management and Pollution Control Act 1998 and Environment Protection and Blockwarshy Conservation Act 1999;	1									4	Full Compliance	The AMP is the same document that is submitted to EEPVIS under the WDL although come appendion (e.g. Rubballistation Plury) are not evident to the WDL and therefore not submitted to DEPVIS. The AMP is therefore consistent (although appendions submitted are not identical) and compliant with the requirements of this condition.	Submitted to DEPMS as part of WBZ requirement on 10 ctx021 and was submitted to DITT 13Mey/2022 (uffer the audit puriod).  1058: Reference in this condition to Waste Management and Pollution Control Act 1598 should be Waster Act 1992.
94.c	be reviewed by a Department approved independent third-party at the discretion of the Minister;	1									N/A	Not Applicable		The Minister did not require a review by a Department approved independent third-party in the audit period.
94.d	be approved by the Minister:	1									N/A	Not Applicable	Letter DTT to Operator subject Rr: MRM Amended Adaptive Management Plan (November 2021) confirmed approval.	
94.0	once approved, be implemented in full.	t.									N/A	Not Applicable	Email Suffrescore Operator to DTT (MAR), DTT Chat of 2014 study 1984x221: Latther DTT to Operator subject Ris: 1880A Renorded Adaptive Management Flan (Bovermbar 2021) (confirmed approval after the audit period,	Edidence of replamentation as away in evident as stand in the enrall submission Operator to NLT (MMR). (DITT Dual SO) (about 1990-):2021 The Requestory of fluxes is sellment is employed at 5500, F519 and F520 has been increased to quarterly, as required under to ved 25 of the fluxel sellment TARP continued in 1884 of the Analyses Management Plan (Cobber 2021 version). Fluxel's sellment results from September 2021 have been provided.

13 Nov 2020 and 18 June	impliance Workbook - Operator  Condition/Requirement	overnanos/General	Jon-mineral Waste Asnagement	Jpen PII/Underground Vorkings	allings Storage Facility	Vater Management and derages	Overburden Emplacement acilities	xploration	Naterways (including Iver diversion)	ing Bong Loading Facility	So	ore (	Compliance Level	Evidence 2002	Comments 2022
95	Arry material changes to the AMP required by Condition 94 must be re- approved by the Minister.	1										4 F	uli Compliance	The Operator has submitted multiple AMPs to DITT and is yet to receive approval.	The AMP submitted as part of the CMP submission was approved 13Nov2020. Subsequent versions have not been approved by DET at the time of the audit. However, they have been submitted by the Operator for approval by DETT.
Mine Closure	From the date of authorisation of the Overburden Management											-			Future Item. No MMPs in the audit period.
96	Project, the Operator must submit an updated Mine Closure Plan with each MMP that builds upon the closure concepts defined in the Overburden Management Project.	1									N	VA I	Not Applicable		
97	The Mine Closure Plan required under Condition 96 must:												Refer to sub conditions		Future item. No MMPs in the audit period so the trigger for the Mine Closure Plan- has not occurred.
97.a	detail how key mine domains will be rehabilitated to achieve the Overburden Management Project closure objectives:	1									N	VA I	Not Applicable		Future item. No MMPs in the audit period so the trigger for the Mine Closure Plan- his not occurred.
97.b	address outcomes of the reviews by independent technical and closure panels in accordance with Condition 21 with respect to mine	1									N	VA I	Not Applicable		Future item. No MMPs in the audit period so the trigger for the Mine Closure Plan- has not occurred.
97.0	closure: Incorporate relevant outcomes from rehabilitation trials defined in	1						-				V4 1	Not Amelicable		Future item: No MMPs in the audit period so the trigger for the Mine Closure Plan
	Condition 8%.  Five years prior to the glanned closure of the mine, the Operator must:												Bufor to sub		has not occurred. Future item. Mine dosure more than 5 years away.
98 98.a	finalise the Mine Closure Plan required under Condition %:												conditions Not Applicable		Future item. Mine dosure more than 5 years away.
98.6	submit to the Department the plan for approval by the Minister;	-											Not Applicable		Future item. Mine closure more than 5 years away.
98.0	following approval, the Mine Closure Plan must be implemented by	1					_						Not Applicable		Future item. Mine closure more than 5 years away.
Unplinned Mine Gos	the Operator in full.	_										VA .	NOT Applicable		1 1
00	From the didn of authorisation of the Overturden Management Project, the Operation and survaily sequent to the Department an Unplained Minic Closure Plain on or before 3.7 August, stering 2021, to the Department, which is accompanied by a related security estimate.	1										4 F	full Compliance	frait Open for to BTT subject 5880, 2022 Unplanned Oscurs Pies and Socur by Accessment dated 514, pd2021.  The email from Operator to DITT included the following that ment the requirements of this condition:  1 Focksium 3 - MA/ethur Rever Mine - 2022 Unplanned Closure Pies (the 2022 UCIV)  1 Focksium 3 - MA/ethur Rever Mine Socurity Calculation 2022.	
100	Ing Assessment Combitions [The Operator must comply with the clauses pertaining to it in SCHEDULE C - INDEPENDENT MONITORING ASSESSMENT CONDITIONS.	1									N	VA I	Not Applicable		Assessed through individual conditions in Schedule C.
Schedule C - 1	And Marketing Associated Cord Born The purpose of the MAPEH River Mine - Independent Monitoring Associated Conditions' is to establish and set out the operational sequirements for an independent monitoring associated for priviveremental performance of the little.												-		Communitary only.
Schedule C -2	Thisse Conditions may be cited as the "McArthur River Mine – independent Monitoring Assessment Conditions".														Communitary only.
Schedule C -3	The purpose of these Conditions is to establish and set out the operational requirements for an independent monitoring assessment of the environmental performance of the Mine.														These Independent Monitor conditions are not relevant to the Operator.
Schedule C -4	The Department will engage an Independent Monitor to undertake the independent monitoring assessment.														These Independent Monitor conditions are not relevant to the Operator.
Schedule C -5	The Operator and the Department acknowledge that this independent monitoring assessment is in addition to their respective obligations and statutory responsibilities in relation to the Mine.	1										4 F	ull Compliance		The Operator has participated in the Independent Monitor assessment in addition to their respective obligations and statutory responsibilities.
Schedule C -6	The Independent Monitor will:														These Independent Monitor conditions are not relevant to the Operator.
Schedule C -6.a	monitor the environmental performance of the Mine by reviewing:												-		These Independent Monitor conditions are not relevant to the Operator.
Schedule C-6.a.i	environmental assessments and monitoring activities undertaken by the Operator: and												-		These Independent Monitor conditions are not relevant to the Operator.
Schedule C -6.a.ii	environmental assessments and audits undertaken by the Department, and												-		These Independent Monitor conditions are not relevant to the Operator.
Schedule C -6.b	report to the Operator and the Department any urgent issues requiring invisitigation and reporting.														These Independent Monitor conditions are not relevant to the Operator.
Schedule C -7	requiring investigation and reporting. The Independent Monitor will not review:														These Independent Monitor conditions are not relevant to the Operator.
Schedule C - 7 a	Mine safety: or												-		These Independent Monitor conditions are not relevant to the Operator.
Schools C. 7 h	social issues arising from the operation of the Mine in the McArthur						-	$\rightarrow$							These Independent Monitor conditions are not relevant to the Operator.
	River Region. The Department will engage an Independent Monitor in accordance														These Independent Monitor conditions are not relevant to the Operator.
Schedule C -8	with its procurement processes. The Independent Monitor may be (in order of preference):										_				These Independent Monitor conditions are not relevant to the Operator.
Schedule C -9	a. an environmental or mining agency is another jurisdiction in a Australia: cer     b. university having the necessary expertise; or     c. an environmental consultant have the necessary expertise, palevant experience and the necessary executors.														

Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder conditions are not close.  Shoulds C-10. No house of the superior of the integrated Moder con	nt to the Operator.  Int to the Operator.  Int to the Operator.  Int to the Operator.
and 19 Acc.  Continue from the final and the	nt to the Operator.  Int to the Operator.  Int to the Operator.  Int to the Operator.
And 1 Successful Programment  Condition Requirement  Condition Requirement  Condition Requirement  Condition Requirement  Condition Reputation  Condition  Condition Reputation  Condition  Condition Reputation  Condition	nt to the Operator.  Int to the Operator.  Int to the Operator.  Int to the Operator.
Note the Confidence of contract and the Confidence of contract	nt to the Operator.  Int to the Operator.  Int to the Operator.  Int to the Operator.
Note 1.0 Section 1	nt to the Operator.  Int to the Operator.  Int to the Operator.  Int to the Operator.
Note 1.0 Section 1	nt to the Operator.  Int to the Operator.  Int to the Operator.  Int to the Operator.
Note 1.0 Section 1	nt to the Operator.  Int to the Operator.  Int to the Operator.  Int to the Operator.
Sheaka C. 30 Months of Department and provide this Operator with a support of the Company of the	nt to the Operator.  Int to the Operator.  Int to the Operator.  Int to the Operator.
project from the control of the cont	nt to the Operator.  It to the Operator.  It to the Operator.
Schools C-102  Should C-102  S	nt to the Operator.  It to the Operator.  It to the Operator.
Shake C. 12   Section of the set	nt to the Operator. nt to the Operator.
Whate C-102  Accordance of core	nt to the Operator.
Note Act 1.04 To Condition of context.  The Condition of context o	
No City Arter any, with 1 - 1 Agent of more in progression of the integredant of the inte	fore the audit period.
Schade C1 To Light permitting product commerced the proposed documentation to 1 ANA Not Applicable  NNA Not Applicable  NNA Not Applicable  And the product of the proposed documentation per to be a second to the proposed documentation per to be a second to the proposed documentation per to be a second to the proposed documentation per to be a second to the proposed documentation per to be a second to the proposed documentation per to be a second to the proposed documentation per to be a second to the proposed documentation per to be a second to the proposed documentation per to be a second to the proposed documentation per to be a second to the proposed documentation per to be a second to the proposed documentation per to the per to th	north of the state
proxied by the Question where proposed documentations prior to  where the priority of the programment of the proposed documentations prior to  where the priority of the programment of the priority of the pr	
The Department may provide the Current may with a separative from the Current may with a separative from the Current may will be separative from the Current may will be separated from the Current from the Curre	
product call the control on the uniquement of this independent Montale (and a second s	et to the Operator
Community on the engagement of the Independent Monitor prior to	
Service starting on the following of the	nt to the Operator.
SCHOOLING: Sollowing:	
2M0MC+123	
Schedule C-132b at Atlanematic Advanced upon that the Operator is responsible for the Conditions are not release as the Condition of the Independent Monter:	
Schedule C-12c a warranty by the Independent Monter that it wit:	
Schedule C-13.c.1 act independent floring from the Opportune, the Operator, the Minister and any other present	nt to the Operator.
Schadulic 13.c.3 (Introduction and recording separate Manifer conditions are not relocate independent manifer conditions are n	st to the Operator.
espectad and	
Schoolski C.1.E.E.E. art shifts he fore-procrited under those Conditions, the forest of special programmed, or where in many procrited under those Conditions, the forest of special programmed, or where intering procrited, under those conditions are red release graphermatic production. The procrited under those conditions are red release graphermatic production. The procrited under those conditions are red release graphermatic production. The procrited under those conditions are red release graphermatic production. The procrited under those conditions are red release graphermatic production. The procrited under those conditions are red release graphermatic production. The procrited under those conditions are red release graphermatic production. The procrited under those conditions are red release graphermatic production. The procrited under those conditions are red release graphermatic production. The procrited under those conditions are red release graphermatic production. The procrited under those conditions are red release graphermatic production. The procrited under those conditions are red release graphermatic production. The procrited under those conditions are red release graphermatic production. The procrited under those conditions are red release graphermatic productions are red release graphermatic productions. The procrited under those conditions are red release graphermatic productions. The procrited under those conditions are red release graphermatic productions are red release graphermatic productions are red red red red red red red red red r	il to the Operator.
time and immediately softly the Organ transfer in writing upon becoming aware Thesis independent Monitor conditions are not reload to the Condition	nt to the Operator.
Schedule C-13.2.lv of the evidence or possibility of a conflict of inferent;	
Sheduk C-13 at seeking to the Independent Monitor or Seeking all information provided to National Accordance (and the Independent Monitor or Seeking all information provided to National Accordance (and the Independent Monitor or Seeking all Information provided to National Accordance (Associated Control of National Accordanc	st to the Operator.
If the Independent Meritar requires an indexemb, the Operator most.  The Independent Meritar requires an indexemb, the Operator most.  The Independent Meritar of the Company of the Operator most of	<i>t</i>
Department and notify the Operator of the appointment of the International Conference of the appointment of the International Conference of the International	nt to the Operator
Schedule C-15 Independent Mention and most provide the Operator with a copy of the arms of enaugement.	
The Counter and the Department must not interfered or attempted to influe	ince the Independent
Schodule C-36   efilazine the Indigenounist Monitor in Its assessment of environmental professional professio	
Schedule C-17 This Operator and the Opperator must coult: This Operator and the Opperator must coult: Schedule C-17 This Operator and the Opperator must coult:	
conditions	connected with the
Schedulic-17.1 Cooperation with being reported Montes content and 1  4 Full Complaines  4 Full Complaines  This Sopporation With the Content and Source Are Content and Conten	
provide a neckodary for mortification and conformation where the provided and account of the conformation and conformation where the provided and account of the conformation and conformation an	
procure for the Independent Manitor access to such promises  No site wide, were requested by the Independent Manitor access to such promises	nitor in the audit period. A
Schedule C-17.c Owned, Nasol, or licensed by it is may be reasonably necessary.	period.
to enable the independent Meritor to undertake its assessment of	enabled the Independent
Schedule C-17.d environmental performance under these Conditions. 1 Full Compliance  Monitor to undertake their assessment.	
The independent Market must employ with the Coparate, the Montal Agent and the Coparate and	or. This is an Independent
monitoring accessment.	considered consisted upwell
Schedule C-19 urgent investigation and reporting: conditions investigation and reporting during the audit period.	
This Independent Mention must allow the Operator and the  Not included as there is no requirement for the Operat  Competition of the Competition of the Competition of the  Not included as there is no requirement for the Operat  Competition of the Competition of the Notice  -  Operator of the Notice as come as practicals and retrieval products  -  Operator of the Notice as come as practicals and retrieval products  -  Operator of the Notice as come as practicals and retrieval products  -  Operator of the Notice as come as practicals and retrieval products  -  Operator of the Notice as come as practicals and retrieval products  -  Operator of the Notice as come as practicals and retrieval products  -  Operator of the Notice and Retrieval Products  -  Operator of the Notice and Products  -  Operator of the Notice and Retrieval Products  -  Operator of the Notice and Retrieval Products  -  Operator of the Notice and Products  -  Operator of the Notice and Retrieval Products  -  Operato	er.
recommendation as to action to be taken and the Operator must consist the address, and any excommendations, The Independent Meretiar did not liderally any issues it.	considered required urgent
Schredule C-10-b Schredule C-10-b Interval and	
and an analysis of the contract of the contrac	

Authorisation Co												
								<b>₽</b>				Comments 2022
13 Nov 2020												
and 18 June								\$				
2021								호	Score			
Authorication								3	scure			
Condition No.			2 €				§ §	<u> </u>				
CONDITION NO.			토환				들린	<u> </u>				
			23	8.8	\$ 5			- E				
	the Department may, where appropriate, advise the Operator and	Ŭ			- "	-	 					Not included as there is no requirement for the Operator.
Schedule C-19.c	the Independent Monitor of action the Department proposes to take:											
	the Independent Monitor may provide further advice to the											The Independent Monitor did not identify any issue it considered required urgent
Schedule C - 19.d	Operator, and where appropriate the Department, regarding the	1							N/A	Not Applicable		investigation and reporting during the audit period.
JUNEAU C-11/4	proposed action and the Operator and the Department must consider the further advice; and								1400	THE PROPERTY.		
	if, after providing further advice, the Independent Monitor is not											Not included as there is no requirement for the Operator.
	satisfied with the proposed action, the Independent Monitor may											
Schedule C-19.e	notify the Operator and the Department of the Independent Monitor's intention to undertake its own investigation and report:											
	Monitor's intention to undertake its own investigation and report; and											
Schedule C - 19.f	the Operator and the Department must facilitate the Independent	1							M/A	Not Applicable		The Independent Monitor did not identify any issue it considered required urgent
ACRESSES C-14.1	Monitor's investigation and report. The independent monitoring assessment is to be conducted, where			$\perp$					1900	Test Physicalists		investigation and reporting during the audit period.  Not included as there is no requirement for the Operator. This is an Independent
	practical, in a manner that complements the existing annual									Refer to sub		Monitor requirement only.
Schedule C -20	anvironmental assessment and surfit represses undertaken by the									conditions		
	Operator and the Department. The Independent Monitor must prepare and provide a report:									Bufor to sub		Not included as there is no requirement for the Operator. This is an Independent
Schedule C -21										conditions		Monitor requirement only.
Schedule C-21.a	annually to the Minister to assist with the review of the Mining									-		Not included as there is no requirement for the Operator.
Schedule C-21.b	Management Plan; and on request by the Minister.		_						_			Not included as there is no requirement for the Operator.
	The Minister must provide a report received from the Independent									Refer to sub		Not included as there is no requirement for the Operator.
Schedule C -22	Monitor to the Operator and the Department within 14 days of receiving the report.									conditions		
Schedule C -23	The Independent Monitor must prepare an additional report in a form									Bufor to sub		Not included as there is no requirement for the Operator.
Schedule C -23	suitable for distribution to the Community.									conditions		
	The Operator and the Department acknowledge that the report from the Independent Monitor will be made publicly available (including										Independent Monitor Report (AEPAR) made publicly available by posting on DITT website (viewed by Independent Monitor on 14Jul2022).	Full copies of the AEPAR 2021 and appendices (audit data) and ARC (summary report) are published on the DLTT website.
	publication on an appropriate internet site) and may include data used										https://industry.nt.gov.au/publications/mining-and-energy/public-environmental-	
Schedule C -24	in the preparation of the report.	1							- 4	Full Compliance	reports/mining/mcarthur-river-independent-monitor	The correspondence from the Minister for Mining and Industry to the Operator
												advised that documents would be uploaded to the internet and DITT's and the Operator's response to the correspondence did not raise concerns.
	Prior to being made publicly available, the Minister must request from the Operator and the Department any comments on the Independent										The Independent Monitor checked the DITT website and confirms the documents are there.	Request from the Minister on 28Mar 2022 and response from Operator on 5Apr 2022 and DETE 20Apr 2022 were within 28 days from the request.
	Monitor's report. Such comments must be provided within 28 days of											24/2222 million 1 204/2222 with million 20 days in difficulty in quality
Schedule C -25	the Minister's request and must be made publicly available with the	1							4	Full Compliance		
	Independent Monitor's report.											
	The Operator acknowledges that it is responsible for all costs of the											The Operator has paid the DITT invoices.
	independent monitoring assessment other than those costs directly											
Schedule C-26	attributable to those elements of the independent monitoring assessment associated with Condition 21(b)) which are the	1							4	Full Compliance		
	responsibility of the Department.											
Schedule C -27	The Department may provide to the Operator, from time to time, a notice setting out amounts due and pavable under the terms of the											Not included as there is no requirement for the Operator.
Schedule C -27	inotice setting out amounts due and payable under the terms of the engagement of the Independent Monitor.											
	The Operator must pay an amount notified in accordance with										The operator made payment against DETT invoices consistent with NTG procurement	DITT advised there have been no issues with payment.
Schedule C-28	Condition 27 within seven (7) days of receiving such notice.	1							4	Full Compliance	timeframes.	
												OBS: DITT invoices require payment in a month rather than within seven days or servint as stated in this condition.
Schedule C - 29	If the Operator disputes a notice provided by the Department under									Refer to sub		Provided for context of the subconditions.
	Condition 27: the Operator must pay the amount specified in the notice in									conditions		The Independent Monitor is not aware of any disputes in the audit period.
Schedule C-29 a	accordance with Condition 28; and	1	1		1	1 1			N/A	Not Applicable		
School of C.19 h	the Operator must notify the Department in writing within 14 days of								MG			The Independent Monitor is not aware of any disputes in the audit period.
schedule C - 29.b	receiving the notice, setting out the reasons why the Operator disputes the notice; and	1							N/A	Not Applicable		
	the Chief Executive of the Operator and the Chief Executive of the											The Independent Monitor is not aware of any disputes in the audit period.
Schedule C-29.c	Department must meet within five (5) working days to resolve the	1							N/A	Not Applicable		
	dispute.  If there is a dispute (other than a dispute mentioned in Condition 29)											The Independent Monitor is not aware of any disputes in the audit period.
	between the Operator and the Department as to any matter or thing											
	arising out of these Conditions (the "Dispute"), the party claiming that a Dispute has arisen must notify the other party to the Dispute and the											
	Chief Executive of the Operator, the Chief Executive of the Department	1							N/A	Not Applicable		
	and the Independent Monitor must meet within five (5) working days											
	to resolve the Dispute.											
	If the Chief Executive of the Operator, the Chief Executive of the											The Independent Monitor is not aware of any disputes in the audit period.
	Department and the Independent Monitor are unable to resolve a											
Schedule C -31	Dispute within ten (10) working days of meeting in accordance with Condition 30, the Operator and the Department may agree to the	1							N/A	Not Applicable		
	appointment of an independent party to assist in the resolution of the											
	Dispute.											

Authorisation Co	mpliance Workbook - Operator				_	ŧ		2				Evidence 2022	Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.			Non-mineral Waste Management	Dpen PII/Underground Norkings		Overburden Emplacema Facilities	Waterways (including tiver diversion)	Bing Bong Loading Fadili	Scor		pliance evel		
Schedule C-32	If, within five (5) working days of either the Operator or the Operatment eneminating a previous to be the independent party, no agreement is reached as to who is to be appointed as the independent party, either the Operator, the Department or both may refer the matter to the Procident of the Law Society of the Northern Territory.	1							NA	Not A	pplicablo		The Independent Monitor is not aware of any disputes in the audit period.
Schedule C -33	The President of the Law Society Northern Territory may nominate a person to be the independent party and the parties to the Dispute are bound to accept the appointment of that person.	1							NA	Not A	pplicable		The Independent Monitor is not aware of any disputes in the audit period.
Schedule C-34	The role of the independent party is to assist in negotiating a resolution of the Dispute and the independent party cannot make a decision that is binding on either the Operator or the Department.	1							N/A	Not A	pplicable		The Independent Monitor is not aware of any disputes in the audit period.
Schedule C-35	The Operator and the Department must make available to the independent party all materials requested by it and must provide the independent party with all other materials relevant to the Dispute.	1							N/A	Not A	pplicable		The Independent Monitor is not aware of any disputes in the audit period.
Schedule C -36	The Operator and the Department must:										r to sub ditions		Provided for context of the subconditions.
Schedule C - 36.a	Bear their own costs of resolving the Dispute under this Condition:	1							N/A		policable		The Independent Monitor is not aware of any disputes in the audit period.
School Gr. 36 h	and Bear equally the costs of any independent party engaged.	1							N/A	Mod &	policable		The Independent Monitor is not aware of any disputes in the audit period.
SCHEDULE D - ENVIRO	NMENTAL MONITORING AND MANAGEMENT										,,		
Schedule D - 1	If the Operator establishes a new surface water monitoring location, a written notice of the location (in GDA 94 format) and nature of the monitoring must be given to the Department within 30 days of its is tablishment.				1		1		-4	Full Co	mpliance	EMR 2001 2002.	The Operator achieved they have not established any new surface water monitoring locations and none were identified in the EMR 2021-20222.
Schedule D - 2	The Operator must maintain continuous monitoring having regard to:						1		4	Full Co	mpliance	SWI Laggers Melater.  Continuous manifering wax not successful in the 2021 to 2022 well season.  Data was retrieved for 5WIZO to February only and USSS (SWITG) would not connect so there is no data and SWIZO date not have an EC togger installed.	
Schedule D - 2.a	devices installed at the following locations:									Rafe	r to sub ditions		
Schedule D - 2.a.i	SW29 (upstream Surprise Creek outside the zone of influence of TSF);						1		4		mpliance	SW Loggers Misster. Gauging Station Register v2. A foocer was installed at SW29 to measure EC.	Data was netrieved for EC to Feb 2022.
Schedule D - 2 a ii	SCCS (Surprise Creek gauge station between the TSF and the Mine):						1		4	Full Co	mpliance	A rangue was ensured as over-to-ensure e.c.  Shi Logger Madeller  Causiging Station Register v.2.  Causiging Station Register  A languer was installed at SCCS (SWCO) to measure EC.	SW022 (SCGS) Dutta was retrioved for EC for the wet season.
Schedule D - 2.a.iii	SW30 (upstream Emu Crook):						1		N/A	Not A	pplicable	SNI Laggers Medietr Causing Station Register v2 Scarface Walter Memoritoring Arexall Report 2021-22. Scarface Walter Memoritoring Arexall Report 2021-22 tables "There were no recorded flows at the Errur Create Control mem	
Schedule D - 2.a.lv	USCS (upstream at the McArthur librar gauge station);						1		4	Full Co	mpliance	SW Loggers Medite: Gauging Station Register v.2. Gauging Station butte, Envirolly , Export. A logger was installed at USGS (SW10) to missioure EC.	SWT0 (LBCS) logger was installed but did not connect.  The surface water logger at SWT0 falled, however the site is also serviced by the paging station conduct this location. As such, electrical conductivity was still recorded over the 2011/122 and sealon.
Schodule D - 2.a.v	BCGS (upstream at the Barney Creek gauge station);						1		4	Full Co	mpliance	SW Loggers Meister. Gauging Station Register v2. A logger was installed at BCDS (SWD4) to measure EC.	SWD4 (BCGS) Data was netrieved for EC for the wet season.
Schedule D - 2 a vi	SW12 (immediately downstream of the Mine capturing outflow from Erru Creek, Barney Creek, drainage lines from SBPICD, Old McArthur Rever Channel and the McArthur Rever deventon mannel but before the Glyde River joins the McArthur River channels:						1		4	Full Co	mpliance	SW Loggers Misster. Gauging Station Register v2. A logger was installed at SW12 to measure EC.	Data was retrieved for EC for the wet season.
Schedule D - 2 b	devices must at a minimum measure electrical conductivity, and may ministure additional parameters such as pht.						1		4	Full Co	mpliance	SW Loggers Minder. Gauging Station Register v2. Devices that measure EC were installed at the required locations.	
Schedule D - 2.c	the Operator must from 30 August 2017 include data from these devices in data submission under Condition 7 of Schedule A.	1					1		4	Full Co	mpliance	Email submission Operator to D1TT (M86A   D1TT Data CI2) dated 16.Aug/2021 2107 - 2109 D1TT Data Continuous data, where available, was supplied by the Operator.	
Schedule D - 3 Authorisation Compila	From the date of authorisation of the Overburden Management Project the Operator must install and manage the following gauging stations at: on Workbook - Operator Considering Domains										r to sub ditions		

Authorisation Compliance Workbook - Operator  Evidence 2022							Distract 2022	Comments 2022					
13 Nov 2020 and 18 June 2021 Authorisation Condition No.			Non-mineral Waste Management	Dpen PII/Underground Norkings			Overburden Emplacemen Facilities	Waterways (including river diversion)		Score	Compliance Level		Confidence and a
Schedule D - 3.a	fmu Ovac							1		3	Part Compliance (High)	Macrosotto De graver M. Common und est del de publica sourcerou publica de la common qualificación de la composition del la composition de la composition del la composition de  la composition de la composition del la composition del la composition della compositio	sauging stations received after the audit period.  Oil: Constitute the permanent gauging stations on Errus Creek and the Chyde Reverons that approach are in place. In the meanterine, display multiple loggers in Errus Creek and the Chyde Rever to provide redundancy to ensure continuous data collection in New Of permanent gauging stations.
Schedule D - 3.b	Cigde filter.							1		3	Part Compliance (High)	Manne Wild No Gyarant E Continuous united united united united united pulsary suscensivality procession and Selegoria. In Continuous united united the Continuous Continuous continuous and continuous designed the 1500 of Authorithet Continuous Continuous Landa Annie No Gyarant Selegoria (1500 Gyarant Selegoria News) and in Discentina 2021 for 1501 Film Coulds).  Albanous Wild No Gyarant SE Continuous united market data quality must annie publication and 1501 Film Coulds).  Albanous Wild No Gyarant SE Continuous united market data quality must annie publication and 1501 Film Coulds) for water tout.	Special and another they have insided together in those locations in the interiors.  Note of the section of the interiors and the section of the interiors.  Note fine in not for measured via recoloring the lateraptical from the water loved via interior grown as suited in the New 1988 fine Open for Centrenous series and and an analysis your amont quality centre of science 2.1 "The data obscillent inside series of the section and the section an
Schedule D - 4	The Operator must ensure groundwater monitoring bores and extraction bores are constructed, maintained and decommissioned in compliance with the document existed Minimum construction requirements for water bores in Australia published by the National Uniform Drillars Unioning Operations (Delife deliber, February 2012 or a current version of the document). In this regard:	1								4	Full Compliance	2021 HIDBIOCECLOGICAL DRILLING AND HELD CAMMINGN 2021 HIDBIOCECLOCICAL DRILLING AND RELD CAMMINGN states "All groundwater merelating bons and WWP benew we constructed in accordance with the Minimum Construction Requirements for Water Bones in Australia (MUDICL, 2020)."	No mention of the groundwaster monitoring bones and estaction bones being maintained or discommissioned in accordance with the Minimum construction requirements for water bone in Australia guidalised by the National Uniform Drillers Licensing Committee However, the Operator advised there has been no deconvisionning or maintenance in the audit period.
Schedule D - 4.a	construction logs and bore location coordinates in CDA94 format result be available to the Minister on request and provided to the Minister annually in the EMR:	1								4	Full Compliance	2021 HYDROGEOLOGICAL DISILING AND FIELD CAMPING'S.  For the five bores drilled in the audit period, bore coordinates in CDA 94 format are in Table 3-1 of the 2021 HYDROGEOLOGICAL DISILING AND FIELD CAMPINGON.	The Operator advised that there were no requests by the Minister in the audit period.
Schedule D - 4.b	logs of maneferance activities must be kept available to the Minister on request;	1								N/A	Not Applicable	Clinal Latherson Herical (20 2001 data - deed 1444)2021 Grant Latherson Herical (20 20 2001 data - deed 1444)2021 Grant Latherson Herical (20 2001 data - deed 1444)2021 Grant Latherson Herical (2	This Cycle is a desired that there were no requests for tigs of maintainness activated by the Melhins to the audit princil.  DISP 685 to 5 demands bown in squessishined 2001 - 2000 DETT Datis, Final and on the field show.  DISP 685 to special to be born that are demanded and some challed that should be maintained to less give memoring storm assistant for most princip that could be maintained for some princip storm, assistant for most princip storm, assistant for the sign of committering the size district princip storm is used gordness they can't be seen and some storm that size of the committering that one state of the memoring storm, assistant on the size of the committering that the contribution of the report as loss of that has failed or documentations.
Schedule D - 4.c	logs of borudecommissioning activities must be kept and available to the Minister on request and reported in the Operator's Ameual EMR.	1								4	Full Compliance	2130 - 2112 BTT Data 2231 HRIDDECENCIACLA DRILLING AND FIELD CAMPAICN BMR 2020 - 2021 Ageneriks T - 2020 Hydrogoslogisch Dilling auf Field Clampaign report in Appendix 4 - Discommissioned Governdwater Membering Boxes 2020/21. 2021 HRIDDECENCIACLA DRILLING AND FIELD CAMPAICH states "No monitoring boxes were discommissioned during the 2021/22 monitoring partial".	The Consister advised that there were no requests by the Minister in the audit period.
Schedule D - 5	The Operator must take appropriate action to reduce the risk to mining operations accounted with Newbook on the adjoining particular property by maintaining an Eschasion Area and managing throstock as appropriate in consultation with the Chief Veterinary Officer.	1								4	Full Compliance	2013-1019 callish management figure was submitted in the laneuary 2020 MMP, which was not approved until 13/Mo/2020.  BMP 2021-2022 To Table 10 stated "In total, 11 cattle innusters were undertaken during the reporting period. As por the Cuttle Management Plan, weekly inspections of the cattle excision zone force were also undertaken throughout the dry submit part of the cattle femous and electric femous are shown on Figure 12.	The Openior advised that BMS accordations was not available for total halicoptur plot and that they have a new BMS accordate in holicoptur provider.  The Openior advised that Stations undertake mentoring with any outher-sation undertaken by DITT who are in the holicoptur.
Schedule D - 6	From the dato of authorisation of the Overburden Management Project the Operator must undertake monitoring in accordance with the following Emironmental Management Plans approved in the MMP:										Refer to sub conditions		

Authorisation Co												Comments 2022
13 Nov 2020 and 18 June 2021 Authorisation Condition No.			Non-mineral Waste Management	Dpen PII/Underground Norkings		Overburden Emplacemen Facilities	Waterways (including river diversion)		Score	Compliance Level		Connents 2022
Schedule D - 6.a	Dust Management Plan:	1						ı	N/A	Not Applicable		[herewas no plan with this name in the approved MMP and therefore this subcondition is considered NIA, DTT has updated the Authorisation to remove reference to a Dost Management Plan. The Air Quality Management Plan is the relevant plan for dust management.
Schedule D - 6 b	take Mangamat Nan -safesa auto-grazeduate and fluid soldments				1		1		3	Part Compliance (High)	The desiration care for 10 KPS Fee 2 and 10 Applies The Community of the C	Nemocrafied.  SC Corealies regularly the Water Management Plan amountly once TARPs are varied to sup to death for a sub-vect season.  SU Lipidate management plans to helicate the process relief to the admining DETT administration. See the control to supplementation.  SE Corp The Water Management Plan and Materialized Standards up to date in terms of processing seasons.  SE Corp The Water Management Plan and Materialized Standards up to date in the rest of remaining discontinuities of granded and force.  SE The STANDARD AND ASSESSION SEES ASSESSION SEES ASSESSION SEES AND ASSESSION SEES ASS
Schedule D - 6.c	An Guelly	1							3	Part Compliance (High)	Microbial Memory and Principal Conference on the Conference of the Conference on the	
Schedule D - 6.d	Vegetation and terrestrial faunic	1							N/A	Not Applicable		There is no plain with this name in the approved MMP and therefore this subcondition is considered MM. The SMay2022 Authorisation removes Vegetation and terristrict fauna as a plan and now states Rehabilitation Management Plan and Water Management Plan.
Schedule D - 6.e	Aquatic faunic				1		1		N/A	Not Applicable		There is no plan with this name in the approved MMP and therefore this subcondition is considered MM. The SMay2022 Authorisation removes aquatic flauna as a plan and now states Rehabilitation Management Plan and Water Management Plan.
Schedule D - 6.f	Heritage and sacred sites.	1							N/A	Not Applicable		There is no plan with this name in the approved MWP and threstore this subcondition is considered MVA. Reference to a Heritage and secred vites plan has been removed from the SMey2022 Authorisation.  The Operator advised that this is regulated outside of the Authorisation.

13 Nov 2020 and 18 June 2021 Authorisation Condition No.	Condition/Requirement	Governamo/General	Non-mineral Waste Management	Open PII/Underground Workings	Tailings Storage Facility	Water Management and Storages	Overburden Emplaosment Facilities	Exploration	Waterways (including river diversion)	Bing Bong Loading Facility	Score	Compliance Level	Evidence 2002	Comments 2022
Schedule D - 7	Plans mentioned in Condition 6 of this Schedule must be approved by the Department in writing.	1									N/A	Not Applicable	23land201.  Noting that the wording of the condition refers cerly to the first entered Management Plans mentioned in Condition 6, and the AAP is not included in this condition used the Authorisation version after the audit period. Therefore, the Operator his demonstrated success in submitting their changed Environmental Management Plans to DOTT.	the management plans and submitted to DTT.  The Operator provided the latest Rehabilitation Management Plan 2011-23 and BBEF Film abilitation 2001 that were settlement to DTTP in Jane 2021. The Operator advised "No other material changes to the EMPs in condition 6 (pitter than the updated AMP already provided) were made cluring the audit period."
Schedule D - 8	For the purposes of managing chemicals and flammable or combustible liquids, the Operator must:											Refer to sub conditions		
Schridule D - 8.a	Other activation of handware comments, the subdivines, parties of the subdivines and the subdivines are subdivined as the subdivine fundamental and subdivines are subdivined as the subdivines are su	1									4	Full Compliance	Tell call and Anti-Ville Complaines before lists in 24-policyDD plane for head played.  For information of the Complaines before lists of the Complaines of	The Committee of the Co
Schedule D - 8.b	include bulk storage tanks and associated infrastructure on a maintenance schedule which conforms with the current Australian Standard where such is applicable, and the laws of the Northern Territory.	1									4	Full Compliance	Screen shot of Work orders for Dissel Tank (M9AP100TK001) monthly inspections.	
Schedule D - 8.c	include insplar integrity bothing is ensure insised constainment or failure of fault extrapy large does not occur.	1									4	Full Compliance	INCLUDED MICHAEL PROBLEM THROUGH STREET COMMAND AND AND AND AND AND AND AND AND AND	



Appendix B Waste Discharge Licence Compliance Workbook - Operator

ondition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments
DL174-13 (2	25 May 2021 - 25 May 2023, issued 10 March 202 GENERAL	22)			
1	The licensee must ensure the contact details recorded with the Administering Agency for this licence are correct at all times.	4	Full Compliance	Note that the state of the stat	Contact details on the NT EPA website are for Adam Hatfield and those contact details were confirmed by email signature from the Operator.
2	The licensee must at all times have a 24 hour emergency contact.	4	Full Compliance	The Operator website (5Aug2022) has an Information line 1800 211 573 and also includes the site switchboard phone number (+61 8 8975 8179) that the Operator advised operates 24/7 prominently located in the contact us section. These were also sighted during the audit period by the Independent Monitor (8Jul2021).	Switchboard direct calls to ERT as required. 24 hour number: MRM emergency phone number is 08 8975 8222.
3	The licensee must notify the Administering Agency prior to making any operational change that will cause, or is likely to cause, an increase in the potential for environmental harm.	N/A	Not Applicable		Operator advised there has been no relevant changes in the audit period and that they would consult with the Department if there was any proposed change.  The Independent Monitor's review did not indicate any operational changes related to this condition.
4	The licensee must cause clear and legible signage, in English, to be displayed in a prominent location at each public entrance to the premises that includes the following		Refer to subconditions		
4.1	waste discharge licence number issued under the Water Act; and	3	Part Compliance (High)	Photo of signage at MRM entrance gate (from 23Sep2021). Photo of signage at entrance to TSF (noting this is not a public entrance so signage is not required by this condition).  The signage at the MRM entrance gate and TSF entrance include the waste discharge licence number. There is no signage at the entrance to the Bing Bong Loading Facility.	The operator advised "Dredging has not yet commenced at BBLF and discharge at this location under WDL174-13 is not occurring. So currently, for the purposes of the WDL the only active premises is MRM lease. MRM will erect WDL signage at BBLF entrance in the near future."  No OFI has been prepared because this was actioned after the audit period.  OBS: The signage in a prominent location at each public entrance to the mine and Bing Bong Loading Facility may need to be updated to reflect
4.2	24 hour emergency contact details.	3	Part Compliance (High)	Photo of signage at MRM entrance gate (from 23Sep2021). Photo of signage at entrance to TSF (noting this is not a public entrance so signage is not required by this condition).  The signage at the MRM entrance gate and TSF entrance includes the 24 hour emergency number of "8975 8222". There is no signage at the entrance to the Bing Bong Loading Facility.	The operator advised "Dredging has not yet commenced at BBLF and discharge at this location under WDL174-13 is not occurring. So currently for the purposes of the WDL the only active premises is MRM lease. MRN will erect WDL signage at BBLF entrance in the near future."  No OFI has been prepared because this was actioned after the audit period.  OBS: The Operator may consider updating the phone number on the signage in a prominent location at each public entrance to the mine and

Waste Dischar	rge Licence Compliance Workbook - Operator 20	022 - Aud	dit Period 01 May 2	021 to 30 April 2022	
Condition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments
5	The licensee must cause a copy of this licence to be available for inspection by any person, in hard copy form, at the premises.	4	Full Compliance	The General Manager's, Mine Manager's and Metallurgy Manager's offices all have copies of the WDL. The Independent Monitor viewed a copy of the WDL on site during the audit video meeting.	
6	The licensee must provide to the Administering Agency, within 10 business days of a request, a copy of any document, monitoring data or other information in relation to the activity, must be provided in electronic form by emailing <a href="mailto:waste@nt.gov.au">waste@nt.gov.au</a> unless otherwise specified.	N/A	Not Applicable		No requests from DEPWS were made (outside of the licence renewal/amendment processes) for any document, monitoring data or other information in relation to the activity in the audit period. Data is sent annually with annual monitoring report.
7	All notices, reports, documents or other correspondence required to be provided as a condition of this licence, unless otherwise specified as a condition of this licence, must be provided in electronic form to the Administering Agency.	4	Full Compliance	The evidence provided for various conditions of the WDL showed that correspondence was emailed to waste@nt.gov.au.	The Operator advised that all correspondence and submissions required by the conditions of the licence were made electronically via email to waste@nt.gov.au.
8	The licensee must maintain and implement the current version of the documents listed in Table 1.		-		
Table 1: Licence Documents	Document Number 1 Communication Plan Waste Discharge Licence (WDL 174- 10)	4	Full Compliance	Memo April 2021 - Edition 62.  MRM Community Office at Borroloola (3 x photos).  Glencore internet page on Environment - Waste Discharge Licence.  Flyer "Come and Meet Our People".  Email Operator to DEPWS MRM   Communication Plan Waste Discharge Licence dated 6Aug2022 (outside audit period).  An example of implementation of the communications plan was the explanation of the WDL included on the Glencore website and photos of the Operator Community Office in Borroloola where the Operator said that face to face engagement on the WDL occurs.  A flyer for "Come and Meet Our People" sessions held every Tuesday 10am to noon at the MRM Borroloola Community Office showed a session scheduled for 14 June where the MRM Environment team would attend and the community could hear about environmental monitoring.  The Communications Plan states for "Broad communication outlining environmental monitoring and activities" the frequency is "On-going basis, but at least quarterly". The attendance at the Borroloola community office every second Tuesday of every month to communicate the latest monitoring shows compliance.	issue and version control.

Waste Dischar	ge Licence Compliance Workbook - Operator 20	022 - Au	dit Period 01 May 2	021 to 30 April 2022	
Condition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments
Table 1: Licence Documents	Document Number 2 Emergency Response Plan McArthur River Mining	4	Full Compliance	Airport Drill 19Jun2021 Photo of emergency coverage roster July 2022 (after audit period) Emergency Response Plan: MPN-26000001 Version 8 dated May 2020. Photo of hardcopy of Emergency Response Plan: MPN-26000001 Version 8 dated May 2020 available in the Operator office. McArthur River Emergency Response Team Training 2021 list. Photo of emergency response channels sign.  Evidence has been provided to demonstrate implementation of the Emergency Response Plan. While the majority is related to safety there are environmental elements and the training would be relevant to how to mobilise for an emergency associated with the WDL.	Emergency Response Plan: MPN-26000001 Version 8 dated May 2020 is the accurate document.  Section 23 of the Emergency Response Plan includes a requirement to "Follow Communication Plan Waste Discharge Licence (WDL174-11)."  Section 26 refers to discharge from the NOEF "Please note, the strategy shall be to release the water from the NOEF into the receding flood waters as soon as possible, to dilute the concentration of contaminates to acceptable WDL limits."
Table 1: Licence Documents	Document Number 3 Adaptive Management Plan McArthur River Mine	4	Full Compliance	AMP March and October 2021 EMR 2021/2022 Executive Summary WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility revision 5 dated 30Aug2022.  "The results of the 2021/22 Natural Surface Water quality assessment have been assessed against the downstream water quality TARP from MRM's Adaptive Management Plan (MRM, 2021a). The relevant TARPs refer to the 2021/22 SSTV exceedances at SW11, which are discussed in Section 4.5. The relevant TARPs are provided in Table 4.8. During the reporting period, the TARP levels were updated during the most recent AMP with the most substantial change in regards to the SWQ report, being that an SW11 analyte measured greater than or equal to 90% of SSTV will increase the TARP level to Level 2. This resulted in a substantial increase in the number of Level 2 triggers. For the previous AMP, only an SW11 analyte greater than or equal to an SSTV exceedance would trigger the TARP to increase to Level 2."  Figure ES-2 of the EMR 2021/2022 Executive Summary shows the trigger action response plan summary indicating implementation of the AMP.	
9	Within 10 business days of any amendment being made to a document listed in Table 1 the licensee must provide the amended document to the Administering Agency, along with:	4	Full Compliance	Email Operator to DITT subject MRM, Updated Adaptive Management Plan (October 2021) dated 1Oct2021 Letter Operator to DITT subject RE: McArthur River Mining – Adaptive Management Plan October 2021 Update Submission dated 1Oct2021 Letter Operator to DEPWS subject RE: McArthur River Mining – Adaptive Management Plan Update dated 27May2022 (after audit period). Email Operator to DEPWS MRM, Communication Plan Waste Discharge Licence dated 6Aug2022 (outside audit period).  There were no updates to the ERP or Communications Plan in the audit period.  The AMP version D dated 1Oct2021 was submitted on 1Oct2021 and therefore was within 10 business days of the amendments being made as required by this condition.	AMP submitted 1 October 2021 to address requests by DEPWS.  "In accordance with the requirements of MRM's VOA 0059 (dated 5 May 2022), MRM made revisions to the AMP and the appended Water Management Plan (WMP) on 13 May 2022." The 27May2022 is 10 business days after 13May2022 so this is compliant, although outside the audit period.

Waste Dischar	rge Licence Compliance Workbook - Operator 2	022 - Au	dit Period 01 May 20	021 to 30 April 2022	
Condition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments
9.1	a tabulated summary of the amendment(s) with document references;	4	Full Compliance	Letter Operator to DITT subject RE: McArthur River Mining – Adaptive Management Plan October 2021 Update Submission dated 01Oct2021.  The letter Operator to DITT subject RE: McArthur River Mining – Adaptive Management Plan October 2021 Update Submission dated 01Oct2021 in Table 1 – Summary of Changes to Adaptive Management Plan includes the tabulated summary of amendments and associated document references.	
9.2	reasons for the amendment(s); and	4	Full Compliance	Letter Operator to DITT subject RE: McArthur River Mining – Adaptive Management Plan October 2021 Update Submission dated 1Oct2021.  The letter Operator to DITT subject RE: McArthur River Mining – Adaptive Management Plan October 2021 Update Submission dated 1Oct2021 in Table 1 – Summary of Changes to Adaptive Management Plan includes the justification for each change.	
9.3	an assessment of environmental risk associated with the amendment(s).	4	Full Compliance	Letter Operator to DITT subject RE: McArthur River Mining – Adaptive Management Plan October 2021 Update Submission dated 10ct2021. Email Operator to DEPWS MRM   Communication Plan Waste Discharge Licence dated 6Aug2022 (outside audit period).  While not a formal risk assessment, the justifications do include the environmental advantages of the changes and did not raise any risks.	The Operator advised that given the updates to the AMP submitted on 10ct2021 were predominantly at the request of DEPWS, the Operator advised that assessment of environmental risk associated with the amendment was not considered to be required.  OBS: Preparing an environmental risk assessment as part of future submissions when plans are amended would better meet compliance requirements. It is noted that the submission of the Communication Plan (after the audit period) did include an assessment of environmental risk.
10	The Administering Agency may require the licensee to revise or amend and resubmit any amended document or document provided in accordance with this licence. Where the Administering Agency requires a document to be resubmitted, the licensee must submit it to the Administering Agency by the date specified by the Administering Agency.	N/A	Not Applicable		The AMP was required to be resubmitted. However, that is considered covered elsewhere with the WDL. Noting the AMP was required to be resubmitted by the licence. No other revisions were requested in the audit period.
11	The licensee must operate and maintain a community feedback number.	4	Full Compliance	https://www.glencore.com.au/operations-and-projects/mcarthur-river-mine/contact  The Operator website (08Jul2021) has an Information line 1800 211 573 and also includes the site switchboard phone number (+61 8 8975 8179) that the Operator advised operates 24/7 prominently located in the contact us section.  The Operator website (8Aug2021) states "If you would like to get in touch with the team at McArthur River Mine, please use one of the following options.  Address and community enquiries Address: McArthur River Mining, PO Box 36821, Winnellie NT 0821 Site switchboard: +61 8 8975 8179 Information line: 1800 211 573."	

ondition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments
12	The licensee must display the community feedback number:		Refer to subconditions		
	where the licensee has a website, in a prominent location on the licensees website;			https://www.glencore.com.au/operations-and-projects/mcarthur-river-mine/contact	
				The Operator website (08Jul2021) has an Information line 1800 211 573 and also includes the site switchboard phone number (+61 8 8975 8179) that the Operator advised operates 24/7 prominently located in the contact us section.	
12.1		4	Full Compliance	The Operator website (8Aug2021) states "If you would like to get in touch with the team at McArthur River Mine, please use one of the following options.	
				Address and community enquiries Address: McArthur River Mining, PO Box 36821, Winnellie NT 0821 Site switchboard: +61 8 8975 8179 Information line: 1800 211 573."	
12.2	in the Communication Plan Waste Discharge Licence; and	3	Part Compliance (High)	Communication Plan Waste Discharge Licence (WDL 174-10). Email Operator to DEPWS MRM, Communication Plan Waste Discharge Licence dated 6Aug2022 (outside audit period).  The Communication Plan Waste Discharge Licence (WDL 174-10) includes "In an emergency contact: MRM on 08 8975 8222". It does not include the community feedback number.	As identified in the 2021 audit, an earlier type of this plan called Consultation and Communication Plan Waste Discharge Licence (WDL 174 10) had the "MRM Information Telephone Line: 1800 211 573" on page 6.  No OFI has been prepared because this was actioned after the audit period.
12.3	in other publicly available documents relating to the activity.	N/A	Not Applicable	-	There were no specific publicly available documents related to waste discharge in the audit period.
12	The licensee must maintain a Complaint Log for all complaints received by the licensee in relation to the activity.	4	Full Compliance	Complaints register 2021-2022  Complaints register did not include any complaints related to the WDL, however a log is maintained in the event there were any.	
14	The licensee must ensure that the Complaint Log includes, for each complaint received by the licensee, the following information:		Refer to subconditions		
14.1	the person to whom the complaint was made;	4	Full Compliance	Complaints register 2021-2022	
14.2	the person responsible for managing the complaint;	4	Full Compliance	Complaints register 2021-2022	
14.3	the date and time the complaint was reported;	4	Full Compliance	Complaints register 2021-2022	Noting the time of email submission of the complaint was not stated in the register, although the column heading does say "Date and time of compliant".
14.4	the date and time of the event(s) that led to the complaint;	4	Full Compliance	Complaints register 2021-2022	
14.5	the contact details of the complainant if known, or where no details are provided a note to that effect;	4	Full Compliance	Complaints register 2021-2022	Email address included.
14.6	the nature of the complaint;	4	Full Compliance	Complaints register 2021-2022	

Waste Dischar	ge Licence Compliance Workbook - Operator 20	022 - Au	dit Period 01 May 20	021 to 30 April 2022	
Condition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments
14.7	the nature of event(s) giving rise to the complaint;	4	Full Compliance	Complaints register 2021-2022	
14.8	prevailing weather conditions at the time (where relevant to the complaint)	N/A	Not Applicable	Complaints register 2021-2022	Weather conditions was not relevant to this purchasing complaint.
14.9	the action taken in relation to the complaint, including any follow-up contact with the complainant; and	4	Full Compliance	Complaints register 2021-2022	
14.10	if no action was taken, why no action was taken.	N/A	Not Applicable	Complaints register 2021-2022	
	EARLY SURRENDER OF LICENCE				
15	Any reports, records or other information required or able to be provided by the licensee under this licence must be submitted to the Administering Agency prior to the licensee surrendering the licence. If the date on which a report, record or other information is required falls after the date the licensee requests to surrender this licensee, the licensee must provide the report, record or information as far as possible using data available to the licensee up to and including the date the request to surrender the licence is made.	N/A	Not Applicable		Not triggered. Licence WDL174-12 commenced on 25 May 2021 so there was no licence in place for the audit period before that date. While there was a period where the licence was discontinuous, the WDL is not considered to have been surrendered.
	OPERATIONAL  The licensee must, without limiting any other condition of this licence, in conducting the activity do all things reasonable and practicable to ensure the activity does not			WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility revision 5 dated 30Aug2022.	SSTVs are designed to protect those beneficial uses. Therefore no SSTV exceedances is a indicator that the beneficial uses are protected.
	adversely affect the Declared Beneficial Uses and Water Quality Objectives and Sites of Conservation Significance as declared from time to time, including those applying to:	4	Full Compliance	Letter Operator to DEPWS RE: McArthur River Mining – 2021/2022 WDL Annual Return & Monitoring Report dated 31Aug2022 (after audit period).  The WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility concludes "Based on WRM's review of surface water quality monitoring data between 1 May 2021 and 30 April 2022, MRM continue to implement effective controls to minimise the risk of environmental harm of downstream receiving waters due to Mine operations. The review concluded that the beneficial uses and community values of the McArthur River continue to be protected from potential mine derived impacts." The specific Declared Beneficial Uses and Sites of Conservation Significance are listed in the report under Section 1.2.3 Beneficial uses.	

Waste Dischar	ge Licence Compliance Workbook - Operator 2	.022 - Au	dit Period 01 May 20	021 to 30 April 2022	
Condition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments
	McArthur River Area: Aquatic ecosystem protection, recreational water quality and aesthetics (Gazette references G9 11 March 1998 and G20 27 May 1998);			WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility revision 5 dated 30Aug2022.	
16.1		4	Full Compliance	The WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility concludes "Based on WRM's review of surface water quality monitoring data between 1 May 2021 and 30 April 2022, MRM continue to implement effective controls to minimise the risk of environmental harm of downstream receiving waters due to Mine operations. The review concluded that the beneficial uses and community values of the McArthur River continue to be protected from potential mine derived impacts." The specific Declared Beneficial Uses and Sites of Conservation Significance are listed in the report under Section 1.2.3 Beneficial uses.	
16.2	McArthur River Catchment Area: Environment, cultural and riparian (Gazette references G10 14 March 2001);	4	Full Compliance	WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility revision 5 dated 30Aug2022.  The WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility concludes "Based on WRM's review of surface water quality monitoring data between 1 May 2021 and 30 April 2022, MRM continue to implement effective controls to minimise the risk of environmental harm of downstream receiving waters due to Mine operations. The review concluded that the beneficial uses and community values of the McArthur River continue to be protected from potential mine derived impacts." The specific Declared Beneficial Uses and Sites of Conservation Significance are listed in the report under Section 1.2.3 Beneficial uses.	
16.3	SOCS Number 33: Sir Edward Pellew Island group;	4	Full Compliance	WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility revision 5 dated 30Aug2022.  The WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility concludes "Based on WRM's review of surface water quality monitoring data between 1 May 2021 and 30 April 2022, MRM continue to implement effective controls to minimise the risk of environmental harm of downstream receiving waters due to Mine operations. The review concluded that the beneficial uses and community values of the McArthur River continue to be protected from potential mine derived impacts." The specific Declared Beneficial Uses and Sites of Conservation Significance are listed in the report under Section 1.2.3 Beneficial uses.	

Waste Dischar	Vaste Discharge Licence Compliance Workbook - Operator 2022 - Audit Period 01 May 2021 to 30 April 2022							
Condition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments			
16.4	SOCS Number 34: McArthur River coastal floodplain; and	4	Full Compliance	WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility revision 5 dated 30Aug2022.  The WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility concludes "Based on WRM's review of surface water quality monitoring data between 1 May 2021 and 30 April 2022, MRM continue to implement effective controls to minimise the risk of environmental harm of downstream receiving waters due to Mine operations. The review concluded that the beneficial uses and community values of the McArthur River continue to be protected from potential mine derived impacts." The specific Declared Beneficial Uses and Sites of Conservation Significance are listed in the report under Section 1.2.3 Beneficial uses.				
16.5	SOCS Number 35: Borroloola area.	4	Full Compliance	WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility revision 5 dated 30Aug2022.  The WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility concludes "Based on WRM's review of surface water quality monitoring data between 1 May 2021 and 30 April 2022, MRM continue to implement effective controls to minimise the risk of environmental harm of downstream receiving waters due to Mine operations. The review concluded that the beneficial uses and community values of the McArthur River continue to be protected from potential mine derived impacts." The specific Declared Beneficial Uses and Sites of Conservation Significance are listed in the report under Section 1.2.3 Beneficial uses.				
	The licensee must comply with the Adaptive Management Plan for the McArthur River Mine as amended from time to time.	4	Full Compliance	WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility revision 5 dated 30Aug2022.  Section 4.6 of the Surface Water Monitoring Report states "The results of the 2021/22 Natural Surface Water quality assessment have been assessed against the downstream water quality TARP from MRM's Adaptive Management Plan (MRM, 2021a). The relevant TARPs refer to the 2021/22 SSTV exceedances at SW11, which are discussed in Section 4.5. The relevant TARPs are provided in Table 4.8.  During the reporting period, the TARP levels were updated during the most recent AMP with the most substantial change in regards to the SWQ report, being that an SW11 analyte measured greater than or equal to 90% of SSTV will increase the TARP level to Level 2. This resulted in a substantial increase in the number of Level 2 triggers. For the previous AMP, only an SW11 analyte greater than or equal to an SSTV exceedance would trigger the TARP to increase to Level 2."	The Operator advised "Evidence of implementation of the AMP and the associated Trigger Action Response Plans (TARPs) is provided within all the environmental managements plans that sit under that overarching AMP, one example has been provided (the WMP). Evidence will also be in the form of the 2021-22 EMR. MRM is currently in the process of finalising a formal AMP TARP Procedure and this will be provided upon completion."  OBS: Condition 17 is a duplicate of the requirements of condition 8.			

Waste Discha	Vaste Discharge Licence Compliance Workbook - Operator 2022 - Audit Period 01 May 2021 to 30 April 2022						
Condition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments		
18	The licensee must ensure any plant and equipment, including flow devices, used by the licensee in conducting the activity:		Refer to subconditions	GDL-3200003 - Mobile Maintenance - revision 1 dated Oct 2014 4.2 m Polycraft - Operating Checklist dated 03Aug2021. PRO-2200023 Natural Surface Water Monitoring Procedure - signed MW dated 08Apr2022. PRO-2200035 Waste Discharge Procedure - signed CD dated 18Nov2021. PRO-2200044 - YSI ProDSS Calibration and Use Procedure revision 1 dated 18Dec2020 NSW220125KL_UD - Field Sheet. NSW220130MW_UD - Field Sheet. WMD Release Point Checklist 2021 to 2022. Internal Operator Email subject RE: Updated Discharge Procedure   Acknowledgement Signoff dated 18Nov2021 (requesting team members read and complete the acknowledgement for the updated Waste Discharge Procedure.			
18.1	is reasonably fit for purpose and use to which it is put;	4	Full Compliance	GDL-3200003 - Mobile Maintenance - revision 1 dated Oct 2014. 4.2 m Polycraft - Operating Checklist dated 3Aug2021. PRO-2200044 - YSI ProDSS Calibration and Use Procedure revision 1 dated 18Dec2020. Calibration spreadsheet dated 3Mar2022.			
18.2	is maintained and operational; and	4	Full Compliance	Procedures and completed forms demonstrate compliance.  GDL-3200003 - Mobile Maintenance - revision 1 dated Oct 2014. 4.2 m Polycraft - Operating Checklist dated 3Aug2021.  PRO-2200044 - YSI ProDSS Calibration and Use Procedure revision 1 dated 18Dec2020.  Calibration spreadsheet dated 3Mar2022.  Procedures and completed forms demonstrated samples of evidence to fulfill this condition.	Operator has an onsite maintenance workshop to ensure mobile plant and equipment are maintained and fit for use.		
18.3	is operated by a person trained to use the plant and equipment.	4	Full Compliance	PRO-2200023 Natural Surface Water Monitoring Procedure - signed MW dated 08Apr2022. PRO-2200035 Waste Discharge Procedure - signed CD dated 18Nov2021. NSW220125KL_UD - Field Sheet. NSW220130MW_UD - Field Sheet.  Procedures are in place to ensure that plant and equipment are operated by trained personnel.	The Operator advised "MRM has a training department, which ensures that personnel have relevant qualifications to operate equipment. Individuals using equipment for environmental sampling are trained in and follow formal procedures (e.g. Natural Surface Water Sampling Procedure), which include instructions on using monitoring equipment.  OBS: MW did the Natural Surface Water Monitoring Procedure training in April 2022 but initialled the sampling sheet for 30Jan2022 (NSW220130MW_UD - Field Sheet). Advised by the Operator that this would have been a supervised sampling event. Only trained personnel should initial the sampling sheets in future.		

Waste Discha	Vaste Discharge Licence Compliance Workbook - Operator 2022 - Audit Period 01 May 2021 to 30 April 2022							
Condition No.	. Condition/Requirement	Score	Compliance Level	Evidence	Comments			
19	No change, replacement or alteration of plant and equipment is permitted if the change, replacement or alteration increases the risk of environmental harm for the licenced activity, unless approved by the Administering Agency.	4	Full Compliance	No other change, replacement or alternation of waste discharge plant and equipment was observed during the audit period that would increase the risk of environmental harm from the licenced activity based on the review of information provided.	An additional discharge point was requested in the audit period. This discharge point has not been installed but now that approval exists in the WDL the Operator is ordering pipework to construct this discharge point.  The Operator advised that no other change, replacement or alternation of waste discharge plant and equipment occurred during the audit period that would increase the risk of environmental harm from the licenced activity.			
20	The licensee must submit a Dredging and Dredge Spoil Management Plan to the Administering Agency 20 business days prior to the commencement of any dredging activities.	N/A	Not Applicable		No dredging activities have occurred during the audit period.			
21	The licensee must comply with the Dredging and Dredge Spoil Management Plan.	N/A	Not Applicable		No dredging activities have occurred during the audit period.			
	DISCHARGES Discharges to water							
22	This licence authorises discharge to water from the authorised discharge point(s) as identified in Table 2 and Appendix 2.	4	Full Compliance	PRO-2200035 Waste Discharge Procedure - signed CD dated 18Nov2021. WMD Release Point Checklist 2021 to 2022. 2021-22 Waste Discharge Records & Loads Tracking. WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility revision 5 dated 30Aug2022. Letter Operator to DEPWS RE: McArthur River Mining – 2021/2022 WDL Annual Return & Monitoring Report dated 31Aug2022 (after audit period). 2021/2022 WDL Annual Monitoring Report stated "During the reporting period, four release events occurred between 01 May 2021 and 30 April 2022. A total of approximately 106.7 and 200.4 ML (total of 307.1 ML) of water was released to the McArthur River via the MLDP and the WMD RP, respectively. "	The Operator advised that there were discharges in 2022 only of treated water from the water management dam in the audit period.  Monthly discharge monitoring reports are no longer required and no longer prepared.			
23	The licensee must ensure that all discharge events at each authorised discharge point consist only of waste from the source(s) as specified in Table 2.	4	Full Compliance	PRO-2200035 Waste Discharge Procedure - signed CD dated 18Nov2021. WMD Release Point Checklist 2021 to 2022. 2021-22 Waste Discharge Records & Loads Tracking. WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility revision 5 dated 30Aug2022.  There was no evidence that indicated this condition was not met.	There were discharges in 2022 only of treated water from the water management dam in the audit period.  Monthly discharge monitoring reports are no longer required and no longer prepared.			

Waste Dischar	rge Licence Compliance Workbook - Operator 20	)22 - Au	dit Period 01 May 20	21 to 30 April 2022	
Condition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments
Table 2: Authorised Discharge Points	Mine Levee Discharge Point(s) (MLDP) (Mine levee pumping outlets) Location - Easting: 618661 Northing: 8183459 1. Rain water collecting in the old McArthur River Channel (NC1A) inside the Mine levee. Waters discharged at Mine Levee Discharge Point are pumped over the mine levee wall and flow into the Old McArthur River channel upstream of the McArthur and Glyde River confluence.		-		This is the Table 2: Authorised Discharge Points audited in conditions 22 and 23.
Table 2: Authorised Discharge Points	Mine Levee Discharge Point(s) (MLDP) (Mine levee pumping outlets) Location - Easting: 618661 Northing: 8183459 2. Groundwater from dewatering bores around main pit collected in and then discharged from Pond 2 (P2). Waters discharged at Mine Levee Discharge Point are pumped over the mine levee wall and flow into the Old McArthur River channel upstream of the McArthur and Glyde River confluence.		-		This is the Table 2: Authorised Discharge Points audited in conditions 22 and 23.
Table 2: Authorised Discharge Points	Mine Levee Discharge Point(s) (MLDP) (Mine levee pumping outlets) Location - Easting: 618661 Northing: 8183459 3. Water from the water management dam. Waters discharged at Mine Levee Discharge Point are pumped over the mine levee wall and flow into the Old McArthur River channel upstream of the McArthur and Glyde River confluence.		-		This is the Table 2: Authorised Discharge Points audited in conditions 22 and 23.
Table 2: Authorised Discharge Points	Mine Levee Discharge Point(s) (MLDP) (Mine levee pumping outlets) Location - Easting: 618661 Northing: 8183459 4. Treated water from the Water Treatment Plant that will be stored in (P2) prior to discharge from the MLDP. Waters discharged at Mine Levee Discharge Point are pumped over the mine levee wall and flow into the Old McArthur River channel upstream of the McArthur and Glyde River confluence.		-		This is the Table 2: Authorised Discharge Points audited in conditions 22 and 23.
Table 2: Authorised Discharge Points	South-East Levee 1 Discharge Point (SEL1 DP) Location - Easting: 618332 Northing: 8183859 Rain water collecting inside the South Eastern Levee and separated from all contaminated seepages. Discharges are pumped via pipe line to Barney Creek and then flow into the		-		This is the Table 2: Authorised Discharge Points audited in conditions 22 and 23.  Advised by the Operator that the coordinates for SEL1 DP were updated in WDL174-13.

Condition No.	. Condition/Requirement	Score	Compliance Level	Evidence	Comments
Table 2: Authorised Discharge Points	McArthur River Diversion Channel Discharge Point(s) (MRDC DP) Location - Easting: 619595 Northing: 8182573 Discharges through McArthur Diversion Channel Discharge Point(s) (MRDC DP) include: 1. Groundwater from dewatering bores around main pit collected in and then discharged from Pond 2 (P2). Waters discharged at Mine Levee Discharge Point are pumped over the mine levee wall and flow into the Old McArthur River channel upstream of the McArthur and Glyde River confluence.		-		This is the Table 2: Authorised Discharge Points audited in conditions 22 and 23.  Authorised Discharge Point McArthur River Diversion Channel Discharge Point (MRDC DP) only present in WDL174-13 relevant from 10Mar2022.
Table 2: Authorised Discharge Points	McArthur River Diversion Channel Discharge Point(s) (MRDC DP) Location - Easting: 619595 Northing: 8182573 Discharges through McArthur Diversion Channel Discharge Point(s) (MRDC DP) include:  2. Water from the water management dam.		-		This is the Table 2: Authorised Discharge Points audited in conditions 22 and 23.  Authorised Discharge Point McArthur River Diversion Channel Discharge Point (MRDC DP) only present in WDL174-13 relevant from 10Mar2022.
Table 2: Authorised Discharge Points	McArthur River Diversion Channel Discharge Point(s) (MRDC DP) Location - Easting: 619595 Northing: 8182573 Discharges through McArthur Diversion Channel Discharge Point(s) (MRDC DP) include: 3. Treated water that will be stored in (P2) prior to		-		This is the Table 2: Authorised Discharge Points audited in conditions 22 and 23.  Authorised Discharge Point McArthur River Diversion Channel Discharge Point (MRDC DP) only present in WDL174-13 relevant from 10Mar2022.  Environmental improvement project of addition of this discharge locatio that allows discharge into the flowing river/water so allows for mixing.

Waste Dischar	Waste Discharge Licence Compliance Workbook - Operator 2022 - Audit Period 01 May 2021 to 30 April 2022						
Condition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments		
Table 2: Authorised Discharge Points	Dredge Spoil Drain (BBDDP) Location - Easting: 649514 Northing: 8271536 The dredge spoil perimeter drain exit point (BBDDP) is located on the tidal mudflats to the east of the loading facility and within a tidal area. The drain is constructed around the external boundary of the dredge spoil cells to intercept saline water and extends approximately 400 metres from the final cell. The drain receives overflow from: 1. the final dredge spoil emplacement area cell when in operation; At BBDDP passive releases flow across the intertidal flats to the Gulf of Carpentaria via the Bing Bong navigation channel. For the purposes of clarity this licence does not authorise dredging and/or pumping or disposal of dredge slurry to the Dredge Spoil Encasement Area.		-		This is the Table 2: Authorised Discharge Points audited in conditions 22 and 23.		
Table 2: Authorised Discharge Points	Dredge Spoil Drain (BBDDP) Location - Easting: 649514 Northing: 8271536 The dredge spoil perimeter drain exit point (BBDDP) is located on the tidal mudflats to the east of the loading facility and within a tidal area. The drain is constructed around the external boundary of the dredge spoil cells to intercept saline water and extends approximately 400 metres from the final cell. The drain receives overflow from: 2. saline water from the perimeter drain which surrounds the dredge spoil emplacement area. At BBDDP passive releases flow across the intertidal flats to the Gulf of Carpentaria via the Bing Bong navigation channel. For the purposes of clarity this licence does not authorise dredging and/or pumping or disposal of dredge slurry to the Dredge Spoil Encasement Area.		-		This is the Table 2: Authorised Discharge Points audited in conditions 22 and 23.		
24	The licensee must, for all authorised discharge points in Table 2, install, operate and maintain a device to measure and record, for each discharge event:		Refer to subconditions		Condition 24 in WDL174-12 states "The licensee must, for discharge point MLDP and SEL 1 DP, install, operate and maintain a device to measure an record for each discharge event: []"  Condition 24 in WDL174-13 states "The licensee must, for discharge point in all authorised discharge points in Table 2 install, operate and maintain device to measure and record for each discharge event: []"		

Waste Dischar	ge Licence Compliance Workbook - Operator 2	2022 - Au	dit Period 01 May 20	021 to 30 April 2022	
Condition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments
24.1	the time the discharge commenced and the duration of the discharge;	4	Full Compliance	2021-22 Waste Discharge Records & Loads Tracking.  The 2021-22 Waste Discharge Records & Loads Tracking show that for the discharges from the MLDP the time the discharge commenced and the duration of the discharge are recorded.  Waste Discharge Procedure states "Liaise with Mine Systems team to inspect flowmeters between allowable source waters and authorised discharge and release points." and "Obtain the start/stop times and volumes and enter the information into the "Discharge Records" spreadsheet []".	2021-22 Waste Discharge Records & Loads Tracking spreadsheet states it is a flowmeter at MLDP.  The Operator advised that all authorised discharge points on the mine site have flow meters. There is nothing permanent at Bing Bong as discharges only occur as a results of dredging programs, which have not occurred since 2014.  OBS: Recognise that Bing Bong discharge events only occur during dredging and part of those preparations for dredging activity would include installation of a device.
24.2	the discharge rate of flow; and	4	Full Compliance	2021-22 Waste Discharge Records & Loads Tracking. PRO-2200035 - Waste Discharge Procedure (version 2, 16Nov2019).  The 2021-22 Waste Discharge Records & Loads Tracking show that for the discharges from the MLDP the average flow rate is recorded.  Waste Discharge Procedure states "Liaise with Mine Systems team to inspect flowmeters between allowable source waters and authorised discharge and release points."	2021-22 Waste Discharge Records & Loads Tracking spreadsheet states it is a flowmeter at MLDP.  The Operator advised that all authorised discharge points on the mine site have flow meters. There is nothing permanent at Bing Bong as discharges only occur as a results of dredging programs, which have not occurred since 2014.  OBS: Recognise that Bing Bong discharge events only occur during dredging and part of those preparations for dredging activity would include installation of a device.
24.3	the discharge volume.	4	Full Compliance	2021-22 Waste Discharge Records & Loads Tracking. PRO-2200035 - Waste Discharge Procedure (version 2, 16Nov2019).  The 2021-22 Waste Discharge Records & Loads Tracking show that for the discharges from the MLDP the total volume discharged is recorded.  Waste Discharge Procedure states "Liaise with Mine Systems team to inspect flowmeters between allowable source waters and authorised discharge and release points." and "Obtain the start/stop times and volumes and enter the information into the "Discharge Records" spreadsheet []".	2021-22 Waste Discharge Records & Loads Tracking spreadsheet states it is a flowmeter at MLDP.  The Operator advised that all authorised discharge points on the mine site have flow meters. There is nothing permanent at Bing Bong as discharges only occur as a results of dredging programs, which have not occurred since 2014.  OBS: Recognise that Bing Bong discharge events only occur during dredging and part of those preparations for dredging activity would include installation of a device.
25	The licensee must ensure that the discharge from all discharge events at each authorised discharge point does not:		Refer to subconditions		
25.1	contain any floating debris, oil, grease, petroleum hydrocarbon sheen, scum, litter or other objectionable matter;	4	Full Compliance	NSW220125KL_UD - Field Sheet. NSW220130MW_UD - Field Sheet. Complaints register 2021-2022.  The Complaints register 2021-2022 did not include any complaints related to the WDL or community concerns about the waterways.  The Upon Discharge Surface Water Sampling WDL 174-12 sheet includes a column "Comments e.g. Dying veg, algal blooms, animals, fish/insects, odour, surface sheen, litter, floating debris."	

Waste Dischar	Waste Discharge Licence Compliance Workbook - Operator 2022 - Audit Period 01 May 2021 to 30 April 2022						
Condition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments		
25.2	cause or generate odours which would adversely affect the use of surrounding waters;	4	Full Compliance	NSW220125KL_UD - Field Sheet. NSW220130MW_UD - Field Sheet. Complaints register 2021-2022.  The Complaints register 2021-2022 did not include any complaints related to the WDL or community concerns about the waterways.  The Upon Discharge Surface Water Sampling WDL 174-12 sheet includes a column "Comments e.g. Dying veg, algal blooms, animals, fish/insects, odour, surface sheen, litter, floating debris."			
25.3	cause algal blooms in the receiving water;	4	Full Compliance	NSW220125KL_UD - Field Sheet. NSW220130MW_UD - Field Sheet. Complaints register 2021-2022.  The Complaints register 2021-2022 did not include any complaints related to the WDL or community concerns about the waterways.  The Upon Discharge Surface Water Sampling WDL 174-12 sheet includes a column "Comments e.g. Dying veg, algal blooms, animals, fish/insects, odour, surface sheen, litter, floating debris."			
25.4	cause visible change in the behaviour of fish or other aquatic organisms in the receiving water;	4	Full Compliance	NSW220125KL_UD - Field Sheet. NSW220130MW_UD - Field Sheet. Complaints register 2021-2022.  The Complaints register 2021-2022 did not include any complaints related to the WDL or community concerns about the waterways.  The Upon Discharge Surface Water Sampling WDL 174-12 sheet includes a column "Comments e.g. Dying veg, algal blooms, animals, fish/insects, odour, surface sheen, litter, floating debris."			
25.5	cause mortality of fish or other aquatic organisms; or	4	Full Compliance	NSW220125KL_UD - Field Sheet. NSW220130MW_UD - Field Sheet. Complaints register 2021-2022.  The Complaints register 2021-2022 did not include any complaints related to the WDL or community concerns about the waterways.  The Upon Discharge Surface Water Sampling WDL 174-12 sheet includes a column "Comments e.g. Dying veg, algal blooms, animals, fish/insects, odour, surface sheen, litter, floating debris."			

Waste Discha	rge Licence Compliance Workbook - Operator 2	022 - Au	dit Period 01 May 20	021 to 30 April 2022	
Condition No	. Condition/Requirement	Score	Compliance Level	Evidence	Comments
25.6	cause adverse impacts on plants.	4	Full Compliance	NSW220125KL_UD - Field Sheet. NSW220130MW_UD - Field Sheet. Complaints register 2021-2022.  The Complaints register 2021-2022 did not include any complaints related to the WDL or community concerns about the waterways.  The Upon Discharge Surface Water Sampling WDL 174-12 sheet includes a column "Comments e.g. Dying veg, algal blooms, animals, fish/insects, odour, surface sheen, litter, floating debris."	
26	The licensee must conduct surface water monitoring in accordance with Appendix 4, Table 1 and Table 2.	3	Part Compliance (High)	NSW220125KL_UD - Field Sheet. NSW220130MW_UD - Field Sheet. 2021-22 MRM Environmental Monitoring Schedule I001 Rev0. WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility revision 5 dated 30Aug2022. SW Logger MASTER. 2021-22 Waste Discharge Records & Loads Tracking. Letter Operator to DEPWS RE: McArthur River Mining – 2021/2022 WDL Annual Return & Monitoring Report dated 31Aug2022 (after audit period). Memo WBM to Operator RE Continuous surface water data quality assurance/quality control dated 25Aug2022. Letter AAPA to Operator Subject RE: ISSUE OF AUTHORITY CERTIFICATE FOR GAUGING STATIONS - 202104614 dated 23Aug2022 (after the audit period).  Table 2.1 of the Memo WBM to Operator regarding Continuous surface water data quality assurance/quality control dated 25Aug2022 indicated SW09 (Glyde River) had 49%, SW21 (McArthur River) had 87% and SW31 (Emu Creek) had 53% data capture for the 2021 to 2022 wet season water level. This is below the required 90% or greater.  EC and temperature data capture at SW11 was above 90%.	River flow is not measured via monitoring but interpolated from the water level via rating curves as stated in the Memo WBM to Operator RE Continuous surface water data quality assurance/quality control Section 2.1 "The data collection rate for flow at Natural Surface Water sites are the same as water level as flows were derived using the recorded water levels and rating curves."  AAPA certificate for installation of Emu Creek and Glyde River (Amelia Yard) gauging stations received after the audit period.  OFI: Obtain continuous wet season river level and flow monitoring data (greater than 90% capture) for SW09 (Glyde River), SW21 (McArthur River) and SW31 (Emu Creek).  OBS: Sites with loggers only monitor water level in the wet season, which is reasonable based on the waterways in the area not flowing in the dry season.

Condition No. Condition/Requirement	Score	Compliance Level	Evidence	Comments
The licensee must conduct fluvial sediment monitoring in accordance with Appendix 5, Table 1 and Table 2.	4	Full Compliance	2021-22 MRM Environmental Monitoring Schedule I001 Rev0. Letter Operator to DEPWS RE: McArthur River Mining – 2021/2022 WDL Annual Return & Monitoring Report dated 31Aug2022 (after audit period). Monitoring of Select Analytes and Lead Isotope Ratios in Fluvial Sediments, Fish, Crustaceans and Molluscs of the McArthur River 2021 (Appendix J of EMR 2021/2022). Metal and Metalloid Concentrations of Near Shore Sediments of Bing Bong Loading Facility, 2021 (Appendix U of EMR 2021/2022).  Monitoring of Select Analytes and Lead Isotope Ratios in Fluvial Sediments, Fish, Crustaceans and Molluscs of the McArthur River 2021 states that it was undertaken in accordance with the WDL 174-12 and appears consistent with requirements based on spot checks (i.e., fluvial sediment sampled at the following locations FS11, FS21, FS28, FS29, FS31, FS09, FS12, FS31 and FS08 (note swap the FS with SW to show the WDL174-12 location names). Table 2 had the pH, EC, soluble cations and anions, Figure 15 had the lead isotope ratios and Appendix 2 had the required metal and metalloid analysis.  Metal and Metalloid Concentrations of Near Shore Sediments of Bing Bong Loading Facility, 2021 includes in Table 2 and Appendix 2 for BBDDP the environmental, metals and metalloids and other parameters required by the WDL.	

Waste Discha	Vaste Discharge Licence Compliance Workbook - Operator 2022 - Audit Period 01 May 2021 to 30 April 2022						
Condition No	. Condition/Requirement	Score	Compliance Level	Evidence	Comments		
28	The licensee must conduct biota monitoring in accordance with Appendix 6.	4	Full Compliance	Letter Operator to DEPWS RE: McArthur River Mining – 2021/2022 WDL Annual Return & Monitoring Report dated 31Aug2022 (after audit period). Monitoring of Select Analytes and Lead Isotope Ratios in Fluvial Sediments, Fish, Crustaceans and Molluscs of the McArthur River 2021 (Appendix J of EMR 2021/2022).  Annual Marine Monitoring Program of the Bing Bong Loading Facility, 2021 (Appendix P of EMR 2021/2022).  Annual Seagrass Survey of the Bing Bong Loading Facility, 2021 (Appendix N of EMR 2021/2022).  Aquatic Fauna Abundance and Diversity of the McArthur River, Northern Territory, Early Dry Season, 2021 Appendix K of EMR 2021/2022).  Aquatic Fauna of the McArthur River, Northern Territory, Late Dry Season, 2022 (Appendix L of EMR 2021/2022).  McArthur River Freshwater Aquatic Macroinvertebrate Assessment, 2021 (Appendix I of EMR 2021/2022).  Metals and Lead in Marine Water (DGT) Monitoring 2021-2022 (Concentrations of select bioavailable metals and lead isotope ratios within ocean water in the vicinity of the Bing Bong Loading Facility as monitored by diffusive gradients in thin films: 2021-2022) (Appendix T of EMR 2021/2022).  The metals and lead in marine water (diffuse gradients in thin films) sampling did not occur quarterly (there was a 6 month gap in the middle of the program followed by three consecutive months). The Operator has acknowledged the sampling will be quarterly during the 2022-2023 monitoring period.	current report assesses deployments which occurred in July 2021, February, March and April 2022. Previous reports have assessed data collected at quarterly intervals. MRM advised that quarterly deployments were not achieved during the current monitoring period due to a combination of factors including COVID-19 restrictions, the availability of a deployment vessel and availability of suitably qualified staff."  OBS: Undertake (diffuse gradients in thin films) sampling as close as practically possible to quarterly periods.		
29	The licensee must ensure that all samples and field environmental data are representative of the conditions at the time of sampling.	4	Full Compliance	<ul> <li>PRO-2200023 Natural Surface Water Monitoring Procedure</li> <li>PRO-2200024 Groundwater Monitoring Procedure</li> <li>PRO-2200025 Artificial Surface Water Monitoring Procedure</li> <li>PRO-2200029 Fluvial Sediment Monitoring Procedure</li> <li>As an example, the Natural Surface Water Monitoring Procedure requires sampling to be undertaken upstream of the sampler's position and has hygiene/cleanliness requirements to ensure that sample collected is representative of the location. All samplers are professionals.</li> </ul>	No change to procedures in the audit period.		
30	The licensee must ensure that all samples and field environmental data are collected in accordance with recognised Australian Standards and guidelines (such as AS/NZS 5667, ANZECC/ARMCANZ).	4	Full Compliance	<ul> <li>PRO-2200023 Natural Surface Water Monitoring Procedure</li> <li>PRO-2200024 Groundwater Monitoring Procedure</li> <li>PRO-2200025 Artificial Surface Water Monitoring Procedure</li> <li>PRO-2200029 Fluvial Sediment Monitoring Procedure</li> <li>As an example, the Natural Surface Water Monitoring Procedure states "This procedure describes the methods and steps to be used for the measurement of field readings as well as for the collection, preservation and transport of the samples in agreement with the Surface Water Sampling Australian Standard described in AS / NZS 5667.11:1998."</li> </ul>	No change to procedures in the audit period.		

analysed at abboratory with current NATA accreditation or equivalent, for the parameters to be ensigned in the laboratory.  So Pert Compliance (styl)  The illumene must ensure that any pupused recisions to the syspanyability required by the parameters of the sense must ensure that any pupused recisions to the syspanyability required by the parameters of the sense must ensure that any pupused recisions to the syspanyability required by the parameters of the sense must ensure that any pupused recisions to the syspanyability required by the parameters of the sense must ensure that any pupused recisions to the syspanyability required by the parameters of the sense must ensure that any pupused recisions to the syspanyability required by condition 2 to to 28 bitter than 18 and 18 a	Waste Dischar	rge Licence Compliance Workbook - Operator 20	022 - Au	dit Period 01 May 20	021 to 30 April 2022	
analysed at a laboratory with current NATA increditation or operation of the parameters to be analysed in the laboratory analyses are provided from the parameters to be analysed in the laboratory.  Part Compliance (High)	Condition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments
The licensee must ensure that any proposed revisions to the monitoring required by Condition Parks of the Subconditions or revisions and submitted to the Administrancy Agency with justification for revisions; and submitted to the Administrancy Agency, with justification for revisions; and submitted to the Administrancy Agency, with justification for revisions; and submitted to the Administrancy Agency, with justification for revisions; and submitted to the Administrancy Agency, with justification for revisions; and submitted to the Administrancy Agency, with justification for revisions; and submitted to the Administrancy Agency, in both hard copy and electronic form (with a complete copy of the qualified professional review). 20 business days prior to the proposed implementation date.  The licensee must ensure that any proposed revisions to format the professional revisions and submitted to the Administrancy Agency, in both hard copy and electronic form (with a complete copy of the qualified professional review). 20 business days prior to the proposed implementation date.  The licensee must ensure that any proposed expectation of the professional revisions and the professional revisions and the professional revisions and the professional revision of the profession of the professional revision of the profession of the p	31	analysed at a laboratory with current NATA accreditation or equivalent, for the parameters to be analysed in the	3	Part Compliance (High)	ENV2200024 report (MRM Environmental Laboratory Chemical Analysis Report issued 30Jan2022)  The example certificates of analysis provided state that the ALS Laboratory and MRM Environmental Laboratory are NATA certified.  The MRM Environmental Laboratory chemical analysis report provided stated related to the turbidity results "Indicates NATA accreditation does	OFI: Either use a NATA accredited laboratory for turbidity analysis or
S2.1   reviewed by a Qualified Person, who must produce a written report about their review:	32	monitoring required by Condition 26 to 28 (other than typographical changes or revisions to formatting or		Refer to subconditions		
submitted to the Administering Agency, with justification for revisions; and submitted to the Administering Agency, in both hard copy and electronic form (with a complete copy of the qualified professional's review), 20 business days prior to the proposed implementation date.  7. The Departance advised that no changes were made in the audit period.  8. Not Applicable No changes were identified in the audit period.  8. Not Applicable No changes were identified in the audit period.  8. Not Applicable Not Applicable Not Applicable Not Applicable Professional's review), 20 business days prior to the proposed implementation date.  8. The Iccrose must for all land based water monitoring points specified in the monitoring documents:  8. Install and maintain appropriate identification signage so that they are reasonably identifiable at all times; and Not Applicable Not Ap	32.1	reviewed by a Qualified Person, who must produce a	N/A	Not Applicable	No changes were identified in the audit period.	The Operator advised that no changes were made in the audit period.
submitted to the Administering Agency, in both hard copy and electronic form (with a complete copy of the qualified professional's review), 20 business days prior to the proposed implementation date.  33 The licensee must for all land based water monitoring points specified in the monitoring documents:  install and maintain appropriate identification signage so that they are reasonably identifiable at all times: and internal Operator Memo subject Identification Signage Inspection dated 18Jun2021 and associated photos (conducted in May) (after the audit period).  The Operator advised that no changes were made in the audit would be done through the amendment process, if require would in the audit period.  The Operator advised that no changes was in t	32.2	submitted to the Administering Agency with justification	N/A	Not Applicable	No changes were identified in the audit period.	The Operator advised that no changes were made in the audit period and it would be done through the amendment process, if required.
The licensee must for all land based water monitoring points specified in the monitoring documents:  install and maintain appropriate identification signage so that they are reasonably identifiable at all times; and  Internal Operator Memo subject Identification Signage Inspection dated 18Jun2021 and associated photos (conducted in May 2021). Internal Operator Memo subject Identification Signage Inspection dated 24May2022 (conducted in May) (after the audit period).  The photos provided from May 2021 showed that the signage says "Environmental Monitoring Site" and then an identifier for the specific site. Photos were provided for all land based sites with the exception of SW08.  The photos indicate that the signage was in place at the beginning of the audit period.  Part Compliance (High)  Part Compliance (High)  Part Compliance.  Refer to subconditions  Internal Operator Memo subject Identification Signage Inspection dated 18Jun2021, Internal Operator Memo subject Identification Signage Inspection dated 24May2022 (conducted in May 2021).  The Operator advised related to the 2021 audit "Signage was "Environmental Monitoring Site" and then an identifier for the specific site. Photos were provided for all land based sites with the exception of SW08. The photos indicate that the signage was in place at the beginning of the audit period.  Part Compliance (High)  Part Compliance (High)  Part Compliance (High)  The lack of a sign at SW08 without approval from DEPWS is a partial compliance in the process of the proces	32.3	and electronic form (with a complete copy of the qualified professional's review), 20 business days prior to the	N/A	Not Applicable	No changes were identified in the audit period.	The Operator advised that no changes were made in the audit period and it would be done through the amendment process, if required.
Internal Operator Memo subject Identification Signage Inspection dated 18 Jun 2021 and associated photos (conducted in May 2021).  Internal Operator Memo subject Identification Signage Inspection dated 18 Jun 2021 and associated photos (conducted in May 2021).  Internal Operator Memo subject Identification Signage Inspection dated 24 May 2022 (conducted in May) (after the audit period).  The Operator advised "MRM has complied with the condition based water monitoring locations on the mining lease".  The Operator advised related to the 2021 audit "Signage was "Environmental Monitoring Site" and then an identifier for the specific site. Photos were provided for all land based sites with the exception of SW08. The photos indicate that the signage was in place at the beginning of the audit period.  The lack of a sign at SW08 without approval from DEPWS is a partial compliance.  The Operator advised "MRM has complied with the condition based water monitoring locations on the mining lease".  The Operator advised related to the 2021 audit "Signage was SW08 in 2017, however was stolen/went missing. Given this frequently used by the public, MRM does not consider it ap install signage for the purpose of this condition in this area. the site is easily identifiable by a rockbar control next to the Bridge. The erection of signage at this location would be of benefit."  The lack of a sign at SW08 without approval from DEPWS is a partial compliance.  The Operator advised related to the 2022 audit "SW08 is loc maintain signage on Community land. This also has the pote unnecessarily 'alarm' the public. MRM is in the process of for the purpose of the public. MRM is in the process of for the public in the process of for the purpose of the public in the process of for the purpose of the purpose of the purpose of the purpose of the purpose	33	The licensee must for all land based water monitoring		Refer to subconditions		
will likely be captured in the next WDL amendment."	33.1	install and maintain appropriate identification signage so	3	Part Compliance (High)	18Jun2021 and associated photos (conducted in May 2021). Internal Operator Memo subject Identification Signage Inspection dated 24May2022 (conducted in May) (after the audit period).  The photos provided from May 2021 showed that the signage says "Environmental Monitoring Site" and then an identifier for the specific site. Photos were provided for all land based sites with the exception of SW08. The photos indicate that the signage was in place at the beginning of the audit period.  The lack of a sign at SW08 without approval from DEPWS is a partial	The Operator advised related to the 2021 audit "Signage was erected at SW08 in 2017, however was stolen/went missing. Given this area is frequently used by the public, MRM does not consider it appropriate to install signage for the purpose of this condition in this area. Additionally, the site is easily identifiable by a rockbar control next to the Borroloola Bridge. The erection of signage at this location would be of limited benefit."  The Operator advised related to the 2022 audit "SW08 is located off the mining lease and MRM does not have jurisdiction/permission to erect and maintain signage on Community land. This also has the potential to unnecessarily 'alarm' the public. MRM is in the process of formally requesting DEPWS remove this condition from the WDL on that basis. This will likely be captured in the next WDL amendment."

Condition No	. Condition/Requirement	Score	Compliance Level	Evidence	Comments
32.2	maintain safe access and egress, as is reasonable and practicable.	4	Full Compliance	Internal Operator Memo subject Identification Signage Inspection dated 18Jun2021 and associated photos (conducted in May 2021). Internal Operator Memo subject Identification Signage Inspection dated 24May2022 (conducted in May) (after the audit period).	The Operator advised "MRM has complied with the conditions for all land based water monitoring locations on the mining lease" and "Safe access is maintained, as required by monitoring team".
34	The licensee must ensure any samples collected in accordance with the monitoring documents or in connection with the activity or this licence, are obtained by, or under the supervision of a Qualified Sampler.	4	Full Compliance	PRO-2200023 Natural Surface Water Monitoring Procedure signed by MW on 8Apr2022.  The Operator advised that the environment team are all degree qualified. They do not have someone that is a technician.	
35	The licensee must ensure that, for each sample collected in accordance with the monitoring documents or the activity the following information must be recorded and retained:		Refer to subconditions		
35.1	the date on which the sample was collected;	4	Full Compliance	Upon Discharge Surface Water Sampling WDL 174-12 30Jan22. Upon Discharge Surface Water Sampling WDL 174-12 25Jan2022.  There is a column for date that has been completed in the examples provided (noting one sheet does not include the year on the sheet but it is in the file name).	
35.2	the time at which the sample was collected;	4	Full Compliance	Upon Discharge Surface Water Sampling WDL 174-12 30Jan22. Upon Discharge Surface Water Sampling WDL 174-12 25Jan2022.  There is a column for time that has been completed in the examples provided.	
35.3	the location at which the sample was collected;	4	Full Compliance	Upon Discharge Surface Water Sampling WDL 174-12 30Jan22. Upon Discharge Surface Water Sampling WDL 174-12 25Jan2022. Sample IDs reflect the location and are included on the sampling sheet.	
35.4	the name of the person who collected the sample;	4	Full Compliance	Upon Discharge Surface Water Sampling WDL 174-12 30Jan (we assume this was 2021) Upon Discharge Surface Water Sampling WDL 174-12 25Jan2022 Initials are used to identify the sampler on the example sheets provided.	
35.5	the chain of custody forms relating to the sample;	4	Full Compliance	NSW220125KL_UD - Submission form (chain of custody 25Jan2022 samples). NSW220130MW_UD - Submission Form (chain of custody 30Jan2022 samples). SR_ENV2200028 (sample receipt report 25Jan2022 samples). SR_ENV2200034 (sample receipt report 30Jan2022 samples).	
35.6	the field measurements (if any) and analytical results (if any) relating to the sample; and	4	Full Compliance	NSW220125KL_UD - Field Sheet NSW220125KL_UD - Field data NSW220130MW_UD - Field Sheet NSW220130MW_UD - Field Data ENV2200034 report  Evidence showed that field and analytical results were retained for sampling on 25Jan2022 and 30Jan2022 as examples of the process	

Waste Dischar	Waste Discharge Licence Compliance Workbook - Operator 2022 - Audit Period 01 May 2021 to 30 April 2022							
Condition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments			
35.7	laboratory quality assurance and quality control documentation.	4	Full Compliance	WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility revision 5 dated 30Aug2022.  ENV2200028 (MRM Environmental Laboratory Worksheet for samples from 25Jan2022). Included blind duplicates.  ENV2200034 (MRM Environmental Laboratory Worksheet for samples from 30Jan2022). No blind duplicates included.  QC Report for ENV2200028.  QC Report for ENV2200034.  Letter Operator to DEPWS RE: McArthur River Mining – 2021/2022 WDL Annual Return & Monitoring Report dated 31Aug2022 (after audit period) Appendix A Quality Assurance.  The WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bong Loading Facility includes tabulated duplicate and blank results and Section 3.4 QUALITY ASSURANCE AND QUALITY CONTROL.  MRM Environmental Laboratory Worksheets included duplicates and lab control samples for sampling on 25Jan2022 and 30Jan2022 as examples of the process followed.				
26	RECORDING AND REPORTING  The licensee must keep records of all non-compliances with this licence. These records must be adequate to enable the licensee to comply with the non-compliance notification conditions of this licence.	3	Part Compliance (High)	Incident, Exceedance and Non Compliance Register 2022.  Non-compliances associated with exceedances as covered in condition 40 are documented in the Incident, Exceedance and Non Compliance Register 2022. However, the non-compliance associated with inability to monitor continuous water level/flow is not included.	OFI: Include all non-compliances (not only those related to exceedances) in the WDL non-compliance register.			

Waste Discha	rge Licence Compliance Workbook - Operator 20	022 - Aud	dit Period 01 May 20	021 to 30 April 2022	
Condition No.	. Condition/Requirement	Score	Compliance Level	Evidence	Comments
37	The licensee must notify the Administering Agency of any non-compliance with this licence as soon as practicable after (and in any case within 24 hours after) first becoming aware of the non-compliance.	3	Part Compliance (High)	Email Operator to NTEPA subject MRM: WDL 174-12   Notification of results triggering investigation IR016 dated 07Feb2022 (related to most recent sample from 01Feb2022).  Email Operator to NTEPA subject MRM WDL 174-12   Notification of results triggering investigation IR018 dated 03Mar2022 (related to sample from 20Feb2022).  Email Operator internal email RE: ENV2200038 Final Report dated 09Feb2022 at 11:50am.  Email Operator internal email RE: ENV2200056 Final Report dated 25Feb2022 at 7:38am.  No evidence of notification to the Administering Agency related to Operator not being able to undertake continuous monitoring was submitted in the audit period (related to monitoring from the previous audit period). The inability to monitor continuous flow in the audit period was notified to the Administering Agency on 25Aug2022 (outside the audit period) and within 24 hours of first becoming aware of the noncompliance.  Emails provided indicate that it was more than 24 hours from the laboratory issuing the final report related to sampling on 20Feb2022 (i.e. laboratory report on 25Feb2022 and notification 3Mar2022) before the Operator advised DEPWS of the exceedance.	The Operator also advised "The environmental team import the lab results into the database manually and the automated alert is generated from the database." There appears to be a lag between the laboratory results being emailed, the environmental team importing the lab results into the database and the alert from the database.  No OFI has been prepared related to needing to report non-compliances related to the inability to monitor continuous flow as this has been addressed after the audit period.  OFI: Implement actions to facilitate notification of non-compliances within 24 hours of receiving final laboratory results.
38	The licensee must include in the notification of non-compliance the following information:		Refer to subconditions		
38.1	when the non-compliance was detected and by whom;	4	Full Compliance	Email Operator to NTEPA subject MRM: WDL 174-12   Notification of results triggering investigation IR016 dated 07Feb2022.  Email Operator to NTEPA subject MRM WDL 174-12   Notification of results triggering investigation IR018 dated 03Mar2022.  Both email notifications included when and by whom the non-compliance was detected. In terms of who detected it there is not a person's name and only reference to it being MRM staff.	
38.2	the date and time of the non-compliance;	4	Full Compliance	Email Operator to NTEPA subject MRM: WDL 174-12   Notification of results triggering investigation IR016 dated 07Feb2022.  Email Operator to NTEPA subject MRM WDL 174-12   Notification of results triggering investigation IR018 dated 03Mar2022.  The date and time of monitoring is included in both emails.	
38.3	whether discharge was occurring at the time of the non- compliance and the source of the discharge; and	4	Full Compliance	Email Operator to NTEPA subject MRM: WDL 174-12   Notification of results triggering investigation IR016 dated 07Feb2022.  Email Operator to NTEPA subject MRM WDL 174-12   Notification of results triggering investigation IR018 dated 03Mar2022.  Both emails stated if there was or was not a discharge and for the example where there was a discharge it stated the source.	

Waste Dischar	rge Licence Compliance Workbook - Operator 20	)22 - Aud	dit Period 01 May 2	021 to 30 April 2022	
Condition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments
38.4	a date when an incident investigation report will be submitted to the Administering Agency.	4	Full Compliance	Email Operator to NTEPA subject MRM: WDL 174-12   Notification of results triggering investigation IR016 dated 07Feb2022. Email Operator to NTEPA subject MRM WDL 174-12   Notification of results triggering investigation IR018 dated 03Mar2022.  They both stated that a report would be provided within 10 business days.	
39	Within 10 business days of notifying the Administering Agency of any non-compliance, or a timing otherwise agreed by the Administering Agency, the licensee must provide the Administering Agency an investigation report that includes:	4	Full Compliance	Email Operator to NTEPA subject RE: WDL 174-12   Notification of results triggering investigation IR016 dated 18Feb2022. Email Operator to NTEPA subject RE: MRM WDL 174-12   Investigation Report IR018 dated 16Mar2022.  Both reports were provided within 10 business days.	
39.1	when the non-compliance was detected and by whom;	4	Full Compliance	Email Operator to NTEPA subject RE: WDL 174-12   Notification of results triggering investigation IR016 dated 18Feb2022. Email Operator to NTEPA subject RE: MRM WDL 174-12   Investigation Report IR018 dated 16Mar2022.  Both examples provided included the date the non-compliance was detected and that it was by MRM staff.	
39.2	the date and time of the non-compliance;	4	Full Compliance	Email Operator to NTEPA subject RE: WDL 174-12   Notification of results triggering investigation IR016 dated 18Feb2022. Email Operator to NTEPA subject RE: MRM WDL 174-12   Investigation Report IR018 dated 16Mar2022.  Both examples provided included the date and time of the sampling.	
39.3	whether discharge was occurring at the time of the non- compliance and the source of the discharge and monitoring data of the discharge;	4	Full Compliance	Email Operator to NTEPA subject RE: WDL 174-12   Notification of results triggering investigation IR016 dated 18Feb2022. Email Operator to NTEPA subject RE: MRM WDL 174-12   Investigation Report IR018 dated 16Mar2022.  One example had no discharge but another example provided the WMD (the source) Filtered Aluminium result (given that was the analyte related to non-compliance) from the start of discharge.	Note that WDL 174-12 does not include "and monitoring data of the discharge" as a requirement.
39.4	the actual and potential causes and contributing factors to the non-compliance;	4	Full Compliance	Email Operator to NTEPA subject RE: WDL 174-12, Notification of results triggering investigation IR016 dated 18Feb2022.  Email Operator to NTEPA subject RE: MRM WDL 174-12, Investigation Report IR018 dated 16Mar2022.  WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility revision 5 dated 30Aug2022.  Actual and potential causes and contributing factors are included for both examples.	"Based on a review of monitoring data for the reporting period, WRM agrees with the conclusions presented within each of the associated investigation reports, including that the potential non-compliances were unrelated to managed release activities."

	rge Licence Compliance Workbook - Operator 2				
Condition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments
39.5	the risk of environmental harm arising from the non-compliance;	4	Full Compliance	Email Operator to NTEPA subject RE: WDL 174-12, Notification of results triggering investigation IR016 dated 18Feb2022. Email Operator to NTEPA subject RE: MRM WDL 174-12, Investigation Report IR018 dated 16Mar2022.  Both examples provided included the risk of environmental harm related to MRM operations.  Email Operator to NTEPA subject RE: MRM WDL 174-12, Investigation Report IR018 dated 16Mar2022 states "The investigation concludes that the subject result was unlikely to be mine-derived but rather sourced from background levels in other areas, which are located away from any potential influence from the Mine. Therefore, the overall risk of environmental harm associated with MRM operations remains low."	
39.6	all water quality monitoring data collected in accordance with Appendix 4 for monitoring sites SW08, SW09, SW11, SW12, SW21, SW28, SW29, SW31, and SW32 (as shown in Appendix 2) collected for the date the non-compliance was triggered and three sampling rounds prior to the non-compliance being detected;	4	Full Compliance	Email Operator to NTEPA subject RE: WDL 174-12, Notification of results triggering investigation IR016 dated 18Feb2022.  Email Operator to NTEPA subject RE: MRM WDL 174-12, Investigation Report IR018 dated 16Mar2022.  A spreadsheet of relevant monitoring results was provided for both examples.	
39.7	available flow rates for the McArthur River, Barney Creek, Surprise Creek, Emu Creek and Glyde River flow rate at SW11 to demonstrate any influence these creeks and rivers may have had on the exceedance of trigger value;	4	Full Compliance	Email Operator to NTEPA subject RE: WDL 174-12, Notification of results triggering investigation IR016 dated 18Feb2022. Email Operator to NTEPA subject RE: MRM WDL 174-12, Investigation Report IR018 dated 16Mar2022.  The email dated 16Mar2022 states "Available flow rates for the McArthur River at the Upstream Gauging Station (USGS), Downstream Gauging Station (DSGS) at SW11, Barney Creek Gauging Station (BSGS) and Surprise Creek Gauging Station (SCGS) at the time the sample was collected are presented in Table 2." "The flow rates for Emu Creek (SW31) and the Glyde River (SW09) are unavailable for reporting, as the continuous flow monitoring undertaken at these sites is not telemetered. However, in the absence of continuous flow data, visual observations were that there was moderate flow in Glyde River and no flow in Emu Creek".	Where monitoring data was not available, this is not considered a non-compliance related to this condition.
39.8	rainfall recorded at the site prior to the exceedance of trigger values and non- compliance occurring;	4	Full Compliance	Email Operator to NTEPA subject RE: WDL 174-12, Notification of results triggering investigation IR016 dated 18Feb2022. Email Operator to NTEPA subject RE: MRM WDL 174-12, Investigation Report IR018 dated 16Mar2022.	
39.9	the action(s) that have or will be undertaken to mitigate any environmental harm arising from the non-compliance;	4	Full Compliance	Email Operator to NTEPA subject RE: WDL 174-12, Notification of results triggering investigation IR016 dated 18Feb2022. Email Operator to NTEPA subject RE: MRM WDL 174-12, Investigation Report IR018 dated 16Mar2022.	
39.10	corrective actions that have or will be undertaken to ensure the non-compliance does not reoccur; and	4	Full Compliance	Email Operator to NTEPA subject RE: WDL 174-12, Notification of results triggering investigation IR016 dated 18Feb2022. Email Operator to NTEPA subject RE: MRM WDL 174-12, Investigation Report IR018 dated 16Mar2022.	As the investigation concluded that the elevated levels were unlikely to be mine-derived but instead related to background levels and no corrective action was relevant.

ndition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments
39.11	if no action was taken, why no action was taken.	4	Full Compliance	Email Operator to NTEPA subject RE: WDL 174-12, Notification of results triggering investigation IR016 dated 18Feb2022. Email Operator to NTEPA subject RE: MRM WDL 174-12, Investigation Report IR018 dated 16Mar2022.  Email Operator to NTEPA subject RE: MRM WDL 174-12, Investigation Report IR018 dated 16Mar2022 states, "Given the subject result did not pertain to MRM operations, no mitigating or corrective actions are required by MRM to resolve the subject result."	
40	The licensee must ensure there is no:		Refer to subconditions		
40.1	exceedance of a trigger value at SW11, as specified in Appendix 3, on three consecutive sampling occasions as a result of the activity; or	4	Full Compliance	Email Operator to NTEPA subject RE: WDL 174-12   Notification of results triggering investigation IR016 dated 18Feb2022.  Email Operator to NTEPA subject RE: MRM WDL 174-12   Investigation Report IR018 dated 16Mar2022.  WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility revision 5 dated 30Aug2022.  WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility stated "Based on a review of monitoring data for the reporting period, WRM agrees with the conclusions presented within each of the associated investigation reports, including that the potential non-compliances were	WDL 174-13 states "exceedance of a trigger value at SW11, as specified in Appendix 3, on three consecutive sampling occasions as a result of the activity;".  WDL 174-12 states "exceedance of a trigger value at SW11, as specified in Appendix 3, on three consecutive sampling occasions".
40.2	exceedance greater than or equal to three times a trigger value at SW11 as a result of the activity;	4	Full Compliance	unrelated to managed release activities."  Email Operator to NTEPA subject RE: WDL 174-12, Notification of results triggering investigation IR016 dated 18Feb2022.  Email Operator to NTEPA subject RE: MRM WDL 174-12, Investigation Report IR018 dated 16Mar2022.  WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility revision 5 dated 30Aug2022.  WRM Water & Environment report Surface Water Monitoring Report 2021/22, McArthur River Mine and Bing Bong Loading Facility stated "Based on a review of monitoring data for the reporting period, WRM agrees with the conclusions presented within each of the associated investigation reports, including that the potential non-compliances were	WDL 174-13 states "exceedance greater than or equal to three times a trigger value at SW11 as a result of the activity;" WDL 174-12 states "exceedance greater than or equal to three times a trigger value at SW11."
41	The licensee must keep records of all exceedances of trigger values specified in Appendix 3 Table 1. These records must be adequate to enable the licensee to comply with the noncompliance notification conditions of this licence.	4	Full Compliance	unrelated to managed release activities."  Exceedance Register 2021-2022  Records were retained in the exceedance register.	

Waste Discha	rge Licence Compliance Workbook - Operator 20	022 - Au	dit Period 01 May 2	021 to 30 April 2022	
Condition No.	. Condition/Requirement	Score	Compliance Level	Evidence	Comments
42	The licensee must submit a completed Annual Return to the Administering Agency by 31 August of each year, which relates to the preceding 12 month period.	4	Full Compliance	Email Operator to NTEPA subject MRM - WDL Monitoring Report and Annual Return dated 31Aug2021. Annual Return dated 31Aug2021. Internal Operator email dated 09Jul21 FW: Monitoring compliance with WDL 174-11, inclusive of pdf 20-21 continuous data (note this was a forwarded email originally dated 21Jun21). Letter Operator to DEPWS RE: McArthur River Mining – 2021/2022 WDL Annual Return & Monitoring Report dated 31Aug2022 (after audit period). Annual Return was submitted on 31Aug2021 as required in the audit period.	The internal Operator email dated 09Jul21 FW:Monitoring compliance with WDL 174-11 showed that data was only captured 54.72% of the time (i.e. data was available between 1Dec20 and 21Feb21, but from then until 1May21 was missing) for the Glyde River.  The annual return submitted in the audit period but for the period 1May2020 to 30Apr2021 did not include non-compliances related to the inability to monitor continuous flow in the 2020 to 2021 audit period. The annual return submitted 31Aug2022 (outside the audit period) did include all non-compliances for the 2021 to 2022 audit period, including related to inability to monitor continuous water flow.
43	The licensee must provide to the Administering Agency a Monitoring Report, as prescribed by the licence which relates to the preceding 1 May to 30 April period by 31 August each year.	4	Full Compliance	Email Operator to NTEPA subject MRM - WDL Monitoring Report and Annual Return dated 31Aug2021. 2021 Waste Discharge Licence (WDL) 174-11 Annual Monitoring Report.  The 2020 to 2021 audit period annual report was submitted on time on 31Aug2021.	
44	The licensee must ensure that each Monitoring Report is prepared in consultation with a Qualified Person to determine the relevance of the information being provided as it relates to the waste discharge component of the site and in the format described in the National Water Quality Management Strategy, Australian Guidelines for Water Quality Monitoring and Reporting, Chapter 7 and must include:	4	Full Compliance	Email Operator to NTEPA subject MRM - WDL Monitoring Report and Annual Return dated 31Aug2021. 2021 Waste Discharge Licence (WDL) 174-11 Annual Monitoring Report. Letter Operator to DEPWS RE: McArthur River Mining – 2021/2022 WDL Annual Return & Monitoring Report dated 31Aug2022 (after audit period).  The 2021 Waste Discharge Licence (WDL) 174-11 Annual Monitoring Report states "This Monitoring Report and its appendices have been generally structured consistent with Chapter 7 of the Guideline. This includes the provision of the executive summary and primary technical report. This Monitoring Report is based on reviews completed by the qualified specialists WRM Water & Environment Pty Ltd (WRM)."	
44.1	a data analysis and interpretation using the National Water Quality Management Strategy, Australian Guidelines for Water Quality Monitoring and Reporting, Chapter 6;	4	Full Compliance	Email Operator to NTEPA subject MRM - WDL Monitoring Report and Annual Return dated 31Aug2021. 2021 Waste Discharge Licence (WDL) 174-11 Annual Monitoring Report. Letter Operator to DEPWS RE: McArthur River Mining – 2021/2022 WDL Annual Return & Monitoring Report dated 31Aug2022 (after audit period).  Waste Discharge Licence 174-11 Monitoring Report 1 May 2020 to 30 April 2021 (relevant to the audit period but submitted after the audit period) states "This Monitoring Report has been generally structured consistent with Chapter 6 of the Guideline. This includes:  • analysis of changes in time and space (Section 4);  • checks for data integrity (Appendix A);  • comparison of site and water quality guidelines (Section 6); and  • interpretation in relation to study objectives (Section 7)."	

Waste Discharge Licence Compliance Workbook - Operator

Waste Discha	arge Licence Compliance Workbook - Operator 20	022 - Au	dit Period 01 May 20	021 to 30 April 2022	
Condition No	Condition/Requirement	Score	Compliance Level	Evidence	Comments
44.2	a tabulation of all monitoring data collected as required as a condition of this licence and any additional data used as part of the analysis and interpretation undertaken in the report, to be submitted in electronic Microsoft Excel format;	4	Full Compliance	Email Operator to NTEPA subject MRM - WDL Monitoring Report and Annual Return dated 31Aug2021. 2021 Waste Discharge Licence (WDL) 174-11 Annual Monitoring Report. Letter Operator to DEPWS RE: McArthur River Mining – 2021/2022 WDL Annual Return & Monitoring Report dated 31Aug2022 (after audit period). 2021 Waste Discharge Licence (WDL) 174-11 Annual Monitoring Report Monitoring Report 1 May 2020 to 30 April 2021 states "Tabulation of data required under the monitoring schedules listed in Conditions 25 to 27 of WDL 174-11 is provided in Section 4.2 and the EMR (Attachment 2). Continuous flow data required by conditions 60 and 62 of WDL 174-11 and condition 26 of WDL 174-12 would also be part of the requirement of condition 44.2. The data available is included in the 2019-2020 and 2020-2021 Mine Derived Analyte Loads Assessment, which are attachments to the Annual Monitoring Report.  Given the monitoring report was relevant to the data from WDL174-11, the excel spreadsheet was not required to be submitted at that time so this is compliant.	Noting that 174-12 commenced on 25 May 2021 with the new requirement for submission of data in Microsoft excel format. The Operator advised the regulator "the Monitoring Report aligns to the period when WDL 174-11 was in effect and has been written pursuant to conditions thereof."  The submission of the 2021/2022 WDL Annual Monitoring Report dated 31Aug2022 included tabulated excel data.
44.3	includes long term trend analysis of monitoring data to demonstrate any environmental impact associated with the activity over a minimum period of three years (where the data is available);	4	Full Compliance	Email Operator to NTEPA subject MRM - WDL Monitoring Report and Annual Return dated 31Aug2021.  2021 Waste Discharge Licence (WDL) 174-11 Annual Monitoring Report.  Waste Discharge Licence 174-11 Monitoring Report 1 May 2020 to 30 April 2021 (relevant to before the audit period but submitted in the audit period) includes "A summary of long term trends for surface water sites in the McArthur River has been provided from 1 January 2008 (where data was available) in Section 4.3 of this report.  Cease to flow conditions were observed for all monthly observations at the Bing Bong Dredge Spoil Drain, and hence no water quality sampling was undertaken during the reporting period. As such, please refer to Waste Discharge Licence 174-10 Monitoring Report 1 June 2017 – 31 May 2018 (MRM, 2018) for long term trend analysis of Bing Bong Dredge Discharge Point (BBDDP) monitoring data.  Long term trend analysis for the various monitoring programs is also provided in the EMR (Attachment 2) and its Appendices."	
44.4	includes mine derived loads entering the McArthur River from the mine site for the contaminants listed in Appendix 3 Table 1;	4	Full Compliance	Email Operator to NTEPA subject MRM - WDL Monitoring Report and Annual Return dated 31Aug2021. 2021 Waste Discharge Licence (WDL) 174-11 Annual Monitoring Report.  Waste Discharge Licence 174-11 Monitoring Report 1 May 2020 to 30 April 2021 (relevant to before the audit period but submitted in the audit period) includes "refer to Section 5 and Attachment 4." Section 5 is the analyte loads section and Attachment 4 is the 2020/21 Mine Derived Analyte Loads Assessment.	In WDL 174-11, this condition was "includes mine derived loads of contaminants for the contaminants listed in Appendix 3 Table 1, reporting to the McArthur River including sources of contaminant loads, compared against background loads in the McArthur River and Glyde River."

Waste Discharge Licence Compliance Workbook - Operator

Waste Discha	rge Licence Compliance Workbook - Operator 20	022 - Au	dit Period 01 May 20	021 to 30 April 2022	
Condition No	. Condition/Requirement	Score	Compliance Level	Evidence	Comments
44.5	compares the mine derived load for each contaminant listed in Appendix 3 table 1 against the background loads in the McArthur River (SW11 and SW21) and Glyde River (SW09);	4	Full Compliance	Email Operator to NTEPA subject MRM - WDL Monitoring Report and Annual Return dated 31Aug2021. 2021 Waste Discharge Licence (WDL) 174-11 Annual Monitoring Report.  Waste Discharge Licence 174-11 Monitoring Report 1 May 2020 to 30 April 2021 (relevant to before the audit period but submitted in the audit period) includes "refer to Section 5 and Attachment 4." Section 5 is the analyte loads section and Attachment 4 is the 2020/21 Mine Derived Analyte Loads Assessment.	In WDL 174-11, this condition was "a comparison of the mine derived contaminant loads referred to in Condition 45.4 against contaminant loads reporting to the McArthur River from July 2017 to June 2018;". Note that condition 45.4 in WDL 174-11 would be equivalent to condition 44.4 in the WDL 174-12 or WDL 174-13.
44.6	a comparison of the mine derived contaminant loads referred to in Condition 44.4 against contaminant loads reporting to the McArthur River from July 2017 to June 2018;	4	Full Compliance	Email Operator to NTEPA subject MRM - WDL Monitoring Report and Annual Return dated 31Aug2021. 2021 Waste Discharge Licence (WDL) 174-11 Annual Monitoring Report.  Waste Discharge Licence 174-11 Monitoring Report 1 May 2020 to 30 April 2021 includes "refer to Section 6 and Attachment 3". Section 6 is the discussion and Attachment 3 is the EMR 2020 - 2021 Appendix R - Surface Water Monitoring Report 2020-21. The 2020/21 Mine Derived Analyte Loads Assessment is also relevant to meet the requirement of this condition.	
44.7	an assessment of all monitoring data (including flow rate and calculated volume from each river contributing to water quality at SW11) and whether the activity has been conducted in a manner that has ensured the McArthur River is being protected at all times from mine related impacts.	4	Full Compliance	Email Operator to NTEPA subject MRM - WDL Monitoring Report and Annual Return dated 31Aug2021. 2021 Waste Discharge Licence (WDL) 174-11 Annual Monitoring Report.  Waste Discharge Licence 174-11 Monitoring Report 1 May 2020 to 30 April 2021 includes "refer to Section 6 and Attachment 3". Section 6 is the discussion and Attachment 3 is the EMR 2020 - 2021 Appendix R - Surface Water Monitoring Report 2020-21. The 2020/21 Mine Derived Analyte Loads Assessment is also relevant to meet the requirement of this condition.	
45	PERFORMANCE IMPROVEMENT  The licensee must undertake an assessment of available monitoring data to determine the sources entering the Glyde River which are contributing to the water quality exceedance of surface water quality trigger values at SW11 prescribed in Appendix 3.	4	Full Compliance	Glyde River Backflow Assessment version 5 dated 03Dec2021.  "Key findings from the advection-dispersion model results are summarised in Table 1.1" of the Glyde River Backflow Assessment.	
46	The assessment required by condition 45 must quantify and qualify the extent those sources are contributing to surface water quality exceedances at SW11.	4	Full Compliance	Glyde River Backflow Assessment version 5 dated 03Dec2021.  The Glyde River Backflow Assessment states in the executive summary "Based on the model results presented in Table 1.1, during low flows in the McArthur River and medium flows in the Glyde River, the water quality in the Glyde River at SW09 is not affected by McArthur River backwater. Further, on all four instances, monitoring data showed that the exceedances coincided with higher NO3 levels in the Glyde River at SW09 and significantly lower NO3 levels in the McArthur River at SW12. Based on the advection-dispersion model results and monitoring data, the NO3 SSTV exceedances at SW11 during the 2020/21 wet season were caused by Glyde River water. The exceedances could not have been caused by McArthur River water from upstream of the Confluence."	

Waste Dischar	Waste Discharge Licence Compliance Workbook - Operator 2022 - Audit Period 01 May 2021 to 30 April 2022							
Condition No.	Condition/Requirement	Score	Compliance Level	Evidence	Comments			
47	The licensee must provide a report to the Administering Agency on the methodology, any assumptions and findings of the assessment required in condition 45 by 30 November 2021.	4	Full Compliance	Glyde River Backflow Assessment version 5 dated 03Dec2021. WDL 174-12 Glyde River Backflow Assessment dated 3Dec2021. Email Operator to DEPWS subject RE: MRM, WDL 174-12 - Condition 47 Report dated 03Dec2021. Email Operator to DEPWS subject MRM, WDL 174-12 - Condition 47 Report dated 30Nov2021.  The report was issued to the Administering Agency on 30Nov2021 and ther revision 5 dated 03Dec2021 was subsequently provided. The original submission met the due date of 30Nov2021 so this is compliant.				
48	The licensee shall provide an updated Adaptive Management Plan by 1 October 2021 to include performance indicators, action and response to ensure wastewater leaving the mine site will meet the specific trigger values at SW11 prior to discharge and does not exceed the mine derived contaminant loads reporting to the McArthur River from July 2017 to June 2018.	4	Full Compliance	Email Operator to DITT subject MRM, Updated Adaptive Management Plan (October 2021) dated 01Oct2021 Letter Operator to DITT subject RE: McArthur River Mining – Adaptive Management Plan October 2021 Update Submission dated 1Oct2021	The letter Operator to DITT subject RE: McArthur River Mining – Adaptive Management Plan October 2021 Update Submission dated 1Oct2021 stated "Note that the Air Quality Management Plan (Appendix B) and the Rehabilitation Management Plan (Appendix C) of the Adaptive Management Plan have been excluded from the submission. These plans are not directly relevant to WDL 174 or the discharge of water, and satisfy McArthur River Mining Pty Ltd's (MRM) other approval requirements and commitments. MRM can provide these documents upon request, if required."			



Appendix C Authorisation Compliance Workbook - DITT

<b>Authorisation Con</b>	mpliance Workbook - DITT Audit period 01 May 2021 to				
Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
SCHEDULE A					
Mining management p	The Operator must on 31 August 2021 and on each anniversary of that date (or such other date as nominated by the Operator and approved by the Minister), review the approved MMP and if necessary, amend the MMP.	4	Full Compliance	EMR 2020-2021, 31Aug21.	DITT considers this condition met if the EMR is submitted on 31 August stating review of the MMP was undertaken. The EMR 2020 to 2021 was submitted on 31 August 2021 (in the audit period) and states in the Executive Summary "In consideration of the results presented in this EMR, the MMP has been reviewed and it was determined that no updates are currently required in order for MRM's key environmental management objectives to continue to be achieved."
7	The Operator must submit quarterly all environmental monitoring data which has been collected since the previous data submission. The data submission must be provided in the approved form (being an MS Excel template that can be provided on request) and include laboratory and field data for the following:		Refer to sub conditions		Note that this condition in the Authorisation has a footnote "See Schedule D this document in relation to environmental monitoring requirements".
7.a	surface water;	4	Full Compliance	Email submission received for Q1 2021 data - dated 15May2021 Email submission received for Q2 2021 data - dated 16Aug2021 Email submission received for Q3 2021 data - dated 19Nov2021 Email submission received for Q4 2021 data - dated 19Mar2022 Email submission received for Q1 2022 data - dated 12Jun2022 (outside the audit period)	DITT advised that quarterly submissions were received in the appropriate format and acknowledged receipt verbally.
7.b	groundwater;	4	Full Compliance	Email submission received for Q1 2021 data - dated 15May2021 Email submission received for Q2 2021 data - dated 16Aug2021 Email submission received for Q3 2021 data - dated 19Nov2021 Email submission received for Q4 2021 data - dated 19Mar2022 Email submission received for Q1 2022 data - dated 12Jun2022 (outside the audit period)	DITT advised that quarterly submissions were received in the appropriate format and acknowledged receipt verbally.
7.c	dust	4	Full Compliance	Email submission received for Q1 2021 data - dated 15May2021 Email submission received for Q2 2021 data - dated 16Aug2021 Email submission received for Q3 2021 data - dated 19Nov2021 Email submission received for Q4 2021 data - dated 19Mar2022 Email submission received for Q1 2022 data - dated 12Jun2022 (outside the audit period)	DITT advised that quarterly submissions were received in the appropriate format and acknowledged receipt verbally.
7.d	soil;	N/A	Not Applicable		No soil sampling was submitted as it is no longer required.
7.e	sediments;	4		2021-2022 MRM Environmental Monitoring Schedule Email submission received for Q2 2021 data - dated 16Aug2021  Annual Fluvial Sediment data has been provided for 20 and 21May 2021. This data in only collected annually and therefore isn't provided each quarter.	DITT advised that quarterly submissions were received in the appropriate format and acknowledged receipt verbally.

Authorisation Con Authorisation Condition No.	npliance Workbook - DITT Audit period 01 May 2021 to  Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
7.f	gas; and	4		Email submission received for Q1 2021 data - dated 15May2021 Email submission received for Q2 2021 data - dated 16Aug2021 Email submission received for Q3 2021 data - dated 19Nov2021 Email submission received for Q4 2021 data - dated 19Mar2022 Email submission received for Q1 2022 data - dated 12Jun2022 (outside the audit period)  While sulphur dioxide (SO2) data wasn't monitored for large parts of the audit period, it appears that data available was submitted quarterly and in the required format in compliance with this condition.	DITT advised that quarterly submissions were received in the appropriate format and acknowledged receipt verbally.
7.g	water transfers and discharges (including dates, times and volumes).	4	Full Compliance	Email submission received for Q1 2021 data - dated 15May2021 Email submission received for Q2 2021 data - dated 16Aug2021 Email submission received for Q3 2021 data - dated 19Nov2021 Email submission received for Q4 2021 data - dated 19Mar2022 Email submission received for Q1 2022 data - dated 12Jun2022 (outside the audit period)	DITT advised that quarterly submissions were received in the appropriate format and acknowledged receipt verbally.
	From the date of authorisation of the Overburden Management Project, the Operator must provide an "as built" construction report, for the structures that the approved MMP specifies require "as built" construction reports, at the completion of each structure approved as per the MMP, within 30 days upon construction being finalised.	2		- Appendix I).  NOEF Management Plan (MMP - Appendix G ).  MRM Tailings Storage Facility Quarterly Report December 2021 –  March 2022.  DITT advised that construction of the NOEF is continuing with no completion and that no new runoff dams were completed in the audit period. DITT considered EPROD still to be in early phase commissioning trials during the audit period with no construction report submitted.  TSF Raising – General Specification for Design and Construction states in Section 5.4.8 "Records documenting the construction of the raises are essential for ongoing management and design of future TSF raises. The records should be collated and presented in a Construction Report along with "As-Constructed" drawings and survey for the raise."  There has been no evidence provided that the Operator submitted as built construction reports for the TSF Cell 1 Stage 5, Cell 2 Stage 6 or Cell 2 Stage 7 raises that were completed more than 30 days before the end of the audit period and so DITT are considered part compliant for not ensuring these reports were provided.	OFI: Amend the condition to specify what as built construction reports are required (including interim stages) rather than relying on the MMP to provide a clear list of what as built construction reports are required OFI: Prepare an annual program/register of Operator deliverables and submissions to assist DITT to manage the acknowledgement of receipt, adequacy review of submissions, and timely request for additional information, if required.

Authorisation Condition No.	mpliance Workbook - DITT Audit period 01 May 2021 to  Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
9	The Operator must submit on or before 31 August 2021 and on each anniversary of that date (or such other date as nominated by the Operator and approved by the Minister), an EMR for the previous year in the reporting period as agreed with the Department.	4	Full Compliance	EMR 2020-2021 Email DITT to Operator subject RE: MRM   2020-21 Environmental Monitoring Report dated 13Sep2021.  EMR 2021 received on 31Aug2021. DITT responded to the Operator to acknowledge receipt of the EMR on 13Sept2021.	
Security and Levy					
10	The Operator must provide to the Minister a security of \$405,116,668 in the form of cash or an unconditional bank guarantee prior to undertaking any mining activities authorised by this Variation of Authorisations 0059-01 and 0059-02.	4	Full Compliance	security amounts shows full payment of the requested security	The Mining Management Act 2001 (MMA) requires payment of security prior to commencement of planned activities detailed in the approved MMP.
11	The security provided for under Condition 10 will be reassessed, and may be revised, following the submission, assessment and approval of an:		Refer to sub conditions		
<b>11</b> .a	independent third party assessment of the security by a qualified person approved by the Minister (also refer Condition 40);	N/A	Not Applicable		There was no requirement for independent third party assessment during the audit period. One was undertaken related to the Unplanned Closure Plan covered in condition 11.c.
11.b	amended MMP;	N/A	Not Applicable	Memo Mining Office to Executive Director - Mines dated 21Oct2021 Subject Approve Amended MMP - 0059-01 McArthur River Mining Pty Ltd (MRM TSF West Haul Road Realignment) Letter DITT to Operator dated 27 Oct2021 Subject Re: Mining Management Plan Amendment Approval - Authorisation 0059 (MRM TSF West Haul Road Realignment)	MMP amendment approved 27 October 2021 (TSF west haul road realignment). Security was reassessed but not revised as cost neutral, more efficient. No requirement to change the Authorisation.  17 December 2021 Operator requested activity but delegate advised it was consistent with their current approval so no MMP amendment was required.  21 January 2022 Operator requested an exemption on condition 69 (release of water from WMD - condition related to only when evidence of continuous flow along Little Barney Creek). It had not been a good wet season but there was treated water in the WMD so an exemption was requested specifically only for that wet season. A risk assessment was undertaken and approval to do so provided by DITT.  Department advised that they always consider security when any Operator submits anything outside current approved MMP.  Requirement to always look at security prior to any documents that are submitted to the Delegate. This is related to any change to security requiring a change to the Authorisation.

Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
11.c	amendment to the Unplanned Closure Plan.	4	Full Compliance	Internal DITT memo to Executive Director Mines from Manager MRM Project subject Vary Authorisation 0059 McArthur River Mining Pty. Ltd McArthur River Mine dated 18 June 2021. Letter Operator to DITT subject Re: McArthur River Mine – Updated Unplanned Closure Plan and Independent Security Assessment dated 31Aug2021. DITT Spreadsheet MRM Security Calculation Comparison 2022 vs. 2021. Internal DITT memo subject Vary Authorisation 0059 McArthur River Mining Pty. Ltd McArthur River Mine dated 18 June 2021 shows that DITT assessed the Operator's revised security, as does the DITT Spreadsheet MRM Security Calculation Comparison 2022 vs. 2021.	An amendment to the Unplanned Closure Plan was submitted before the audit period and as a result the security changed in the Authorisation on 18Jun2021 (in the audit period).  An amendment to the Unplanned Closure Plan was submitted in Augus 2021 (in the audit period) and was approved on 5 May 2022 (outside the audit period). Operator changed to requesting a three year approval are inclusion of Unplanned Closure to provide more surety around the approval timing to not disrupt operations. Assessment undertaken by Phronis Consulting.
12	The revised security amount to be provided under Condition 10 is to be provided prior to creating the new disturbance, covered under the revised security as per written notification from the Department. For the avoidance of doubt, the Operator must provide the revised security amount in the form of cash or an unconditional bank guarantee to the Minister.	4	Full Compliance	DITT database recording details of authorised projects including security amounts shows full payment of the requested security amount in the form requested	The MMA requires payment of security prior to commencement of planned activities detailed in the approved MMP.
13	Each financial year, upon receipt of a written notice by the Minister as to the levy payable for that financial year, the Operator must pay a levy to the Mining Remediation Fund of an amount calculated in accordance with the Act and as stated by the Minister in the notice.	4	Full Compliance	DITT database recording details of authorised projects including levy amounts payable shows full payment of the requested levy	The MMA requires payment of security prior to commencement of planned activities detailed in the approved MMP.
verburden Managem 15	The Operator must provide written notice to the Minister and NT EPA if it alters or proposes to alter the McArthur River Mine Overburden Management Project and/or commitments, safeguards or mitigation measures in the Environmental Impact Statement in such a manner that the environmental significance of the action may have changed, in accordance with clause 14A of the Environmental Assessment Administrative Procedures 1984.	N/A	Not Applicable		DITT advised that there has been no submission or contact to the minister specific to this condition from the Operator in the audit period
16	Within 18 months of the date of authorisation of the Overburden Management Project, unless otherwise agreed in writing by the Department, the Operator must submit a plan to the Department for review, that:	N/A	Not Applicable		Not required until 18 months from 13 November 2020 so falls outside of the audit period (i.e. 13 May 2022).
16.a	Enables measurement of total loads of lead and zinc and is consistent with requirements of Condition 27;	N/A	Not Applicable		Not required until 18 months from 13 November 2020 so falls outside of the audit period (i.e. 13 May 2022).
16.b	Quantifies and ensures annual loads of lead and zinc discharged to the McArthur River in future years (July to June) do not exceed the loads discharged in 2017-2018 (as per Condition 68(e)) taking into account seasonal variations in rainfall, and subject to future annual load calculations;	N/A	Not Applicable		Not required until 18 months from 13 November 2020 so falls outside of the audit period (i.e. 13 May 2022).
16.c	addresses recommendations and outcomes arising from audits of loads by the Independent Monitor;	N/A	Not Applicable		Not required until 18 months from 13 November 2020 so falls outside the audit period (i.e. 13 May 2022).

Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
16.d	include sufficient detail to inform the development of monitoring and management measures (including but not limited to early warning alerts and intervention levels), as part of the site wide AMP (Condition 45);	N/A	Not Applicable		Not required until 18 months from 13 November 2020 so falls outside the audit period (i.e. 13 May 2022).
16.e	once approved by the Department, be implemented by the Operator by the Operator.	N/A	Not Applicable		Not required until 18 months from 13 November 2020 so falls outside the audit period (i.e. 13 May 2022).
17	Within 18 months date of authorisation of authorisation of the Overburden Management Project, the Operator must:		Refer to sub conditions		Not required until 18 months from 13 November 2020 so falls outside the audit period (i.e. 13 May 2022).
17.a	submit a plan to the Department for review, that shall include:	N/A	Not Applicable		Not required until 18 months from 13 November 2021 so falls outside the audit period (i.e. 13 May 2022).
17.a.i	site-specific trigger values determined in accordance with Australian and New Zealand Guidelines for Fresh and Marine Water Quality, 2018 framework, incorporating ANZECC (2000) guidelines, at appropriate monitoring locations, in accordance with Condition 27;	N/A	Not Applicable		refer above
17.a.ii	a commitment that creeks on the mine site to show long-term improving trends in water quality within 20 years after cessation of mining;	N/A	Not Applicable		refer above
17.a.iii	methodology to calculate contaminant loads and contaminant concentrations entering creeks and the McArthur River using system modelling that must:	N/A	Not Applicable		refer above
17.a.iii.a	use suitable site-specific data collected as part of Condition 26;	N/A	Not Applicable		refer above
17.a.iii.b	be subject to review by the relevant independent panel;	N/A	Not Applicable		refer above
17.a.iii.c	detail specific assumptions to be tested including but are not limited to:	N/A	Not Applicable		refer above
17.a.iii.c.i	groundwater flow paths;	N/A	Not Applicable		refer above
17.a.iii.c.ii	attenuation of metals from mine-derived wastes;	N/A	Not Applicable		refer above
17.b	once approved by the Department, implement the plan;	N/A	Not Applicable		refer above
17.c	incorporate the relevant findings from the plan into the AMP.	N/A	Not Applicable		refer above
18	The Operator must provide a written response to the Department, if an independent technical panel's, required under Condition 21, review of the models and modelling outputs, and the data collection programs that informed the model development at Condition 17(a)(iii) address recommendations for improvements. All relevant outputs must be used to inform and update the AMP.	N/A	Not Applicable		No independent technical panels, required under Condition 21, have been set up therefore no written response was required from the Operator.
19	Every three (3) years from the date of authorisation of the Overburden Management Project, an independent environmental audit of the Quality Assurance (QA) and Quality Control (QC) procedures and waste rock identification and handling performance must be undertaken and:		Refer to sub conditions		Note intent of this condition is related to waste rock so QA/QC is component of the waste rock audit.
19.a	the results of the audit be provided within six (6) weeks to the Department and to the relevant independent panel;	N/A	Not Applicable		Not triggered as due 3 years from 13Nov2020. Not audit is planned fo June 2022.
19.b	the Operator must provide a written response to the satisfaction of the Department where findings from the audit and review by the relevant panel includes matters that need to be addressed or areas for improvement.	N/A	Not Applicable		Not triggered as due 3 years from 13Nov2020. Not audit is planned fo June 2022.

Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
21	The Operator must provide funding and assist the Department to establish and operate an independent panel(s) of experts to advise on matters affecting the environmental performance of the NOEF, TSF and mine closure planning.	4	Full Compliance		Operator is providing ongoing assistance for development of the draft ToR since late 2021. No funding has been required to date.
22	Within 12 months of date of authorisation of the Overburden Management Project, the Operator must submit a report to the Department for review, detailing the results of relevant studies undertaken to inform the requirements for implementation (including timelines) of a NOEF groundwater seepage interception and recovery system that:	3	David Cassalian as	DITT provided verbal feedback regarding receipt of the submission at TWG.	The Operator advised that NOEF seepage interception is of no value until 2027.  DITT intend to obtain expert advice related to seepage interception from the NOEF independent panel.  OFI: Provide more timely responses from DITT on review/approval of submitted documents (e.g. NOEF Interception Scheme Report Authorisation Condition 22 dated 13Nov2021, Ecotoxicology research and investigation program submitted 25Oct2021, Air Quality Management Plan submitted 13Nov2021 and AMP submitted 13Nov2021 to allow for implementation of any recommendations.  OFI: Establish the independent expert panel (NOEF) or use an alternati expert review in the interim to assess requirement for the NOEF seepage interception trench and recovery system.
22.a	controls seepage to the Barney Creek diversion channel and the McArthur River;	4	Full Compliance	NOEF Interception Scheme Report VOA Condition 22 dated 13 Nov2021.  Letter DITT to Operator subject NOEF Interception Scheme – EPBC Condition 12 Report dated 9Jun2020 (outside audit period)  Table 1 of the NOEF Interception Scheme Report states "The components of the interception scheme are presented in GHD (2020b). KCB (2020) concludes that the interception scheme would be ineffective if constructed in the short-medium term as the groundwater levels are being drawn down below the invert of Barney Creek. The interception scheme may be required after the Open Pit Lake has been established in approximately 2067. A Trigger Action Response Plan (TARP) for the monitoring and management of groundwater levels has been designed in consultation with third party experts and incorporated into the Adaptive Management Plan required under VOA 0059 Condition 93."  Letter DITT to Operator subject NOEF Interception Scheme – EPBC Condition 12 Report ", we conclude that mitigation measures for NOEF seepage as baseflow to the BCD are not likely to be required for at least several decades and concur that installation of any dedicated interception infrastructure in the short term would not be beneficial. To counter the low likelihood of existing predictions and assessments underestimating the timing and magnitude of any significant NOEF seepage discharging to the BCD, the monitoring and TARP approach proposed by MRM is considered appropriate."	prediction to ensure MRM is able to implement corrective measures (e.g. initiation of detailed design and installation of an interception scheme) prior to significant impacts on the Barney Creek Diversion Channel.  A further groundwater monitoring site located between the Barney Creek Diversion Channel and Open Pit would be included in the TARP t confirm the rate of recovery of the water table following the establishment of the Open Pit Lake is as predicted."

Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
22.b	achieves a recovering trend in the Barney Creek diversion channel and the old McArthur River channel (at SW06) water quality within 20 years of cessation of mining;	4	Full Compliance	Attachment A NOEF Interception Scheme Report VOA Condition 22 dated 13 Nov2021  Table 1 of the NOEF Interception Scheme Report states "As above, the interception scheme would be ineffective within the specified time period, however, MRM is proposing to implement a TARP to ensure that an interception scheme is implemented at an appropriate time if required earlier than anticipated."	"The groundwater monitoring program and relevant TARP will be updated at a more appropriate time closer to cessation of mining operations (and the recovery of groundwater levels), in order to ensure a recovering trend in water quality in the Barney Creek Diversion Channel (including at SW06) within 20 years of cessation of mining. "
22.c	facilitates achieving requirements of Conditions 16 and 17.	4	Full Compliance	Attachment A NOEF Interception Scheme Report VOA Condition 22 dated 13 Nov2021  Table 1 of the NOEF Interception Scheme Report states "As described, the interception scheme would be ineffective in the short-medium term, however, the implementation of the TARP will not prevent Conditions 16 and 17 from being addressed."	
23	Within 24 months of date of authorisation of the Overburden Management Project, the Operator must submit a NOEF geosynthetic liner cover system plan to the Department for review. The plan must:	N/A	Not Applicable		Not triggered until two years after 13Nov2020.
23.a	outline a process (including timelines) to test and evaluate (i.e. criteria) the constructability and effectiveness of geosynthetic liner cover options including a geosynthetic liner /compacted clay layer combination;	N/A	Not Applicable		Not triggered until two years after 13Nov2020.
23.b	include implementation of trials on rehabilitated stages of the NOEF;	N/A	Not Applicable		Not triggered until two years after 13Nov2020.
23.c	identify relevant performance parameters must be monitored, including but not limited to:	N/A	Not Applicable		Not triggered until two years after 13Nov2020.
23.c.i	slope stability during extreme events;	N/A	Not Applicable		Not triggered until two years after 13Nov2020.
23.c.ii	cover performance as a result of heat effects;	N/A	Not Applicable		Not triggered until two years after 13Nov2020.
23.c.iii	tolerance of the geosynthetic liner to expected differential settlement;	N/A	Not Applicable		Not triggered until two years after 13Nov2020.
23.c.iv	veracity of cover longevity predictions;	N/A	Not Applicable		Not triggered until two years after 13Nov2020.
23.c.v	likely long-term maintenance requirements.	N/A	Not Applicable		Not triggered until two years after 13Nov2020.
23.d	Include reporting of trial results and monitoring outcomes:	N/A	Not Applicable		Not triggered until two years after 13Nov2020.
23.d.i	within three years from the submission of the plan;	N/A	Not Applicable		Not triggered until two years after 13Nov2020.
23.d.ii	every three years thereafter, to the relevant independent panel and the Community Reference Group for review, and shall be audited by the Independent Monitor. The Operator must provide a written response to the Department, if review from the relevant panels and Community Reference Group require matters to be addressed;	N/A	Not Applicable		Not triggered until two years after 13Nov2020.
23.d.iii	must be used to inform the AMP and closure planning for the mine.	N/A	Not Applicable		Not triggered until two years after 13Nov2020.

Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
23.e	The NOEF geosynthetic liner cover system plan, once approved by the Department, must be implemented by the Operator.	N/A	Not Applicable		Not triggered until two years after 13Nov2020.
24	Within five (5) years of the date of authorisation of the Overburden Management Project, the Operator must submit a strategy to the Department that details the long-term disposal management of tailings into the mine pit void, submerged under a suitable depth of pit water. The plan must:	N/A	Not Applicable		Not triggered until five years after 13Nov2020.
24.a	include strategies on the tailings reprocessing and assessment of residual chemical contaminants that may likely impact on meeting the requirements of Condition 16;	N/A	Not Applicable		Not triggered until five years after 13Nov2020.
24.b	be reviewed by the relevant independent panel.	N/A	Not Applicable		Not triggered until five years after 13Nov2020.
25	Once approved by the Department, the strategy developed in accordance with Condition 24 must be used to develop a plan five (5) years prior to cessation of mining, for approval by the Department. Any requirement to vary the approved disposal strategy or plan must be:	N/A	Not Applicable		Not triggered as required five years before mine closure.
25.a	applied for in writing to the Minister;	N/A	Not Applicable		Not triggered as required five years before mine closure.
25.b	based on leading practice and site conditions;	N/A	Not Applicable		Not triggered as required five years before mine closure.
25.c	supported by the relevant independent panel;	N/A	Not Applicable		Not triggered as required five years before mine closure.
25.d	notified to the NT EPA in accordance with Condition 15.	N/A	Not Applicable		Not triggered as required five years before mine closure.
26	Within 12 months of date of authorisation of the Overburden Management Project, the Operator must review and synthesise all available and relevant information to submit a revised water monitoring plan (surface water and groundwater) to the Department for review, ensuring the plan is capable of identifying and quantifying impacts of mining activities on the environmental values and beneficial uses of the McArthur River.	4	Full Compliance	EMR 2020-2021.  Letter Operator to DITT subject RE: McArthur River Mining – Variation of Authorisation 0059 Conditions 26 & 27 dated 19Aug2021.  Technical Working Group Meeting 7Oct2021 minutes dated 15Oct2021.  DITT advised that the Operator requested an extension to align this timeframe with the 18 month time of condition 18 related to loads monitoring by letter and this was discussed at technical working group meetings. Therefore DITT are compliant in monitoring this condition.	The Water Management Plan is a subplan of the AMP. The Operator submitted two versions of the AMP. One related to WDL update (31Mar2021 before the audit period) and the other (13Nov2021) relate to incorporating additional minor comments from independent expert Professor Barry Noller. DITT advised that the AMP did include synthesised water data.  DITT also advised that the yearly EMR submissions have included synthesised water data.
27	The plan required under Condition 26 must:		Refer to sub conditions		
27.a	allow for assessment of compliance with Condition 16 and include sufficient detail to inform/develop/update the AMP;	N/A	Not Applicable		Due to time extension in condition 26, this condition is not applicable until 13May2022, outside the audit period.
27.b	at a minimum:		Refer to sub conditions		
27.b.i	quantify loads of lead and zinc entering the McArthur River each year;	N/A	Not Applicable		Due to time extension in condition 26, this condition is not applicable until 13May2022, outside the audit period.
27.b.ii	quantify impacts to water quality and trends in groundwater to determine that objectives and targets are being met, including the effectiveness of source control to reduce loads to as low as is reasonably practicable;	N/A	Not Applicable		Due to time extension in condition 26, this condition is not applicable until 13May2022, outside the audit period.

8

Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
27.b.iii	develop appropriate future trigger values for waterways on the mine site and the McArthur River in accordance with the ANZECC Guidelines. In the interim, the trigger values in the most current WDL shall be used;	N/A	Not Applicable		Due to time extension in condition 26, this condition is not applicable until 13May2022, outside the audit period.
27.c	be prepared in consultation with the NT EPA;	N/A	Not Applicable		Due to time extension in condition 26, this condition is not applicable until 13May2022, outside the audit period.  The Operator requested another extension of time for condition 27.c but this it outside the audit period.
27.d	be prepared in consultation with the relevant independent panel;	3	Part Compliance (High)	The twelve month timeframe for this plan to be prepared has passed and no independent panel for consultation about the plan has been established so a part compliance has been recorded.	No independent panel(s) of experts, required under Condition 21, have been set up.  OFI: Establish the independent panels (NOEF and TSF) so that consultation during the preparation of future management plans can occur.
27.e	once approved by the Department, be implemented by the Operator;	N/A	Not Applicable		Due to time extension in condition 26, this condition is not applicable until 13May2022, outside the audit period.
27.f	be subject to consultation with the relevant independent panel in the event that the plans requires updating (e.g.to maintain the currency of the monitoring network);	N/A	Not Applicable		No independent technical panels, required under Condition 21, have been set up.  Refer to condition 27.d OFI.
27.g	ensure results of the program:		Refer to sub conditions		
27.g.i	are reported annually to the Department;	N/A	Not Applicable		Due to time extension in condition 26, this condition is not applicable until 13May2022, outside the audit period.
27.g.ii	are audited by the Independent Monitor every three years;	N/A	Not Applicable		Due to time extension in condition 26, this condition is not applicable until 13May2022, outside the audit period.
27.g.iii	be published on the Operator's website.	N/A	Not Applicable		Due to time extension in condition 26, this condition is not applicable until 13May2022, outside the audit period.
28	Within 18 months of date of authorisation of the Overburden Management Project, the Operator must submit a research and investigation program to the Department for review that establishes the concentration of mine-derived contaminants at which chronic and acute impacts to biota of relevance to the McArthur River system occur using recognised and accepted eco-toxicological testing, and:	4	Full Compliance	Letter Operator to DITT subject Re: Condition 28 Submission – Ecotoxicology Research and Investigation Program dated 25Oct2021  Letter DITT to Operator subject Re: VOA 0059 Condition 28 – Ecotoxicology research and investigation program dated 3Aug2022 (after the audit period)	Not triggered as due 18 months after 13Nov2020, however it was submitted in the audit period.

Authorisation	mpliance Workbook - DITT Audit period 01 May 2021 to  Condition/Requirement	Score	Compliance	Evidence 2022	Comments 2022
Condition No.	condition, requirement	30010	Level	Evidence 2022	Comments 2022
	the results of this program must be integrated with other relevant programs monitoring programs and management plans;			Letter DITT to Operator subject Re: VOA 0059 Condition 28 – Ecotoxicology research and investigation program dated 3Aug2022 (after the audit period)  The Operator submitted the Ecotoxicology Research and Investigation	Independent Monitor confirms that as an example of implementation i other programs, SSTVs for Cobalt and Thallium are included in the WDL 174-13 dated 10 March 2022 (APPENDIX 3: Site Specific Trigger Values Table 1: Site Specific Trigger Values).
28.a		4		Evidence that DITT has checked for compliance is in the Letter DITT to Operator dated 3Aug2022 that says "Pursuant to Condition 28 the department has reviewed the submission and, taking the following into account, consider the condition requirements to have been satisfied:  •MRM state that the program was undertaken in accordance with Recommendation 14 of the NT EPA's Assessment Report 86;  •On the basis of program results, MRM applied to the Department of Environment, Parks and Water Security to amend the site-specific trigger values in waste discharge licence WDL 174-12, and WDL 174-13 was subsequently approved on 10 March 2022;  •MRM note that the Adaptive Management Plan (AMP) is directly linked to the site-specific trigger values detailed in the WDL and would therefore incorporate any values revised in the WDL; and  •MRM submitted an amended AMP to the department (for review) on 13 November 2021."	
28.b	the plan once approved by the Department must be implemented by the Operator.	3	Part Compliance (High)	MRM submitted the plan 25Oct2021.  DITT advised that this matter is discussed at TWG meetings and has requested advice from NT EPA.  Given the plan submitted has not been approved by DITT during the audit, this is a part compliance.	OFI: Refer to Condition 22.
29	Within 18 months of date of authorisation of the Overburden Management Project, the Operator must submit an aquatic ecosystem monitoring program to the Department for review that provides improved understanding of aquatic ecosystems in the McArthur River from changing water flows, levels and quality, including available dry season habitat. The program must:	N/A	Not Applicable		Not triggered as due 18 months after 13Nov2020, outside the audit period.  Note the Operator submitted the Aquatic Ecology Monitoring Plan on 13May2022 (outside the audit period).
29.a	assess impacts of the mine on water levels in refuge pools/waterholes, upstream and downstream of the mine, including in the McArthur River diversion channel;	N/A	Not Applicable		Not triggered as due 18 months after 13Nov2020.
29.b	assess impacts of the mine on water quality in refuge pools/waterholes in the dry season;	N/A	Not Applicable		Not triggered as due 18 months after 13Nov2020.
29.c	assess impacts of the mine on the health of aquatic biota in the McArthur River using non-lethal sampling methods;	N/A	Not Applicable		Not triggered as due 18 months after 13Nov2020.
29.d	be designed to be integrated with requirements of the AMP consistent with Condition 45;	N/A	Not Applicable		Not triggered as due 18 months after 13Nov2020.
29.e	once approved by the Department, be implemented by the Operator.	N/A	Not Applicable		Not triggered as due 18 months after 13Nov2020.

Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
30	At all times, the Operator must conduct works consistent with the Northern Territory Aboriginal Sacred Sites Act 1989 and valid AAPA certificate. All conditions of the AAPA certificate must be complied with (including but not limited to NOEF height restrictions), and evidence produced to demonstrate compliance, when requested by the Minister.	N/A	Not Applicable		DITT approval of NOEF height up to 140 m is conditional on the Operator obtaining Aboriginal Areas Protection Authority approval.
31	The Operator must not disturb or encroach within 5m of archaeological site MRM4, until a design of the NOEF is agreed in writing by the Department. Consultation between the Operator and Minister for Arts, Culture and Heritage must be undertaken prior to seeking endorsement of the design.	N/A	Not Applicable		DITT advised that there were no requests for any changes in the aud period.
32	Within six months of date of authorisation of the Overburden Management Project, the Operator must provide a report to the Minister, and AAPA or the Minister for Arts, Culture and Heritage (where relevant) that demonstrates the consultation process undertaken or provide a plan to the Minister that details consultation activities and timeliness to identify and engage with appropriate custodians and traditional owners with an interest in land that would be or maybe affected by the Overburden Management Project.	4	Full Compliance	Email Operator to DITT re TRM: RE: Cultural Heritage Management Stakeholder Engagement Report dated 9Feb21. Email DITT to Operator subject RE: Cultural Heritage Management Stakeholder Engagement Report dated 11Feb2021  Updated Cultural Heritage Management Stakeholder Engagement Report dated February 2021 submitted on 9Feb21 and DITT acknowledged receipt on 11Feb2021 (before the audit period).	This condition was due in the audit period but had been submitted in the previous audit period.
33	Within 12 months of date of authorisation of the Overburden Management Project, the Operator must develop or revise and submit to the Department for review an existing air quality plan that monitors sulfur dioxide emissions at an appropriate location between the NOEF and sensitive receptors determined in consultation with NT EPA.	4	Full Compliance	Email Operator to DITT subject MRM   Updated AMP & AQMP (November 2021) dated 13Nov2021.  Letter NT EPA to Operator dated 17Jul20 Re: Proposed sulfur dioxide monitoring location (Recommendation 19 of Assessment Report 86) (before the audit period).  Air Quality Management Plan (dated 1 October 2021).  Letter Operator to DITT subject RE: McArthur River Mining – Adaptive Management Plan & Air Quality Management Plan Submission dated 13 November 2021.  DITT advised that verbal acknowledgement of receipt of the AQMP was provided to the Operator.	
34	The air quality monitoring plan required under Condition 33 must include:		Refer to sub conditions		Department needs to prepare a response for the Delegate. A draft exists.
<b>34</b> .a	objectives, locations, frequency of monitoring, trigger values and reporting commitments to manage and protect any potential air quality risk to human health outside of the mineral lease;	4	Full Compliance	Air Quality Management Plan (dated 1 October 2021).  The AQMP includes objectives, locations, frequency of monitoring and reporting commitments. The AMP (rather than the AQMP) does include a TARP (hence trigger values) for sulphur dioxide but not for depositional dust monitoring or the high volume air sampling. DITT advised that this condition is "related to PAF combustion and SO2 release only" so only the sulphur dioxide trigger values are required.	OBS: AQMP should reflect the AMP TARP.

Authorisation ondition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
34.b	evidence of consultation with the NT EPA to be provided at the time of the plan submission;	4	Full Compliance	Email Operator to DITT subject MRM   Updated AMP & AQMP (November 2021) dated 13Nov2021.  Letter NT EPA to Operator dated 17Jul20 Re: Proposed sulfur dioxide monitoring location (Recommendation 19 of Assessment Report 86) (before the audit period).  Letter Operator to DITT subject RE: McArthur River Mining – Adaptive Management Plan & Air Quality Management Plan Submission dated 13 November 2021.	
	once approved by the Department, be implemented by the Operator.		Don't Convoling	MRM submitted the Amended Adaptive Management Plan (November 2021).  DITT provided verbal feedback regarding receipt of the submission at	OFI: Refer to Condition 22.
34.c		3	(High)	TWG.  DITT draft response prepared however correspondence was not finalised during the audit period.	
35	The results of the air quality plan for each reporting frequency must be:		Refer to sub conditions		
35.a	made available on the Operator's website. Initial monitoring results to be reported within 6 months of the plan being accepted by the Department or an alternative timeframe as agreed in writing with the Department;	4	Full Compliance	Sighted real time data and monthly reports on Operator's website 21Sep21.	
35.b	incorporated where relevant in the AMP.	4	Full Compliance	DITT advised that results of the AQMP are reported in the EMR and that these inform review of the AMP.	The AQMP is an appendix to AMP. The AMP dated October 2021 wupdated to reference the updated National Environment Protection (Ambient Air Quality) Measure (as amended May 2021).
36	Within 24 months of date of authorisation of the Overburden Management Project, the Operator must submit a monitoring and management plan to the Department for review that manages risks of metal toxicity from human consumption of aquatic fauna obtained from the McArthur River. The plan must:	N/A	Not Applicable		Condition not triggered as required two years after 13Nov2020.
36.a	determine if aquatic fauna obtained from any reach of the McArthur River, that may be impacted by the mine's operations, is safe to eat;	N/A	Not Applicable		Condition not triggered as required two years after 13Nov2020.
36.b	include demonstrated evidence of consultation with NT EPA;	N/A	Not Applicable		Condition not triggered as required two years after 13Nov2020.
36.c	detail public reporting of the monitoring results, including at appropriate locations in the Borroloola region;	N/A	Not Applicable		Condition not triggered as required two years after 13Nov2020.
36.d	include provisions for implementation and maintenance of signage at waterways at the MRM site in accordance with the requirements of Condition 62 until the risk of contamination from consumption of this aquatic fauna is demonstrated to be acceptable by the Department;	N/A	Not Applicable		Condition not triggered as required two years after 13Nov2020.
36.e	once approved by the Department, be implemented by the Operator.	N/A	Not Applicable		Condition not triggered as required two years after 13Nov2020.
37	Within 24 months of date of authorisation of the Overburden Management Project, the Operator must submit a plan to the Department for review that outlines monitoring program for	N/A	Not Applicable		Condition not triggered as required two years after 13Nov2020.  Department is expecting a separate document to fulfil this condition associated with Commonwealth also.

Authorisation	mpliance Workbook - DITT Audit period 01 May 2021 to  Condition/Requirement	Score	Compliance	Evidence 2022	Comments 2022
Condition No.	include a sampling strategy for Largetooth Sawfish that is non-lethal;	N/A	Level Not Applicable		Condition not triggered as required two years after 13Nov2020.
37.b	include details of parameters and criteria, from which the results could be used to define specific (measurable and time-bound) performance indicators to abate a significant decline in Largetooth Sawfish movement;	N/A	Not Applicable		Condition not triggered as required two years after 13Nov2020.
37.c	include trigger levels for investigation and implementation of management measures;	N/A	Not Applicable		Condition not triggered as required two years after 13Nov2020.
37.d	once approved by the Department, be implemented by the Operator.	N/A	Not Applicable		Condition not triggered as required two years after 13Nov2020.
38	Within six months following the establishment of the required panels and groups in accordance with Condition 21, the Operator must:		Refer to sub conditions		This condition is not triggered as the panels have not been established.
38.a	develop environmental objectives for a Care and Maintenance Plan in consultation with the relevant Independent Panels, CRG, custodians and traditional owners;		-		Provided for context related to condition 38.b.
38.b	submit this to the Department for review.	N/A	Not Applicable		This condition is not triggered as the panels have not been established.
39	Within five years of date of authorisation of the Overburden Management Project, the environmental objectives arising from Condition 38 must be used to develop a Care and Maintenance Plan in consultation with the Department.	N/A	Not Applicable		Condition not triggered as required five years after 13Nov2020.
40	The Operator must facilitate an independent third-party assessment of the security for rehabilitation of disturbances resulting from authorised activities in the approved MMP that is consistent with requirements under Conditions 10, 11 and 12, to the satisfaction of the Department, and every 3 years thereafter if the security has been re-calculated or adjusted.	N/A	Not Applicable	DITT acknowledged receipt of the independent third-party review of the security amount on 10Jul20 (before the audit period).	Condition not triggered as the next requirement is three years from 13Nov2020.
41	The Operator, consistent with Condition 40, must:		Refer to sub conditions		
41.a	commission a qualified person to review the security amount whose appointment is accepted by the Minister;	N/A	Not Applicable	DITT acknowledged receipt of the independent third-party review of the security amount on 10Jul20 (before the audit period).	Condition not triggered as it is specific to condition 40, for which the next requirement is three years from 13Nov2020.
41.b	ensure that the security is reviewed and delivered to the Department within six months of acceptance of the qualified person.	N/A	Not Applicable		Condition not triggered as it is specific to condition 40, for which the next requirement is three years from 13Nov2020.  OBS: DITT may consider changing the wording of this condition if reapproval of the qualified person to undertake the independent third-party assessment of the security is not required.
42	For every approved MMP and MMP amendment, the Operator must provide a revised copy of the approved document that removes commercially sensitive information, includes an overview and environmental section, and is suitable for publication on the Department's website, or provide written approval to make the complete documents publicly accessible.	N/A	Not Applicable		No MMP amendments occurred in the audit period.

Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
	The Operator must assist, as required, the Department to establish and operate a Community Reference Group (CRG).			https://industry.nt.gov.au/boards-and-committees/mcarthur-river-mine-community-reference-group	DITT advised that nominations have been received and are awaiting feedback on the membership.
43		3	•	DITT website heralding the establishment of the CRG called for nominations by 31Oct2021. Nominations have been received and the Ministerial nomination process has commenced.	OFI: Establish the Community Reference Group as a priority.
				This is a part compliance as the CRG is yet to be established.	
44	Within 18 months of date of authorisation of the Overburden Management Project, the Operator must undertake a synthesis of all environmental monitoring programs (Condition 26) that assess impacts of mining activities on the environmental values and beneficial uses of the McArthur River, in accordance with NT EPA's overarching environmental outcome. The revised monitoring programs must:	N/A	Not Applicable	Email Operator to DITT subject McArthur River Mine   Variation of Authorisation 0059 - Condition 44 dated 2May2022 (after audit period but relevant) EMR 2020-2021.	Not triggered in the audit period as due 18 months after 13Nov2020
	use outputs generated for review and synthesis of water monitoring				Provided for context of condition 44.c.
44.a	programs, as part of addressing Condition 26;		-		
44.b	demonstrate how all monitoring data collected under various monitoring programs and management plans were considered and synthesised (e.g. conceptual site models, trend analysis);		-		Provided for context of condition 44.c.
44.c	be incorporated in the AMP.	N/A	Not Applicable		
	Within 18 months of date of authorisation of the Overburden	,	11 11		Not triggered in the audit period as due 18 months after 13Nov2020
45	Management Project, the Operator must submit an AMP to the Department:	N/A	Not Applicable		Was submitted to DITT 13May2022 (after the audit period).
45.a	The AMP must include the following key elements:		Refer to sub conditions		OBS: Previous versions of the AMP that were submitted could have reviewed with feedback provided to the Operator so that any recommendations might be implemented.
45.a.i	clear, measurable environmental objectives for all significant environmental risks and potential impacts;	N/A	Not Applicable		
45.a.ii	measureable performance indicators to show that objectives are on target to be met;	N/A	Not Applicable		
45.a.iii	pre-determined triggers to warn of potential for performance indicators to be exceeded, as informed by monitoring;	N/A	Not Applicable		
45.a.iv	realistic and achievable contingency interventions to maintain performance indicators if triggers are consistently exceeded;	N/A	Not Applicable		
45.a.v	clearly defined management measures/actions that are capable of being implemented in a timely way to meet performance indicators and environmental objectives;	N/A	Not Applicable		
45.a.vi	monitoring in accordance with relevant Recommendations in NT EPA Assessment Report 86 to determine whether management measures are effective and to inform the need for adjustments to management measures or need for alternatives;	N/A	Not Applicable		
45.a.vii	a continual feedback system to inform appropriate actions to be initiated when triggered and environmental objectives are always	N/A	Not Applicable		

uthorisation ondition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
45.a.viii	continual development of new management actions as required based on knowledge gained from experience at the site and elsewhere across industry.	N/A	Not Applicable		
45.b	The AMP must be reviewed by the Independent Monitor or an appropriately qualified, independent third party, and updated with inputs from the CRG (once established under Condition 43);	N/A	Not Applicable		The AMP review will be part of the Independent Monitor tasks sche for late 2022.
45.c	all review findings and CRG input requirements are to be provided to the Department for approval.	N/A	Not Applicable		
46	Unless agreed otherwise in writing by the Department, the AMP must:		Refer to sub conditions		Not triggered in the audit period as condition 45 only requires AMP months after 13Nov2020.
46.a	clearly set out the required management objectives and performance indicators;	N/A	Not Applicable		Not triggered in the audit period as condition 45 only requires AMP months after 13Nov2020.
46.b	provide clarity on the triggers for changes to management actions, and responsibility and evidentiary basis for decision-making;	N/A	Not Applicable		Not triggered in the audit period as condition 45 only requires AMP months after 13Nov2020.
46.c	establish the timeframe for initiation of certain actions if triggers are exceeded, including decisions to discontinue an activity and clarify responsibility and evidentiary basis for decision-making;	N/A	Not Applicable		Not triggered in the audit period as condition 45 only requires AMP months after 13Nov2020.
46.d	establish a process for adjusting triggers that includes the regulator;	N/A	Not Applicable		Not triggered in the audit period as condition 45 only requires AMP months after 13Nov2020.
46.e	establish transparent monitoring, reporting and review requirements;	N/A	Not Applicable		Not triggered in the audit period as condition 45 only requires AMP months after 13Nov2020.
46.f	establish processes to achieve transparency and stakeholder engagement in AMP design and implementation that includes NT EPA, DAWE and CRG;	N/A	Not Applicable		Not triggered in the audit period as condition 45 only requires AMP months after 13Nov2020.
46.g	set out the mechanism for periodic review by Independent Monitor, which must not exceed a frequency of every three years;	N/A	Not Applicable		Not triggered in the audit period as condition 45 only requires AMP months after 13Nov2020.
46.h	be provided to the Department for re-approval in the event that any material changes are made to the AMP.	N/A	Not Applicable		Not triggered in the audit period as condition 45 only requires AMP months after 13Nov2020.
47	The Operator must provide written notice to the Minister and to the NT EPA (under clause 14A of the Environmental Assessment Administrative Procedures 1984) where trends indicate performance indicators and environmental objectives will not, or are unlikely to be, met by implementing the AMP.	N/A	Not Applicable		DITT advised that information to date indicates that trends are consistent with the modelling presented in OMP EIS.
pendent Tailings I	Review Board				
50	The Operator must:		Refer to sub conditions		
50.a	convene an advisory board (Independent Tailings Review Board or ITRB);		-		

Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
	provide details of the members of the ITRB panel and meeting frequency to the Department for endorsement by the Department;				There has been no change to the ITRB in the audit period and no ITRB meetings in the audit period.
50.c		N/A	Not Applicable		OBS: DITT could liaise with the Operator on the ITRB not meeting in the audit period in relation to matters including:  •ITRB review of TSF construction documentation not occurring in time manner  •OMS Manual not being finalised for the Cell 1 stage 5 and Cell 2 Stage raises or reviewed by ITRB  •design changes to the Cell 2 Stage 7 raise buttressing not being
					reviewed or endorsed by the ITRB.
50.d	together with the ICE, provide a written response to the satisfaction of the Department, in the event that future review of the designs by independent experts require additional matters to be addressed;	N/A	Not Applicable		Review of the designs by independent experts have not required additional matters to be addressed so there were no written responses submitted to the Department in the audit period.
aste Rock Managem	ent				
51	From the date of authorisation Non-benign Waste is to be permanently placed consistent with the approved MMP:		Refer to sub conditions		
51.i	in the event that future review of the designs or as-built structure by independent experts require additional matters to be addressed, the Operator together with the ICE must provide a written response to the satisfaction of the Department;	N/A	Not Applicable		Review of the designs or as-built structure by independent experts have not required additional matters to be addressed so there were no written responses submitted to the Department in the audit period.
51.j	at mine closure, non-benign waste rock is encapsulated and fully contained within an engineered cover system consistent with the Overburden Management Project, or an alternative cover system endorsed by the relevant independent technical panels to the satisfaction of the Department.	N/A	Not Applicable		Not triggered until mine closure
emaining Waste Rock	Management Facilities				
55	From the date of authorisation of the Overburden Management Project, temporary placement of non-benign waste is authorised for the following:		Refer to sub conditions		
55.a	EOEF (except for PAF(RE));		-		
55.b	stockpiles on NOEF, SOEF and WOEF;		-		
55.c	ROM Pad;		-		
55.d	any other location approved by Department in writing.	N/A	Not Applicable		No additional locations have been approved by the Department.
ater Management a					
59	Until the AMP (including Environmental Management Plans and sub- plans) is approved by the Department in writing, the Operator must prepare, review and include the following for each MMP and where appropriate each MMP amendment, a Water Management Plan which includes:	N/A	Not Applicable		No MMP amendment was submitted in the audit period so this condition is N/A.
ater Transfer and Di	scharge				
68	The Operator must:		Refer to sub conditions		

Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
68.e	by 30 June 2020, characterise total loads of mine-derived contaminants from all source inputs for the 2017-2018 period consistent with Condition 16.b), unless otherwise agreed in writing by the Department.	N/A	Not Applicable		Was complied with prior to the audit period (Operator provided a load report on 15May2020 and acknowledgement of receipt was emailed 15May2020). Not relevant in the audit period.  OBS: This condition is no longer relevant and DITT may consider removing it from future Authorisations.
69	The Operator must in relation to the WMD release point to Little Barney Creek undertake:		Refer to sub conditions		
69.b	remediation in the event of unacceptable erosion occurring at the Carpentaria Highway culvert system to the satisfaction of the Department of Infrastructure, Planning and Logistics and the Department;	N/A	Not Applicable		DITT has not observed, nor been advised of, any unacceptable erosion requiring action by the Operator occurring at the Carpentaria Highway culvert.
69.h	Measure total loads of analytes (including lead and zinc) from all controlled discharge activities entering McArthur River at location SW06 or an alternate location as agreed by the Department;	N/A	Not Applicable		DITT has not approved any alternate locations for monitoring.
71	At the conclusion of the trials in Condition 70, the Operator must apply in writing to the Department for approval of full-scale implementation.	N/A	Not Applicable		DITT is aware of trials being conducted and are yet to be finalised so the condition is not triggered.
imeter Run-Off Dar	ms - SPROD, SEPROD, WPROD and EPROD				
75	The Operator must construct EPROD and WPROD in accordance with the following regime in the event groundwater dewatering is necessary:		Refer to sub conditions		
75.i	field water quality parameters, flow meter volumes and laboratory analysis must be submitted to Department on a monthly basis;	N/A	Not Applicable		No groundwater dewatering was undertaken on site to warrant submission of results.
75.k	Construction reports including QA and QC data endorsed by the ICE must be provided to the Department prior to commencement of operation within 30 days of construction being completed.	N/A	Not Applicable		OBS: Amend the condition so that provision of construction reports is required regardless of whether dewatering has occurred or not.
ilings storage facility					
76	From the date of authorisation of the Overburden Management Project, tailings must be managed in accordance with the following:		Refer to sub conditions		
76.b	any construction of tailings lift, as approved in Condition 79, be reviewed and endorsed by independent oversight requirements in Condition 48 and 50 or an alternative independent qualified and experienced third party approved by the Department in writing;	N/A	Not Applicable		No approval for an alternative independent qualified and experienced third party was requested during the audit period by the Operator.  OBS: DITT to obtain copies of reports related to design of tailings lifts that are reviewed and endorsed by independent oversight.
76.e	in the event that future review of the designs or as-built structure by independent experts require additional matters to be addressed, the Operator together with the ICE must provide a written response that justifies the existing design or proposes an alternate design to the satisfaction of the Department.	N/A	Not Applicable		The Independent Monitor is not aware of any reviews of the designs be independent experts therefore no additional matters were raised that needed to be addressed and no written responses were submitted to the Department in the audit period.

Authorisation Cor Authorisation Condition No.	mpliance Workbook - DITT Audit period 01 May 2021 to  Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
80	The Operator must provide quarterly to the Minister a written status report on the seepage and management of seepage from the TSF, including the following:	4		Letter DITT to the Operator subject Re: McArthur River Mine Quarterly TSF Reports dated 8Oct2021.  Email Operator to DITT subject MRM   TSF Quarterly Report   March 2021 to May 2021 dated 6Aug21.  Email Operator to DITT subject MRM   TSF Quarterly Report   June 2021 to August 2021 dated 13Oct21.  Email Operator to DITT subject MRM   TSF Quarterly Report   September to November 2021 dated 4Mar22.  Email Operator to DITT subject MRM   TSF Quarterly Report   December 2021 - March 2022 dated 23Jun22 (noting this is for 4 months rather than a quarter and submitted after the audit period).  Reports were received for Mar-May 2021, June-Aug 2021, Sep-Nov 2021 and the Independent Monitor has sighted those (i.e. Dec21-Mar22 was outstanding during the audit period). DITT has accepted the Mar-May 2021 report as demonstrated by a letter from DITT to the Operator subject Re: McArthur River Mine Quarterly TSF Reports dated 8Oct2021. Other reports are yet to be processed.	DITT reviewing via spreadsheet. No further action at this point from the DITT. End of year 2021 report not received. Department requested the annual independent audit report must be provided progressively.  DITT advised that they undertake the following process: "Acceptance/approval procedure: Receipt of TSF Quarterly Reports 1.Operator submits report via email, FTP or hardcopy 2.Department acknowledges receipt via email or verbally at TWG 3.Department conducts review of document focusing on priority sections ie findings and recommendations 4.Department provides feedback to operator: a. no matters requiring regulatory action - verbally at TWG b. when regulatory action required – verbal advice at TWG followed up by formal correspondence from the department to the operator"
80.a	water levels in the TSF;	4	Full Compliance	MRM TSF Quarterly Report - September to November 2021 MRM TSF Quarterly Report - December 2021 - March 2022  MRM Tailings Storage Facility Quarterly Report September 2021 - November 2021 checked by the Independent Monitor and compliance is evident based on average levels in the TSF in Table 3-1 Tailings, seepage and water management summary. There are also graphs of water levels in Figure 3-1 Cell 2 decant pond management and Figure 3-2 Cell 1 decant pond management.  MRM TSF Quarterly Report - December 2021 - March 2022 includes Figure 2-1 Cell 2 decant pond management, TABLE 2-1 Tailings, seepage and water management summary and "The water level in the TSF Cell 1 is monitored manually through survey. The water level over the reporting period is presented in Figure 2-2."	

Authorisation Cor	mpliance Workbook - DITT Audit period 01 May 2021 to				
Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
80.b	all monitoring data associated with the seepage (including geotechnical and environmental monitoring);	4	Full Compliance	MRM TSF Quarterly Report - March 2021 to May 2021 MRM TSF Quarterly Report - June 2021 to August 2021 MRM TSF Quarterly Report - September to November 2021 MRM TSF Quarterly Report - December 2021 - March 2022  MRM Tailings Storage Facility Quarterly Report December 2021 - March 2022 section 2.4 and MRM Tailings Storage Facility Quarterly Report September 2021 - November 2021 section 3.4 include relevant water quality data on seeps, although this is limited. MRM Tailings Storage Facility Quarterly Report September 2021 - November 2021 Table 3-1 also includes volume monitoring data.  MRM Tailings Storage Facility Quarterly Report September 2021 - November 2021 section 3.4.3. TSF Cell 2 seepage "Seepage from the Cell 2 Wall Seep, located on the west corner of Cell 2, is collected in a sump and pumped back into the TSF Cell 2. No sample was collected from the Cell 2 Wall Seep. Seepage from the Cell 2 Spillway Seep (the spillway before completion of the Oell 2, Stage 4 raise) is collected in a tank at the bottom of the old spillway wall and pumped back into the TSF Cell 2. No sample was collected from the Cell 2 Seepage Spillway during the quarter. The Cell 2 Spillway Seep Recovery Bore was sampled in September 2021. Arsenic, zinc and sulphate concentrations recorded a decrease from the previous quarter, with zinc concentrations of 4,569 ug/L. Total alkalinity remained well above 100 mg/L, and field pH was measured at 6.58 pH units in September 2021."	MRM Tailings Storage Facility Quarterly Report December 2021 – March 2022 section 2.4.3 TSF Cell 2 seepage states "Seepage from the Cell 2 Wall Seep, located on the west corner of Cell 2, is collected in a sump and pumped back into the TSF Cell 2. Due to no seepage present in the sump, no samples were collected from the Cell 2 Wall Seep during the reporting period.  Seepage from the Cell 2 Spillway Seep (the spillway before completion of the Cell 2, Stage 4 raise) is collected in a tank at the bottom of the old spillway wall and pumped back into the TSF Cell 2. Similar to Cell 2 Wall Seep, no seepage was present in the tank, therefore no samples were collected from the Cell 2 Seepage Spillway during the reporting period. The Cell 2 Spillway Seep Recovery Bore was not sampled throughout the reporting period due to restricted access during the wet season."
80.c	flow rate of each seep;	4	Full Compliance	MRM TSF Quarterly Report - June 2021 to May 2021 MRM TSF Quarterly Report - June 2021 to August 2021 MRM TSF Quarterly Report - September to November 2021 MRM TSF Quarterly Report - December 2021 - March 2022  MRM Tailings Storage Facility Quarterly Report December 2021 - March 2022 has section 2.2.2. Seepage management, which includes the flow rate of each seep, noting that two of the three locations had no seepage observed.  MRM Tailings Storage Facility Quarterly Report September 2021 - November 2021 sections 3.3.2.1. WMD Seepage and Water Level Observations and 3.3.3. Surprise Creek Interception Trench provide the other seepage rates.  MRM Tailings Storage Facility Quarterly Report December 2021 - March 2022 sections 2.3.2.1. WMD seepage and water level observations and 2.3.3. Surprise Creek Interception Trench provide the other seepage rates.	MRM Tailings Storage Facility Quarterly Report September 2021 – November 2021 section 3.2.2.2 states "During the reporting period, the flowmeter was found to be inaccurate and a replacement has been ordered."  MRM Tailings Storage Facility Quarterly Report December 2021 – March 2022 in section 2.2.2.2 indicates that a faulty flowmeter for the flow rate for Cell 2 old spillway seepage was replaced 25 February 2022.

Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
80.d	all actions undertaken during the quarter associated with the seepage and management of Tailings;	3	Part Compliance (High)	MRM TSF Quarterly Report - March 2021 to May 2021 MRM TSF Quarterly Report - June 2021 to August 2021 MRM TSF Quarterly Report - September to November 2021 MRM TSF Quarterly Report - December 2021 - March 2022	OFI: Monitor overdue Operator TSF actions from the TSF Recommendation Instruction and Action Register to ensure they are closed out satisfactorily.  OBS: DITT to consider if the TSF Recommendation Instruction and Acti Register should identify actions that are overdue (rather than calling them incomplete).
80.e	all actions planned for the next quarter associated with seepage and management of Tailings.	4	Full Compliance	MRM TSF Quarterly Report - March 2021 to May 2021 MRM TSF Quarterly Report - June 2021 to August 2021 MRM TSF Quarterly Report - September to November 2021 MRM TSF Quarterly Report - December 2021 - March 2022  Attachment B - TSF Recommendation Instruction and Action Register of the MRM TSF Quarterly Report - September to November 2021 and MRM TSF Quarterly Report - December 2021 - March 2022 include the actions proposed going forward. Also the MRM TSF Quarterly Report - September to November 2021 and MRM TSF Quarterly Report - December 2021 - March 2022 including the ongoing operational actions in Table 3-3 and Table 2-3 respectively.	
chemical, Geotech	nical and Hydrogeological Assessments and Investigation Drilling Characterisation data from the drilling must be kept and available to the			Appendix V of the EMR 2020 Hydrogeological Drilling and field	No request was made in the audit period from the Minister for
83	Minister on request and reported in the Operator's EMR.	4	Full Compliance	Campaign. June 2021.  Hydrogeological characterisation data was included.	characterisation data from the drilling. Appendix V of the EMR dated June 2021 submitted in August 2021 contained 2020 Hydrogeologica Drilling and field Campaign.  OBS: EMR 2021-2022 does not appear to include all characterisation data from exploration drilling but includes data related to hydrogeological drilling characterisation only.
84	All documentation relating to the investigations undertaken is to be made available to the Department on request.	N/A	Not Applicable		There were no investigations required and therefore no documentat was required to be submitted.
85	On completion of the investigation the disturbances are to be rehabilitated in accordance with the approved MMP and the basis for the proposed adjustment of total security adjustments required under Condition 11, are provided in the annual Unplanned Closure Plan report to the satisfaction of the Department.	4	Full Compliance	Internal DITT memo to Executive Direct Mines from Manager MRM Project subject Vary Authorisation 0059  McArthur River Mining Pty. Ltd McArthur River Mine dated 18 June 2021.  Letter DITT to Operator subject Re: Variation of Authorisation 0059, Unplanned Closure Plan Approval and Security Request dated 18 June 2021.  The internal memo provided by DITT shows that they assess the Unplanned Closure Plan report and associated security adjustments. Specifically related to the exploration domain, DITT identified that the Operator appeared to have included an incorrect assumption related to rehabilitation of previous disturbances associated with exploration works. DITT advised the Operator to address this in subsequent Unplanned Closure Reports (note the total overall security proposed and accepted was still above that determined by DITT and the	DITT advised that the Unplanned Closure Reports are also discussed the technical working group meetings.

disturbance rehabilitated offil holes and the basis for the proposed agultament of total beauthyn accordance with Conditions 10, 1 and 12 to the satisfaction of the Department.  ### International Waste Measurement  f a credibilitation plan.  ### International Waste Measurement of a prediging and Dregge Spoil	Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
Set a rehabilitation report including details regarding the status of disturbance rehabilitation in local and the basis for the proposed of disturbance rehabilitated citin local and the basis for the proposed of disturbance rehabilitated citin local and the basis for the proposed of disturbance rehabilitated in local and the basis for the proposed of disturbance rehabilitated in local and the basis for the proposed of the prop	ploration	The Consideration of the L		Defeate a h		
a rehabilitation report including details regarding the status of distributance rehabilitation drill holes and the basis for the proposed adjustment of total security in accordance with Conditions 10, 11 and 12. to the statisfication of the Department prior to commencement of Conditions 10.  31. A management Plan.  32. Submission to the department of Dridging and Dridge Spoil MAR Not Applicable  33. Management Plan.  34. Not Applicable  35. Professional state of Department prior to commencement of Conditions 20.  36. The Operator did not conduct any dridging in the audit protocial therefore this condition is not been triggered.  37. Not Applicable  38. Professional throughout the Plant by the Department prior to commencement of Conditions 20.  39. Description and the Plant by the Department prior to commencement of Conditions 20.  39. Description and the Plant by the Department prior to commencement of Conditions 20.  39. Description and the Plant by the Department prior to commencement of Conditions 20.  39. Description and the Plant by the Department prior to commencement of Conditions 20.  39. Description and the Plant by the Department prior to commencement of Conditions 20.  39. Description and the Plant by the Department prior to commencement of Conditions 20.  39. Description and the Plant by the Department prior to commencement of Conditions 20.  39. Description and the Plant by the Department prior to commencement of Conditions 20.  39. Description and the Plant by the Department prior to commencement of the Conditions 20.  39. Description and the Plant by the	86	The Operator must ensure that:				
The Operator was tensure the non-mineral waste facility, landfill or equivalent previously in use is rehabilitated following approval by the programment of a rehabilitation plan.  For one Confidency Reviously in use is rehabilitated following approval by the programment of a rehabilitation plan.  For one Confidency Reviously in use is rehabilitated following approval by the plan by the Department of a Predging and Dredge Spoil  All administration of the department of a Dredging and Dredge Spoil  NA Not Applicable  Programment of a Dredging activities at the Bing Bong Port Facility are authorised, subject to  Submission to the department of a Dredging and Dredge Spoil  NA Not Applicable  Programment Plan  The Operator did not conduct any dredging in the audit period an therefore this conditions in or the entire program.  NA Not Applicable  The Operator submitted a revised AMP 13 Nov2021.  The Operator submitted and revised AMP 23 Nov2021.  The Operator submitted and revised AMP 38 Nov2021.  The Operator submitted a revised AMP 13 Nov2021.  The Operator submitted and revised AMP 23 Nov2021.  The Operator submitted in the AMP by the Operator and approval is relevant to a separate condition so DUTT is a drafted a response however this was not sent during the audit period.  The Operator submitted to the AMP by the Operator and Ample on the AMP submitted the Amended Adaptive Management Plun (November 2021).  The Operator s	86.d	disturbance rehabilitated drill holes and the basis for the proposed adjustment of total security in accordance with Conditions 10, 11 and	N/A			No rehabilitation report was required as no final rehabilitation of dri holes has been required.
general to a first explaination of the date of authorisation of the Operator and a page of the Condition 45.  94 a The revised AMP must:  address the comments from the Independent Monitor or independent third party avites of the Graft AMP and ensuring compliance with Condition 45.  94 a De consistent with the AMP required under the Waste Management Plan (November 2021).  95 be consistent with the AMP required under the Waste Management and Pollution Control Act 1999.  96 be consistent with the AMP required under the Waste Management Plan (November 2021).  97 be consistent with the AMP required under the Waste Management Plan (November 2021).  98 be consistent with the AMP required under the Waste Management Plan (November 2021).  99 be consistent with the AMP required under the Waste Management Plan (November 2021).  99 be consistent with the AMP required under the Waste Management Plan (November 2021).  99 be consistent with the AMP required under the Waste Management and Pollution Control Act 1999.  90 be consistent with the AMP required under the Waste Management Plan (November 2021).  90 be consistent with the AMP required under the Waste Management Plan (November 2021).  90 be consistent with the AMP required under the Waste Management Plan (November 2021).  90 be consistent with the AMP required under the Waste Management and Pollution Control Act 1999.  91 be consistent with the AMP required under the Waste Management Plan (November 2021).  92 be consistent with the AMP required under the Waste Management Plan (November 2021).  92 be consistent with the AMP required under the Waste Management and Pollution Control Act 1999.  92 be consistent with the AMP required under the Waste Management and Pollution Control Act 1999.  93 be consistent with the AMP required under the Waste Management and Pollution Control Act 1999.  94 be consistent with the AMP required under the Waste Management and Pollution Control Act 1999.  95 be consistent with the AMP required under the Waste Management and Pollution Control A	n-mineral Waste Ma					
91. a Summission to the department of a Dredging and Dredge Spoil NA Not Applicable Summission to the department of a Dredging and Dredge Spoil NA Not Applicable Summission to the department prior to commencement of dredging.  91. b approval of the Plan by the Department prior to commencement of dredging.  With 12 months of the date of authorisation of the Overburden Management Project, the Operator must submit a revised AMP as required under Conditions 45.  93. The Operator submitted a revised AMP 13 Nov2021.  With 12 months of the date of authorisation of the Overburden Management Project, the Operator must submit a revised AMP as required under Conditions 45.  4 Full Compliance Submitted a response however this was not sent during the audit period.  This condition is about submission of the AMP by the Operator and approval is relevant to a separate condition so DITT is considered compliant.  Part address the comments from the Independent Monitor or independent With Condition 45:  Pull Compliance Submitted the Amended Adaptive Management Plan (November 2021).  Pull Compliance Submitted the Amended AMP complied with this condition in the AMP required under the Waste Management and Pollution Control Act 1998 and Environment Protection and Bodiversity Conservation Act 1999;  Be consistent with the AMP required under the Waste Management Plan (November 2021).  Pull Compliance Submitted the Amended AMP complied with this condition.  The AMP is the same document that is submitted to DEPWS under the Will although appendicts submitted are not obtained to DEPWS. The AMP is the same document that is submitted to DEPWS. The AMP is the same document that is submitted are not obtained to DEPWS. The AMP is the same document that the requirements of this condition.  Pull Compliance Submitted are not submitted to DEPWS. The AMP is the same document that is submitted are not obtained to DEPWS. The AMP is the same document that the requirements of this condition.	88	equivalent previously in use is rehabilitated following approval by the	N/A	Not Applicable		The non-mineral waste facility/landfill remains in use.
91. to: 91. submission to the department of a Dredging and Dredge Spoil Management Plan: 91. submission to the department of a Dredging and Dredge Spoil Management Plan: 92. Not Applicable Within 12 months of the date of authorisation of the Overburden Management Project. the Operator must submit a revised AMP as required under Conditions 45.  93. The Operator submitted a revised AMP 13 Nov2021.  DITT has drafted a response however this was not sent during the audit period.  The Operator submitted two iterations of the AMP as stated below which compiles with the 22-month timeframe under Condition as approval is relevant to a separate condition as possible of the AMP by the Operator and approval is relevant to a separate condition so DITT is considered compliant.  94. The revised AMP must:  86. Pull Compliance  Address the comments from the independent Monitor or independent third party review of the draft AMP and ensuring compliance with Condition 45;  94. Full Compliance  4 Full Compliance  4 Full Compliance  Full Compliance  4 Full Compliance  5 Pull Compliance  4 Full Compliance  4 Full Compliance  5 Pull Compliance  4 Full Compliance  5 Pull Compliance  6 Pull Compliance  6 Pull Compliance  6 Pull Compliance  7 Pull Compliance  8 Pull Compliance  9 Pull Pull Pull Pull Pull Pull Pull Pul	g Bong Loading Fac	ility				
91.3 submission to the department of a Dredging and Dredge Spoil N/A Not Applicable  91.b approval of the Plan by the Department prior to commencement of dredging.  91.b approval of the Plan by the Department prior to commencement of dredging.  91.b Not Applicable  92.b Not Applicable  93. The Operator submitted a revised AMP 13 Nov2021.  94. Full Compliance  95. The Operator submitted a revised AMP 13 Nov2021.  96. The revised AMP must:  97. The Operator submitted a revised AMP 13 Nov2021.  98. The revised AMP must:  99. The revised AMP and ensuring compliance with Condition 45;  99. The revised AMP and ensuring compliance with Condition 45;  99. The revised AMP and ensuring compliance with Condition 45;  99. The revised AMP and ensuring compliance with Condition 45;  99. The revised AMP required under the Waste Management and Pollution Control Act 11999;  99. The AMP and ensuring compliance with the AMP required under the Waste Management and Pollution Control Act 11999;  99. The revised AMP provision of the AMP and ensuring compliance with the AMP required under the Waste Management and Pollution Control Act 11999;  99. The revised AMP provision of the AMP required under the Waste Management and Pollution Control Act 11999;  99. The revised AMP must be apparated to a separate condition as DITT is considered compliant.  99. The revised AMP must be apparated condition as DITT is considered compliant.  99. The revised AMP must be apparated to a separate condition as DITT is considered and approval is relevant to a separate condition as DITT is considered compliant.  99. The revised AMP must be apparated to a separate condition as DITT is considered and approval is relevant to a separate condition as DITT is considered to a separate condition as DITT i	91					
91.b approval of the Plan by the Department prior to commencement of dredging.  Within 12 months of the date of authorisation of the Overburden Management Project, the Operator must submit a revised AMP as required under Conditions 45.  Pull Compliance  93 The revised AMP must:  address the comments from the Independent Monitor or independent third party review of the draft AMP and ensuring compliance with Condition 45;  94.a Be consistent with the AMP required under the Waste Management and Pollution Control Act 1999;  94.b Be consistent with the AMP required under the Waste Management and Pollution Control Act 1999;  95. Full Compliance  Pull Compliance  N/A  Not Applicable  The Operator submitted a revised AMP 13 Nov2021.  DITT has drafted a response however this was not sent during the audit period.  This condition is about submission of the AMP by the Operator and approval is relevant to a separate condition so DITT is considered compliant.  Waster to subcondition.  RRM submitted the Amended Adaptive Management Plan (November 2021).  DITT draft response prepared however correspondence was not finalised during the audit period.  Pull Compliance  Pull Compliance  Full Compliance  Full Compliance of Full Compliance with the AMP required under the Waste Management and Pollution Control Act 1999 and Environment Protection and Biodiversity Conservation Act 1999;  Pull Compliance of Full Compliance of Pollution Control Act 1999 and Environment Protection and Biodiversity Conservation Act 1999;  Pull Compliance of Full Compliance of Pollution Control Act 1999 and Environment Protection and Biodiversity Conservation Act 1999;  Pull Compliance of Full Compliance of Pollution Control Act 1992 and Environment Protection and Environment Protection and Pollution Control Act 1992.  Pull Compliance of Pollution Control Act 1993 and Environment Protection and Environment Prot	91.a	submission to the department of a Dredging and Dredge Spoil	N/A			The Operator did not conduct any dredging in the audit period and therefore this condition has not been triggered.
Within 12 months of the date of authorisation of the Overburden Management Project, the Operator must submit a revised AMP as required under Conditions 45.  4 Full Compliance Full Compliance Part of the AMP of AMP of AMP of Americal Part of the AMP of Americal Part of the Management Plan (November 2021).  The revised AMP must:  Pull Compliance Part of the date of authorisation of the AMP as stated below which compliant in the full period.  Refer to subconditions a sparrate condition so DITT is considered compliant.  Pull Compliance Part of the full compliance with Condition 45:  Pull Compliance Part of the date of authorisation of the AMP as stated below which compliants with the 12-month timeframe under Condition 93	91.b	approval of the Plan by the Department prior to commencement of	N/A	Not Applicable		The Operator did not conduct any dredging in the audit period and
Management Project, the Operator must submit a revised AMP as required under Conditions 45.  4 Full Compliance  Full Compliance  Full Compliance  Full Compliance  This condition is about submission of the AMP by the Operator and approval is relevant to a separate condition so DITT is considered compliant.  Provided AMP must:  Refer to sub conditions  Address the comments from the independent Monitor or independent third party review of the draft AMP and ensuring compliance with Condition 45;  Pull Compliance  Full Compliance  F	ptive Management					
address the comments from the Independent Monitor or independent third party review of the draft AMP and ensuring compliance with (November 2021).  MRM submitted the Amended Adaptive Management Plan (November 2021).  DITT draft response prepared however correspondence was not finalised during the audit period.  The draft response indicated that the amended AMP complied with this condition.  The AMP is the same document that is submitted to DEPWS under the WDL although some appendices (e.g., Rehabilitation Plan) are not relevant to the WDL and therefore not submitted to DEPWS. The AMP is therefore consistent (although appendices submitted are not identical) and compliant with the requirements of this condition.  Pull Compliance  The AMP is the same document that is submitted to DEPWS under the WDL although some appendices (e.g., Rehabilitation Plan) are not identical) and compliant with the requirements of this condition.  Pull Compliance  The AMP is the same document that is submitted to DEPWS. The AMP is the reference to waste Management and Pollution Control Act 1992.  Future item. Independent Monitor review of AMP planned for late.	93	Management Project, the Operator must submit a revised AMP as	4	Full Compliance	DITT has drafted a response however this was not sent during the audit period.  This condition is about submission of the AMP by the Operator and approval is relevant to a separate condition so DITT is considered	which complies with the 12-month timeframe under Condition 93: <ul> <li>Amended AMP (version: 31 March 2021, AMP-C) and supporting information - submitted 23 June 2021</li> <li>Amended AMP (version: 1 October 2021, AMP-D) and supporting</li> </ul>
third party review of the draft AMP and ensuring compliance with Condition 45;  94.a  be consistent with the AMP required under the Waste Management and Pollution Control Act 1998 and Environment Protection and Biodiversity Conservation Act 1999;  be reviewed by a Department approved independent third-party at the be reviewed by a Department approved independent third-party at the N/A Not Applicable  (November 2021).    (November 2021).   DITT draft response prepared however correspondence was not finalised during the audit period.  The draft response indicated that the amended AMP complied with this condition.  The AMP is the same document that is submitted to DEPWS under the WDL although some appendices (e.g., Rehabilitation Plan) are not relevant to the WDL and therefore not submitted to DEPWS. The AMP is therefore consistent (although appendices submitted are not identical) and compliant with the requirements of this condition.    OBS: Reference to Waste Management and Pollution Control Act 1992 is therefore consistent (although appendices submitted to DEPWS. The AMP is therefore consistent (although appendices submitted are not identical) and compliant with the requirements of this condition.    Putter item. Independent Monitor review of AMP planned for late	94	The revised AMP must:				
be consistent with the AMP required under the Waste Management and Pollution Control Act 1998 and Environment Protection and Biodiversity Conservation Act 1999;  4 Full Compliance  Be reviewed by a Department approved independent third-party at the Space of the Waste Management and Pollution Control Act 1998 and Environment Protection and the WDL although some appendices (e.g., Rehabilitation Plan) are not relevant to the WDL and therefore not submitted to DEPWS. The AMP is therefore consistent (although appendices submitted are not identical) and compliant with the requirements of this condition.  Future item. Independent Monitor review of AMP planned for late	94.a	third party review of the draft AMP and ensuring compliance with	4	Full Compliance	(November 2021).  DITT draft response prepared however correspondence was not finalised during the audit period.  The draft response indicated that the amended AMP complied with	
94 c   N/A   Not Applicable	94.b	and Pollution Control Act 1998 and Environment Protection and	4	Full Compliance	The AMP is the same document that is submitted to DEPWS under the WDL although some appendices (e.g., Rehabilitation Plan) are not relevant to the WDL and therefore not submitted to DEPWS. The AMP is therefore consistent (although appendices submitted are not	
	94.c		N/A	Not Applicable		Future item. Independent Monitor review of AMP planned for late

Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
94.d	be approved by the Minister;	3	Part Compliance (High)	MRM submitted the Amended Adaptive Management Plan (November 2021).  DITT draft response prepared however correspondence was not finalised during the audit period.	OFI: Refer to Condition 22.
94.e	once approved, be implemented in full.	N/A	Not Applicable		The AMP was approved August 2022 (after the audit period).
95	Any material changes to the AMP required by Condition 94 must be reapproved by the Minister.	N/A	Not Applicable		The AMP submitted as part of the OMP submission was approved 13Nov2020. The updated AMP was approved August 2022 (after the audit period).
e Closure					
96	From the date of authorisation of the Overburden Management Project, the Operator must submit an updated Mine Closure Plan with each MMP that builds upon the closure concepts defined in the Overburden Management Project.	N/A	Not Applicable		Mine Closure Concepts are included in the OMP. No MMP was submitted in the audit period so this condition is not triggered.
97	The Mine Closure Plan required under Condition 96 must:		Refer to sub conditions		
97.a	detail how key mine domains will be rehabilitated to achieve the Overburden Management Project closure objectives;	N/A	Not Applicable		No MMP was submitted in the audit period so condition 96 is not triggered and therefore the Mine Closure Plan has not been prepared
97.b	address outcomes of the reviews by independent technical and closure panels in accordance with Condition 21 with respect to mine closure;	N/A	Not Applicable		No MMP was submitted in the audit period so condition 96 is not triggered and therefore the Mine Closure Plan has not been prepare
97.c	incorporate relevant outcomes from rehabilitation trials defined in Condition 89.	N/A	Not Applicable		No MMP was submitted in the audit period so condition 96 is not triggered and therefore the Mine Closure Plan has not been prepare
98	Five years prior to the planned closure of the mine, the Operator must:		Refer to sub conditions		
98.a	finalise the Mine Closure Plan required under Condition 96;		-		Provided for context.
98.b	submit to the Department the plan for approval by the Minister;	N/A	Not Applicable		Not triggered as not required until five years before planned closure the mine.
98.c	following approval, the Mine Closure Plan must be implemented by the Operator in full.	N/A	Not Applicable		Not triggered as not required until five years before planned closure the mine.
planned Mine Closu					
99	From the date of authorisation of the Overburden Management Project, the Operator must annually submit to the Department an Unplanned Mine Closure Plan on or before 31 August, starting 2021, to the Department, which is accompanied by a related security estimate.	4	Full Compliance	Internal DITT memo to Executive Director Mines from Manager MRM Project subject Vary Authorisation 0059 McArthur River Mining Pty. Ltd McArthur River Mine dated 18Jun2021. Letter Operator to DITT subject Re: McArthur River Mine – Updated Unplanned Closure Plan and Independent Security Assessment dated 31Aug2021. DITT Spreadsheet MRM Security Calculation Comparison 2022 vs. 2021 Internal DITT memo subject Vary Authorisation 0059 McArthur River Mining Pty. Ltd McArthur River Mine dated 18 June 2021 shows that DITT assessed the Operator's revised security.	audit period). Operator changed to requesting a three year approval inclusion of Unplanned Closure to provide more surety around the approval timing to not disrupt operations. Assessment undertaken by Phronis Consulting.

Authorisation Co	mpliance Workbook - DITT Audit period 01 May 2021 to				
Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
SCHEDULE C - Indepen	dent Monitoring Assessment Conditions				
Schedule C - 1	The purpose of the McArthur River Mine – Independent Monitoring Assessment Conditions" is to establish and set out the operational requirements for an independent monitoring assessment of the environmental performance of the Mine.		-		
Schedule C - 2	These Conditions may be cited as the "McArthur River Mine – Independent Monitoring Assessment Conditions".		-		
Schedule C - 3	The purpose of these Conditions is to establish and set out the operational requirements for an independent monitoring assessment of the environmental performance of the Mine.		-		
Schedule C - 4	The Department will engage an Independent Monitor to undertake the independent monitoring assessment.	4	Full Compliance	Notification of Independent Monitor services acceptance letter 11Dec2019 DITT to Advisian (before the audit period).	
Schedule C - 5	The Operator and the Department acknowledge that this independent monitoring assessment is in addition to their respective obligations and statutory responsibilities in relation to the Mine.	4		The Independent Monitor was advised of this verbal understanding from DITT that this condition is acknowledged.	
Schedule C - 6	The Independent Monitor will:		Refer to sub conditions		
Schedule C - 6.a	monitor the environmental performance of the Mine by reviewing:		Refer to sub conditions		
Schedule C - 6.a.i	environmental assessments and monitoring activities undertaken by the Operator; and		-		
Schedule C - 6.a.ii	environmental assessments and audits undertaken by the Department; and	4	Full Compliance	period. DITT advised the Operator of the appropriateness of remedial action undertaken when matters were discussed with the Operator at TWG. Incidents did not result in off site environmental impacts.	
Schedule C - 6.b	report to the Operator and the Department any urgent issues requiring investigation and reporting.	N/A	Not Applicable		Note: no urgent issues have been identified by the Independent Monitor as to date.
Schedule C -7	The Independent Monitor will not review:		-		
Schedule C -7.a	Mine safety; or		<u>-</u>		
Schedule C -7.b	social issues arising from the operation of the Mine in the McArthur River Region.		-		
Schedule C - 8	The Department will engage an Independent Monitor in accordance with its procurement processes.	4	Full Compliance		Engagement of the Independent Monitor occurred before the audit period.
Schedule C - 9	The Independent Monitor may be (in order of preference):  a. an environmental or mining agency in another jurisdiction in Australia; or  b. a university having the necessary expertise; or  c. an environmental consultant have the necessary expertise, relevant experience and the necessary resources.	4	Full Compliance		Note: Independent Monitor appointed is option c.

Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
Schedule C - 10	Prior to advertising a tender seeking to engage an Independent Monitor, the Department must provide the Operator with a copy of the proposed tender documentation, including:	N/A	Not Applicable		Engagement of the Independent Monitor occurred before the audit period.
Schedule C - 10.a	the Conditions of tendering; and	N/A	Not Applicable		Engagement of the Independent Monitor occurred before the audit period.
Schedule C - 10.b	the scope of services; and	N/A	Not Applicable		Engagement of the Independent Monitor occurred before the audit period.
Schedule C - 10.c	the assessment criteria; and	N/A	Not Applicable		Engagement of the Independent Monitor occurred before the audit period.
Schedule C - 10.d	the Conditions of contract.	N/A	Not Applicable		Engagement of the Independent Monitor occurred before the audit period.
Schedule C - 11	The Operator may, within 14 days of receiving the proposed tender documentation, provide comment on the proposed documentation to the Department and the Department must consider any comments provided by the Operator on the proposed documentation prior to advertising the tender.	N/A	Not Applicable		Engagement of the Independent Monitor occurred before the audit period.
Schedule C - 12	The Department must provide the Community with an opportunity to provide submissions on the engagement of the Independent Monitor and the Department must consider any submissions provided by the Community on the engagement of the Independent Monitor prior to advertising the tender.	N/A	Not Applicable		Engagement of the Independent Monitor occurred before the audit period.
Schedule C - 13	The terms of engagement of the Independent Monitor may include the following:		Refer to sub conditions		
Schedule C - 13.a	a period of engagement between three and five years;	N/A	Not Applicable		
Schedule C - 13.b	a statement acknowledging that the Operator is responsible for the costs of the Independent Monitor;	N/A	Not Applicable		Engagement of the Independent Monitor occurred before the audit period.
Schedule C - 13.c	a warranty by the Independent Monitor that it will:		Refer to sub conditions		
Schedule C - 13.c.i	act independently of the Department, the Operator, the Minister and any other person; and	N/A	Not Applicable		Engagement of the Independent Monitor occurred before the audit period.
schedule C - 13.c.ii	act honestly, reasonably and with the degree of professional care, knowledge, experience, skill and diligence which may reasonably be expected; and	N/A	Not Applicable		Engagement of the Independent Monitor occurred before the audit period.
chedule C - 13.c.iii	act within the time prescribed under these Conditions, the terms of engagement, or where no time is prescribed, within a reasonable time; and	N/A	Not Applicable		Engagement of the Independent Monitor occurred before the audit period.
chedule C - 13.c.iv	immediately notify the Department in writing upon becoming aware of the existence or possibility of a conflict of interest;	N/A	Not Applicable		Engagement of the Independent Monitor occurred before the audit period.
Schedule C - 13.d	an obligation on the Independent Monitor to keep all information provided to the Independent Monitor confidential.	N/A	Not Applicable		Engagement of the Independent Monitor occurred before the audit period.
Schedule C - 14	If the Independent Monitor requires an indemnity, the Operator must enter into a binding agreement providing a reciprocal indemnity to the Department.	N/A	Not Applicable		None requested by Independent Monitor.

Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
Schedule C - 15	The Department must notify the Operator of the appointment of the Independent Monitor and must provide the Operator with a copy of the terms of engagement.	N/A	Not Applicable		Engagement of the Independent Monitor occurred before the audit period.
Schedule C - 16	The Operator and the Department must not interfere or attempt to influence the Independent Monitor in its assessment of environmental performance under these Conditions.	4	Full Compliance		The Operator and the Department have not interfered or attempted to influence the Independent Monitor.
Schedule C - 17	The Operator and the Department must each:		Refer to sub conditions		
Schedule C - 17.a	cooperate with the Independent Monitor; and	4	Full Compliance		Very high level of cooperation from DITT in assisting the Independent Monitor.
Schedule C - 17.b	provide all necessary information and documents within their possession, custody or control to the Independent Monitor; and	4	Full Compliance		All requests for information have been responded to promptly to provide the relevant documentation requested.
Schedule C - 17.c	procure for the Independent Monitor access to such premises owned, leased, or licensed by it as may be reasonably necessary,	4	Full Compliance		Independent Monitor workshops and meeting conducted at DITT's Darwin office on 16 and 17 June 2022.
Schedule C - 17.d	to enable the Independent Monitor to undertake its assessment of environmental performance under these Conditions.	4	Full Compliance		DITT has facilitated and assisted the Independent Monitor to undertak its assessment of environmental performance against Authorisation Conditions.
Schedule C - 18	The Independent Monitor must engage with the Operator, the Department and the Community in undertaking the independent monitoring assessment.	4	Full Compliance		Independent Monitor face to face consultation with Borroloola community facilitated by local NT business.
Schedule C - 19	If the Independent Monitor identifies an issue it considers requires urgent investigation and reporting:		Refer to sub conditions		
Schedule C - 19.a	the Independent Monitor must advise the Operator and the Department of the issue as soon as practicable and may include recommendations as to action to be taken; and	N/A	Not Applicable		No issues were identified by the Independent Monitor.
Schedule C - 19.b	the Operator must consider the advice, and any recommendations, from the Independent Monitor and notify the Department and the Independent Monitor of the action the Operator proposes to take; and	N/A	Not Applicable		No issues were identified by the Independent Monitor.
Schedule C - 19.c	the Department may, where appropriate, advise the Operator and the Independent Monitor of action the Department proposes to take; and	N/A	Not Applicable		No issues were identified by the Independent Monitor.
Schedule C - 19.d	the Independent Monitor may provide further advice to the Operator, and where appropriate the Department, regarding the proposed action and the Operator and the Department must consider the further advice; and	N/A	Not Applicable		No issues were identified by the Independent Monitor.
Schedule C - 19.e	if, after providing further advice, the Independent Monitor is not satisfied with the proposed action, the Independent Monitor may notify the Operator and the Department of the Independent Monitor's intention to undertake its own investigation and report; and	N/A	Not Applicable		No issues were identified by the Independent Monitor.
Schedule C - 19.f	the Operator and the Department must facilitate the Independent Monitor's investigation and report.	N/A	Not Applicable		No issues were identified by the Independent Monitor.
Schedule C - 20	The independent monitoring assessment is to be conducted, where practical, in a manner that complements the existing annual environmental assessment and audit processes undertaken by the	N/A	Not Applicable		The audit period aligns with the Operator's EMR dates and the AEPAR will be provided in the same calendar year as the EMR.

Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
Schedule C - 21	The Independent Monitor must prepare and provide a report:		Refer to sub conditions		
Schedule C - 21.a	annually to the Minister to assist with the review of the Mining Management Plan; and	N/A	Not Applicable		The AEPAR fulfills this condition.
Schedule C - 21.b	on request by the Minister.	N/A	Not Applicable		Future item. No request made by the Minister to date.
Schedule C - 22	The Minister must provide a report received from the Independent Monitor to the Operator and the Department within 14 days of receiving the report.	4	Full Compliance	Minister for Mining and Industry sent correspondence seeking feedback on the Independent Monitor report (AEPAR) from the Operator and DITT 12 days after receiving the report.	
Schedule C - 23	The Independent Monitor must prepare an additional report in a form suitable for distribution to the Community.	4	Full Compliance	Annual Report Card summarising the Independent Monitor findings was submitted to the Minister on 16Mar2022.	
Schedule C - 24	The Operator and the Department acknowledge that the report from the Independent Monitor will be made publicly available (including publication on an appropriate internet site) and may include data used in the preparation of the report.	4	Full Compliance	Independent Monitor Report (AEPAR) made publicly available by posting on DITT website (viewed by Independent Monitor on 14Jul2022). https://industry.nt.gov.au/publications/mining-and-energy/public-environmental-reports/mining/mcarthur-river-independent-monitor	Full copies of the AEPAR 2021 and appendices (audit data) and ARC (summary report) are published on the DITT website.  The correspondence from the Minister for Mining and Industry to the Operator advised that documents would be uploaded to the internet and DITT's and the Operator's response to the correspondence did not raise concerns.
Schedule C - 25	Prior to being made publicly available, the Minister must request from the Operator and the Department any comments on the Independent Monitor's report. Such comments must be provided within 28 days of the Minister's request and must be made publicly available with the Independent Monitor's report.	4	Full Compliance	DITT provided a written response to the Minister on 20Apr2022.	Request from the Minister on 28Mar2022 and response from Operator on 5Apr2022 and DITT 20Apr2022 were within 28 days from the reques
Schedule C - 26	The Operator acknowledges that it is responsible for all costs of the independent monitoring assessment other than those costs directly attributable to those elements of the independent monitoring assessment associated with Condition 21(b)) which are the responsibility of the Department.	n/a	Not Applicable		Nothing has been triggered under condition 21.b.
Schedule C - 27	The Department may provide to the Operator, from time to time, a notice setting out amounts due and payable under the terms of the engagement of the Independent Monitor.	4	Full Compliance	DITT issued invoices to the Operator for reimbursement of expenses incurred by the department in the administration of contract D19-0053 for Independent Monitor Services.	
Schedule C - 28	The Operator must pay an amount notified in accordance with Condition 27 within seven (7) days of receiving such notice.	4	Full Compliance	The operator made payment against DITT invoices consistent with NTG procurement timeframes.	OBS: DITT invoices require payment in a month rather than within sever days of receipt as stated in this condition.
Schedule C - 29	If the Operator disputes a notice provided by the Department under Condition 27:		Refer to sub conditions		
Schedule C - 29.a	the Operator must pay the amount specified in the notice in accordance with Condition 28; and	N/A	Not Applicable		No disputes in the audit period.
Schedule C - 29.b	the Operator must notify the Department in writing within 14 days of receiving the notice, setting out the reasons why the Operator disputes the notice; and	N/A	Not Applicable		No disputes in the audit period.
Schedule C - 29.c	the Chief Executive of the Operator and the Chief Executive of the Department must meet within five (5) working days to resolve the dispute.	N/A	Not Applicable		No disputes in the audit period.

Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022 Comments 2022	
Condition No.	If there is a dispute (other than a dispute mentioned in Condition 29)		Level	No disputes in the audit period.	
Schedule C - 30	between the Operator and the Department as to any matter or thing arising out of these Conditions (the "Dispute"), the party claiming that a Dispute has arisen must notify the other party to the Dispute and the Chief Executive of the Operator, the Chief Executive of the Department and the Independent Monitor must meet within five (5) working days to resolve the Dispute.	N/A	Not Applicable	ino disputes in the addit period.	
Schedule C - 31	If the Chief Executive of the Operator, the Chief Executive of the Department and the Independent Monitor are unable to resolve a Dispute within ten (10) working days of meeting in accordance with Condition 30, the Operator and the Department may agree to the appointment of an independent party to assist in the resolution of the Dispute.	N/A	Not Applicable	No disputes in the audit period.	
Schedule C - 32	If, within five (5) working days of either the Operator or the Department nominating a person to be the independent party, no agreement is reached as to who is to be appointed as the independent party, either the Operator, the Department or both may refer the matter to the President of the Law Society of the Northern Territory.	N/A	Not Applicable	No disputes in the audit period.	
Schedule C - 33	The President of the Law Society Northern Territory may nominate a person to be the independent party and the parties to the Dispute are bound to accept the appointment of that person.	N/A	Not Applicable	No disputes in the audit period.	
Schedule C - 34	The role of the independent party is to assist in negotiating a resolution of the Dispute and the independent party cannot make a decision that is binding on either the Operator or the Department.	N/A	Not Applicable	No disputes in the audit period.	
Schedule C - 35	The Operator and the Department must make available to the independent party all materials requested by it and must provide the independent party with all other materials relevant to the Dispute.	N/A	Not Applicable	No disputes in the audit period.	
Schedule C - 36	The Operator and the Department must:		Refer to sub conditions		
Schedule C - 36.a	Bear their own costs of resolving the Dispute under this Condition; and	N/A	Not Applicable	No disputes in the audit period.	
Schedule C - 36.b	Bear equally the costs of any independent party engaged.	N/A	Not Applicable	No disputes in the audit period.	
CHEDULE D - ENVIRO	NMENTAL MONITORING AND MANAGEMENT			No. 10 to 10	washad da ta st
Schedule D - 1	If the Operator establishes a new surface water monitoring location, a written notice of the location (in GDA 94 format) and nature of the monitoring must be given to the Department within 30 days of its establishment.	N/A	Not Applicable	No new surface water monitoring locations were req audit period.	uested during th
Schedule D - 2	The Operator must maintain continuous monitoring having regard to:		Refer to sub conditions		
Schedule D - 2.a	devices installed at the following locations:		-	Provided for context	
Schedule D - 2.a.i	SW29 (upstream Surprise Creek outside the zone of influence of TSF);		-	Provided for context	
Schedule D - 2.a.ii	SCGS (Surprise Creek gauge station between the TSF and the Mine);		-	Provided for context	
Schedule D - 2.a.iii	SW30 (upstream Emu Creek);		-	Provided for context	
Schedule D - 2.a.iv	USGS (upstream at the McArthur River gauge station);		-	Provided for context	

Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
Schedule D - 2.a.v	BCGS (upstream at the Barney Creek gauge station);		-		Provided for context
Schedule D - 2.a.vi	SW12 (immediately downstream of the Mine capturing outflow from Emu Creek, Barney Creek, drainage lines from SEPROD, Old McArthur River Channel and the McArthur River diversion channel but before the Glide River joins the McArthur River channel);		-		Provided for context
Schedule D - 2.b	devices must at a minimum measure electrical conductivity, and may measure additional parameters such as pH;		-		Provided for context
Schedule D - 2.c	the Operator must from 30 August 2017 include data from these devices in data submission under Condition 7 of Schedule A.	4	Full Compliance	Email submission received for Q2 2021 data - dated 16Aug2021  Continuous data, where available, was supplied by the Operator.	Department not advised by Operator of any continuous monitoring that could not be undertaken.
Schedule D - 4	The Operator must ensure groundwater monitoring bores and extraction bores are constructed, maintained and decommissioned in compliance with the document entitled Minimum construction requirements for water bores in Australia published by the National Uniform Drillers Licensing Committee (third edition, February 2012 or a current version of the document). In this regard:		Refer to sub conditions		
Schedule D - 4.a	construction logs and bore location coordinates in GDA 94 format must be available to the Minister on request and provided to the Minister annually in the EMR;	4	Full Compliance	Construction logs and bore location coordinates are included in the EMR 2020-2021.	No construction logs and bore location coordinates were requested by the Minister within the audit period.
Schedule D - 4.b	logs of maintenance activities must be kept available to the Minister on request;	N/A	Not Applicable		No logs of maintenance activities were requested by the Minister within the audit period.
Schedule D - 4.c	logs of bore decommissioning activities must be kept and available to the Minister on request and reported in the Operator's Annual EMR.	4	Full Compliance	Decommissioning activities are included in the EMR 2020-2021.	No logs of decommissioning activities were requested by the Minister within the audit period.
Schedule D - 6	From the date of authorisation of the Overburden Management Project the Operator must undertake monitoring in accordance with the following Environmental Management Plans approved in the MMP:		Refer to sub conditions		DITT not advised of any inability to undertake required monitoring othe than as included in the quarterly data submissions from the Operator.
Schedule D - 6.a	Dust Management Plan;	N/A	Not Applicable	DITT has approved the MMP, which contains an Air Quality Management Plan, not a Dust Management Plan as listed in this condition.	
Schedule D - 6.b	Water Management Plan – surface water, groundwater and fluvial sediments;	4	Full Compliance	Water Management Plan 2020 as part of the AMP submitted with the January 2020 MMP. DITT advised that the Operator's "approved plans with respect to Water Management Plan, has been amended and references to "surface water, groundwater and fluvial sediments" has been omitted". The Authorisation dated 5May2022 addresses this management plan naming inconsistency (after the audit period).  The Department's review of the implementation of the monitoring being in accordance with the Water Management Plan occurs in their review of the EMR.	

Authorisation Co	mpliance Workbook - DITT Audit period 01 May 2021 to				
Authorisation Condition No.	Condition/Requirement	Score	Compliance Level	Evidence 2022	Comments 2022
Schedule D - 6.c	Air Quality;	4	Full Compliance	The Department confirm that this condition relates to the Air Quality Management Plan, including dust. The Authorisation dated 5May2022 addresses this management plan naming inconsistency and refers to the Air Quality Management Plan (after the audit period).  The Department's review of the implementation of the monitoring being in accordance with this plan occurs in their review of the EMR.	
Schedule D - 6.d	Vegetation and terrestrial fauna;	3	Part Compliance (High)	There is no plan with this exact name in the approved MMP.  DITT advised that the Operator's "approved Rehabilitation  Management Plan includes the vegetation and terrestrial fauna plans."  The Authorisation dated 5May2022 addresses this management plan naming inconsistency (after the audit period) by stating Rehabilitation  Management Plan.	No OFI has been prepared as this plan name has been corrected in the more recent Authorisation dated 5May2022.
Schedule D - 6.e	Aquatic fauna;	3	Part Compliance (High)	There is no plan with this name in the approved MMP. DITT advised that the Operator's approved Rehabilitation Management Plan and Water Management Plan include the aquatic fauna plans.  The Authorisation dated 5May2022 addresses this management plan naming inconsistency (after the audit period).  DITT has approved the MMP, which does not contain an Aquatic fauna Management Plan as listed in this condition.	No OFI has been prepared as this plan name has been corrected in the more recent Authorisation dated 5May2022.
Schedule D - 6.f	Heritage and sacred sites.	N/A	Not Applicable		As there is no equivalent plan in the MMP, this is considered not applicable.
Schedule D - 7	Any required material changes to the Environmental Management Plans mentioned in Condition 6 of this Schedule must be approved by the Department in writing.	N/A	Not Applicable		The Authorisation dated 5May2022 addresses the management plan naming inconsistency (after the audit period) and now includes the AMP (that had material changes) and the Unplanned Closure Plan (that had material changes) under condition 6.



Appendix D NT EPA Recommandations Compliance Workbook - DITT

NT EPA	7 2021 to 30 April 2022				
Recommendation No.	NT EPA Recommendation	Score	Compliance Level	2022 Evidence	2022 Comments
1	The Proponent shall ensure that the McArthur River Mine Overburden Management Project is implemented in accordance with all environmental commitments and safeguards:	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 14.	Note: "Confirmed condition in Authorisation 0059 dated 18June21 - Condition 14" text in the evidence column is referring to whether the NT EPA Recommendation was adopted into an Authorisation condition and references the corresponding condition number. This approach is used throughout this NT EPA Recommendations Compliance Workbook - DITT in the evidence column.  In January 2020, as required under Section 41 of the MMA, the Operator submitted for assessment an amended Mining Management Plan (MMP) for the OMP works addressing commitments made in the EIS, the NT EPA recommendations and EPBC Act approval conditions.  DITT completed assessment of the 2020 MMP. Authorisation 0059 issued under section 38 of the MMA on 13Nov2020 approved the 2020 MMP proposing the OMP related activities.  The commitments and safeguards made in relation to the OMP by the Operator and NT EPA in their recommendations were first incorporated as conditions where relevant in Authorisation 0059 issued 15Aug2019 and retained in all subsequent Authorisations.  Future action:  Compliance monitoring will be ongoing. Examples include continuation of health of MacArthur River monitoring, specifically bio-uptake of metals in flora and fauna and NOEF monitoring including infrared to measure heat (west stage with high convective oxidation). Monitoring program reports to be submitted with the EMR annually.
1.i	identified in the final Environmental Impact Statement for the McArthur River Mine Overburden Management Project (draft Environmental Impact Statement, Supplement to the draft Environmental Impact Statement and additional information)	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 14.a).  2022 EMP Appendix B - Reconciliation of Commitments and Actions (incorporating EIS and MMP commitments)	In January 2020, as required under Section 41 of the MMA, the Operator submitted for assessment an amended MMP for the OMP works addressing commitments made in the EIS, the NT EPA recommendations and EPBC Act approval conditions.  EMR 2022 contains Appendix B - Reconciliation of Commitments and Actions to address implementation of EIS and MMP commitments
1.ii	recommended in this Assessment Report 86.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 14.b).	No action for DITT.  TSF, EPROD, CW Charlie basal construction (NT EPA recommended a 0.5m CCL), bridging MMP was approved consistent with NT EPA recommendations before they were officially a requirement/commenced.
1 continued	The Northern Territory Environment Protection Authority considers that all safeguards and mitigation measures outlined in the Environmental Impact Statement are binding commitments made by the Proponent. Where there is an inconsistency between the commitments made by the Proponent and these recommendations, the recommendations will take precedence.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 14.c.  Note: The Authorisation shall prevail, rather than the Recommendations, in the event of an inconsistency.	Inconsistency addressed in condition in Authorisation 0059 dated 18June21 - Condition 14.c). "the most recent Authorisation shall prevail to the extent of any inconsistency".  The role of DITT to ensure actions are not contrary to the NT EPA recommendations and that their intent has been complied with.  Operator commitments are listed in 2022 Environmental Monitoring Report, Appendix B - Reconciliation of Commitments and Actions.
2	The Proponent shall provide written notice to the Northern Territory Environment Protection Authority and the responsible Minister if it alters or proposes to alter the McArthur River Mine Overburden Management Project and/or commitments, safeguards or mitigation measures in the Environmental Impact Statement in such a manner that the environmental significance of the action may have changed, in accordance with clause 14A of the Environmental Assessment Administrative Procedures.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 15.  Situation has not arisen. Would be considered on a case by case basis.	The 2020 MMP has been assessed by DITT and conforms to the NT EPA Recommendations.

## NT EPA Recommendations Compliance Workbook - 2022 Department of Industry, Tourism and Trade (DITT)

Audit Period 1 May 2021 to 30 April 2022
--

NT EPA					
Recommendation No.	NT EPA Recommendation	Score	Compliance Level	2022 Evidence	2022 Comments
3	The Proponent shall ensure that the commitments and safeguards listed in the EIS for the McArthur River Mine Overburden Management Project and recommended in this Assessment Report 86 are implemented in a manner and to the extent that ensures the health of the McArthur River is protected along its whole length at all times from mine related impacts. This is the overarching environmental outcome that is required to be achieved in respect of the Proposal and all future stages of the mine.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 16.  Note: The overarching environmental outcome is not specifically stated in the Authorisation however, the Authorisation contains requirements that contribute to achieving the outcome.	Compliance monitoring will be ongoing. Annual EMR report (latest 31 August 2022) informed by expert consultants engaged by Operator. Experts review and assess the data. EMR comments on how Operator intends to action recommendations and report on monitoring programs. WDL annual return with water quality monitoring reporting requirements also submitted 31 August 2022. DITT reviews previous EMRs to determine if issues have been addressed and if recommendations have been actioned. DITT notifies operator via letter of acceptance (or otherwise) of EMR.
3 continued	To ensure the protection of the McArthur River from mine related impacts, the Proponent shall ensure that the annual loads of lead and zinc discharged to the McArthur River in future years (July to June) do not exceed the loads discharged in 2017-2018, taking into account seasonal variations in rainfall, and subject to future annual load calculations.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 16.b  MRM Mine Derived Analyte Loads criteria for 2017-18 submitted to DITT, email 11:00am 08May20.  EMR 2022 Executive Summary table ES-5 Fluvial Sediments and EMR 2022 Appendix J - 2021 Monitoring of Metals/Lead in Fluvial Sediments and Aquatic Fauna assess performance During the Reporting Period - discusses zinc and lead concentration in fluvial sediment.	The Independent Monitor reviewed the Adaptive Management Plan (AMP) in May 2020 and advised it is appropriate for the current stage of the Project.  DITT will oversee implementation by the Operator of the AMP, in accordance with NT EPA recommendation 28, which allows for management measures and interventions to be adapted if necessary to achieve this overarching environmental outcome.  Related to NT EPA recommendation 27 which refers to a review within nine months following OMP authorisation. AMP review by Independent Monitor scheduled for late 2022.  Future action:  Condition recognises that the AMP will change over time and provides an approval requirement. Compliance monitoring will be ongoing.  Operator submitted loads criteria for 2017-2018 on 08May2020 in response to Condition 38 of the Authorisation. Subsequent annual EMRs, including the current EMR 2022, report against those values.
3 continued	The Proponent shall implement a monitoring program, developed in accordance with Recommendation 13, within six months of authorisation of the Proposal, to the satisfaction of the relevant regulator. The monitoring program shall quantify the annual loads of lead and zinc entering the main channel of the McArthur River and be used to assess whether or not the load limits specified herein have been met. A load summation shall be provided to the Independent Monitor for auditing at three yearly intervals.	3	Part Compliance (High)	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 16.c.  Operator future requirement.  Timeframe for the requirement to prepare a plan for monitoring is stated as 18 months in the OMP Authorisation rather than 6 months as stated in the NT EPA recommendations.	Operator future requirement within 18 months of the authorisation of the OMP.  Timeframe for the requirement to prepare a plan for monitoring is stated as 18 months in the OMP Authorisation rather than 6 months as stated in the NT EPA recommendations.  DITT advises 18 month timeframe is in recognition of adequate time to undertake a quality review including incorporating results from other relevant studies.  Note: no OFI required as Authorisation has set the timeframe
3 continued	The Proponent shall implement an Adaptive Management Plan, to be developed in accordance with Recommendation 28, to allow for management measures and interventions to be adapted if necessary to achieve this overarching environmental outcome.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 16.d.  Operator future requirement.	The Independent Monitor has reviewed the Adaptive Management Plan (AMP) version 31Jan2020 and provided comments 15 May 2020.  Operator future requirement to implement an AMP within 18 months of the authorisation of the OMP (Condition 16.d), which did not fall within in the audit period.  The AMP was updated prior and during the audit period. Pre-audit period, Amended AMP version 31Mar21, AMP-C, submitted to DITT 23 June 21 (updated WDL requirements submitted to DEPWS), and Amended AMP version 01Oct21, AMP -D, submitted to DITT 13 November 2021 with minor changes. Amended AMP (AMP-D) was approved by DITT, letter dated 15 August 2022, outside the audit period.  DITT will oversee implementation by the Operator of the AMP, consistent with NT EPA recommendation 28, which allows for management measures and interventions to be adapted if necessary to achieve this overarching environmental outcome.  DITT reviewed outside of the audit period plus a substantive review by Independent Monitor 15May20. AMP implementation to be reviewed by Independent Monitor in late 2022.

	2021 to 30 April 2022				
NT EPA					
Recommendation	NT EPA Recommendation	Score	Compliance Level	2022 Evidence	2022 Comments
No.					
4	The Proponent shall implement all stages of the Proposal to meet the NT EPA's overarching environmental outcome provided for in Recommendation 3 to the satisfaction of the relevant regulator. In doing so, the Proponent shall ensure:	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 17.	Refer to NT EPA recommendation 13.  The ecotoxicological research and investigation program is complete and the WDL now has amended SSTVs criteria to monitor against.  Amended SSTVs approved by DEPWS 10Mar2022 and WDL174 -13 was issued. Operator submitted an amended AMP incorporating the revised SSTVs to DITT for review on 13Nov2021. DITT approved AMP-D, 15Aug22.
4.i	water quality in the McArthur River meets site-specific trigger values determined in accordance with ANZECC (2000) guidelines at appropriate monitoring locations determined in accordance with Recommendation 13	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 17. a) i.  Monitoring locations in accordance with recommendation 13 are referenced in Condition 17.a).i. and have been incorporated in Condition 27.b). i, ii and iii.	Operator future requirement: within 18 months of the authorisation of the OMP.  Ecotoxicological program completed within 18month of OMP approval, submitted to DITT 25Oct21.  The ecotoxicological program proposed site specific criteria (SSTVs), that have been since approved under WDL174-13 (dated 10Mar22). The Operator submitted an amended AMP incorporating the revised SSTVs to DITT for review on 13Nov2021. DITT approved AMP-D, 15Aug22 including that the AMP-D assessed as meeting the requirements of Schedule D Conditions 6 and 7 - Environmental Management Plans including 6.b. Water Quality Management Plan.
4.ii	creeks on the mine site show long-term improving trends in water quality within 20 years after cessation of mining.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 17. a) ii.	Future item: 20 years after cessation of mining. There is historic data and DITT has the quarterly data that would allow for comparison. Mine closure panel to consider 20 year trend.  EMR 2022 describes Barney Creek and Surprise Creek in similar condition to previous recent year's condition. Barney Creek haul road bridge targeted sediment removal (2021) and TSF interception trench (commissioned 2020) adjacent to Surprise Creek have resulted in water quality monitoring data improvements.
5	Approvals and decisions in relation to the Proposal shall include conditions that require the Proponent to calculate contaminant loads and contaminant concentrations entering creeks and the McArthur River using models that have been regularly reviewed and recalibrated.  Specific assumptions to be tested include but are not limited to:	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 17.iii.	
5.i	groundwater flow paths	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 17.iii.c.i.  Hydrogeological investigations to be undertaken.	Advised by the DITT that the Operator has commissioned additional hydrogeological investigations that will include calculating contaminant loads and contaminant concentrations entering creeks and the McArthur River. The Operator will drill a number of additional bore holes to increase site data and increase certainty around calibration of the model.
5.ii	attenuation of metals from mine-derived wastes.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 17.iii.c.ii.	Advised EPBC conditions has further prescriptive requirements to do studies.
5 continued	Updated modelling shall use suitable site-specific data collected in the monitoring program. Models and modelling outputs, and the data collection programs to inform model updates, shall be reviewed at three year intervals by relevant Independent Panels appointed in accordance with Recommendations 8, 11 and 23, and the outputs used to inform the Adaptive Management Plan, to be developed in accordance with Recommendation 28.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 18.  Future requirement.	Independent Panel responsibility to review models and modelling outputs, and the data collection programs that informed the model development in future. Once accepted or otherwise, information to be incorporated into AMP.  Future requirement as the Independent Panel(s) of experts is yet to be established.  Differences between Departments on whether independent panel should be established for a short period of time (3 year) and disbanded rather than permanent.  Advised that Draft TORs for NOEF and TSF Independent Panels have been prepared and advice prepared for delegate to present to the Minister.

NT EPA	2021 to 30 April 2022				
Recommendation	NT EPA Recommendation	Score	Compliance Level	2022 Evidence	2022 Comments
No.					
6	Approvals and decisions in relation to the Proposal shall include conditions that require an audit to be conducted of the Proponent's Quality Assurance / Quality Control procedures and waste rock identification and handling performance every three years and reported to the relevant Independent Panel and the relevant regulator.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21- Condition 19.  Independent Monitor Audit of Waste Rock Handling Procedures conducted 13-15 June 2022 (note: timing outside the audit period)	Operator future requirement: every three years, triggered by the authorisation of the OMP.  For approval of any OMP-related activities, Operator to prepare and submit an amended MMP under Section 41 of the MMA detailing the QA/QC system implemented for waste rock management.  DITT completed assessment of the MMP, ensuring the proposed QA/QC system for waste rock management meets the requirements of Section 36(5) of the MMA and issue an appropriately conditioned Variation of Authorisation under section 38 of the MMA 13Nov20.  Engineering Review of Northern Overburden Emplacement Facility (NOEF) Independent Certifying Engineer (ICE) Review of Central West Charlie Design Report dated 20Aug2019 states "The design is consistent with the latest approvals that include the OMP EIS NOEF concepts."  For future action: Audit required every three years from issuing of Authorisation 0059 on 18June21.
7	The basal layer of the NOEF foundation shall be constructed with a compacted clay layer of at least 0.5 m thickness to limit seepage to groundwater during construction of the NOEF.			Confirmed condition in Authorisation 0059 dated 18June21 - Condition 20.	For approval of any OMP-related activities, Operator to prepare and submit an amended MMP under Section 41 of the MMA that details the construction details of the NOEF.
ground	groundwater during construction of the Noer.			NOEF CWE ICE Review Letter 23Apr2020	DITT has completed the assessment of the MMP and the proposed NOEF construction and development satisfies regulatory requirements as part of OMP Authorisation 13Nov20.
		4	Full Compliance	Advised DITT assessment structure complies with 0.5m CCL for CENOEF. Independent Monitor Waste Rock Audit site visit (13-15June2022) observed CCL Northern NOEF under construction and geotechnical laboratory materials testing of clay properties. (Note: outside of audit period)	Conditions included in Authorisation 0059 effective from the Authorisation issued on 15Aug2019 specific to the construction of the NOEF. DITT advised that relevant conditions have been in all Authorisations since 12Oct2018.
8	Approvals and decisions in relation to the proposal will include conditions requiring the Proponent to provide funding to establish and			Confirmed condition in Authorisation 0059 dated 18June21 - Condition 21.	Independent Panel of experts, not active during audit period.
	operate a panel of independent experts to:	4	Full Compliance		Planning for Independent Expert Panel establishment underway. Developing a framework for the establishment of the Independent Expert Panels for consultation with relevant government agencies. Final Draft TORs have been prepared for NOEF and TSF panel in August 2022 (outside audit period) and advice prepared for Delegate and awaiting Minister's approval.
8.i	review every three years the outcomes of the Proponent's management program for the NOEF, including the stability, surface condition, internal temperature, reactions and seepage quantity and			Confirmed condition in Authorisation 0059 dated 18June21 - Condition 23.d).ii.	Operator future requirement: within 12 months of the authorisation of the OMP for a NOEF groundwater seepage interception and recovery system report, refer Conditions 22.a) and b).
	characteristics of the NOEF to ensure the overarching environmental outcome can be met			No reference to a requirement to review the NOEF Management Program every three years in the Authorisation.	Operator future requirement: within 24 months of the authorisation of the OMP must submit a NOEF geosynthetic liner cover system plan to the DITT, refer Conditions 23.a) to e), including audit of trial result by the Independent Monitor every three years thereafter. refer Condition 23. d. ii.
		3	Part Compliance (High)	NOEF Independent Panel ToR Final Draft (August 2022, outside the audit period) Secion 2 includes a technical review every three years.	
8.ii	review NOEF runoff and seepage monitoring results, and in particular trends in the contaminant concentrations in groundwater, and leads entering groups and the MeArthur Divor.			Confirmed condition in Authorisation 0059 dated 18June21- Condition 22.a) and b).	Operator future requirement: within 12 months of the authorisation of the OMP for a NOEF groundwater seepage interception and recovery system report, refer Conditions 22.a) and b).
	and loads entering creeks and the McArthur River	4	Full Compliance	NOEF seepage and runoff, contaminate concentrations in groundwater loads reported in 2022 EMR - Appendix R - Groundwater Monitoring Report and Appendix J - Monitoring of Select Analytes & Lead in Fluvial Sediments & Aquatic Fauna.	Operator report advise NOEF interception trench not required until closer to closure. DITT advised they would seek NOEF Independent Panel to review this assessment and provide advice.

NT EPA					
Recommendation No.	NT EPA Recommendation	Score	Compliance Level	2022 Evidence	2022 Comments
8.iii	review the cover trial results, construction quality records, critical controls, stability assessments, cover performance and performance of progressive rehabilitation of the NOEF.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 23.b) and c).  Cover trail 10ha BGM (Bituminous Geomembrane) liner installed on section of southern NOEF batter in late 2021.	Operator future requirement: within 24 months of the authorisation of the OMP must submit a NOEF geosynthetic liner cover system plan to DITT.  DITT advised report on 10ha cover trial due in late 2022.
8 continued	The panel shall provide a report every three years to the relevant regulator and the Independent Monitor and the report made available to the Proponent, government agencies, the Community Reference Group and the public.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 23.d).ii.	Operator future requirement: within 24 months of the authorisation of the OMP must submit a NOEF geosynthetic liner cover system plan to DITT.
8.iv	The panel is to be formed: with an independent chair, appointed by the responsible Minister in consultation with the Minister for Environment and Natural Resources	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 21.  Reference to panel Independent Chair has been removed from Authorisation 13Nov20 and 18Jun21.  Reference to an independent technical expert to chair the NOEF panel appointed by the NT Minister for Mining and Industry in consultation with the NT Minister for Environment is included in NOEF TOR Final Draft, Section 4 - Panel Membership	DITT, with support from the Operator, is managing the process to establish and operate an independent panel of experts.  DITT previously advised this requirement will be captured in the terms of reference for the Independent Panels and has been in NOEF TOR Final Draft version August 2022.
8.v	on the advice of the Department of Environment and Natural Resources, the Department of Primary Industry and Resources, and the Proponent.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 21.	DITT, with support from the Operator, is managing the process to establish and operate an Independent Panel of experts, including developing a Terms of Reference, for NOEF, TSF and mine closure planning. Draft Terms of Reference for NOEF Independent Panel were circulated for comment to DITT, DEPWS, NT EPA and DAWE in July 2021. NOEF Independent Panel TOR Final Draft version August 2022.  Note: Future audit task to check that consultation responses on the formation of the panel have been received from DITT, DEPWS and Operator (2023 audit).
8 continued	Terms of Reference for the panel shall set out the terms for roles and responsibilities, membership, timeframe for commencement and scope, reporting obligations and transparency and accountability. The Terms of Reference shall be finalised by the responsible Minister, in consultation with the Minister for Environment and Natural Resources acting on advice from the NT EPA, within three months of authorisation of the Proposal.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 21.  Reference to terms of reference requirements has been removed from Authorisation 13Nov21 and 18June 21.  No timeframe for the finalisation of the terms of reference contained in the Authorisation.  No timeframe for the commencement for the NOEF independent panel is contained in the Draft Final TOR.  Advised that the Draft ToR for NOEF Independent Panel and TSF Independent Panel have been prepared and advice from the Delegate is with the Minister for approval.  NOEF Independent panel TOR Final Draft includes reference to roles, responsibility, membership, scope, reporting, transparency and accountability.	Draft Terms of Reference for NOEF were circulated for comment to DITT, DEPWS, NT EPA and DAWE in July 2021. NOEF Independent Panel TOR Final Draft version August 2022. Advised Draft ToRs and advice prepared for the Delegate is awaiting Minister approval.  Although there is no timeframe for the establishment of the Independent Panels, the process is taking a long time. Within 12 months of the authorisation of the OMP (i.e. 13Nov2021) a revised Water Management Plan is to be "prepared in consultation with the relevant Independent Panel (C27.d). The WMP has been revised but consultation with the Independent Panel has not. There are other Authorisation requirements for the Panel within 18 months (C17) and 24 months (C23) timeframes from the approval of the OMP that are past due.  OBS: The establishment of the Independent Panel(s) of experts has taken an unduly long time. Not having an Independent Panel in place is now impacting on the ability to fulfil Authorisation conditions where the panel's involvement is a prerequisite.
	The structure of the panel and its Terms of Reference shall be reviewed by the Responsible Minister, in consultation with the Minister for Environment and Natural Resources every six years from the date the Terms of Reference are finalised.	4	Full Compliance	NOEF independent panel TOR Draft Final, Section 7 - Period of Review states TOR shall be reviewed every six years in consultation with the NT Minister for Environment.	Draft Terms of Reference for NOEF were circulated for comment to DITT, DEPWS, NT EPA and DAWE in July 2021. NOEF Independent Panel TOR Final Draft version August 2022.

	2021 to 30 April 2022				
NT EPA					
Recommendation	NT EPA Recommendation	Score	Compliance Level	2022 Evidence	2022 Comments
No.					
9	Approvals and decisions in relation to the Proposal shall include conditions that require the Proponent to implement a groundwater interception and recovery system for the NOEF. The system is to be designed to:	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 22.	Operator requirement: within 12 months of the authorisation of the OMP. Operator's NOEF groundwater interception report has been submitted to the DITT by the due date 13Nov2021.  DITT advised that the Operator has prepared a report proposed in that the NOEF interception trench is not needed until 2067 at the end of pit life when drawdown conditions may change resulting in any proposed NOEF interception trench becoming effective as ground water level shift closer to the ground surface. Proposed to refer report to Independent Panel of experts for assessment to respond to Operator's proposal. Advised report review advice has been drafted for the Delegate.  OBS: Independent Panel not yet established and unable to review the report and provide an assessment on need and timing for NOEF Interception Trench. (Note: Independent Panel review is not an Authorisation requirement)  OBS: Timeliness of DITT's response to Operator's submission of NOEF Groundwater Seepage and Recovery System report (submitted 13Nov21) is unduly slow.  OBS: Timeliness of DITT response to Operator's NOEF Groundwater Seepage and Recovery System report submission is unduly slow and alternative expert advice could be sought rather than awaiting the establishment of the NOEF Independent Panel.  Also Refer to NT EPA Recommendations 3, 4 and 13 above.
·	control seepage to Barney Creek diversion and the McArthur River over the life of the NOEF to as low as reasonably practicable	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 22.a).	Refer to NT EPA Recommendation 9 comments above.
	achieve a recovering trend in the Barney Creek diversion and the old McArthur River channel water quality within 20 years of cessation of mining.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 22.b).	Operator future requirement: within 20 year of cessation of mining.
9 continued	The system design and performance shall be reviewed by the Independent Panel, appointed in accordance with Recommendation 8, and approved by the relevant regulator/s.	4	Full Compliance		DITT managing the process to establish and operate an Independent Panel of experts, including developing a Terms of Reference for NOEF and TSF. NOEF Independent Panel TOR Final Draft version August 2022.  Note: Authorisation require interception report within 12 months of OMP approval and EPA recommendation states system design and performance shall be reviewed by the NOEF Independent Panel.  OBS: The establishment of the Independent Panel(s) of experts has taken an unduly long time. Not having an Independent Panel in place is now impacting on the ability to fulfil Authorisation conditions where the panel's involvement is a prerequisite requirement.
10	Approvals and decisions in relation to the Proposal shall include conditions that require the Proponent to undertake constructability tests for geosynthetic liner cover options, including a geosynthetic liner /compacted clay layer combination, and monitor the options on rehabilitated stages of the NOEF to determine all relevant performance parameters including:	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 23. a) and b).	Included in 2019 bridging MMP.  Addressed in the 2020 MMP, which appropriately details the proposed trials and works to be implemented to develop a NOEF cover system.  For future action: Reporting of trial results and monitoring outcomes are to be:  1. within 24 months of authorisation of the OMP the Operator must submit a NOEF geosynthetic liner cover system plan to the DITT (due 13Nov 2022). Within every three years of submission of the plan reporting of the trials and monitoring outcomes to the relevant Independent Panel and the Community Reference Group for review (due 13 Nov 2025), and  2.audited by the Independent Monitor (Waste Rock Handling Procedures audit conducted 13-15 June 2022)  3.incorporated into review of Adaptive Management Plan.  Compliance monitoring will be ongoing and described in NOEF Management Plan (MMP - Appendix G)

NT EPA					
Recommendation No.	NT EPA Recommendation	Score	Compliance Level	2022 Evidence	2022 Comments
	slope stability during extreme events	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 23. c).i.	
	cover performance as a result of heat effects	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 23. c).ii.	
	tolerance of the geosynthetic liner to expected differential settlement	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 23. c).iii.	
	veracity of cover longevity predictions	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21- Condition 23. c).iv.	
	likely long-term maintenance requirements.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 23. c).v.	
10 continued	Reporting of trial results and monitoring outcomes shall be provided every three years to the relevant Independent Panel and the Community Reference Group for review, and shall be audited by the Independent Monitor. Outcomes of trials and monitoring shall be used to inform the Adaptive Management Plan, to be developed in accordance with Recommendation 28, and the Closure Plan for the mine.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 23. d) ii.	Operator future requirement: within 24 months of the authorisation of the OMP submit to the DITT a geosynthetic liner cover plan (due 13 Nov 22) and then reviewed every three years by the Independent Panel, CRG and audited by the Independent Monitor.
11	Approvals and decisions in relation to the proposal will include conditions requiring the Proponent to provide funding to establish and operate a panel of independent experts to:	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - 21.	DITT, with support from the Operator, is managing the process to establish and operate an Independent Panel of experts, including developing a Terms of Reference, for NOEF and TSF. Draft Terms of Reference for NOEF were circulated for comment to DITT, DEPWS, NT EPA and DAWE in July 2021. TSF Independent Panel TOR Final Draft version August 2022.  Advised that the TSF Independent Panel TOR Final Draft has have been prepared along with advice for the Delegate is with the Minister for approval.
11.i	review every three years the outcomes of the Proponent's management program for the TSF including the berm stability, risk of overtopping, seepage and other aspects of the TSF that could impact on site water quality and the McArthur River, including the risk of catastrophic failure of any component of the TSF, to ensure that the overarching environmental outcome can be met	4	Full Compliance	Independent Panel review of Proponent's TSF management every three years in not contained in the Authorisation 18June21.  The TSF Independent Panel TOR Final Draft has a requirement (Section 6 Reporting Obligations and Process, paragraph 1) for a TSF Independent panel review report on the TSF performance every three years.  TSF operated and maintained in accordance with the most up to date TSF Operations Maintenance and Surveillance Manual ensuring 79.a) no discharge of water 79.d) integrity of the embankment.	(Independent Tailings Review Board or IRTB) to Condition 50. e) endorse any future modification to the TSF in writing, including but not limited to 50.e).i. studies and or trials and 50.e).ii. the TSF Operations, Maintenance and Surveillance Manual.  Operator must provide quarterly report to the Ministers on TSF seepage and seepage management (Condition 80).
11.ii	review TSF seepage monitoring results and the appropriateness of the monitoring program.	4	Full Compliance	No reference to Independent Panel review of TSF seepage monitoring results every three year in the Authorisation 18June21.  The TSF Independent Panel TOR Final Draft has a requirement (Section 2 Purpose, dot point 2.)focus on the seepage monitoring results and the appropriateness of the seepage system	Condition 76.d) The TSF seepage interception trench was operational by early 2021.  Confirmed conditions in Authorisation 0059 dated 13Nov21 - 80. and 80.b), c), d), and e). Operator must submit quarterly TSF written status report to the Minister on seepages and management of seepage.  DITT previously advised this requirement will be captured in the terms of reference for the yet to be established TSF Independent Panel and it is now incorporated in TSF independent panel TOR Final Draft
11 continued	The panel shall provide a report every three years to the relevant regulator and the Independent Monitor and is made available to the Proponent, government agencies, the Community Reference Group and the public.  The panel shall be formed:	4	Full Compliance	public is contained in the Authorisation 18June21.	Draft Terms of Reference for NOEF were circulated for comment to DITT, DEPWS, NT EPA and DAWE in July 2021. TSF Independent Panel TOR Final Draft version August 2022.  DITT previously advised this requirement will be captured in the terms of reference for the yet to be established TSF Independent Panel and it is incorporated in the TSF TOR Final Draft August 2022.

NT EPA Recommendations Compliance Workbook - DITT

7

3	2021 to 30 April 2022				
NT EPA Recommendation No.	NT EPA Recommendation	Score	Compliance Level	2022 Evidence	2022 Comments
11.iii	With an independent chair, appointed by the responsible Minister in consultation with the Minister for Environment and Natural Resources.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 21.  Reference to Independent Chair has been removed from Authorisation 13Nov20 and 18June21.  Reference to an independent technical expert to chair the NOEF panel appointed by the NT Minister for Mining and Industry in consultation with the NT Minister for Environment is included in TSF TOR Final Draft, Section 4 - Panel Membership	DITT, with support from the Operator, is managing the process to establish and operate an Independent Panel of experts, including developing a Terms of Reference, for NOEF, TSF and mine closure planning. Draft Terms of Reference for TSF were circulated for comment to DITT, DEPWS, NT EPA and DAWE in July 2021. TSF Independent Panel TOR Final Draft version August 2022.
11.iv	on the advice of the Department of Environment and Natural Resources, the Department of Primary Industry and Resources, and the Proponent.			Refer 11.i. and 11.ii. above.  Confirmed condition in Authorisation 0059 dated 18June21 - Condition 21.  Refer 11.i. and 11.ii. above.	Draft Terms of Reference for NOEF were circulated for comment to DITT, DEPWS, NT EPA and DAWE in July 2021. TSF Independent Panel TOR Final Draft version August 2022.  TSF is required to be operated and maintained in accordance with the most up to date TSF Operations
		4	Full Compliance	Neich Frii. dru Frii. dbove.	Maintenance and Surveillance Manual ensuring 79.a) no discharge of water 79.d) integrity of the embankment.  Note: Future audit task to check that consultation responses on the formation of the panel have been received from DITT, DEPWS and Operator (2023 audit).
	Terms of Reference for the panel shall set out the terms for roles and responsibilities, membership, timeframe for commencement and scope, reporting obligations and transparency and accountability. The Terms of Reference shall be finalised by the responsible Minister, in consultation with the Minister for Environment and Natural Resources acting on advice from the NT EPA, within six months of authorisation of the Proposal.			Confirmed condition in Authorisation 0059 dated 18June21 - Condition 21.  Reference to terms of reference has been removed from Authorisation 13Nov21.  No timeframe for the finalisation of the terms of reference contained in the Authorisation.	Draft Terms of Reference for TSF were circulated for comment to DITT, DEPWS, NT EPA and DAWE in July 2021. TSF Independent Panel TOR Final Draft version August 2022.  DITT previously advised this requirement will be captured in the terms of reference for the Independent Panels and has been in TSF TOR Final Draft version August 2022.
		4	Full Compliance	No timeframe for the commencement for the TSF independent panel is contained in the Draft Final TOR.  Advised that the Draft ToR for TSF Independent Panel and TSF Independent Panel have been prepared and advice from the Delegate is with the Minister for approval.  TSF Independent panel TOR Final Draft includes reference to roles, responsibility, membership, scope, reporting, transparency and accountability.	
	The structure of the panel and its Terms of Reference shall be reviewed by the Responsible Minister, in consultation with the Minister for Environment and Natural Resources every six years from the date the Terms of Reference are finalised.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 21.  Reference to consultation with DEPWS and six yearly review has been removed from Authorisation 13Nov20 and 18June21.  TSF independent panel TOR Draft Final, Section 7 - Period of Review states TOR shall be reviewed every six years in consultation with the NT	Draft Terms of Reference for TSF were circulated for comment to DITT, DEPWS, NT EPA and DAWE in July 2021. TSF Independent Panel TOR Final Draft version August 2022.

	2021 (0 007,611) 2022				
NT EPA	NT EPA Recommendation	Score	Compliance Level	2022 Evidence	2022 Comments
Recommendation	NT EPA RECOMMENDATION	Score	Compliance Level	2022 EVIGETICE	2022 Comments
No. 12	As soon as practicable after cessation of mining, tailings and other contaminated earthen materials from the Tailings Storage Facility shall be deposited in the mine pit void using contemporary best-practice placement techniques, then protected with a water cover. Tailings shall preferably be reprocessed before in-pit disposal.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21- Condition 24.	Condition 24. a) includes requirements for strategies for tailing reprocessing.  Operator future requirement: to submit a strategy on long term disposal management of tailings into the mine pit void within 5 years of authorisation of OMP. (due 13Nov25).
12 continued	The intention of these measures is to protect the McArthur River water quality and aquatic ecosystems from surface or groundwater contamination consistent with the NT EPA's overarching environmental outcome in Recommendation 3. Any requirement to vary these measures will need approval from the relevant regulator and notification to the NT EPA in accordance with Recommendation 2. These measures should only be varied on the basis of further information to inform leading practice.	N/A	Not Applicable		Noted.
13	Approvals and decisions in relation to the Proposal shall include conditions that require the Proponent to conduct a review and synthesis of all water monitoring programs (groundwater and surface water) and implement a revised program that is capable of identifying and quantifying impacts of mining activities and their trends on the environmental values and beneficial uses of the McArthur River to measure performance against the NT EPA's overarching environmental outcome in Recommendation 3.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 26.	Operator requirement: within 12 months of the authorisation of the OMP.  DITT advised the operator submitted EMR 2021 S.6 p247 - Barney Creek Haul Bridge dust, not runoff, analysis identified sediment contaminates.
 13.i	The revised water monitoring program shall:  quantify loads of lead and zinc entering the McArthur River each			Confirmed condition in Authorisation 0059 dated 18June21 - Condition	
13.1	year	4	Full Compliance	27.b).i.	
13.ii	quantify impacts to water quality and trends in groundwater and surface water at appropriate points including upstream and downstream of the mine to determine that objectives and targets are being met, including the effectiveness of source control to reduce loads as low as is reasonably practicable	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 27.b).ii.	
13.iii	develop appropriate future trigger values for waterways on the mine site and the McArthur River in accordance with the ANZECC 2000 Guidelines. In the interim, the trigger values in the most current WDL shall be used.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 27.b).iii.	
13 continued	The review and revision of the water monitoring program shall be conducted to the satisfaction of the relevant regulator/s and the NT EPA as part of the broader monitoring review provided for in Recommendation 27 and incorporated into the authorised Adaptive Management Plan.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 27.a).	
13 continued	The results of the monitoring program are to be reported by the Proponent to the relevant regulator and audited by the Independent Monitor every three years. The monitoring report together with the Independent Monitor's audit report shall be made available to government agencies, the Community Reference Group and publicly on the Proponent's and relevant regulators' websites.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 27.g).i, ii and iii	Note: Authorisation Condition 27.g).iii. only requires publishing on the Operator's website, not making the reports available in any other format or on the DITT's website. The condition does not fully reflect the NT EPA recommendation wording. However the DITT intends to publish the Operator reporting on their website.  Subsequent to the audit period, the Amended AMP (version AMP- D version 01Oct21, submitted 13Nov21) approved by the DITT 15Aug22 in intended to been uploaded to the DITT's website. (not uploaded as at 12Sep22).  Future requirement that the Independent Monitor required to review a revised Water Management Plan.

NT EPA Recommendation No.	NT EPA Recommendation	Score	Compliance Level	2022 Evidence	2022 Comments
14	Approvals and decisions in relation to the Proposal shall include conditions that require the Proponent to prepare and implement a research and investigation program designed to determine the chronic and acute impacts to biota of mine-derived contaminants using recognised and accepted ecotoxicological testing. The program shall be designed to integrate with the monitoring program to be developed in accordance with Recommendation 15. Results of the program shall be used to inform trigger criteria in the Adaptive Management Plan.	4	Full Compliance	28.  Operator requirement is a future requirement within 18 months of the OMP approval. However, Operator submitted Ecotoxicology Research and Investigation Program (version September 2021) to DITT letter dated 25 October 2021.  Amended SSTVs approved by DEPWS 10 March 2022 and WDL174 -13	Operator requirement: to submit ecotoxicological research and investigation program within 18 months of the approval of the OMP. DITT advised that a revised version of the AMP (version AMP-D 010ct21 submitted 13Nov21) contained some ecotoxicological data.  Condition 28. a) states - the results of this program must be integrated with other relevant programs (stet) monitoring programs and management plans. This may include the AMP.  Condition 44 requires within 18 months of the authorisation of the OMP the Operator must undertake a synthesis of all environmental monitoring and the revised monitoring programs must Condition 44. c be incorporated in the AMP. This may include the ecotoxicological monitoring program.  The DITT ecotoxicology letter dated 03Aug22 notes that the AMP is directly linked to the SSTVs detailed in the WDL (DEPWS approved and issued WDL174-13, 10 Mar22). The Operator submitted AMP-D incorporating the revised SSTVs to DITT for review 13Nov22 and DITT approved the AMP-D 15Aug22. (note: after the audit period).
14 continued	The program shall be prepared and implemented to the satisfaction of the Department of Environment and Natural Resources, and the Australian Government Department of the Environment and Energy.	3	Part Compliance (High)	Confirmed part condition in Authorisation 0059 dated 18June21 - Condition 28.a).  No reference in the Authorisation to DEPWS (formerly DENR) or the Australian Government DAWE (formerly the Department of Environment and Energy).	OFI: Incorporate into DITT processes consultation with other government agencies on the implementation and integration with the monitoring of the Ecotoxicological program e.g. NT DEPWS and Commonwealth DAWE (now DCCEEW).
15	Approvals and decisions in relation to the Proposal shall include conditions that require the Proponent to implement an aquatic ecosystem monitoring program based on improved understanding of aquatic ecosystems in the McArthur River including flow requirements and available Dry season habitat. The program shall be designed to assess impacts from the mine on:	4	Full Compliance	29.	Operator future requirement, within 18 months of the approval of the OMP.  Note: Advised that the program will be reviewed by DITT over time as part of ongoing oversight of the Operator's performance.  DITT will seek evidence from the Operator to ensure the aquatic ecosystem plan developed meets the relevant regulator's expectations.
15.i	water levels in refuge pools/waterholes, upstream and downstream of the mine, including in the McArthur River diversion channel	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 29.a.	· · · · · · · · · · · · · · · · · · ·
15.ii	water quality in refuge pools/waterholes in the Dry season	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 29.b.	
15.iii	the health of aquatic biota in the McArthur River using non-lethal sampling methods.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 29.c.	
15 continued	The monitoring program shall be prepared and implemented to the satisfaction of the Department of Environment and Natural Resources, and the Australian Government Department of the Environment and Energy.	3	Part Compliance (High)	Condition 29.e.	OFI: Incorporate into DITT processes consultation with other government agencies on the preparation and implementation of the aquatic ecosystem monitoring program e.g. NT DEPWS and DAWE (now DCCEEW).
15 continued	The monitoring program shall be designed to integrate with a revised monitoring program provided for in Recommendation 27 and incorporated into the Adaptive Management Plan, to be developed in accordance with Recommendation 28	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 29.d. includes reference to Authorisation Condition 45 - AMP.	
15 continued	The results of the monitoring program are to be reported by the Proponent and audited by the Independent Monitor every three years. The monitoring report together with the Independent Monitor's audit report shall be made available to government agencies and the community on the Proponent's and relevant regulators' websites.	4	Full Compliance		Independent Monitor's aquatic ecosystem audit conducted in May 2022 with audit report to be made publicly available on DITT website late in 2022.

NT EPA Recommendation No.	NT EPA Recommendation	Score	Compliance Level	2022 Evidence	2022 Comments
16	Approvals or decisions in relation to the Proposal, shall include conditions that require the Proponent to conduct all works in accordance with a valid Certificate issued in accordance with the Northern Territory Aboriginal Sacred Sites Act.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 30.  Condition in Authorisation 0059 dated 15Aug2019 - 5 (broad requirement to meet all legislation).	Authorisation conditioned such that Operator must provide evidence of a valid AAPA certificate, as appropriate for proposed work. There are current AAPA certificates for current mining footprint but additional certificates will need to be obtained for additional disturbance.  DITT not aware of any breaches.
17	Prior to any approvals for the Proposal, the Proponent and the responsible Minister shall consult with the Minister for Tourism and Culture on an alternative design of the NOEF that would preserve archaeological site MRM4. Any alternative design of the NOEF must achieve the same environmental outcomes as the currently proposed NOEF, taking into consideration the recommendations in this report.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 31.  DITT advised no NOEF design updates occurred during the audit period.	Works proposed in the 2020 MMP do not disturb or impact on MRM4. There is no development in or proposed in the MRM4 area.  When appropriate DITT will facilitate consultation with the Minister for Arts, Culture and Heritage (also see NT EPA recommendation 18).  Authorisation 0059 to require mining activities to avoid MRM4 whilst consultation occurs with the responsible NT agency (Minister for Arts, Culture and Heritage) to finalise an agreed NOEF design.
18	Approvals or decisions in relation to the Proposal, shall include conditions that require the Proponent to demonstrate to the responsible Minister, and the AAPA or the Minister for Tourism and Culture (where relevant), that it has undertaken a thorough process to identify, inform and consult with the appropriate custodians and traditional owners with an interest in lands that would be or may be affected by the Proposal.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 32.  DITT advised that Operator has entered into an ILUA commenced in 2021.	Operator has provided a Traditional Owner consultation report to DITT Minister, and AAPA and Minister for the Arts, Culture and Heritage. Due in audit period and submitted early prior to the audit period.  Updated Cultural Heritage Management Stakeholder Engagement Report dated February 2021 submitted on 09Feb21 and DITT acknowledged receipt on 11Feb2021 (before the audit period).  Works proposed in the 2020 MMP to extend above the 80m height for the Waste Rock emplacement facilities are subject to Operator obtaining valid AAPA certificates.  The Authorisation includes condition/s requiring Operator to demonstrate evidence of consultation going forward.  A previous Stakeholder Engagement Plan was provided to the Minister by Operator in February 2020.
19	Approvals and decisions in relation to the Proposal shall include conditions that require the Proponent to monitor sulfur dioxide within 1 km downwind of the NOEF, to the satisfaction of the NT EPA and relevant regulator. The objective of this monitoring program should be to identify any increase in sulfur dioxide emissions from the NOEF and any potential air quality risk to human health outside the MRM leases for all stages of the Proposal.		Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 33.  Note: the condition does not specify the location within 1km downwind of the NOEF but does require it at an appropriate location between NOEF and sensitive receptors determined in consultation with NT EPA.	Operator requirement to update AQMP within 12 months of the authorisation of the OMP.  DITT advised that AQMP was submitted 13 Nov 2021, however DITT still to respond.  OBS: Timeliness of DITT's response to Operator's submission of Updated Air Quality Management Plan (13 Nov 21) is unduly slow.  SO <sub>2</sub> monitoring was undertaken at the sites for Devil Spring and Borroloola during the audit period.  EMR 2022 - Appendix E- Ambient Air Monitoring Report data indicates that there was one exceedance of the National Environmental Protection Measure (NEPM) guideline for hourly SO2 concentrations at the SO2VAN01 (Devil Spring) monitoring site during the reporting period and no exceedances at the SO2VILL02 (workers village) monitoring site.
19 continued	The monitoring program shall be reviewed in accordance with Recommendation 27 and incorporated into the Adaptive Management Plan, to be developed in accordance with Recommendation 28.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 44, synthesis of all environmental monitoring programs (Recommendation 27) and Condition 93 - Adaptive Management Plan (Recommendation 28).	

NT EPA Recommendation No.	NT EPA Recommendation	Score	Compliance Level	2022 Evidence	2022 Comments
19 continued	The results of the monitoring program are to be reported by the Proponent to the relevant regulator and audited by the Independent Monitor every three years. The monitoring report together with the Independent Monitor's audit report shall be made available to government agencies, the Community Reference Group and publicly on the Proponent's and regulator's websites.	3	Part Compliance (High)	EMR.  Independent Monitor Task 12 review and audit specific monitoing programs sulphur dioxide (air qualtiy) future task with timing to be	Operator future requirement for the AQMP report within 6 months of the authorisation of the OMP. DITT advised "The air quality plan in question is the one submitted as part of the MMP on January 2020, and included in the AMP, and approved by Minister Manison on 13 November 2020"  Air Quality Management Plan was reviewed by the Independent Monitor as part of the AMP review 15May20 and sulphur dioxide monitoring program review and audit is in Independent Monitor scope of work for 2023-2025.  The AMP submission received by DITT 13Nov21 (including AMP-D version 01Oct21) was assessed as meeting the Air Quality Management Plan Authorisation Schedule A Conditions 33, 34 and 35.  OFI: Update a future Authorisation to include reference to the results of the air quality monitoring plan to be audited by the Independent Monitor every three years.
20	Approvals and decisions in relation to the Proposal shall include conditions that require the Proponent to:		-	determined.	
20.i	continue a monitoring program, to the satisfaction of the NT EPA on advice of the Chief Health Officer, to determine if aquatic fauna obtained from any reach of the McArthur River is safe to eat during all stages of the Proposal	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 36.	Operator future requirement within 24 months of authorisation of OMP.
20.ii	publicly report the results of monitoring, including at appropriate locations in the region	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 36.c.	Conditions included in Authorisation 0059 address this NT EPA recommendation (Condition 36.c.), which require public reporting of the monitoring results, including at appropriate locations in the Borroloola region.  DITT advised it will identify an appropriate medium for communicating the monitoring results. This may, for example, be achieved as part of addressing NT EPA recommendation 25, i.e. publishing via the DITT website and in hardcopy at various locations in the Borroloola community.  OBS: Although not required during the audit period, it may be of benefit to make publicly available the results of monitoring in relation to aquatic fauna obtained from the McArthur River, including at appropriate locations in the region, to communicate river health.
20.iii	maintain signage at waterways within the MRM site advising that fishing and harvesting of aquatic food species is prohibited, until the waterways recover and the risk of contamination from consumption of this aquatic fauna is negligible.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 36.d) and refers to condition 62.  The wording on the signage differs from Conditions 62. b). wording requirement "fishing and harvesting of aquatic food species is prohibited", which is specific wording from the Chief Health Officer.  Warning Signage Register 2019 provided by Operator showed photos of the "no unauthorised entry" wording on signage.	Letter from Operator (dated: 04Feb2015) to Chief Health Officer advising of the proposed wording to be used on signage. Not aware of any Chief Heath Officer response.  Future item, Operator to obtain agreement with NT EPA/Chief Health Officer that the alternative wording used on waterway signage "no unauthorised entry" at mining lease boundary is acceptable within 24 months of Authorisation of OMP (Due date 13Nov 2022).

### NT EPA Recommendations Compliance Workbook - 2022 Department of Industry, Tourism and Trade (DITT)

Audit Period 1 May 2021 to 30 April 202	Audit Period	1 May 20	021 to 3	0 Apri	1 2022
---	--------------	----------	----------	--------	--------

NT EPA Recommendation No.	NT EPA Recommendation	Score	Compliance Level	2022 Evidence	2022 Comments
21	Approvals and decisions in relation to the Proposal shall include conditions that require the Proponent to develop a non-lethal monitoring program for sawfish and from the results, define a specific (measurable and time-bound) threshold for a significant decline in sawfish movement (based on data) that would trigger investigation and implementation of management measures. This threshold is to be developed to the satisfaction of the Australian Government Department of the Environment and Energy and the Department of Environment and Natural Resources, within 12 months of authorisation of the Proposal.	3	Part Compliance (High)	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 37 requires non-lethal monitoring, setting performance indicators to abate a significant decline and trigger levels for investigation and implementation of management measures, within 24 months of the approval of the OMP.  Authorisation does not contain the requirement for development of the submission within 12 months of authorisation of the Proposal. It also does not reference the satisfaction of the Australian Government Department of the Environment and Energy.	Operator has partially actioned earlier than required by implementing sawfish transponder monitoring.  Operator future requirement within 24 months of the authorisation of the OMP.  DITT advises 24 month timeframe is in recognition of adequate time to undertake a quality review including incorporating results from other relevant studies.  OFI: Incorporate a requirement into DITT processes to consult other government agencies on the development of non-lethal monitoring program for sawfish monitoring program, including trigger threshold for investigation and management measures, e.g. NT DEPWS and DAWE (now DCCEEW).
	Approvals and decisions in relation to the Proposal shall contain conditions that require environmental objectives to be established and achieved in case the mine site enters into care and maintenance. Environmental objectives should be reviewed by the relevant Independent Panel/s and approved by the relevant regulator/s after consultation with the Community Reference Group, custodians and traditional owners.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 38.	Operator future requirement, triggered by and within 6 months of the establishment of the Independent Panel(s) of Experts (Condition 21).  DITT is working to establish the Community Reference Group (NT EPA recommendation 26), to facilitate consultation with custodians and traditional owners to inform the development of the care and maintenance plan and independent panel (NT EPA recommendation 23). Advised that nominations for CRG membership are with the Minister for approval.  OBS: The timeliness of the establishment of the Independent Panel/s and Community Reference Group has taken an unduly long time and consultation on environmental objectives for a Care and Maintenance Plan with CRG prior to regulator approval has been delayed.
23	Approvals and decisions in relation to the proposal will include conditions requiring the Proponent to provide funding to establish and operate a panel of independent experts to:	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 21.	Independent Panel of experts for closure, not yet established.  Planning for independent expert panel establishment underway. Developing a framework for the establishment of the independent expert panels for consultation with relevant government agencies. Panels' Draft Terms of Reference (NOEF and TSF) were under review in September 2021. No Closure independent panel TOR has been prepared.
23.i	review and advise on the development of closure and care and maintenance strategies for mine site domains, and the Proponent's trajectory towards achieving agreed closure objectives	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Conditions 38 and 39.	DITT, with support from the Operator, is managing the process to establish and operate an Independent Panels of experts, including developing and finalising a Terms of Reference, for NOEF and TSF.  OBS: Independent Panel Final Draft TOR for the NOEF and TSF are with the Minister, however TOR for Independent Panel for Closure is not currently progressed. It was advised that Closure independent panel TOR was assessed as a lower priority due to later implementation.  Operator future requirement to submit an updated Mine Closure Plan with each MMP from the date of authorisation of the OMP.
23.ii	review the risk of potential catastrophic failure of the mine levee wall and the McArthur River diversion channel in view of future closure objectives.	3	Part Compliance (High)	No reference to catastrophic failure of mine levee wall and McArthur River diversion channel in Authorisation care and maintenance Conditions 38 or 39.	Care and Maintenance Plan to be developed may consider the mine levee wall and the McArthur River diversion but there is no specific requirement in the Authorisation for this content.  DITT advised this requirement will be captured in the terms of reference for the yet to be established Mine Closure independent panel.  OFI: Incorporate a requirement into DITT processes for the Independent Panel to review the risk of failure of the Mine levee wall and the McArthur River diversion channel as part of the closure plan objectives.
23 continued	The panel shall be formed:		-		

NT EPA Recommendation No.	NT EPA Recommendation	Score	Compliance Level	2022 Evidence	2022 Comments
23.iii	with an independent chair, appointed by the responsible Minister in consultation with the Minister for Environment and Natural Resources	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 21.  The closure independent panel TOR have not been progressed and the panel has not been established.  Reference to Independent Chair has been removed from Authorisation 13Nov20 and 18Jun21	Draft Terms of Reference for Closure independent panel have not been developed.  OBS: Prioritise the preparation of Closure independent panel Terms of Reference for consultation with NT Minister for Environment, relevant government agencies and the Operator.  Note: Future audit task to check that the independent chair recommendations are include in the Closure independent panel terms of reference (2023 audit).
23.iv	on the advice of the relevant regulator/s and the Proponent.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 21.	refer OBS for recommendation 23.iii.  Note: Future audit task to check that consultation responses on the formation of the panel have been received from DITT, DEPWS, DAWE and Operator (2023 audit).
23 continued	The panel shall conduct a rolling 3-5 year review of the mine closure plan to assess the trajectory of closure options for MRM site domains and provide a report to the relevant regulator and the Independent Monitor that is made available to the Proponent, government agencies, the Community Reference Group and the public.	3	Part Compliance (High)	Confirmed condition in Authorisation 0059 dated 18June21 - Conditions 96 and 97.b.  No reference to rolling 3 to 5 year review, however there is a requirement to update the mine closure plan as closure concepts are developed.  No reference to providing mine closure plan to Independent Monitor, CRG and the public. Note a review of the Mine Closure Plan is part of the Independent Monitor's scope of work.  Refer observation 23.i.	refer OBS for recommendation 23.iii.  DITT advised this requirement will be captured in the terms of reference for the yet to be established Mine Closure Independent Panel.  OFI: Incorporate a requirement into DITT processes for the independent panel to provide a 3-5 yearly review report on the Mine closure plan to assess the trajectory of closure options to DITT and the Independent Monitor. To subsequently be made available to the Operator, government agencies, CRG and the public.
23 continued	Terms of Reference for the panel shall set out the terms for roles and responsibilities, membership, timeframe for commencement and scope, reporting obligations and transparency and accountability. The Terms of Reference shall be finalised by the responsible Minister, in consultation with the Minister for Environment and Natural Resources acting on advice from the NT EPA, within 12 months of authorisation of the Proposal.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 21.  Reference to terms of reference requirements has been removed from Authorisation 13Nov21 and 18June 2021. No timeframe for finalisation of the terms of reference contained in the Authorisation.  Refer observation 23.i.	Note: Future audit task to check NT EPA requirements for the Closure Independent Panel terms of reference have been included (2023 audit).
23 continued	The structure of the panel and its Terms of Reference shall be reviewed by the Responsible Minister, in consultation with the Minister for Environment and Natural Resources every six years from the date the Terms of Reference are finalised.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 21.  Reference to consultation with DEPWS and six yearly review has been removed from Authorisation 13Nov21.	Note: Future audit task to check requirement for a review of the structure of the panel, every six years, by the DITT Minister in consultation with the DEPWS Minister have been included in the terms of reference (2023 audit).
24	An independent third-party assessment of the security that must be provided by the Proponent or Operator for rehabilitation of the Authorised activities at the McArthur River Mine site shall be conducted by a qualified person approved by the responsible Minister. The security amount shall be sufficient to secure the site in a manner that meets the NT EPA's overarching environmental outcome. The independently calculated amount and final amount of the security shall be published on the relevant regulator's website with any variation between the amounts explained.	3	Part Compliance (High)	Confirmed condition in Authorisation 0059 dated 18June21 - Conditions 40 and 41.  Note the condition does not mention the security needing to be sufficient to secure the site in a manner that meets the NT EPA's overarching environmental outcome. DITT advises this is the role of DITT in administering the MMA and security amount is approved by the Minister.  Independent Monitor sighted the security held as at 02August2022 published on the DITT website.	Operator nominated a third party assessor which has been approved by the Minister accepted by the DITT. The third party review of the security was completed as part of the 2020 MMP approval and is required every three years thereafter.  DITT advised the Independent Monitor that Northern Territory Government has committed to make mine security amounts publicly available. Currently the information published is the security amounts for major mines in the NT, including McArthur River Mine, with the individual mine's security amount held listed on the DITT's website.  Note: No OFI prepared as DITT advised it is not appropriate to provide the details of each security assessment the on the Regulator's website or to explain any variation between the independently calculated and final security amount.

NT EPA	7 2021 to 30 April 2022				
Recommendation No.	NT EPA Recommendation	Score	Compliance Level	2022 Evidence	2022 Comments
24 continued	The security amount shall be reassessed every three years if an assessment of the security amount by the regulator has been undertaken during that time in accordance with the Authorisation for the McArthur River Mine.	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 40.  DITT advised security assessment is provided annually as part of the Unplanned Closure Plan, supported by an independent report.	Operator future requirement for the security assessment to occur every three years if the security has been recalculated or adjusted.
25	The Mining Management Plan (overview and environmental management section) and the Authorisation for the McArthur River Mine Overburden Management Project shall be made available to the public on the relevant regulator's website and in hard copy at an appropriate location in Borroloola (e.g. Borroloola Public Library).	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - 42, A public copy of the MMP with commercially sensitive information removed is available on DITT website (sighted 22Aug 2022).	Triggered by 2020 MMP approval.  DITT advised an MMP hard copy provided to Borroloola Library. Sighted copy of email 07Oct20 from DITT confirming Borroloola Community Library postal address to send MMP hardcopy.
26	Approvals and decisions in relation to the Proposal shall include conditions that require a Community Reference Group to be established that has the following roles:	4	Full Compliance	Confirmed condition in Authorisation 0059 dated 18June21 - Condition 43.  Note: the subparts of this NT EPA recommendation are not stated in the 13Nov20 and 18Jun21 Conditions and no longer states "in accordance with the relevant NT EPA Recommendation" but have been captured in CRG draft terms of reference, refer to 26.i. to 26.v. and 26. continued below.	Operator future requirement, triggered by 2020 MMP approval. No timeframe for CRG establishment but DITT has progressed this activity.  Draft terms of reference for the CRG (version 02 dated 28May21) prepared by DITT were endorsed by the NT EPA (letter dated 06Jun21) and are available on DITT website.  Public advertising for CRG members nominations closed in 31Oct21 and provided the opportunity for stakeholders to present nominations. Advised that nominations have been presented to the Minister approval (members and chairperson) and decision is pending.
26.i	communicate the mine's performance to the local and broader NT community	4	Full Compliance	Confirmed in CRG Draft Terms of Reference, Version 02, 28May21 - Section 2. Purpose, dot point No.1.	
26.ii	advise on the most appropriate method for the Proponent to report information that is required to be made publicly available	4	Full Compliance	Confirmed in CRG Draft Terms of Reference, Version 02, 28May21 - Section 2. Purpose, dot point No.2.	
26.iii	provide a structured forum for review and discussion in setting environmental objectives for adaptive management, operation, care and maintenance, mine closure and the evaluation and costing of mine closure options	4	Full Compliance	Confirmed in CRG Draft Terms of Reference, Version 02, 28May21 - Section 2. Purpose, dot point No.3.	
26.iv	provide a forum for discussing economic and social post-mining impacts	4	Full Compliance	Confirmed in CRG Draft Terms of Reference, Version 02, 28May21 - Section 2. Purpose, dot point No.4.	
26.v	translate technical information into communication that is readily understood by the community, clear statements of outcomes to be achieved and progress in achieving them for both operational and closure matters.	4	Full Compliance	Confirmed in CRG Draft Terms of Reference, Version 02, 28May21 - Section 2. Purpose, dot point No.5.	
26 continued	The Group shall be chaired by an independent person appointed by government, who is held in high regard in civic life and has expertise in taking the community interests into account and experience in the position of chair.	4	Full Compliance	Confirmed in CRG Draft Terms of Reference, Version 02, 28May21 - Section 4. Membership, paragraph No.1.	
26 continued	The Group shall comprise members who represent the local community and broader Northern Territory community, as well as key stakeholders, particularly custodians and Traditional Owners.	4	Full Compliance	Confirmed in CRG Draft Terms of Reference, Version 02, 28May21 - Section 4. Membership, paragraph No.2.	
26 continued	A Terms of Reference for the Group shall be developed to the satisfaction of the NT EPA and agreed by the relevant regulator/s and the Department of the Chief Minister. Details regarding the establishment of the Community Reference Group, including roles and responsibilities, membership, timeframe for commencement and scope, reporting obligations and accountability should be decided within 12 months of all approvals being received for the Proposal.	4	Full Compliance	Draft terms of reference for the CRG (version 02 dated 28May21) prepared by DITT were endorsed by the NT EPA 31May21 (letter dated 06Jun21) and are available on DITT website.  No reference to a timeframe for the establishment of the CRG in the Authorisation 13 Nov2020.	

NT EPA Recommendations Compliance Workbook - DITT

15

## NT EPA Recommendations Compliance Workbook - 2022 Department of Industry, Tourism and Trade (DITT)

Audit Period 1 May 2021 to 30 April 2022

NT EPA Recommendation No.	NT EPA Recommendation	Score	Compliance Level	2022 Evidence	2022 Comments
26 continued	The structure of the Group and its Terms of Reference shall be reviewed every six years from the date the Terms of Reference are	4	Full Compliance	Confirmed in CRG Draft Terms of Reference, Version 02, 28May21 - Section 9. Period of review, paragraph No.1.	
20 continued	finalised.	'	r dii oompiidhee	Section 7.1 criou of review, paragraph (vo.1.	
	Approvals and decisions in relation to the Proposal shall include conditions that require the Proponent to conduct a complete review and synthesis of all monitoring programs that assess impacts of mining activities on the environmental values and beneficial uses of the McArthur River, in accordance with the NT EPA's overarching environmental outcome in Recommendation 3. The revised monitoring program shall be reviewed by the Independent Panel/s and Independent Monitor within nine months of authorisation of the Proposal, and then approved by the relevant regulator/s.  The revised monitoring program shall be incorporated into the Adaptive Management Plan.	3	Part Compliance (High)	Confirmed condition in Authorisation 0059 dated 18June21 - 44.  The Condition 44 does not require the review by the Independent Panel/s and Independent Monitor within nine months of authorisation of the Proposal, instead it states within 18 months of the authorisation.  No reference to review by the Independent Panel or the Independent Monitor. However, revised monitoring program is required to be incorporated into the AMP which as per Condition 45.b). must be reviewed by the Independent Monitor and updated with inputs from the CRG.	Dust, water (surface water, groundwater and fluvial sediment), air quality, vegetation, terrestrial fauna, aquatic fauna, heritage and sacred sites management plans to be revised.  DITT advises 18 month timeframe is in recognition of adequate time to undertake a quality review



Appendix E River Health Review



Table E-1 : Monitoring Program Outcomes for Protection of the McArthur River Beneficial Uses and Community Values from Mining Impacts

Monitoring Program	2021 - 2022	Key Conclusions
Freshwater Macroinvertebrate Monitoring	This monitoring program has been developed and refined since 2008 to allow for a quantifiable and site-specific assessment to detect statistically significant differences in freshwater aquatic macroinvertebrate communities resulting from Mine activities.	The Independent Monitor agrees with the conclusions of the Operator's external expert's assessment that it indicates no statistically significant differences in macroinvertebrate assemblages in sites upstream and downstream of the Mine's operations for the monitoring period encompassing 2021 - 2022.
Diversity and Abundance of Freshwater Aquatic Fauna	This monitoring program has been developed and refined since 2006 to allow for a quantifiable and site-specific assessment to detect statistically significant differences in freshwater aquatic fauna resulting from Mine activities.	The monitoring program appears to have been implemented in accordance with the approved MMP. The Independent Monitor agrees with the conclusions of the Operator's external expert's assessment that there has been no observable change in species diversity and abundance outside the range of natural variance (largely driven by inter-year seasonal flow variation).
Metals in Freshwater Aquatic Fauna	This monitoring program has been developed and refined since 2005. Significant improvements to the monitoring program were made in 2009 to allow species specific comparisons between sites. In 2014, larger species (more likely to be consumed by people) were included in the monitoring program. These and other improvements have increased the appropriateness and robustness of the program.	The Independent Monitor agrees with the conclusions of the Operator's external expert's assessment that the data suggests little measurable effect on tissue metal concentrations in the McArthur River and downstream environments. The program is suitably designed to detect any potential metal tissue concentration elevations in the future. Past detection of elevated metal tissue concentrations has informed management actions.



Table E-2 : Monitoring Program Outcomes for Facilitation of Development of the Ecosystems and Their Functions Along the McArthur River Diversion Channel for Terrestrial and Aquatic Flora and Fauna

Monitoring Program	2021 – 2022	Key Conclusions
Freshwater Macroinvertebrate Monitoring	This monitoring program has been developed and refined since 2008 to monitor the development of instream habitats in the McArthur River and Barney Creek diversion channels. The level of sampling and sampling sites selected were appropriate for meeting the monitoring objective to assess development of macroinvertebrate assemblages within the diversion channels.	The monitoring program appears to have been implemented in accordance with the approved MMP. The Independent Monitor agrees with the conclusions of the Operator's external expert's assessment, that the results suggest that macroinvertebrate assemblages riffle sites along the McArthur River Diversion Channel appeared to have resembled those in reference sites within two years of channel operation, and that edge habitats were becoming more similar over time.
Diversity and Abundance of Freshwater Aquatic Fauna	Components of this monitoring program have been developed and refined since 2008 to monitor changes in aquatic fauna in the diversion channels, monitor fish passage success through the McArthur River Diversion Channel, and assess the effectiveness of adding woody debris to the McArthur River Diversion Channel as a key rehabilitation strategy.	The monitoring program appears to have been implemented in accordance with the approved MMP. The Independent Monitor agrees with the conclusions of the Operator's external expert's assessment that there has been no observable change in species assemblages related to mining activities. Fish assemblages in complex habitat (i.e., where woody debris has been introduced) were comparable with naturally complex habitat upstream and downstream of the Diversion Channel.
Freshwater Sawfish and Barramundi Acoustic Monitoring	Since 2011, tagging has focused on migratory species, notably barramundi and sawfish. This included dart tags, and for specimens captured at locations whose future movements were likely to inform the objectives of the acoustic monitoring program, the specimens were fitted with acoustic tags.	The recording of two sawfish at the upstream extent of the McArthur Diversion Channel brings the total to five individuals recorded as passing through the Diversion Channel since 2017. This supports the assertion that fish passage for this species is not impaired and exceeds the minimum requirement of demonstrating passage of sawfish through the Diversion Channel once every five years.



Monitoring Program	2021 – 2022	Key Conclusions
Metals in Freshwater Aquatic Fauna	This monitoring program has been developed and refined since 2005. Significant improvements to the monitoring program were made in 2009 to allow species specific comparisons between sites. In 2014, larger species (more likely to be consumed by people) were included in the monitoring program. These and other improvements have increased the appropriateness and robustness of the program.	The monitoring program appears to have been implemented in accordance with the approved MMP. The Independent Monitor agrees with the conclusions of the Operator's external expert's assessment that Mine operations continue to have little measurable effect on the McArthur River main channel but that an exceedance in the Barney Creek Diversion Channel requires ongoing monitoring/management to reduce the risk of future exceedances.