Challenger Gold
2021 Annual Compliance Report

Barton Gold Holdings Ltd

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Template 2.8.1

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Abbreviations and definitions

Abbreviation	Description
ACR	Annual Compliance Report
AMYAC	Antakirinja Matu-Yankunytjatjara Aboriginal Corporation
ARD	Acid rock drainage
Au	Gold
BOM	Bureau of meteorology
CIP	Carbon-in-Pulp
DEM	Department for Energy and Mining
DEW	Department of Environment and Water
DoH	Department of Health
DSD	Department for State Development
EC	Electrical conductivity
EL	Exploration Licence
ELA	Eco Logical Australia
EMMP	Environmental Management and Monitoring Program
EPA	Environmental Protection Authority
JORC	Joint ore reserves committee
km	Kilometres
LoM	Life of Mine
m	Metres
MARP	Mining and Rehabilitation Program
MCR	Mining Compliance Report
ML	Mining Lease
MPL	Miscellaneous Purpose Licences
MD 009	Ministerial Determination 009
Mining Act	*Mining Act 1971*
MSDS	Material Safety Data Sheets
NTMA	Native Title Mining Agreement
NVMP	Native vegetation management plan
OMC	Outcome Measurement Criteria
Oz	Ounce
PEPR	Program for Environment Protection and Rehabilitation
ROM	Run of mine
SEB	Significant environmental benefit

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SWL	Standing water level
TDS	Total dissolved solids
tpa	tonnes per annum
TSF	Tailing storage facility
WPG	WPG Resources Limited

Executive summary

This Annual Compliance Report (ACR) is submitted for the Challenger Gold Mine (Challenger) for the period 1 July 2020 to 30 June 2021. Challenger is located approximately 780 km north-west of Adelaide and 225 km north-northwest of Ceduna in South Australia and is owned and operated by Barton Gold Holdings Limited (Barton Gold) via its wholly owned subsidiary Challenger 2 Pty Ltd (Challenger 2). The Project commenced operations in 2002 under the ownership of Kingsgate Consolidated Limited (Kingsgate). WPG Resources Limited (WPG) acquired Challenger in 2016. In 2019 Barton Gold acquired a number of former WPG tenements. Those tenements comprise Challenger's operations and include Mining Leases (MLs) 6103 and 6457, as well as Miscellaneous Purpose Licences (MPLs) 63, 65 and 66. There have been several updates to the Program for Environment Protection and Rehabilitation (PEPR) for Challenger, since the initial document was submitted in April 2002 (previously referred to as a Mining and Rehabilitation Program (MARP)). This ACR applies to the period 1 July 2020 to 30 June 2021.

The Project has remained in a period of care and maintenance since it was acquired by Barton Gold in 2019. The Project is subject to the conditions outlined within the ML documents and approved PEPR (PEPR2017/020), with the most recent regulatory ACR for the site submitted in October 2020, covering the period between 1 April 2018 and 30 June 2020. This document presents a review of compliance for the subsequent year, with a reporting period of 1 July 2020 to 30 June 2021, for the Challenger site.

This ACR reports the evidence available to demonstrate compliance of the Project against requirements of the current approved PEPR2017/020 (dated February 2018, approved 31 July 2018) document's Outcome Measurement Criteria (OMC). This document has been prepared in accordance with the Department of Energy and Mining's (DEM) *Determination: Terms of reference 009 – Mining compliance reports (Notice under Regulation 77 of the mining Regulations 2020)*, dated 11 December 2020.

In relation to some environmental outcomes, OMC, and lease conditions, there was insufficient data or records available to demonstrate achievement compliance with the criteria or conditions. This has occurred due to a gap in resources allocated to compliance related tasks and/ or insufficient records. Proposed corrective actions and timeframes to address all outstanding compliance matters are further detailed in this report.

Prior to and since acquisition of Challenger, Barton Gold and its consultants have established and maintained an active dialogue with the Department for Energy and Mining of South Australia (DEM) to jointly determine and agree a pathway to returning the project to compliance, including in relation to formulating a new PEPR, OMC, environmental outcomes suitable to an expected prolonged state of care and maintenance. This dialogue and joint effort remain ongoing, with the intention of establishing these outcomes during the 1 July 2021 – 30 June 2022 year.

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Ministerial determination checklist

Compliance with the *Terms of reference 009* and associated *MG3 Preparing a mining and rehabilitation compliance report* template is summarised in Table 1.

Table 1 Compliance with the *Terms of reference 009* and associated template

Section (as per MD 009 / MCR template)	Section in this ACR
Item 1.1 / Section 1: Declaration of accuracy	1
Item 3.19 / Section 2: Public liability insurance	2
Item 3.1 / Section 3: Identification	3.2
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1. Declaration of accuracy

This report is prepared for the DEM to fulfil the annual mining compliance reporting requirements for the tenements listed herein. The information contained in this report is to the best of my knowledge a true and accurate record of the mining activities and compliance status for the reporting period.

Table 2 Declaration of accuracy

Name	Andrew Goode
Position	Principal Geologist
Company / agent	Barton Gold
Signature	
Date	7/10/2021
Summary of steps undertaken to review the compliance report to ensure its accuracy	I, Mr Andrew Goode, holding the position of Principal Geologist, for the tenement holder Barton Gold, have taken the following steps to review the information in this compliance report to ensure its accuracy: • implemented an audit process against the Ministerial Determination MD009 to ensure the minimum requirements have been addressed; • obtained a third-party review of annual compliance data; and • undertaken an internal process for review, endorsement and sign off by senior management of Barton Gold.

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2. Public liability insurance

Details of the relevant public liability insurances are outlined below in Table 3. Certificates demonstrating currency and showing further detail are provided in Appendix A.

Table 3 Public liability insurances

Insurer	Policy Number	Insurance period (begin/end)
DUAL Australia Pty Ltd	PRL/0/252452/19/K5	31 October 2020 / 31 October 2021
CGU Insurance	10M 8272185	31 October 2020 / 31 October 2021

These insurance policies are maintained and renewed on an annual basis and will be renewed prior to the end of the current insurance period (31 October 2021).

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3. Introduction

3.1 Background

The Challenger deposit was discovered by Dominion Mining in 1995 and after a period of project evaluation work, a feasibility study was completed in 2001. Open pit mining commenced in April 2002 delivering ore to a refurbished Carbon in pulp (CIP) processing plant with an original capacity of 250,000 tonnes per annum. Underground production commenced in June 2005, and the plant was upgraded to 650,000 tonnes per annum in January 2010. Mining continued until August 2018 when receivers were appointed and the project moved to a care and maintenance status.

The Challenger mine is located in remote South Australia, 730 kilometres (km) northwest of Adelaide, 150 km southwest of Coober Pedy and approximately 225 km north-northwest of Ceduna, as shown in Figure 1 and Figure 2. Infrastructure associated with the Mine occupies approximately 3 square kilometres (km^2) of a 13.2 km^2 mining tenement area within the Mobella Pastoral Station.

Challenger currently consists of Mining Lease (ML) 6103, Miscellaneous Purpose Licences (MPLs) 63, 65 and 66, originally granted in November 2001; and ML 6457 granted in 2016, as shown in Figure 2 and Figure 3 in the following section. ML 6457 was granted to extend operations at Challenger, with an updated Program for Environment Protection and Rehabilitation (PEPR) produced to account for this change in operations (PEPR 2016/058, approved 5 January 2017). Tenement boundaries are shown in Figure 3.

The most recent regulatory Annual Compliance Report (ACR) for the site was submitted in October 2020, covering the period from 1 April 2018 to 30 June 2020. This ACR applies to the reporting period from 1 July 2020 to 30 June 2021 (submission date: September 2021).

Since the Project was acquired by Barton Gold in 2019, it has remained in a period of care and maintenance. It is anticipated that the project will remain in a period of care and maintenance for an extended period of time. The Project is subject to the conditions outlined within the ML documents and approved PEPR 2017/020 (dated 19 February 2018). This ACR has considered available records and data to demonstrate compliance against the current approved PEPR 2017/020.

Barton Gold is submitting this ACR as required by the *Mining Act 1971* (Mining Act) and associated *Mining Regulations 2020*, as well as the conditions of the MLs for the Challenger Gold Mine (ML 6103 and ML 6457).

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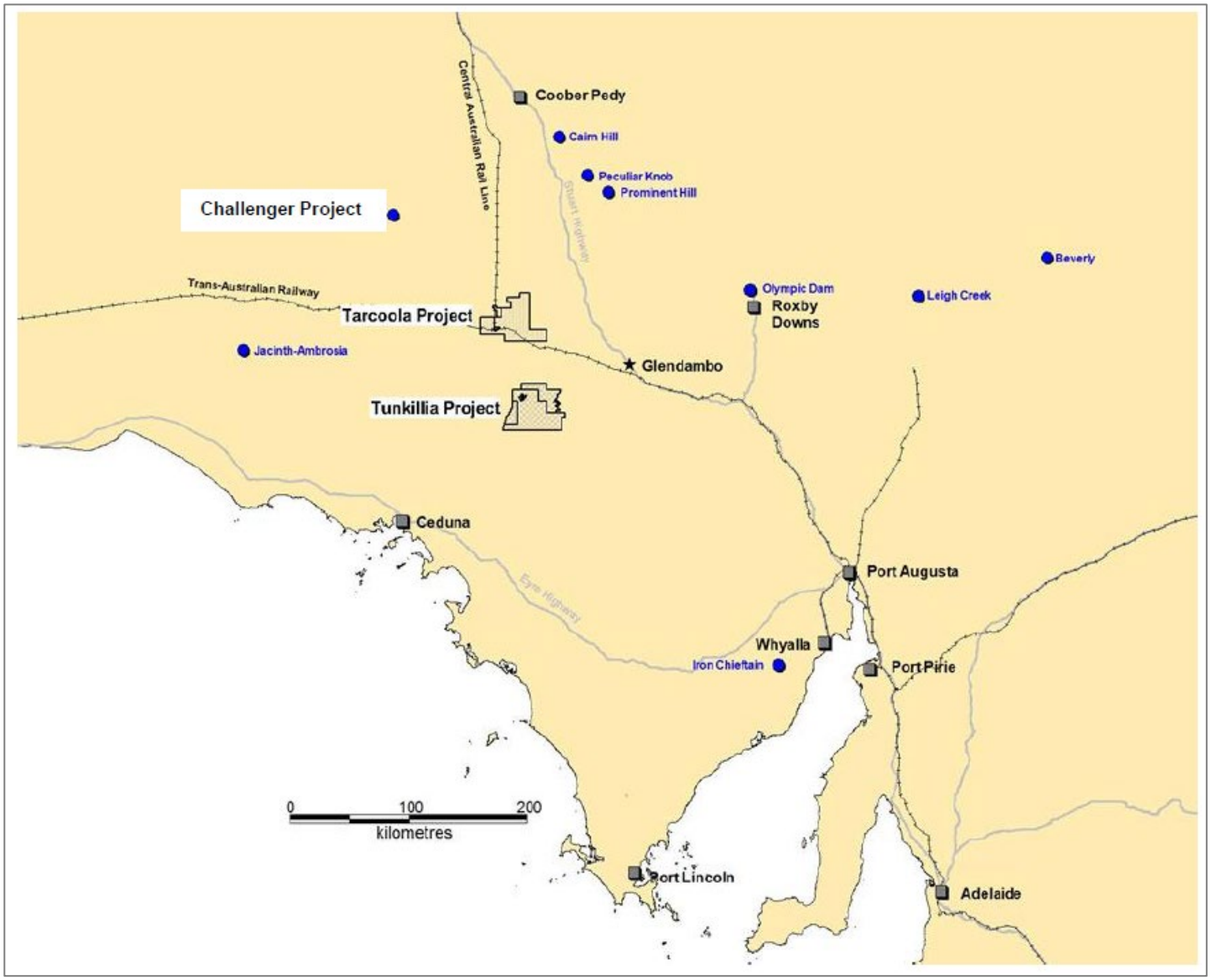


Figure 1 Challenger Gold project location

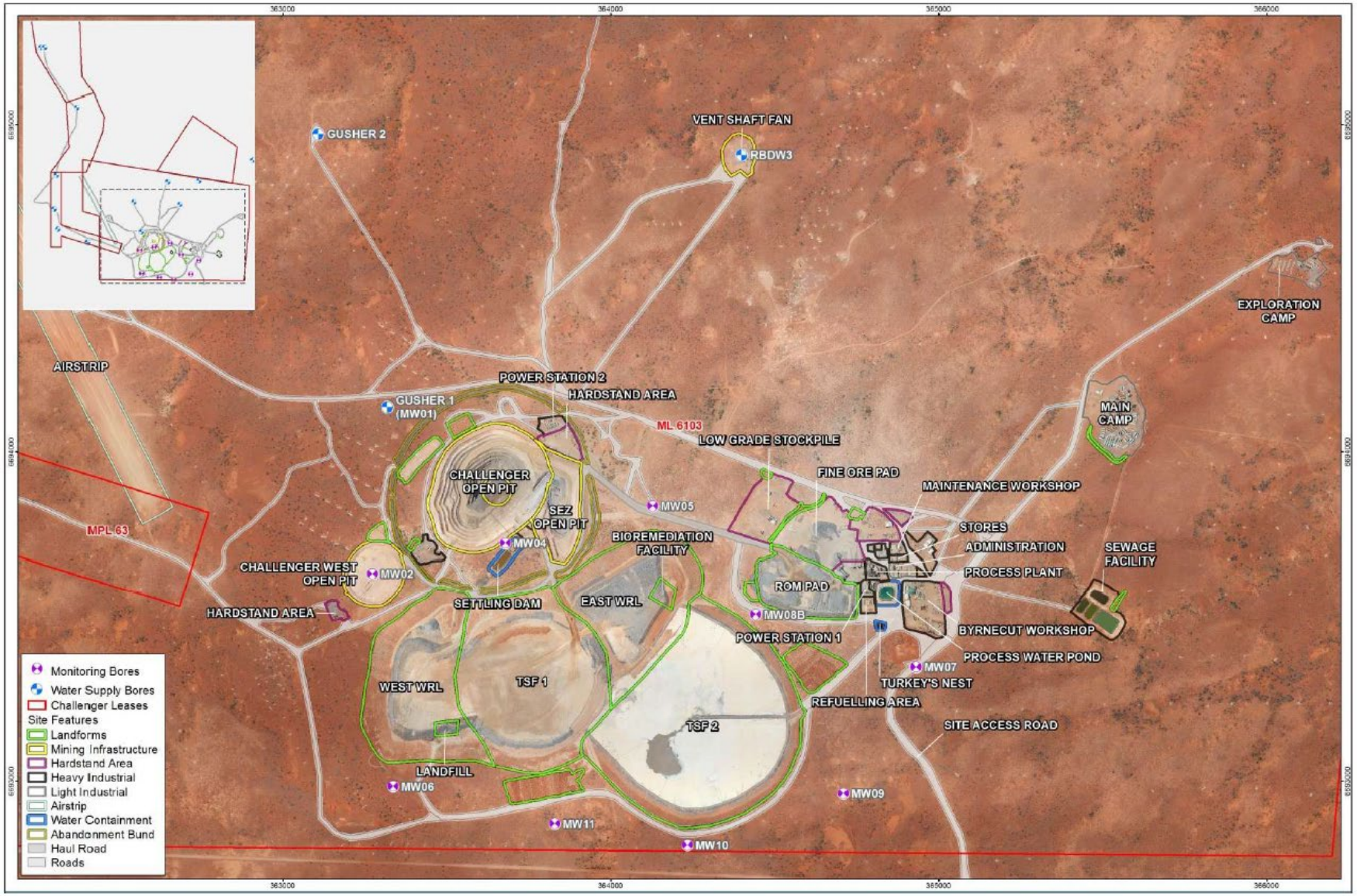


Figure 2 Location of Mineral Leases (inset) and project layout

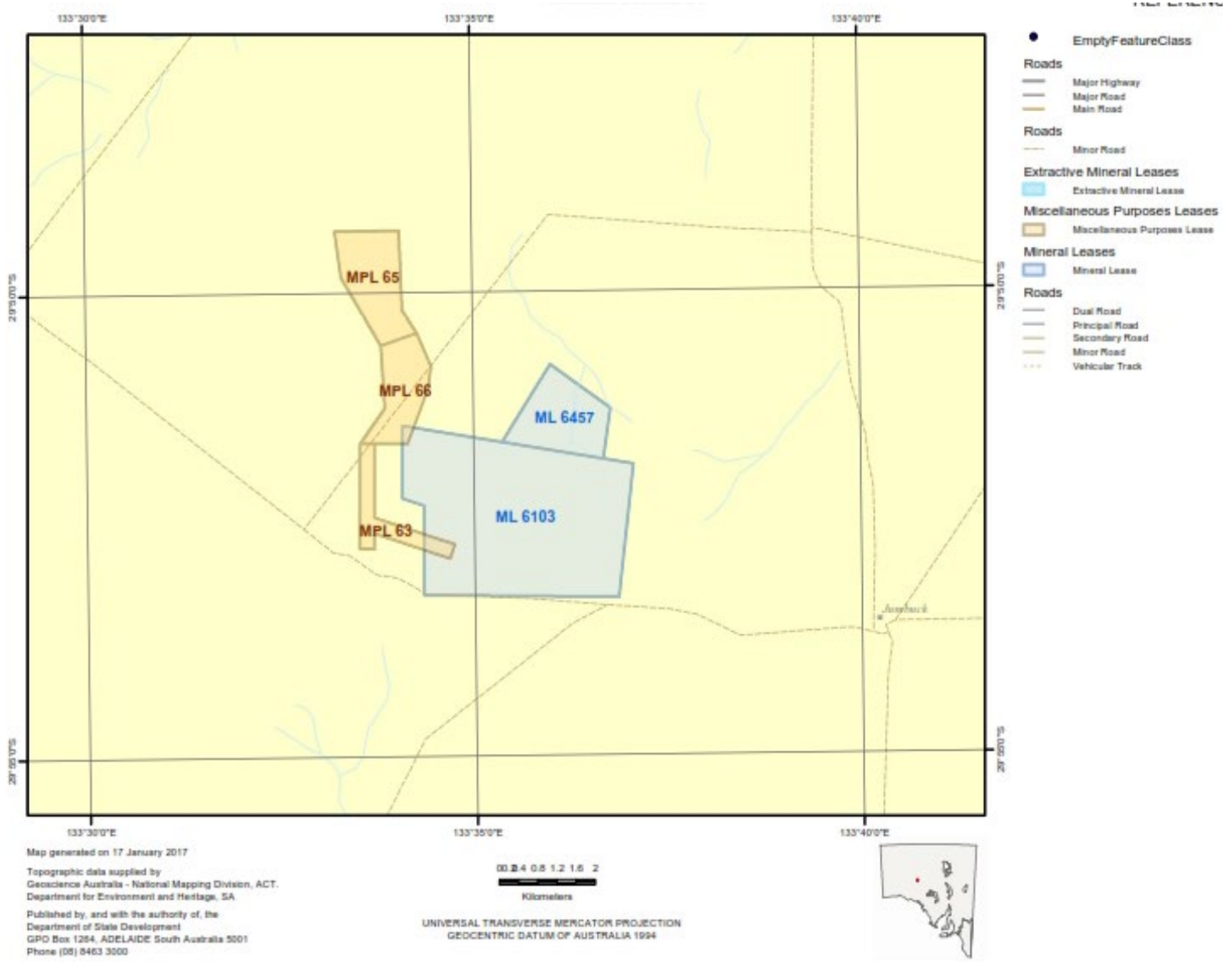


Figure 3 Challenger tenement boundaries (source: SARIG)

3.2 Identification

Site details are provided below in Table 4.

Table 4 Project and site details

Mine name(s)	Details		
Tenement holder(s)	Barton Gold Holdings Ltd Suite 5 62 Ord Street, West Perth, WA 6005		
Operating company(s)	Barton Gold Suite 5 62 Ord Street, West Perth, WA 6005		
Tenement number(s)	ML6103 – 12/12/2001, renewed 12/10/2008 ML6457 – 30/5/2016 MPL 63, 65 and 66 – (borefield) approved 6/11/2008		
PEPR(s) document	Challenger Gold Operations: Program for Environment Protection and Rehabilitation (February 2018)	PEPR No.	PEPR 2017/020
		PEPR approval date	19 February 2018
Site contact	Name	Andrew Goode	
	Email	Andrew.Goode@miningplus.com.au	
	Phone	08 9213 2600	
Location details	Challenger is located on Mobella Pastoral Station, situated approximately 225 km NNW of Ceduna and 730 km NW of Adelaide, South Australia. The mine site is located 6 km west of the Jumbuck outstation.		
Reporting period	From 1/07/2020	To 30/06/2021	
Compliance report submission date	September 2021		

3.3 Tenements

For the reporting period, Challenger includes the following tenements as outlined in Table 5.

Table 5 Tenement summary

Tenement	Tenement number	Tenement grant date	Approval date	Expiry date	Reporting period activity
Challenger ML	ML 6103	12 October 2008	12 October 2008	11 October 2028	The tenement will be retained for Life of Mine (LoM). The Project was in care and maintenance for the entire reporting period.
Challenger Extension	ML 6457	30 May 2016	30 May 2016	11 October 2028	The tenement will be retained for LoM. The Project was in care and maintenance for the entire reporting period.
MPLs	MPL 63, 65 and 66	6 November 2008	6 November 2008	5 November 2028	The tenement will be retained for LoM. The Project was in care and maintenance for the entire reporting period.

The tenement boundaries covered by the approved PEPR(s) are shown in Figure 3.

3.4 Other approvals, licenses, permits, waivers and Native Title Agreements

In addition, and linked to, the approved PEPR, a series of additional licences and permits are associated with general operation and water use on site. These are summarised in Table 6.

There is Native Title Mining Agreement (NTMA) for the exploration and production on the tenements, originally signed 18 June 2001, with a Deed of Assumption, Variation and Restatement (accompanying a Restated Native Title Mining Agreement) effective 26 February 2016 and endorsed in the Native Title Mining Register as instrument number 369. The NTMA was assigned to Challenger 2 by way of a Deed of Covenant executed 2 September 2019.

Table 6 Approval summary

Approval document	Regulatory authority or other	Supporting documents	Relevant environmental outcome or tenement condition	State of currency
EPA 50824	Environmental Protection Authority (EPA)	EPA Prescribed Premises Licence 50824	No contamination of land and soils as a result of mining related activities that would preclude pre-mining land use.	Current (to 30 September 2022)
Permit to undertake a water affecting activity – Well Permit	Department for Environment and Water (DEW, formerly Department of Environment, Water and Natural Resources)	Various permits for each bore (drilling and construction)	N/A	N/A
Native Title Mining and Land Access Agreement for Exploration and Production	Native Title Claimants Department for Engineering and Mining (DEM)	2001.06.18 AMYAC NTMA (Exploration & Production) (RI 25) 2016.02.26 AMYAC NTMA Deed of Assumption, Variation and Restatement and Restated Native Title Mining Agreement (RI 369) 2019.09.02 AMYAC NTMA Deed of Covenant	N/A	Current

4. Mining operations

4.1 Mineral resources

Previously mined materials have comprised primary and oxidised gold bearing ore and unmineralised waste material. The total waste generated is a mixture of unmineralised waste from mining operations and gold depleted tailings from the processing plant.

Barton Gold completed a reappraisal of mineral resources at the Challenger Mine in October 2020. A broad-scale Mineral Resource Estimate within the remnant mining areas and in Challenger Deeps has been presented in Table 7.

Table 7 Challenger Mineral Resources (October 2020)

Mineral Resource Estimate for the Challenger Deposit – October 2020							
Domain	Cut-Off	Indicated			Inferred		
	g/t Au	Tonnes (kt)	Au (g/t)	Au (koz)	Tonnes (kt)	Au (g/t)	Au (koz)
Remnant Areas >215 RL	2.0	-	-	-	322	4.1	42.6
Challenger Deeps <90 RL	2.0	-	-	-	208	3.5	23.0
Total	2.0	-	-	-	530	3.9	65.6

4.2 Mining, processing and waste storage activities

Mining operations commenced at the Challenger mine in 2002 and ceased in 2018 when receivers were appointed to previous owners WPG. Records from WPG operations indicate the quantity of ore mined at Challenger was 7,951,693 tonnes with a further 294,324 tonnes hauled to the Challenger processing plant from the Tarcoola mine. No mining activities were undertaken during the current reporting period.

4.3 Care and maintenance phase activities

During the care and maintenance phase standard mining operation activities e.g. ore extraction, waste rock haulage, ore processing and tailings production, ceased. A Care and Maintenance Plan was developed for the Project as described in section 3.9 of the PEPR (February 2018) and outlines a number of activities to be conducted. The status against those activities is described below in Table 8.

In 2019, during the care and maintenance phase, ownership transferred from WPG to Barton Gold. Care and maintenance inspection records were kept and have been viewed in the preparation of this ACR. Some records are limited in detail and there is some uncertainty whether sufficient information is available for the entire ACR period to conclude that criteria have been met. It should be noted however that a reduction in the intensity of mining activities at the Project site during the care and maintenance period may have reduced the risk of non-achievement of the overall outcomes. Where applicable, comments on this have been included in Section 5 of this ACR.

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Table 8 Care and maintenance strategies and activities

Strategies and activities (PEPR 2017/020)	Status
Site to be made safe and access restricted.	Complete and ongoing – as per inspection summaries.
Demobilise contractors and their equipment.	Complete – as per inspection summaries.
Retain CGO owned equipment and vehicles onsite to maintain flexibility and complete remediation/repair works as required.	Complete – as per inspection summaries.
Progressive rehabilitation completed up to the point in time when care and maintenance begins.	Complete, includes capping of landfill during care and maintenance period (further rehabilitation on Project recommencement).
Topsoil stockpiles remain in situ.	Ongoing
Environmental monitoring (surface water, groundwater and flora) activities continue and be reviewed regularly.	Ongoing – as per inspection summaries. Some monitoring activities have not occurred within the reporting period
Compliance reporting activities continue.	Records of inspections kept, No records of reportable incidents within the reporting period.
Removal of general wastes, tyres, hydrocarbons and septic systems from site in accordance with EPA requirements.	Wastes managed/removed from site, fuel storage reduced and monitored, septic systems maintained for restart – as per inspection summaries.
Equipment to be maintained to ensure readiness for operation should the mine reopen.	Ongoing – as per inspection summaries.
Wastes generated during care and maintenance to be identified and managed as per operational management practices and PEPR Section 3.6.2.	Ongoing - as per inspection summaries.
Crushing, grinding and processing: • Regular inspections to be carried out. • Identified leaks repaired. • Ore, chemicals and waste to be removed from crushing, grinding, processing and product transport plant and equipment. • Stock levels of cyanide and other reagents to be depleted prior to care and maintenance period commencing. • Stock levels of diesel, LPG gas, oils/lubricants and other hydrocarbons reduced to as low as practicable prior to care and maintenance. Any remaining stores to be managed as per operational management practices.	Ongoing – inspection summaries indicate these activities are occurring or have occurred: • Yes • Yes – noting records of an on-going minor leak from tank 6 • Yes • Yes • Yes
Waste Infrastructure: • Tailings to be placed within tailings cells, as per the TMP and OM, and waste rock placed in the WRLs to be made stable. Due to inherent stability, no further work would be planned for the WRLs; • Progressive rehabilitation to continue into the care and maintenance period, where practicable.	• Complete on entering care and maintenance. • Yes – clean-up of legacy equipment, infrastructure and signage from across ML/MPL.

Strategies and activities (PEPR 2017/020)	Status
• Tailings surface in Tailing storage facility (TSF)2 covered with a thin layer of waste rock to prevent dust generation from the drying/dried tails.	• No – small amounts of wind eroded tailings material has been noted within C&M inspection records.
Surface Infrastructure:	
• Supporting surface infrastructure to be inspected and maintained. • Any fuels and chemicals not required for care and maintenance activities relocated offsite, and any wastes associated with supporting surface infrastructure managed as per PEPR Section 3.6.3.	• Yes • Yes
Underground mine:	
• Relocate electrical infrastructure i.e., jumbo boxes, pump starters, pump stations, etc. from the bottom of the mine to upper levels, to avoid flooding risk. • Adjust ventilation controls to ensure maximum possible air flow volumes via natural ventilation. • Pump stations and pumping reticulation systems remain in place, but only utilised if required. • No planned underground activities or inspections (including dewatering), due to the geotechnical stability of underground workings and dry nature of operations. All access to the mine barricaded to prevent access. • Power to the mine turned off. • Construct bunds at each mine decline to redirect potential surface water flows away from underground working and to the bottom of Challenger main pit. • In the event of a major rainfall event or unexpected groundwater accumulation, underground power could be restored to pump water and dewater mine if required. Or a portable generator could be utilised to dewater the pit sump by pumping water from pit sump to turkey's nest.	• Yes • Yes • Yes • Yes • Yes • Yes • Groundwater levels in pit/mineshaft monitored and recorded. Care and maintenance reports and photographs indicate pit water is accumulating. There is no evidence of the pit or underground being dewatered.
Camp and Offices:	
• Turn off main power. A six room block and wet mess at camp to be powered by a portable generator and provide messing, sleeping and cooking facilities for care and maintenance crew. • Portable generator to be used at the office complex to maintain communications server and access to files and procedures.	• Camp facilities mothballed and skeleton areas maintained for care and maintenance crew. • Yes
Mill:	
• Tanks filled with water to reduce maintenance requirements; • Gearboxes filled with oil to maintain and reduce maintenance requirements. • Daily turning of mill and gears to ensure even wear of bearings on equipment in process plant. • Regular running of the RO plant to provide fresh water and maintain membrane in working condition.	• Yes • Unclear if this occurred. • Not required as mill has been lifted off bearings. • Yes
During a care and maintenance period, there would be ongoing employment for 4 people, with two onsite at any time, working a 2:2 week, drive in/drive out roster. Other works, such as environmental	During the absence of mining and processing activities the number of personnel has been adjusted to align with tasks and responsibilities

Strategies and activities (PEPR 2017/020)	Status
monitoring, would be conducted on a drive-in drive-out basis by external parties. Due to the dry nature of the mine, ongoing mine dewatering would not be required.	associated with environmental monitoring and maintenance. This equates to attendance for 4 weeks per month, accommodated across Challenger, Tarcoola and Tunkillia.

5. Compliance

5.1 Compliance with environmental outcomes and leading indicator criteria

Unless otherwise indicated, tables and appendices referenced within the OMC and Leading Indicator Criteria columns in this section, refer to the PEPR (PEPR 2017/020 dated February 2018), as indicated. Compliance with outcome measurement criteria has been assessed as well as leading indicator criteria to the extent of being relevant to the operation of any control strategy.

Table 9 to Table 19 summarise outcomes per environmental aspect, as per the PEPR:

- surface water;
- land use;
- soil;
- native vegetation;
- groundwater and hydrology;
- native fauna;
- weeds and pests (and feral animals);
- Aboriginal and European heritage;
- waste disposal and hazardous substances, and
- air quality, odours and noise.

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ENVIRONMENTAL OUTCOMES AND MEASUREMENT CRITERIA RELEVANT TO: PEPR 2017/020 (FEBRUARY 2018)

Table 9 Surface water and vegetation environmental outcome and compliance status

Aspect: Surface water/ Vegetation	**Tenements: ML6103, MPL63**	**Impact ID: C1**	**Compliance status:**	Unable to be determined
Environmental outcome:	No long-term impact on local environmental values as a result of changes to flows or surface water quality characteristics.			
Outcome measurement criteria	What will be measured and form (method) of measurement	Locations	Outcome achievement	Frequency
	Landscape functional attributes include: • abundance of long-lived perennial shrubs; • cover of long-lived perennial shrubs; • fecundity of perennial shrubs; • presence / cover of seed resource; • litter deposition; • grazing utilisation; • juvenile abundance; and • presence of perennial grass species.	Monitoring sites, CHA01 to CHA12 (refer to PEPR Figure 5.19).	Annual flora monitoring and EFA indicates no impact to vegetation communities and weeds are being controlled, i.e., on lease sites to match, exceed or trending towards off lease site values. Where lease sites do not match or exceed off-lease sites, differences are not attributed to site drainage issues.	Annual
Outcome measurement criteria summary	An annual vegetation survey has not been completed for Challenger since spring 2017 (EBS, 2018a). During the 2017 survey, no significant reduction in species abundance and diversity was recorded. There are no records during the reporting period and as such it is unknown if vegetation communities and weed densities match with off lease site values and / or whether any potential issues may / not be attributable to site drainage network efficacy. As a result, compliance with the OMC and achievement of the Outcome cannot be demonstrated. It should be noted that the risk of non-achievement of the Outcome has been reduced due to the care and maintenance status of the Project.			
Leading indicator criteria	Inspection following intense and prolonged rainfall events demonstrate toe drains, diversion and other surface water and sediment control infrastructure are effectively managing surface water flows and containing sediment. Annual audit of inspection, monitoring and maintenance, incident and corrective action records, will demonstrate that toe drains, diversion and any other surface water and sediment control infrastructure are operating and being maintained to effectively managing surface water flows and containing sediment.			
Leading indicator criteria summary	Care and maintenance inspection records do not indicate toe drains, diversion and other surface water and sediment control infrastructure are ineffective, however nor do they explicitly indicate effectiveness.			
Effectiveness of existing controls.	There is insufficient detail in Care and maintenance inspection records to determine the effectiveness of the listed control and management strategies (as outlined in the PEPR dated February 2018).Since the Project was placed into care and maintenance in late 2018 and changing ownership in 2019, control and management strategies have been implemented on a reduced basis to reflect reduced site activities. It is the intention of the current ownership to restore control and management strategies (as outlined in the PEPR) to meet compliance requirements moving forward.			
Supporting report reference	Care and maintenance inspection records (not appended).			
Forward work plan	Undertake annual vegetation surveys to demonstrate the abundance and diversity of vegetation.			
Aspect: Surface Water	**Tenement: ML6103 and ML6457**	**Impact ID: C2**	**Compliance status:**	Unable to be determined
Environmental outcome:	No long-term impact on local environmental values as a result of changes to flows or surface water quality characteristics.			
Outcome measurement criteria	What will be measured and form (method) of measurement	Locations	Outcome achievement	Frequency
	• Operation and maintenance of drainage containment system through inspection and annual assessment (audit).	ML area, IWL, TSF2, toe drain.	Results of annual audits of inspection, monitoring and maintenance, incident and corrective action records, will demonstrate that toe drains, diversion and other surface water and sediment control infrastructure are effectively managing surface water flow sand containing sediment.	Annual
Outcome measurement criteria summary	Care and maintenance inspection records do not indicate toe drains, diversion and other surface water and sediment control infrastructure are ineffective, however nor do they explicitly indicate effectiveness. Ongoing wind erosion (previously identified in December 2018 and DEM notified) occurring throughout the current reporting period at the tailings dam. Care and maintenance records indicate strong winds in June and July 2021 raise a significant amount of sediment. Known cracking in wall of tailings dam continually monitored throughout care and maintenance inspections.			
Leading indicator criteria	Inspections following intense and prolonged rainfall events demonstrate toe drains, diversions and other surface water and sediment control infrastructure are effectively managing surface water flows and containing sediment.			
Leading indicator criteria summary	Care and maintenance inspection records do not indicate toe drains, diversion and other surface water and sediment control infrastructure are ineffective, however nor do they explicitly indicate effectiveness.			

Effectiveness of existing controls.	There is insufficient detail in care and maintenance inspection records to determine the effectiveness of the listed control and management strategies (as outlined in the PEPR dated February 2018). Since the Project was placed into care and maintenance in late 2018 and changing ownership in 2019, control and management strategies have been implemented on a reduced basis to reflect reduced site activities. It is the intention of the current ownership to restore control and management strategies (as outlined in the PEPR) to meet compliance requirements moving forward.
Supporting report reference	None
Forward work plan	Adapt care and maintenance inspection instructions to ensure inspection records following intense and prolonged rainfall events are retained, so it can be demonstrated that surface water and sediment loads are being managed effectively

Table 10 Soils / land environmental outcome and compliance status

Aspect: Land/Soils	**Tenement: ML6103**	**Impact ID: C3, C4**	**Compliance status:**	**Unable to be determined**
Environmental outcome:	No contamination of land and soils as a result of mining related activities that would preclude pre-mining land use.			
Outcome measurement criteria	What will be measured and form (method) of measurement	Locations	Outcome achievement	Frequency
	Audit of records of incidents – unplanned chemical releases breaching primary containment (bunds) to within secondary containment (disturbed operational areas, engineered or traffic compacted surfaces) – recorded and cleaned up. Records of incidents – Reviews of records demonstrates that where a chemical release breaches secondary containment (disturbed operational areas, engineered or traffic, compacted surfaces), DPC have been notified verbally within 24 hours and received a written report of incident details including: release location, volume, actions taken, forward plan, has been made to DPC within 2 business days of the incident occurring.	Mining related unplanned release (spill) locations within the tenement, breaching, primary containment. Mining related unplanned release (spill) locations within the tenement, breaching secondary containment. Mining related unplanned release (spill) locations within the tenement, to previously undisturbed areas.	Audit (annual) demonstrates spills and leaks outside primary containment/bunded areas (including within the plant) are recorded on the Incident Reporting System and have been cleaned up as per the Emergency Response procedures and MSDS sheets. Where a chemical release breaches secondary containment (disturbed operational areas, engineered or traffic compacted surfaces), DPC have been notified verbally withing 24 hours and received a written report of incident details including: release location, volume, actions taken, forward plan, has been made to DPC within 2 business days of the incident occurring.	Incident details recorded on incident Reporting System within 24 hours of unplanned releases breaching primary containment. Release has been cleaned up within 3 days of release unless otherwise agreed with DPC. Annual audit of records. Following unplanned releases breaching secondary containment, verbally reported to DPC within 24 hours of incident occurring and follow up written report within 2 business days unless otherwise agreed with DPC.
Outcome measurement criteria summary	Care and maintenance inspection records did nor record any spills, nor did they report the absence of spills. As such it could not be demonstrated that incidents records were recorded on the incident reporting system and/or cleaned up as per Emergency Response procedures and/or that DPC (now DEM) were notified of breaches outside secondary containment.			
Leading indicator criteria	Audit (annual) of bunding and fuel, oil and chemical storage management, and of inspection, maintenance, incident and corrective action records, demonstrate that relevant facilities are designed, constructed and operated to minimise environmental impacts.			
Leading indicator criteria summary	Care and maintenance reports indicate that chemical storage facilities are undergoing regular inspection and appropriate management actions are taken when required.			
Effectiveness of existing controls.	There is insufficient detail in care and maintenance inspection records to determine the effectiveness of the listed control and management strategies (as outlined in the PEPR dated February 2018). Since the Project was placed into care and maintenance in late 2018 and changing ownership in 2019, control and management strategies have been implemented on a reduced basis to reflect reduced site activities. It is the intention of the current ownership to restore control and management strategies (as outlined in the PEPR) to meet compliance requirements moving forward.			
Supporting report reference	None			
Forward work plan	Adapt care and maintenance inspection instructions to ensure inspection records include records (including the absence) of spills and response, so it can be demonstrated that spills are being addressed effectively.			
Aspect: Land/Soils	**Tenement: ML6103, ML6457, MPL63, MPL65, MPL66**	**Impact ID: C5**	**Compliance status:**	Compliant
Environmental outcome:	No contamination of land and soils as a result of mining related activities that would preclude pre-mining land use.			
Outcome measurement criteria	What will be measured and form (method) of measurement	Locations	Outcome achievement	Frequency
	• Records of incidents – Review of records demonstrates that where an unplanned release of bore water of >1000 L occurs, DPC have been notified verbally within 24 hours and receive a written report of incident details including: release location, volume, actions taken, forward plan, has been made to DPC within 2 business days of the incident occurring.	Unplanned releases of bore water within the tenement.	Where an unplanned release of >1000 L of bore water occurs, DPC have been notified verbally within 24 hours and received a written report of incident details including: release location, volume, actions taken, forward plan, has been made to DPC within 2 business days of the incident occurring.	Following and unplanned release of >1000 L of bore water, verbally reported to DPC within 24 hours of incident occurring, and follow up written reporting within 2 business days.

Outcome measurement criteria summary	No incidents involving saline releases >1000 L recorded during reporting period within Care and maintenance inspection records, nor did they report the absence of spills. As such it could not be demonstrated that incidents records were recorded and reported to DEM as required.
Leading indicator criteria	N/A
Leading indicator criteria summary	Not required.
Effectiveness of existing controls.	There is insufficient detail in Care and maintenance inspection records to determine the effectiveness of the listed control and management strategies (as outlined in the PEPR dated February 2018). Since the Project was placed into care and maintenance in late 2018 and changing ownership in 2019, control and management strategies have been implemented on a reduced basis to reflect reduced site activities. It is the intention of the current ownership to restore control and management strategies (as outlined in the PEPR) to meet compliance requirements moving forward.
Supporting report reference	None
Forward work plan	Adapt care and maintenance inspection instructions to ensure inspection records include records (including the absence) of spills and response, so it can be demonstrated that spills are being addressed effectively.

Aspect:	**Land/Soil**	**Tenement:**	**ML6103, ML6457, MPL63, MPL65, MPL66**	**Impact ID:**	**C6**	**Compliance status:**	Unable to be determined

Environmental outcome:	No contamination of land and soils as a result of mining related activities that would preclude pre-mining land use.			
Outcome measurement criteria	What will be measured and form (method) of measurement	Locations	Outcome achievement	Frequency
	• Audit of waste disposal records.	Challenger site.	Records show waste has been managed in accordance with the approved LEMP.	Annual
Outcome measurement criteria summary	Could not be assessed. During the reporting period, care and maintenance records indicate waste was removed from site and the on-site refuse pit was not in use. It is noted that the November 2020 care and maintenance report indicates exposed waste (calico bags) was observed at the refuse pit, likely as a result of erosion. There were no subsequent records that indicate this was addressed or that the area was managed in accordance with the LEMP.			
Leading indicator criteria	Periodic audits of landfill area and waste practices demonstrate EPA licence compliance.			
Leading indicator criteria summary	Could not be assessed, no records to support compliance with the EPA licence.			
Effectiveness of existing controls.	There is insufficient detail in Care and maintenance inspection records to determine the effectiveness of the listed control and management strategies (as outlined in the PEPR dated February 2018). Since the Project was placed into care and maintenance in late 2018 and changing ownership in 2019, control and management strategies have been implemented on a reduced basis to reflect reduced site activities. It is the intention of the current ownership to restore control and management strategies (as outlined in the PEPR) to meet compliance requirements moving forward.			
Supporting report reference	None			
Forward work plan	Care and maintenance records to include waste disposal practices. Conduct audit of waste disposal records to demonstrate achievement of the OMC and adherence to approved LEMP for waste disposal.			

Table 11 Soil / vegetation environmental outcome and compliance status

Aspect:	**Soil/vegetation**	**Tenement:**	**ML6103**	**Impact ID:**	**C7**	**Compliance status:**	Unable to be determined

Environmental outcome:	No contamination of land as a result of loss of containment of ARD.			
Outcome measurement criteria	What will be measured and form (method) of measurement	Locations	Outcome achievement	Frequency
	Audit of the record of condition, monitoring and operation of the TSF. Construction of TSF lifts against proposed design.	TSF	Annual audits by a suitable independent professional demonstrate that the TSF has been operated in accordance with the Tailing Management Plan and Operating Manual. Audit demonstrates: • freeboard is sufficient; • tailings density is consistent with design density; • the management plan and operating manual are suitable for the next lift;	Annual

			• embankments have been assessed for indications of seepage. Construction report for TSF lifts, prepared by a suitably experience independent civil or mining engineer, demonstrates that the construction met specified design report: • design dimensions; • soil composition; • soil properties, including moisture levels and compaction.	Post TSF lift construction
Outcome measurement criteria summary	Care and maintenance records for TSF1 and TSF2 include the results of general inspection during the operational period. These records include observation of ongoing erosion from the surface of TSF2 (DEM was previously notified regarding potential wind erosion in relation to the TSF2 area occurring during December 2018). Regular inspections continued to be conducted and there is some indication of attempts to reduce erosion (placement of vegetation on TSF2 surface). Records of visual inspections continue to note some cracking, though without changes (to TSF2). Records do not indicate an independent professional has conducted an audit or inspection within the reporting period. Records of visual inspections of the TSF2 facilities continue to report seepage at the toe of TSF2 and cracking occurring in TSF 2. There was no TSF lift constructed within the reporting period.			
Leading indicator criteria	Inspections following intense and prolonged rainfall events demonstrate toe drains, diversions and other surface water and sediment control infrastructure are effectively managing surface water flows and containing sediment. Annual audit of inspection, monitoring and maintenance, incident and corrective action records, will demonstrate that toe drains, diversions and any other surface water and sediment control infrastructure are operating and being maintained to effectively managing surface water flows and containing sediment. Daily inspections and recording (by plant staff) of observations are undertaken in relation to the operation of TSF1 and 2. This includes visual observation – total freeboard, seepage/wet areas, spillages downstream of TSF2, pumps operating, discharge water clarity, and distress/cracking on TSF2 embankment. Presence of avifauna and fauna and any deaths of either. Any death or stress in flora surrounding TSF1/TSF2, damage to instruments. Daily inspection forms are included in the Tailing Operating Manual. TSF2 operated in accordance with the Tailings Operating Manual, assessed during monthly inspection (condition of embankment, spigotting, decant system, water balance, monitoring, climatic data) – criteria not met leads to review of control measures and mitigation measures as required. Recommendations from annual TSF audits are closed out or scheduled prior to next audit.			
Leading indicator criteria summary	The effectiveness of surface water and sediment control infrastructure could not be assessed, there are no records to support compliance with these leading indicator criteria. It is unknown whether annual audit/s and recommendations from the 2018 audit report were conducted/fully addressed. Care and Maintenance Inspection Reports indicate regular monthly inspections of tailings facilities during the care and maintenance phase noting visual observations as outlined in the LIC. Evidence was provided to demonstrate action to address potential issues identified during regular inspections of the TSF2 facility. The leading indicator criteria have been triggered in relation to visual observations of cracking and seepage.			
Effectiveness of existing controls.	There is insufficient detail in Care and maintenance inspection records to determine the effectiveness of the listed control and management strategies (as outlined in the PEPR dated February 2018). Since the Project was placed into care and maintenance in late 2018 and changing ownership in 2019, control and management strategies have been implemented on a reduced basis to reflect reduced site activities. It is the intention of the current ownership to restore control and management strategies (as outlined in the PEPR) to meet compliance requirements moving forward.			
Supporting report reference	None			
Forward work plan	Arrange for annual audit of TSF by dam engineer. Adapt Care and maintenance inspection instructions to ensure inspection records include records of surface water and sediment control infrastructure			

Table 12 Vegetation environmental outcome and compliance status

Aspect: Vegetation	**Tenement: ML6103, MPL63**	**Impact ID: C8**	**Compliance status:**	Unable to be determined
Environmental outcome:	The tenement holder must during construction and operation, ensure that there is no loss of abundance or diversity of native vegetation on the Land unless a significant environmental benefit has been approved.			
Outcome measurement criteria	What will be measured and form (method) of measurement	Locations	Outcome achievement	Frequency
	• Landscape function attributes. Include: • abundance of long-lived perennial shrubs; • cover of long-lived perennial shrubs; • fecundity of perennial shrubs; • presence / cover of seed resource; • litter deposition; • grazing utilisation;	Existing monitoring sites (refer to PEPR Figure 5.12) reduced to a 10 x 2 metre plot.	On lease sites to match, exceed or trending towards off lease site values.	Annual

	• juvenile abundance; and • presence of perennial grass species.			
Outcome measurement criteria summary	An annual vegetation survey has not been completed for Challenger since spring 2017 (EBS, 2018a). During the 2017 survey, no significant reduction in species abundance and diversity was recorded. There are no records during the reporting period and as such it is unknown if vegetation communities and weed densities match with off lease site values. As a result, compliance with the OMC and achievement of the Outcome cannot be demonstrated. It should be noted that the risk of non-achievement of the Outcome has been reduced due to the care and maintenance status of the Project.			
Leading indicator criteria	The TSF is operated in accordance with ANCOLD requirements. Annual TSF audit considers embankment and toe for indications of seepage. Potential indicators of seepage are assessed – soil sampling and analysis (WAD, CN, total CN, free CN, thiocyanate) of samples within and external to the area will be undertaken to assess for the potential of seepage and consideration given to inclusion inf future EFA assessments.			
Leading indicator criteria summary	Records do not indicate an independent professional has conducted an audit or inspection within the reporting period. Records of visual inspections of the TSF2 facilities continue to report seepage at the toe of TSF2, however no records of soils testing were observed.			
Effectiveness of existing controls.	There is insufficient detail in Care and maintenance inspection records to determine the effectiveness of the listed control and management strategies (as outlined in the PEPR dated February 2018). Since the Project was placed into care and maintenance in late 2018 and changing ownership in 2019, control and management strategies have been implemented on a reduced basis to reflect reduced site activities. It is the intention of the current ownership to restore control and management strategies (as outlined in the PEPR) to meet compliance requirements moving forward.			
Supporting report reference	None			
Forward work plan	Arrange for annual audit of TSF by dam engineer. Reinstate vegetation surveys to demonstrate the abundance and diversity of vegetation.			

Table 13 Groundwater environmental outcome and compliance status

Aspect: Groundwater	**Tenement:** ML6103 and ML 6457	**Impact ID:** C10	**Compliance status:**	**Unable to be determined**
Environmental outcome:	The tenement holder must during construction and operation, ensure that there is not adverse impact to the quality and quantity of groundwater caused by mining operations to existing users and water dependent ecosystems (source ML6457)			
Outcome measurement criteria	What will be measured and form (method) of measurement	Locations	Outcome achievement	Frequency
	Groundwater quality including WADCN. Using best practice i.e., a low flow/micro purge method and field filtered samples.	COW1, identified on Figure 5.19 (refer to PEPR)	Biannual groundwater quality monitoring demonstrates WADCN in samples from COW1 does not exceed 0.08mg/L	6 monthly
Outcome measurement criteria summary	Records could not be located, and groundwater quality has not been monitored on a 6 monthly basis during the care and maintenance period. As such there is insufficient data to demonstrate achievement of the OMC. It's noted that in 2017 concentrations of target analytes at Challenger mine site monitoring wells accessing the shallow fractured rock aquifer met criteria requirements and ANZECC (2000) livestock drinking water trigger values, and were consistent with previous monitoring results and all measurement criteria specified in the PEPR were complied with. The groundwater model was validated in 2017 and included within the 2018 PEPR submission. It should be noted that the risk of non-achievement of the Outcome has been reduced due to the care and maintenance status of the Project.			
Leading indicator criteria	Biannual groundwater quality monitoring demonstrates water quality at Pastoral bores - Bluff bore and dead finish bore are assessed against the criteria listed in Table X, where exceedances are recorded further assessment is undertaken to consider what, if any, mining influences are present. Biannual groundwater quality monitoring demonstrates WADCN in COW1 and COW2 is less than LOR. Where WADCN in COW1 or COW2 is found to be greater than laboratory detection limit, further assessment (laboratory and/or desktop) is undertaken to consider the likelihood of mining influence and/or the veracity of the result. Biannual groundwater quality monitoring at MW06, 07, 09, 10 and 11 demonstrates achievement of trigger levels listed in Table X *(NB Table X could not be located within the PEPR)*			
Leading indicator criteria summary	There are no records from July 2020 to the end of June 2020 and groundwater quality has not been monitored on a 6 monthly basis during the care and maintenance period. It's noted that in 2017 concentrations of target analytes at Challenger mine site monitoring wells accessing the shallow fractured rock aquifer met criteria requirements and ANZECC (2000) livestock drinking water trigger values, and were consistent with previous monitoring results and all measurement criteria specified in the PEPR were complied with. The groundwater model was validated in 2017 and included within the 2018 PEPR submission. It should be noted that the risk of non-achievement of the Outcome has been reduced due to the care and maintenance status of the Project.			
Effectiveness of existing controls.	There is insufficient detail in care and maintenance inspection records to determine the effectiveness of the listed control and management strategies (as outlined in the PEPR dated February 2018). Since the Project was placed into care and maintenance in late 2018 and changing ownership in 2019, control and management strategies have been implemented on a reduced basis to reflect reduced site activities. It is the intention of the current ownership to restore control and management strategies (as outlined in the PEPR) to meet compliance requirements moving forward.			
Supporting report reference	None			
Forward work plan	Conduct a round of the groundwater monitoring program and reporting requirements as per the PEPR (2017/020 dated February 2018). Locate Table X from WPG data records and addend to the PEPR.			

Aspect:	Groundwater	Tenement:	ML6457 ML6103	Impact ID:	C11	Compliance status:	Unable to be determined
Environmental outcome:	The tenement holder must during construction and operation, ensure that there is no adverse impact to the quality and quantity of groundwater caused by mining operations to existing users and water dependent ecosystems (source ML6457).						
Outcome measurement criteria	What will be measured and form (method) of measurement		Locations		Outcome achievement		Frequency
	Groundwater quality including TDS, WAD, CN, pH, Arsenic as per the Groundwater Monitoring Plan for sampling and analysis protocols.		MW06, 07, 09, 10, 11.		Biannual groundwater monitoring results confirm that groundwater quality are consistent with modelled predictions (PEPR Figure 5.18, table 5.4). TDS <50,000 mg/L WAD CN <0.08 mg/L pH 6>9 As <0.5.		Biannual (typically January and July).
Outcome measurement criteria summary	Records could not be located, and groundwater quality has not been monitored on a 6 monthly basis during the care and maintenance period. As such there is insufficient data to demonstrate achievement of the OMC. It's noted that in 2017 concentrations of target analytes at Challenger mine site monitoring wells accessing the shallow fractured rock aquifer met criteria requirements and ANZECC (2000) livestock drinking water trigger values, and were consistent with previous monitoring results and all measurement criteria specified in the PEPR were complied with. The groundwater model was validated in 2017 and included within the 2018 PEPR submission. It should be noted that the risk of non-achievement of the Outcome has been reduced due to the care and maintenance status of the Project.						
Leading indicator criteria	N/A						
Leading indicator criteria summary	Not required.						
Effectiveness of existing controls.	There is insufficient detail in care and maintenance inspection records to determine the effectiveness of the listed control and management strategies (as outlined in the PEPR dated February 2018). Since the Project was placed into care and maintenance in late 2018 and changing ownership in 2019, control and management strategies have been implemented on a reduced basis to reflect reduced site activities. It is the intention of the current ownership to restore control and management strategies (as outlined in the PEPR) to meet compliance requirements moving forward.						
Supporting report reference	None						
Forward work plan	Conduct a round of the groundwater monitoring program and reporting requirements as per the PEPR (2017/020 dated February 2018).						

Aspect:	**Groundwater**	**Tenement:**	**ML6103 ML6457**	**Impact ID:**	**C12**	**Compliance status:**	Unable to be determined
Environmental outcome:	The tenement holder must during construction and operation, ensure that there is no adverse impact to the quality and quantity of groundwater caused by mining operations to existing users and water dependent ecosystems (source ML6457).						
Outcome measurement criteria	What will be measured and form (method) of measurement		Locations		Outcome achievement		Frequency
	Monitoring of groundwater standing levels. Monitoring of groundwater quality using best practice i.e. a low flow/micro purge method.		COW1 see Figure 2 (refer to PEPR Figure 5.8).		RL of COW1 groundwater levels remains greater than 159.9 mAHD (less than 19.2 mTOC) Biannual groundwater quality monitoring demonstrates TDS at COW1 does not exceed 7000 mg/L.		monthly (groundwater levels). 6 monthly (groundwater monitoring).
Outcome measurement criteria summary	Monitoring of the groundwater SWLs were recorded in December 2020 and May 2021. SWL for COW1 was reportedly less than 19.2 mTOC during both events (refer Appendix C). Records for groundwater quality were not provided, and it is understood groundwater quality has not been monitored on a 6 monthly basis during the care and maintenance period. As such there is insufficient data to demonstrate achievement of the OMC. Abstraction of groundwater reduced significantly from October 2018, with only minimal quantities abstracted for general care and maintenance purposes, significantly reducing the risk of impacts to the quality and quantity of groundwater caused by mining operations to existing users and water dependent ecosystems. It should be noted that the risk of non-achievement of the Outcome has been reduced due to the care and maintenance status of the Project.						
Leading indicator criteria	Quarterly field measurements of TDS in groundwater in COW1 are 20% or less of baseline levels. Where exceedances are observed, undertake assessment works to determine the source and impact of the increased salinity, and any next steps. Biannual groundwater quality monitoring demonstrates water quality at Pastoral bores - Bluff bore and dead finish bore do not exceed ANZECC criteria for cobalt, TDS and pH, where exceedances are recorded further assessment is undertaken to consider what, if any, mining influences.						
Leading indicator criteria summary	There were no groundwater quality records provided for the reporting period and it is understood groundwater quality has not been monitored on a 6 monthly basis during the care and maintenance period. It is unknown whether relevant parameters for COW1 were within the listed trigger levels. Abstraction of groundwater reduced significantly from October 2018, with only minimal quantities abstracted for general care and maintenance purposes, significantly reducing the risk of impacts to the quality and quantity of groundwater caused by mining operations to existing users and water dependent ecosystems. It should be noted that the risk of non-achievement of the Outcome has been reduced due to the care and maintenance status of the Project.						
Effectiveness of existing controls.	There is insufficient detail in care and maintenance inspection records to determine the effectiveness of the listed control and management strategies (as outlined in the PEPR dated February 2018). Since the Project was placed into care and maintenance in late 2018 and changing ownership in 2019, control and management strategies have been implemented on a reduced basis to reflect reduced site activities. It is the intention of the current ownership to restore control and management strategies (as outlined in the PEPR) to meet compliance requirements moving forward.						
Supporting report reference	None						
Forward work plan	Conduct a round of the groundwater monitoring program and reporting requirements as per the PEPR (2017/020 dated February 2018).						

Table 14 Flora environmental outcome and compliance status

Aspect: Flora	**Tenement:** ML6103 MPL63	**Impact ID:** C13	**Compliance status:** Unable to be determined	
Environmental outcome:	To maintain the abundance, diversity and productivity of flora at ecosystems levels through the avoidance of management of adverse impacts.			
Outcome measurement criteria	What will be measured and form (method) of measurement	Locations	Outcome achievement	Frequency
	• Ecosystem functional attributes include: • abundance of long lived perennial shrubs; • cover of long lived perennial shrubs; • fecundity of perennial shrubs; • presence / cover of seed resource; • litter deposition; • grazing utilisation; • juvenile abundance; and • presence of perennial grass species. Presence and abundance of Kingoonya NRM board target weed species. Functional indices and plant cover data on rehabilitation transects.	Monitoring sites, CHA01 to CHA12 (refer to PEPR Figure 5.19). Selected locations based on risk assessment. Conducted on waste rock dump, TSF wall and other areas of rehabilitation of an area greater than 1ha. Two analogue sites, one in each vegetation community type of rehabilitation.	Annual flora monitoring and EFA indicates no impact to vegetation communities and weeds are being controlled, i.e. on lease sites to match, exceed or trending towards off leas site values. Annual review demonstrates that weed incursion have been managed and avoided through monitoring and treatment. Assessment of ecosystem function analysis for trends of continuous improvement towards analogue sites. Trend of continual improvement and move towards analogue values.	Annual Annual Annual for rehabilitation and biennial for analogue sites
Outcome measurement criteria summary	An annual vegetation survey has not been completed for Challenger since spring 2017 (EBS, 2018a). During the 2017 survey, no significant reduction in species abundance and diversity was recorded. There are no records during the reporting period and as such it is unknown if vegetation communities and weed densities match with off lease site values. As a result, compliance with the OMC and achievement of the Outcome cannot be demonstrated. It should be noted that the risk of non-achievement of the Outcome has been reduced due to the care and maintenance status of the Project.			
Leading indicator criteria	Operational inspections identify weed outbreaks or vegetation dieback or disturbance; site systems and incident reporting. Spot checking and treatment of weeds. Targeted checks following rainfall totals of >25mm, at locations based on risk assessment.			
Leading indicator criteria summary	An annual vegetation survey has not been completed for Challenger since 2018 (EBS, 2018a). During the 2018 survey, no significant reduction in species abundance and diversity was recorded. There are no records of weed management during the care and maintenance period.			
Effectiveness of existing controls.	There is insufficient detail in care and maintenance inspection records to determine the effectiveness of the listed control and management strategies (as outlined in the PEPR dated February 2018). Since the Project was placed into care and maintenance in late 2018 and changing ownership in 2019, control and management strategies have been implemented on a reduced basis to reflect reduced site activities. It is the intention of the current ownership to restore control and management strategies (as outlined in the PEPR) to meet compliance requirements moving forward.			
Supporting report reference	None			
Forward work plan	Conduct a vegetation surveys to demonstrate the abundance and diversity of vegetation.			

Table 15 Fauna environmental outcome and compliance status

Aspect:	**Fauna**	**Tenement:**	**ML6103, MPL63**	**Impact ID:**	**C14**	**Compliance status:**	**Unable to be determined**
Environmental outcome:		To maintain the abundance, diversity and productivity of fauna at ecosystems levels through the avoidance or management of adverse impacts					
Outcome measurement criteria		What will be measured and form (method) of measurement		Locations		Outcome achievement	Frequency
		Species abundance and richness of key resident species. Bird species abundance and richness of known resident species. Frequency utilising motion sensing cameras.		Two near mine and two off lease sites (See PEPR Figure 5.19). Two near mining and two off lease sites (See PEPR Figure 5.19). At selected near mine lease sites.		Annual fauna monitoring and EFA at set monitoring locations (See PEPR Figure 5.19) indicates that the abundance, diversity and productivity of fauna is not impacted by mining operations (i.e. within 80% of mean equivalent site values collated 2002-date). Annual bird monitoring at set locations (See PEPR Figure 5.19) indicates abundance, and richness of known resident species is within 80% of mean long term equivalent site values collated 2002-date.	Annual Annual

			Pest predator species monitoring report levels not significantly exceeding previously data from 2002 – 2016.	Annual
Outcome measurement criteria summary	An annual fauna survey has not been completed for Challenger since spring 2017 (EBS, 2018a). During the 2017 survey, no significant reduction in species abundance and diversity was recorded. There are no records during the reporting period and as such it is unknown if fauna species abundance and richness match with off lease site values. As a result, compliance with the OMC and achievement of the Outcome cannot be demonstrated. It should be noted that the risk of non-achievement of the Outcome has been reduced due to the care and maintenance status of the Project.			
Leading indicator criteria	N/A			
Leading indicator criteria summary	Not required.			
Effectiveness of existing controls.	There is insufficient detail in care and maintenance inspection records to determine the effectiveness of the listed control and management strategies (as outlined in the PEPR dated February 2018). Since the Project was placed into care and maintenance in late 2018 and changing ownership in 2019, control and management strategies have been implemented on a reduced basis to reflect reduced site activities. It is the intention of the current ownership to restore control and management strategies (as outlined in the PEPR) to meet compliance requirements moving forward.			
Supporting report reference	None			
Forward work plan	Conduct a fauna survey to demonstrate the abundance and diversity of fauna.			

Table 16 Soil environmental outcome and compliance status

Aspect: Soil	**Tenement: ML6103**	**Impact ID: C15**	**Compliance status:**	**Unable to be determined**
Environmental outcome:	Maintain quantity and quality of top soil for rehabilitation activities.			
Outcome measurement criteria	What will be measured and form (method) of measurement	Locations	Outcome achievement	Frequency
	• Volume of topsoil stockpiles and use in rehabilitation works.	Stockpiles as per PEPR Figure 3.8.	Topsoil register records demonstrate reconciliation of stockpile volumes against rehabilitation use.	On-going, reported annually.
Outcome measurement criteria summary	As per the 2018 ACR a progressive rehabilitation and closure program (PRAC®) has been implemented for Challenger with sections already rehabilitated. No records of current topsoil stockpile volumes and/or reconciliation against rehabilitation uses have been located for the reporting period. As a result, compliance with the OMC and achievement of the Outcome cannot be demonstrated. It should be noted that the risk of non-achievement of the Outcome has been reduced due to the care and maintenance status of the Project.			
Leading indicator criteria	N/A			
Leading indicator criteria summary	Not required.			
Effectiveness of existing controls.	There is insufficient detail in care and maintenance inspection records to determine the effectiveness of the listed control and management strategies (as outlined in the PEPR dated February 2018). Since the Project was placed into care and maintenance in late 2018 and changing ownership in 2019, control and management strategies have been implemented on a reduced basis to reflect reduced site activities. It is the intention of the current ownership to restore control and management strategies (as outlined in the PEPR) to meet compliance requirements moving forward.			
Supporting report reference	None			
Forward work plan	Review and/or update topsoil records to ensure reconciliation of stockpile volumes against rehabilitation uses reflects current status.			

Table 17 Air quality environmental outcome and compliance status

Aspect:	**Tenement: ML6103**	**Impact ID: C17**	**Compliance status:**	Compliant
Environmental outcome:	Emissions do not adversely affect the health, welfare and amenity of People (the public) and land use.			
Outcome measurement criteria	What will be measured and form (method) of measurement	Locations	Outcome achievement	Frequency
	WPG response to and close out of complaints regarding dust impacts to the public as a result of mining operations. Assessment of potential for mining related dust impacts to the public (on receipt of complaint).	Site of complaint.	All complaints acknowledged (to complainant and the Regulator) within 48 hours and closed out within 7 days or as agreed with the Regulator). Mine operator did not cause or could not reasonably have prevented the incident occurring.	As required (on receipt of complaint).

Outcome measurement criteria summary	Care and maintenance inspection records from the reporting period indicate there were no complaints received.
Leading indicator criteria	N/A
Leading indicator criteria summary	Not required.
Effectiveness of existing controls.	There is insufficient detail in care and maintenance inspection records to determine the effectiveness of the listed control and management strategies (as outlined in the PEPR dated February 2018). Since the Project was placed into care and maintenance in late 2018 and changing ownership in 2019, control and management strategies have been implemented on a reduced basis to reflect reduced site activities. It is the intention of the current ownership to restore control and management strategies (as outlined in the PEPR) to meet compliance requirements moving forward.
Supporting report reference	None
Forward work plan	Continue to maintain incident/complaints register and investigate where required.

Table 18 Cultural heritage environmental outcome and compliance status

Aspect:	**Cultural Heritage**	**Tenement:**	**ML6103, ML6457, MPL63, MPL65, MPL66**	**Impact ID:**	**C20**	**Compliance status:**	Compliant		
Environmental outcome:		No disturbance to Aboriginal artefacts or sites of significance unless prior approval under the relevant legislation has been obtained.							
Outcome measurement criteria		What will be measured and form (method) of measurement					Locations	Outcome achievement	Frequency
		• Audit of records relating to disturbance to Aboriginal heritage sites, objects or artefacts.					All tenements.	Audit of records demonstrates procedure CEN-SOP-032 related to discovery of potential Aboriginal artefacts and/or Aboriginal/ European Heritage sites has been followed, including that no unauthorised disturbance has occurred. Where potential sites/artefacts are identified, work is stopped and not recommenced until authorised.	Annual
Outcome measurement criteria summary		Available records indicate there were no lodged incidents of disturbance to Aboriginal heritage sites, objects or artefacts. The 2018 ACR confirmed relevant information about Aboriginal Heritage was included in the induction and that no sites of Aboriginal cultural heritage or significance had been identified within the mining lease area. As a result, compliance with the OMC and achievement of the Outcome is deemed for the entire reporting period.							
Leading indicator criteria		Records demonstrate personnel have been appropriately inducted.							
Leading indicator criteria summary		There are no induction records available for review for the preparation of the ACR for the reporting period, however the 2018 ACR did confirm relevant information about Aboriginal Heritage was included in the induction. Challenger was placed under care and maintenance in October 2018, as such only care and maintenance related activities have been conducted since then. It should be noted that the risk of non-achievement of the Outcome has been reduced due to the care and maintenance status of the Project.							
Effectiveness of existing controls.		There is insufficient detail in care and maintenance inspection records to determine the effectiveness of the listed control and management strategies (as outlined in the PEPR dated February 2018). Since the Project was placed into care and maintenance in late 2018 and changing ownership in 2019, control and management strategies have been implemented on a reduced basis to reflect reduced site activities. It is the intention of the current ownership to restore control and management strategies (as outlined in the PEPR) to meet compliance requirements moving forward.							
Supporting report reference		None							
Forward work plan		Conduct audit of records to validate all activities are being conducted according to CEN-SOP-032 and personnel have been appropriately inducted.							

Table 19 Protection of third-party property environmental outcome and compliance status

Aspect:	**Third Party Property**	**Tenement:**	**ML6103, ML6457, MPL63, MPL65, MPL66**	**Impact ID:**	**C21**	**Compliance status:**	Compliant		
Environmental outcome:		No unauthorised damage to adjacent public or private property and infrastructure, including that caused by fire, as a result of mine activity.							
Outcome measurement criteria		What will be measured and form (method) of measurement					Locations	Outcome achievement	Frequency

	• Records demonstrate complaints have been resolved within timeframes and to the satisfaction of the complainant or DPC. The results of any investigations demonstrate damage (including caused by uncontrolled fires) to adjacent public or private property and infrastructure was not attributable to mining operations.	Adjacent public or private property.	Complaints acknowledged within 48 hours and resolved within 14 days (or as agreed with DPC). Where complaints are not resolved to the satisfaction of the complainant or DPC, an internal investigation is commenced. Records of investigations carried out within 14 days (or as agreed with DPC) show that damage (including caused by controlled fires) to adjacent public or private property and infrastructure was not attributable to mining operations.	Complaints acknowledged within 48 hours and resolved within 14 days (or as agreed with DPC).
Outcome measurement criteria summary	Available records indicate there were no lodged complaints during the reporting period. As a result, compliance with the OMC and achievement of the Outcome are deemed to have been achieved for the reporting period.			
Leading indicator criteria	Records demonstrate personnel have been appropriately inducted.			
Leading indicator criteria summary	There are no induction records available for review for the preparation of the ACR for the reporting period. Challenger was placed under care and maintenance in October 2018, as such only care and maintenance related activities have been conducted since then.			
Effectiveness of existing controls.	There is insufficient detail in care and maintenance inspection records to determine the effectiveness of the listed control and management strategies (as outlined in the PEPR dated February 2018). Since the Project was placed into care and maintenance in late 2018 and changing ownership in 2019, control and management strategies have been implemented on a reduced basis to reflect reduced site activities. It is the intention of the current ownership to restore control and management strategies (as outlined in the PEPR) to meet compliance requirements moving forward.			
Supporting report reference	None			
Forward work plan	Continue to maintain incident/complaints register and investigate where required.			

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5.2 Compliance with non-outcome based mining lease or tenement conditions

Table 20 summarises the compliance status of tenement conditions of the lease or licence that do not relate to an environmental outcome in the approved PEPR. Any non-compliances are also reported in Section 5.4.

Table 20 Compliance with non-outcome-based Mining Lease conditions

Lease condition	Compliance status	Summary and supporting evidence of compliance status determination
ML6103 S1 Condition 1 Mining operations may be carried out for the recovery of gold bearing ore from the area of the lease. Processing of ore may be carried out on the lease.	Complied	No mining occurred during the care and maintenance period.
ML6103 S1 Condition 2 The lessee shall ensure that mining operations on the land are carried out in an orderly and skilful manner in accordance with a Mining and Rehabilitation Program (MARP) approved by the Minister and according to the requirements of clause 5 of Schedule 2.	Complied	This ACR reports on compliance against the PEPR 2017/020. No mining occurred during the care and maintenance period.
ML6103 S1 Condition 3 The lessee shall submit, for approval by the Minister, an Environmental Management and Monitoring Program (EMMP) as supplement to the Mining and Rehabilitation Program and shall conduct operations, monitor parameters and report activity in accordance with the requirements of clause 7 of Schedule 2.	Complied	This ACR reports on compliance against the PEPR 2017/020. Table 6.7 of the PEPR contains the updated environmental outcomes, monitoring, measurement criteria and control methods for Challenger.
ML6103 S2 Condition 1 The lessee shall, prior to commencing any work, lodge a Rehabilitation Bond to ensure land disturbed by mining operations will be rehabilitated. The bond will be reviewed annually by the Minister.	Complied	A bank guarantee was provided when Challenger commenced.
ML6103 S2 Condition 2 The lessee shall ensure that land disturbed by mining operations is, where possible, progressively rehabilitated to the satisfaction of the Chief Inspector of Mines.	Complied	A progressive rehabilitation and closure program has been implemented for Challenger with rehabilitation tasks for the project sections already rehabilitated. Vegetation clearance and rehabilitation activities are reported as part of the ACR. See Section 7 for details.

Lease condition	Compliance status	Summary and supporting evidence of compliance status determination
		Results of the 2017 EFA monitoring indicate that the current rehabilitation methods are adequate for the given landscape, and good results have been achieved so far (EBS 2018c). No rehabilitation activities have been undertaken during the reporting period.
ML6103 S2 Condition 3 The lessee shall ensure that topsoil is pre-stripped from the disturbance footprint of the pit, waste dump, tailings storage facility, airstrip, ROM pad and camp areas and temporally stockpiled for use in the rehabilitation of the land disturbed by mining.	Complied	A progressive rehabilitation and closure program has been implemented for Challenger with rehabilitation tasks for the project sections already rehabilitated. No rehabilitation activities have been undertaken during the reporting period.
ML6103 S2 Condition 4 The waste dumps shall be constructed in a manner which will deposit the deeper and more saline waste material in the centre of the fill. The terminal slopes shall not exceed 1 vertical to 3 horizontal (max. 18o). The surface of the dumps shall be progressively rehabilitated and vegetated to the satisfaction of the Chief Inspector of Mines.	Complied	To date, rehabilitation has occurred at IWL Eastern Wing (2004), TSF 2 – Lift 1 (2011) and TSF Lift 2 (2014) (EBS 2018c). Further, topsoil placement and ripping has been conducted on Lift 3 during 2016 and 2017. Results of the 2017 EFA monitoring indicate that the current rehabilitation methods are more than adequate for the given landscape. No rehabilitation activities have been undertaken during the reporting period.
ML6103 S2 Condition 5 The lessee shall prepare and submit for approval a Mining and Rehabilitation Program which amongst other things shall address the following: • details of the stages of the mining sequence of the operations and proposed rehabilitation; • details of how the safe design and operation of the Tailings Storage System will be achieved; • details of the mine closure including the removal of all plant, structures, buildings, • equipment, materials and rehabilitation; • any other information as may be required by the Chief Inspector of Mines. • all changes or amendments to the approved Mining and Rehabilitation Program must be approved prior to implementation by the Minister.	Complied	Section 6.3 of the current PEPR details the Closure Environmental Outcomes for Challenger including the updated management strategies, monitoring, measurement criteria and control methods (Tables 6.9 and 6.10). No rehabilitation activities have been undertaken during the reporting period.

Lease condition	Compliance status	Summary and supporting evidence of compliance status determination
ML6103 S2 Condition 6 The lessee shall prepare and implement an Environmental Management and Monitoring Program (EMMP) which will address, amongst other things: • the impact of mining operations on native biological communities and measurements of the success of their rehabilitation; • the maintenance of environmental flows of water and minimising the amount of contaminants entering the natural drainage system, both surface and groundwater, minimising the erosive effect of surface water runoff and the management of surface water management issues; • minimising the loss of surface soils due to heavy or excessive vehicle movements; • monitoring of vegetation regeneration in rehabilitated areas, including photographic records of changes to the environment; and • the management of rubbish and waste disposal issues.	Complied	Table 6.8 of the current PEPR contains the updated environmental outcomes, monitoring, measurement criteria and control methods for Challenger. No rehabilitation activities have been undertaken during the reporting period.
ML6103 S2 Condition 7 The lessee shall provide the Minister with an annual environmental report detailing the following: • operations undertaken during the period; • progressive rehabilitation undertaken during the period; • an environmental report on the progress and monitoring which has been carried out in accordance with the EMMP; and • any other information as may be required by the Chief Inspector of Mines.	Complied	Barton Gold provide this ACR, and in doing so meet this lease condition.
ML6103 S2 Condition 8 The lessee shall keep the Pastoral Lessee fully advised of their program of activities, particularly in regard to the impact on the land and the proposed rehabilitation technique to be undertaken.	Complied	Care and maintenance records indicate communications with the pastoralists were recorded during the reporting period. Communication is undertaken as necessary and records retained by site staff.
ML6103 S2 Condition 11 The lessee shall ensure all fuel and liquid chemical storage is adequately bunded to capture spillage and to prevent an accidental release of product from the storage area.	Can't be confirmed	An independent audit of the bunds was conducted in 2017 and includes opportunities for improvement. There is no evidence that these have been addressed or still need to be addressed.

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Lease condition	Compliance status	Summary and supporting evidence of compliance status determination
ML6103 S2 Condition 12 The lessee shall ensure that areas compacted or disturbed land are progressively rehabilitated when practicable to do so in accordance with seasonal conditions, to achieve a grazing after use. The land is to be spread with available topsoil, ripped and sown, with self-sustaining floristic community, using species local to the area that is compatible with pastoral utilisation, to the satisfaction of the Chief Inspector of Mines.	Complied	A progressive rehabilitation and closure program has been implemented for Challenger with rehabilitation tasks for the project sections already rehabilitated. Results of the most recent (2017) EFA monitoring indicate that the current rehabilitation methods are more than adequate for the given landscape, and excellent results have been achieved so far. No rehabilitation activities have been undertaken during the reporting period.
ML6103 S2 Condition 13 The lessee shall implement a monitoring program to identify the impact of mining on stock water supply to Pastoral Lease 2169 and shall provide an alternate water supply of stock water should mining operations adversely impact that supply.	Can't be confirmed	Some groundwater dipping records were made available for the reporting period, however no groundwater quality results were available.
ML6103 S2 Condition 14 The tenement holder shall be liable for the ongoing management of the Tailings Storage Facility following mine closure and decommissioning. The term of this will be coincident with the Bond and to the satisfaction of the Chief Inspector of Mines.	Yet to be determined	This phase of operations is yet to commence.
ML6103 S2 Condition 15 The lessee shall on completion of mining ensure that the long-term pit wall slopes are geotechnically stable to the satisfaction of the Chief Inspector of Mines and define an adequate exclusion zone by constructing a bund around the pit and also chainmesh perimeter fence (with warning signs), to reduce access to the pit area by stock, other animals and unauthorised persons.	Yet to be determined	This phase of operations is yet to commence.
ML6457 S1 Condition 1 The grant of the Mining Tenement authorises mining operations (only) for the recovery of: 1.1. Gold.	Complied	Mining operations to date have produced ore for gold recovery only.
ML6457 S1 Condition 2 The grant of the Mining Tenement authorises mining operations (only) that are consistent with the mining operations described in the Mining Lease Proposal document dated April 2014.	Acknowledged	PEPR2016/062 (rev. 3) was originally approved in November 2016 and updated (rev. 4) in March 2018 for mining operations consistent with those described in the MLP document dated August 2015 and subsequent Response Document dated 17 November 2015. Mining operations are conducted in accordance with the approved PEPR2017/020 (rev. 4).

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Lease condition	Compliance status	Summary and supporting evidence of compliance status determination
ML6457 S2 Condition 1 The Tenement Holder agrees to the APPROVED PEPR and any compliance reports and reportable incident reports, submitted in accordance with the Regulations, being made available for public inspection.	Complied	Updated PEPR was approved in March 2018 (rev. 4).
ML6457 S6 Condition 1 The tenement holder must during construction and operation, ensure that there is no adverse impact to the quality and quantity of groundwater caused by mining operations to existing users and water dependent ecosystems.	Yet to be determined.	Currently in Care and maintenance, however future operation is expected.
MPL 63, 65 & 66 S1 Condition 3 The licensee shall ensure that the land disturbed by activity ancillary to mining shall be rehabilitated to return the land to grazing.	Complied	A progressive rehabilitation and closure program has been implemented for Challenger with rehabilitation tasks for the project sections already rehabilitated. Results of the most recent (2017) Ecological Function Analysis (EFA) monitoring indicate that the current rehabilitation methods are more than adequate for the given landscape, and excellent results have been achieved so far. No rehabilitation activities have been undertaken during the reporting period.
MPL 63, 65 & 66 S2 Condition 1 The lessee shall, prior to commencing any work on the MPL, lodge a Rehabilitation Bond to ensure land disturbed by these ancillary operations will be rehabilitated.	Complied	A bank guarantee was provided when Challenger commenced.
MPL 63, 65 & 66 S2 Condition 6 The licensee shall on completion of mining activity at the tenement on the Challenger Gold Mine, recover and remove the pipeline from the land and the bores shall be effectively capped below ground level and abandoned as per PIRSA Information sheet "Construction and Abandonment of Drill holes for Mineral Exploration", and to the satisfaction of the Chief Inspector of Mines.	Yet to be determined	This phase of operations is yet to commence.
MPL 63, 65 & 66 S2 Condition 7 The licensee shall rehabilitate any land disturbed by activities ancillary to mining, when practical to do so and in accordance with seasonal conditions, to the satisfaction of the Chief Inspector for Mines.	Complied	A progressive rehabilitation and closure program has been implemented for Challenger with rehabilitation tasks for the project sections already rehabilitated. Rehabilitation activities are reported as part of the ACR.

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Lease condition	Compliance status	Summary and supporting evidence of compliance status determination
		Results of the most recent (2017) EFA monitoring indicate that the current rehabilitation method is more than adequate for the given landscape, and excellent results have been achieved so far.

5.3 Compliance with mine closure criteria

Compliance assessment against mine completion criteria not already included are outlined in Table 22.

Table 21 Assessment against mine completion outcomes

Impact ID	Outcome	OMC				Leading Indicator Criteria	Compliance status	Summary and supporting evidence of compliance status determination
		What will be measured and form (method) of measurement	Locations	Outcome achievement	Frequency			
C102	Post closure, mining activities do not impact on the ability of existing and/or future users to continue to gain access to supplies of suitable quality groundwater.	Groundwater quality – CN in groundwater.	Gusher 1 (MW01), MW02 – MW11	Post closure groundwater monitoring indicates stable or declining concentrations of cyanide. Results at MW01, MW02, and MW11 <0.08 mg/L.	Annually for at least three years	Annual groundwater results (CN) are consistent with modelling predictions. Biannual groundwater quality monitoring during operation and closure demonstrates WADCN in samples from COW1 does not exceed 0.08mg/L (Operational Measurement Criteria C10).	Not relevant at this point.	Mine is in care and maintenance and future operation is expected (i.e. site is not in post closure phase).
C104	Permanent landforms are chemically and physically stable so as to not impact the diversity and abundance of native vegetation.	Suitably qualified third party assessment of embankment stability and tailing density.	IWL	Audit report demonstrates that – tailings density is trending towards 1.5 t/m3 (TSF2) TSF1 – liquefaction assessment and seismic hazard assessment confirm embankment stability.	Once, post processing operations, prior to each 5 m lift.	Operational construction (lifts) meets approved design or equivalent performance as demonstrated through as construct report Annual third party audits of TSF2 conducted until closure and demonstrate sufficient freeboard has been maintained, Operations Manual are relevant, recommendations are actioned prior to next audit or confirmed as not necessary, by independent expert advice. Modelling of surface water, erosion and dispersion areas indicate abundance and diversity of vegetation will not be impacted.	Not relevant at this point.	Mine is in care and maintenance and future operation is expected (i.e. site is not in post closure phase).
C108	Mining activities do not impact on the ability of existing and/or future users to continue to gain access to supplies of suitable quality groundwater.	Groundwater quality water quality against modelling outcomes, as defined in the groundwater monitoring plan.	Gusher1 (MW01), MW02 – MW11	Post completion groundwater monitoring indicates stable or declining concentration of salinity, cyanide, pH and arsenic. Cyanide concentrations are consistent with or better than 2020 modelling predictions (wells MW01 – MW08b).	Annual for three years post completion	Annual groundwater results are consistent with modelling prediction in relation to impact to other users. Groundwater model, recalibrated at 2020, demonstrates no likely risk to groundwater suitable for industrial purposes.	Not relevant at this point.	Mine is in care and maintenance and future operation is expected (i.e. site is not in post closure phase).
C109	Seepage from permanent landforms do not impact the diversity and abundance of native vegetation.	Depth to groundwater.	MW06, MW08b, MW09, MW10, MW11	Depths to groundwater are declining or stable and greater than 1m below surface.	6 monthly during operation and annually for three years post completion.	During operation and closure landscape functional attributes are measure and on lease sites match, exceed or trending towards off lease site value. Attributes include: • Abundance of long live perennial shrubs; • Cover of long lived perennial shrubs; • Fecundity of perennial shrubs; • Presence / cover of seed resource; • Litter deposition; • Grazing utilisation; • Juvenile abundance; and • Presence of perennial grass species (Operational Measurement Criteria C8).	Not required.	Mine is in care and maintenance and future operation is expected (i.e. site is not in post closure phase).
C112	Sedimentation from permanent landforms does not impact the diversity and abundance of native vegetation.	Landscape functional attributes. Include: • abundance of long lived perennial shrubs; • cover of long lived perennial shrubs; • presence / cover of seed resource; • litter deposition;	Monitoring sites. CHA01 to CHA12 (refer to Figure 5.19)	Landscape function monitoring in the post completion period demonstrates no loss of diversity or abundance of native vegetation as a result of mining activities.	Annually for three years post completion	Results of annual audits of inspection, monitoring and maintenance, incident and corrective action records, will demonstrate that toe drains, diversions and other surface water and sediment control infrastructure are effectively managing surface water flows and containing sediment *during operation, completion and for 3 years post completion* (operations measurement criteria impact event ID C2).	Not relevant at this point.	Mine is in care and maintenance and future operation is expected (i.e. site is not in post closure phase).

Impact ID	Outcome	OMC				Leading Indicator Criteria	Compliance status	Summary and supporting evidence of compliance status determination
		What will be measured and form (method) of measurement	Locations	Outcome achievement	Frequency			
		• grazing utilisation; • juvenile abundance; and • presence of perennial grass species.				Annual flora monitoring and EFA indicates no impact to vegetation communities and wees are being control, ie on lease sites to match, exceed or trending towards off lease site values Where landform based lease sites do not trend towards, match or exceed off-lease sites, differences are not attributed to erosion of permanent landforms (operations measurement criteria impact event C1).		
C114	Where practicable, the pre-mining land use can be recommenced after mine completion.	Soil sampling in accordance with the National Environment Protection (Assessment of Site Contamination) Measure. Landscape function attributes. Include: • abundance of long lived perennial shrubs; • cover of long lived perennial shrubs; • fecundity of perennial shrubs; • presence / cover of seed resource; • litter deposition; • grazing utilisation; • juvenile abundance; and • presence of perennial grass species.	ML and MPL area, infrastructure locations. Monitoring sites, CHA01 to CHA12 (refer to PEPR Figure 5.19).	Prior to mine completion Soil sampling undertaken at infrastructure locations demonstrate that the concentration of analytes in soils will not preclude the post mining land-use of grazing Landscape function monitoring in the post completion period demonstrate rehabilitation of on lease sites match, exceed or trending towards off lease site values.	Post-closure and prior to relinquishment. Prior to relinquishment of tenement.	Annual flora monitoring and EFA indicates no impact to vegetation communities and weeds are being controlled, ie on lease sites to match, exceed or trending towards off lease site values. Where landform based lease sites do not trend towards, match or exceed off-lease sites, differences are not attributed to erosion of permanent landforms (operations measurement criteria impact event C1). N/A	Not relevant at this point.	Mine is in care and maintenance and future operation is expected (i.e. site is not in post closure phase).
C115	Where practicable, the pre-mining land use can be recommenced after mine completion.	Site contamination at closure compared to pre-mining, conducted by an independent auditor. Species abundance and richness of key resident species.	ML and MPL area. Two near mine and two off leas sites (See PEPR Figure 5.19).	Prior to mine completion an audit is conducted and concludes that the Lease is suitable for the future post-mining land use/pre-mining land use can recommence with no harm to ecological and human health. Post closure monitoring and EFA at set monitoring locations (See Fig 5.19) indicates that the abundance, diversity and productivity of fauna is no impacted by mining operations (i.e. within 80% of mean equivalent site values collated 2002-date).	Post-closure and prior to relinquishment. Once, prior to surrender.	Annual flora monitoring and EFA indicates no impact to vegetation communities and weeds are being controlled ie on lease sites to match exceed or trending towards off lease site values. Where landform based lease sites do not trend towards, match or exceed off-lease sites, differences are not attributed to erosion of permanent landforms (operational measurement criteria impact event C1). Result of annual assessment indicate stable or improving trends	Not relevant at this point Not relevant at this point.	Mine is in care and maintenance and future operation is expected (i.e. site is not in post closure phase). Mine is in care and maintenance and future operation is expected (i.e. site is not in post closure phase).
C117	Post mine completion, the risks to the health and safety of the public so far as it may be affected by mining operations are as low as reasonably practicable.	An audit of decommissioning rehabilitation and closure activities.	Decline – underground portal Vent shaft Abandonment bund at Challenger and	Audit at post closure demonstrates signage regarding unauthorised access has been installed, abandonment bund has been constructed as designed and portal and vent fan have been sealed.	Once, prior to surrender.	N/A	Not relevant at this point.	Mine is in care and maintenance and future operation is expected (i.e. site is not in post closure phase).

Impact ID	Outcome	OMC				Leading Indicator Criteria	Compliance status	Summary and supporting evidence of compliance status determination
		What will be measured and form (method) of measurement	Locations	Outcome achievement	Frequency			
			Challenger West Pits.					
C119	Mining activities do not impact on the ability of existing and/or future users to continue to gain access to supplies of suitable quality groundwater.	Monitoring of groundwater standing levels Monitoring of groundwater quality using best practice i.e. a low flow/micro purge method. Groundwater conditions at mine site and stock watering bores.	COW1 see PEPR Figure 5.8. ML and MPL area (MW01 – MW11, dead finish, bluff bore, COW1).	RL of COW1 groundwater level remains greater than 159.9 mAHD (less than 19.2mTOC). Annual groundwater quality monitoring demonstrates TDS at COW1 does not exceed 7000mg/L. A post completion audit demonstrates that groundwater response in the mine area will not cause impact to third party access to stock water (at existing stock watering bores).	Post closure and prior to relinquishment – annually for three years. Post completion.	Quarterly field measurements of TDS in groundwater in COW1 are 120% or less of baseline levels. Where exceedances ae observed, undertake assessment works to determine the source and impact of the increased salinity, and any next steps. Biannual groundwater quality monitoring demonstrates water quality at Pastoral bores – Bluff bore and dead finish bore do not exceed ANZECC criteria for cobalt, TDS and pH, where exceedances are recorded further assessment is undertaken to consider what, if any, mining influences are present.	Not relevant at this point Not relevant at this point.	Mine is in care and maintenance and future operation is expected (i.e. site is not in post closure phase). Mine is in care and maintenance and future operation is expected (i.e. site is not in post closure phase).
C120	Mining activities do not impact on the ability of existing and/or future users to continue to gain access to supplies of suitable groundwater.	Depth to groundwater and groundwater RL.	COW1	Post closure groundwater monitoring indicates stable or increasing groundwater level.	Post-closure and prior to relinquishment – annually for three years.	Annual groundwater results are consistent with modelling predictions in relation to impact to other users.	Not relevant at this point.	Mine is in care and maintenance and future operation is expected (i.e. site is not in post closure phase).
C121	Where practicable, the pre-mining land use can be recommenced after mine completion.	That remaining infrastructure meets the land transfer agreement.	the site	An independent audit demonstrates that the condition of the site will allow a pre-mining land use (pastoral) to be resumed and that the condition is in accordance with the transfer agreement.	Once, post completion.	N/A	Not relevant at this point.	Mine is in care and maintenance and future operation is expected (i.e. site is not in post closure phase).
C122	Where practicable, the pre-mining land use can be recommenced after mine completion.	The condition of the site.	The site.	An independent audit demonstrates that the condition of the site will allow a pre-mining land use (pastoral) to be resumed and that the condition is in accordance with the transfer agreement.	Post completion.	N/A	Not relevant at this point.	Mine is in care and maintenance and future works are expected (i.e. site is not in post closure phase).
C123	Establishment of ecosystem and landscape function, commensurate with or trending towards surrounding within the site.	Ecosystem functional attributes. Include: • abundance of long lived perennial shrubs; • cover of long lived perennial shrubs; • fecundity of perennial shrubs; • presence / cover of seed resource; • litter deposition; • grazing utilisation; • juvenile abundance; and • presence of perennial grass species.	Monitoring sites, CHA01 to CHA12 (refer to PEPR Figure 5.19). ML and MPL	Results of flora monitoring and EFA indicates no impact to vegetation communities and weeds are being controlled, ie on lease sites to match, exceed or trending towards off lease site values. Audit by an independent suitably qualified and experienced specialist during closure, verifies that vegetation surveys at representative monitoring sites located on rehabilitated areas have achieved or are trending towards baseline ecosystem condition and landscape function and is appropriate for the agree post-completion land use.	Post-closure and prior to relinquishment – annually for at least three years.	EFA monitoring performed and recommendations acted on progressively. Annual review during operation demonstrates that weed incursions have been managed and avoided through monitoring and treatment (C13).	Not relevant at this point.	Mine is in care and maintenance and future operation is expected (i.e. site is not in post closure phase).

5.4 Summary of non-compliances and corrective actions

Table 22 provides a summary of all non-compliances for the reporting period that relate to environmental outcomes.

Table 23 provides details of the source of non-compliance and corrective actions identified in relation to environmental outcomes listed in the PEPR.

Table 22 Summary of non-compliances

Aspect of environment	Impact ID	Status
Surface water/ Vegetation	C1	Unable to determine
Land/soils	C3, C4	Unable to determine
Land/soils	C6	Unable to determine
Soil/ Vegetation	C7	Unable to determine
Vegetation	C8	Unable to determine
Groundwater	C10	Unable to determine
Groundwater	C11	Unable to determine
Groundwater	C12	Unable to determine
Vegetation	C13	Unable to determine
Fauna	C14	Unable to determine
Soil	C15	Unable to determine

Table 23 Non compliances and corrective actions associated with Environmental Outcomes and Measurement Criteria

Aspect	**Surface water**	**Impact ID**	**C1**	**Tenement**	**ML6103, MPL63**
Environmental Outcome	No long-term impact on local environmental values as a result of changes to flows or surface water quality characteristics.				
Outcome measurement criteria	**What will be measured and form (method) of measurement**		**Locations**	**Outcome achievement**	**Frequency**
	Landscape functional attributes include: • abundance of long-lived perennial shrubs; • cover of long-lived perennial shrubs; • fecundity of perennial shrubs; • presence / cover of seed resource; • litter deposition; • grazing utilisation; • juvenile abundance; and • presence of perennial grass species.		Monitoring sites, CHA01 to CHA12 (refer to Figure 5.19).	Annual flora monitoring and EFA indicates no impact to vegetation communities and weeds are being controlled, i.e. on lease sites to match, exceed or trending towards off lease site values. Where lease sites do not match or exceed off-lease sites, differences are not attributed to site drainage issues.	Annual
Cause of non-compliance	No annual vegetation survey undertaken over reporting period, due to project being in care and maintenance and change of ownership.				
Summarise any actions taken or yet to be taken to rectify the non-compliance and to prevent the reoccurrence of any such non-compliance	It is the intention of Barton Gold to restore existing control and management strategies (as outlined in the PEPR) to improve compliance through monitoring and a PEPR review. This will include vegetation surveys to demonstrate the abundance and diversity of vegetation.				
Aspect	**Land/Soils**	**Impact ID**	**C3, C4**	**Tenement**	**ML 6103**
Environmental Outcome	No contamination of land and soils as a result of mining related activities that would preclude pre-mining land use.				
Outcome measurement criteria	**What will be measured and form (method) of measurement**		**Locations**	**Outcome achievement**	**Frequency**
	Audit of records of incidents – unplanned chemical releases breaching primary containment (bunds) to within secondary containment (disturbed operational areas, engineered or traffic compacted surfaces) – recorded and cleaned up.		Mining related unplanned release (spill) locations within the	Audit (annual) demonstrates spills and leaks outside primary containment/bunded areas (including within the plant) are	Incident details recorded on Incident Reporting System within 24 hours of unplanned releases breaching primary

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	• Records of incidents – Reviews of records demonstrates that where a chemical release breaches secondary containment (disturbed operational areas, engineered or traffic, compacted surfaces), DPC have been notified verbally within 24 hours and received a written report of incident details including: release location, volume, actions taken, forward plan, has been made to DPC within 2 business days of the incident occurring.	tenement, breaching, primary containment. Mining related unplanned release (spill) locations within the tenement, breaching secondary containment. Mining related unplanned release (spill) locations within the tenement, to previously undisturbed areas.	recorded on the Incident Reporting System and have been cleaned up as per the Emergency Response procedures and MSDS sheets. Where a chemical release breaches secondary containment (disturbed operational areas, engineered or traffic compacted surfaces), DPC have been notified verbally withing 24 hours and received a written report of incident details including: release location, volume, actions taken, forward plan, has been made to DPC within 2 business days of the incident occurring.	containment. Release has been cleaned up within 3 days of release unless otherwise agreed with DPC. Annual audit of records. Following unplanned releases breaching secondary containment, verbally reported to DPC within 24 hours of incident occurring and follow up written report within 2 business days unless otherwise agreed with DPC.
Cause of non-compliance	Records of incidents and/or audits of incident records could not be located for the operational period			
Summarise any actions taken or yet to be taken to rectify the non-compliance and to prevent the reoccurrence of any such non-compliance	It is the intention of Barton Gold to restore existing control and management strategies (as outlined in the PEPR) to improve compliance through monitoring and a PEPR review. This includes: • Continuation of regular care and maintenance inspections to maintain incident register; and, • Conducting an audit of incident records, chemical storage facilities within 6 months of mining activities resuming to demonstrate compliance with the OMC.			

Aspect	**Land/ Soil**	**Impact ID**	**C6**	**Tenement**	**ML6103, ML6457, MPL63, MPL65, MPL66**
Environmental Outcome	No contamination of land and soils as a result of mining related activities that would preclude pre-mining land use.				
Outcome measurement criteria	**What will be measured and form (method) of measurement**		**Locations**	**Outcome achievement**	**Frequency**
	• Audit of waste disposal records.		Challenger site.	Records show waste has been managed in accordance with the approved LEMP.	Annual
Cause of non-compliance	Documentation of audits of waste disposal records could not be located for the operational period.				
Summarise any actions taken or yet to be taken to rectify the non-compliance and to prevent the reoccurrence of any such non-compliance	It is the intention of the current ownership (Barton Gold) to restore existing control and management strategies (as outlined in the PEPR) to meet compliance requirements in the next reporting period. This will involve conducting an audit of waste disposal records to demonstrate achievement of the OMC and adherence to approved LEMP for waste disposal.				

Aspect	**Soil/ Vegetation**	**Impact ID**	**C7**	**Tenement**	**ML6103**
Environmental Outcome	No contamination of land as a result of loss of containment of ARD.				
Outcome measurement criteria	**What will be measured and form (method) of measurement**		**Locations**	**Outcome achievement**	**Frequency**
	Audit of the record of condition, monitoring and operation of the TSF. • Construction of TSF lifts against proposed design.		TSF	Annual audits by a suitable independent professional demonstrate that the TSF has been operated in accordance with the Tailing Management Plan and Operating Manual. Audit demonstrates: • freeboard is sufficient; • tailings density is consistent with design density; • the management plan and operating manual are suitable for the next lift; and • embankment have been assessed for indications of seepage. A construction report for TSF lifts, prepared by a suitably experience independent civil or mining engineer, demonstrates that the construction met specified design report: • design dimensions; • soil composition; and • soil properties, including moisture levels and compaction.	Annual Post TSF lift construction
Cause of non-compliance	Records of audits could not be located for the operational period.				

Summarise any actions taken or yet to be taken to rectify the non-compliance and to prevent the reoccurrence of any such non-compliance	DEM was first notified regarding potential wind erosion occurring during December 2018. Regular inspections continued to be conducted and repair works carried out as required, although minor wind erosion is still occurring as of June 2021. Known cracking in wall of tailings dam continually monitored throughout care and maintenance inspections. It is the intention of Barton Gold to restore existing control and management strategies (as outlined in the PEPR) to improve compliance through monitoring and a PEPR review. This will include an audit of TSF by a dam engineer.

Aspect	**Vegetation**	**Impact ID**	**C8**	**Tenement**	**ML6103, MPL63**
Environmental Outcome	The tenement holder must during construction and operation, ensure that there is no loss of abundance or diversity of native vegetation on the Land unless a significant environmental benefit has been approved.				
Outcome measurement criteria	**What will be measured and form (method) of measurement**		**Locations**	**Outcome achievement**	**Frequency**
	Landscape function attributes. Include: • abundance of long-lived perennial shrubs; • cover of long-lived perennial shrubs; • fecundity of perennial shrubs; • presence / cover of seed resource; • litter deposition; • grazing utilisation; • juvenile abundance; and • presence of perennial grass species.		Existing monitoring sites (refer to Figure 5.12) reduced to a 10 x 2 metre plot.	On lease sites to match, exceed or trending towards off lease site values.	Annual
Cause of non-compliance	No annual vegetation survey undertaken over reporting period, due to project being in care and maintenance and change of ownership.				
Summarise any actions taken or yet to be taken to rectify the non-compliance and to prevent the reoccurrence of any such non-compliance	It is the intention of Barton Gold to restore existing control and management strategies (as outlined in the PEPR) to improve compliance through monitoring and a PEPR review. This will include vegetation surveys to demonstrate the abundance and diversity of vegetation.				

Aspect	**Groundwater**	**Impact ID**	**C10**	**Tenement**	**ML6103 and ML 6457**
Environmental Outcome	The tenement holder must during construction and operation, ensure that there is not adverse impact to the quality and quantity of groundwater caused by mining operations to existing users and water dependent ecosystems (source ML6457)				
Outcome measurement criteria	**What will be measured and form (method) of measurement**		**Locations**	**Outcome achievement**	**Frequency**
	Groundwater quality including WADCN. Using best practice i.e. a low flow/micro purge method and field filtered samples.		COW1, identified on Figure 5.19 (refer PEPR).	Biannual groundwater quality monitoring demonstrates WADCN in samples from COW1 does not exceed 0.08mg/L	6 monthly
Cause of non-compliance	Records could not be located, and groundwater quality has not been monitored on a 6 monthly basis during the care and maintenance period.				
Summarise any actions taken or yet to be taken to rectify the non-compliance and to prevent the reoccurrence of any such non-compliance	It is the intention of Barton Gold to restore existing control and management strategies (as outlined in the PEPR) to improve compliance through monitoring and a PEPR review. This includes groundwater monitoring and reporting as per the PEPR (2017/020 dated February 2018 and locate Table X from WPG data records to addend to the PEPR.				

Aspect	**Groundwater**	**Impact ID**	**C11**	**Tenement**	**ML6103 and ML6457**
Environmental Outcome	The tenement holder must during construction and operation, ensure that there is no adverse impact to the quality and quantity of groundwater caused by mining operations to existing users and water dependent ecosystems (source ML6547).				
Outcome measurement criteria	**What will be measured and form (method) of measurement**		**Locations**	**Outcome achievement**	**Frequency**
	Groundwater quality including TDS, WAD, CN, pH, Arsenic as per the Groundwater Monitoring Plan for sampling and analysis protocols.		MW06, 07, 09, 10, 11.	Biannual groundwater monitoring results confirm that groundwater quality are consistent with modelled predictions (Figure 5.18, table 5.4). TDS <50,000mg/L WAD CN <0.08 mg/L pH 6>9 As <0.5.	Biannual (typically January and July).
Cause of non-compliance	Records could not be located, and groundwater quality has not been monitored on a 6 monthly basis during the care and maintenance period.				
Summarise any actions taken or yet to be taken to rectify the non-compliance and to prevent the reoccurrence of any such non-compliance	It is the intention of Barton Gold to restore existing control and management strategies (as outlined in the PEPR) to improve compliance through monitoring and a PEPR review. This includes groundwater monitoring and reporting as per the PEPR (2017/020 dated February 2018).				

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Aspect	Groundwater	Impact ID	C12	Tenement	
Environmental outcome:	The tenement holder must during construction and operation, ensure that there is no adverse impact to the quality and quantity of groundwater caused by mining operations to existing users and water dependent ecosystems (source ML6547).				
Outcome measurement criteria	**What will be measured and form (method) of measurement**		**Locations**	**Outcome achievement**	**Frequency**
	Monitoring of groundwater standing levels. • Monitoring of groundwater quality using best practice i.e. a low flow/micro purge method.		COW1 refer to PEPR Figure 5.8	RL of COW1 groundwater levels remains greater than 159.9 mAHD (less than 19.2 mTOC) Biannual groundwater quality monitoring demonstrates TDS at COW1 does not exceed 7000 mg/L.	monthly (groundwater levels). 6 monthly (groundwater monitoring).
Cause of non-compliance	Records were unable to be located for 6 monthly groundwater quality monitoring. Monitoring of groundwater levels has been undertaken twice during the reporting period and COW1 groundwater levels remained less than 19.2 mTOC.				
Summarise any actions taken or yet to be taken to rectify the non-compliance and to prevent the reoccurrence of any such non-compliance	It is the intention of Barton Gold to restore existing control and management strategies (as outlined in the PEPR) to improve compliance through monitoring and a PEPR review. This includes groundwater monitoring and reporting as per the PEPR (2017/020 dated February 2018).				

Aspect	**Vegetation**	**Impact ID**	**C13**	**Tenement**	**ML 6103, MPL63**
Environmental Outcome	To maintain the abundance, diversity and productivity of flora at ecosystems levels through the avoidance of management of adverse impacts				
Outcome measurement criteria	**What will be measured and form (method) of measurement**		**Locations**	**Outcome achievement**	**Frequency**
	Ecosystem functional attributes include: • abundance of long lived perennial shrubs; • cover of long lived perennial shrubs; • fecundity of perennial shrubs; • presence / cover of seed resource; • litter deposition; • grazing utilisation; • juvenile abundance; and • presence of perennial grass species. Presence and abundance of Kingoonya NRM board target weed species. Functional indices and plant cover data on rehabilitation transects.		Monitoring sites, CHA01 to CHA12 (refer to Figure 5.19). Selected locations based on risk assessment. Conducted on waste rock dump, TSF wall and other areas of rehabilitation of an area greater than 1ha. Two analogue sites, one in each vegetation community type of rehabilitation.	Annual flora monitoring and EFA indicates no impact to vegetation communities and weeds are being controlled, ie on lease sites to match, exceed or trending towards off leas site values. Annual review demonstrates that weed incursion have been managed and avoided through monitoring and treatment. Assessment of ecosystem function analysis for trends of continuous improvement towards analogue sites. Trend of continual improvement and move towards analogue values.	Annual Annual Annual for rehabilitation and biennial for analogue sites
Cause of non-compliance	No annual vegetation survey undertaken over reporting period.				
Summarise any actions taken or yet to be taken to rectify the non-compliance and to prevent the reoccurrence of any such non-compliance	It is the intention of Barton Gold to restore existing control and management strategies (as outlined in the PEPR) to improve compliance through monitoring and a PEPR review. This will include vegetation surveys to demonstrate the abundance and diversity of vegetation.				

Aspect	**Fauna**	**Impact ID**	**C14**	**Tenement**	**ML 6103, MPL63**
Environmental Outcome	To maintain the abundance, diversity and productivity of fauna at ecosystems levels through the avoidance or management of adverse impacts				
Outcome measurement criteria	**What will be measured and form (method) of measurement**		**Locations**	**Outcome achievement**	**Frequency**
			Two near mine and two off lease sites (See PEPR Figure 5.19). Two near mine and two off lease sites (See PEPR Figure 5.19). At selected near mine lease sites.	Annual fauna monitoring and EFA at set monitoring locations (See PEPR Figure 5.19) indicates that the abundance, diversity and productivity of fauna is not impacted by mining operations (i.e. within 80% of mean equivalent site values collated 2002-date). Annual bird monitoring at set locations (See PEPR Fig 5.19) indicates abundance, and richness of known resident species is within 80% of mean long term equivalent site values collated 2002-date. Pest predator species monitoring report levels not significantly exceeding previously data from 2002 – 2016.	Annual Annual Annual
Cause of non-compliance	No annual fauna survey has been undertaken during the reporting period, due to project being in care and maintenance and change of ownership.				

Aspect	Groundwater	Impact ID	C12	Tenement	
Summarise any actions taken or yet to be taken to rectify the non-compliance and to prevent the reoccurrence of any such non-compliance	It is the intention of Barton Gold to restore existing control and management strategies (as outlined in the PEPR) to improve compliance through monitoring and a PEPR review. This will include fauna surveys to demonstrate the diversity of fauna.				
Aspect	**Soil**	**Impact ID**	**C15**	**Tenement**	**ML 6103**
Environmental Outcome	Maintain quantity and quality of top soil for rehabilitation activities.				
Outcome measurement criteria	**What will be measured and form (method) of measurement**	**Locations**	**Outcome achievement**	**Frequency**	
	Volume of topsoil stockpiles and use in rehabilitation works.	Stockpiles as per PEPR Figure 23.8.	Topsoil register records demonstrate reconciliation of stockpile volumes against rehabilitation use.	On-going, reported annually.	
Cause of non-compliance	No records of current topsoil stockpile volumes and /or reconciliation against rehabilitation uses have been located for the reporting period.				
Summarise any actions taken or yet to be taken to rectify the non-compliance and to prevent the reoccurrence of any such non-compliance	It is the intention of the current ownership (Barton Gold) to restore existing control and management strategies (as outlined in the PEPR) to meet compliance requirements in the next reporting period. This includes reviewing and/or updating topsoil records to ensure reconciliation of stockpile volumes against rehabilitation uses reflects current status.				

A review of the compliance status with non-outcomes ML conditions has identified fours conditions where compliance is unable to be determined. These are summarised in Table 24, including corrective actions proposed to be undertaken where applicable.

Table 24 Non-compliances and corrective actions associated with Lease Conditions

Lease Condition	Summarise any actions taken or yet to be taken to rectify the non-compliance and to prevent the reoccurrence of any such non-compliance
ML6103 S2 Condition 14 The tenement holder shall be liable for the ongoing management of the Tailings Storage Facility following mine closure and decommissioning. The term of this will be coincident with the Bond and to the satisfaction of the Chief Inspector of Mines.	The mine closure and decommissioning phases are yet to commence, therefore no actions can be taken at this time. A Bond is held for the operation. The site is currently in care and maintenance phase, however future operation is expected.
ML6103 S2 Condition 15 The lessee shall on completion of mining ensure that the long-term pit wall slopes are geotechnically stable to the satisfaction of the Chief Inspector of Mines and define an adequate exclusion zone by constructing a bund around the pit and also chainmesh perimeter fence (with warning signs), to reduce access to the pit area by stock, other animals and unauthorised persons.	The site is currently in care and maintenance phase, as such this phase is yet to commence. Regular inspections of the pit walls are conducted as part of ongoing care and maintenance activities.
ML6457 S6 Condition 1 The tenement holder must during construction and operation, ensure that there is no adverse impact to the quality and quantity of groundwater caused by mining operations to existing users and water dependent ecosystems.	It is the intention of the current ownership (Barton Gold) to restore existing control and management strategies (as outlined in the PEPR) to meet compliance requirements in the next reporting period. This includes continuation of existing groundwater monitoring program and reporting requirements as per the PEPR (2017/020 dated February 2018).
MPL 63, 65 & 66 S2 Condition 6 The licensee shall on completion of mining activity at the tenement on the Challenger Gold Mine, recover and remove the pipeline from the land and the bores shall be effectively capped below ground level and abandoned as per PIRSA Information sheet "Construction and Abandonment of Drill holes for Mineral Exploration", and to the satisfaction of the Chief Inspector of Mines.	The site is currently in care and maintenance phase, as such this phase is yet to commence.

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6. Disturbance and rehabilitation activities

No disturbance or rehabilitation activities took place during the reporting period. Table 25 provides the clearance and rehabilitation activities for Challenger to date. Disturbance and/ or rehabilitation works for the next reporting period have not yet been finalised.

Table 25 Summary total of native vegetation clearance and rehabilitation

Summary total	Clearance (Ha)
Total area of native vegetation cleared in the reporting period	**0**
Total area of vegetation rehabilitated in the reporting period	**0**
Total area of native vegetation cleared to date	**173.16**
Total area of vegetation rehabilitated to date	**24.06**
Estimated area proposed to be cleared in the next reporting period	**-**
Estimated area proposed to be rehabilitated in the next reporting period	**-**

Note: figures in the table are subject to rounding

7. Reconciliation of native vegetation clearance

The site is currently under care and maintenance and there was no clearing undertaken during the reporting period. Any future clearance will be subject to an internal application process to ensure compliance with the Native Vegetation Management Plan (NVMP) and Significant Environmental Benefit (SEB) approved clearance.

8. Environment Protection and Biodiversity Conservation Act 1999 reporting

ML 6103 and 6457 for the Challenger Gold Mine are not subject to an approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

9. Exempt land

None of the land on which Challenger is located is exempt or requires a waiver of exemption. As such, the site is compliant with exempt land provisions in accordance with Section 9 of the Mining Act.

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10. Complaints

No complaints were received during the reporting period.

11. Audits and management system review

11.1 Audits

During operations (up until October 2018) spot audits were undertaken to assess operational compliance. Records of audits for the operational period could not be located.

During care and maintenance, regular inspections have been undertaken. The findings and actions arising from these have been recorded as caretaker inspections.

11.2 Management system reviews

No management system reviews, or audits have been undertaken during the reporting period. Barton Gold will review and implement appropriate management systems and review processes to ensure compliance with environmental and mine closure outcomes.

12. Verification of uncertainty

No PEPR uncertainties have been addressed during the reporting period, as for most of this time the Project was in care and maintenance. Please see the forward work plan for planned works to address identified uncertainties.

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13. Forward work plans

A summary of the proposed current and future works is provided in Table 26. The works have been proposed based on existing uncertainties or lack of data identified as part of defining the environmental outcomes. Table 26 does not include items that are considered controls, operational monitoring or actions required to confirm completion or components associated with Barton Gold's Environmental Management System or, which will be implemented, reviewed, continuously improved and maintained in order to ensure compliance and to manage risks associated with uncertainties and assumptions. A number of tasks included in previous forward work plans, have been removed to allow Barton Gold to reassess and prioritise tasks based on mining and processing operations which will be better defined in the coming year. The forward work plan will be subject to ongoing discussion and agreement with DEM.

Table 26 Challenger forward work plan

Activity	Start Date	Completion Date	Planned Date for Submission	Justification of Timing for Works	Responsibility	Current Status
Undertake ecology monitoring survey	2021	2022	To be submitted in 2022 ACR	Change of ownership and high demand for ecological services during spring	General Manager	Scope developed
Reinstate groundwater monitoring	2021	2022	To be submitted in the 2022 ACR	Reinstated monitoring program	General Manager	Not yet commenced
Continue Ecosystem Function Analysis (EFA), or similar to determine success of rehabilitated sites and adjust rehabilitation activities as appropriate based on the results	2021	2022	Compliance report	Annual assessment, post-closure assessment to provide assessment statements for completion	General Manager	Scope developed
Contaminated site assessment of operational areas	post closure			For completion (required to be undertaken after decommissioning and remedial works)	General Manager	Not yet commenced
Legal asset transfer agreement to be compiled and agreed by all relevant parties, and as per Closure Outcome 1	prior to LOM			Completion requirement	General Manager	Not yet commenced
Finalisation of closure design and implementation of barriers	post LOM			For completion	General Manager	Not yet commenced

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Activity	Start Date	Completion Date	Planned Date for Submission	Justification of Timing for Works	Responsibility	Current Status
Closure activities - signage and abandonment bund are in place	post closure			For completion	General Manager	Not yet commenced

14. Changes to mining operations and emerging environmental hazards

No changes that required a Program Notification for mining operations occurred during the reporting period. Exploration details are in Appendix B.

15. Technical reports

No technical studies or reports were completed relevant to the OMC during the reporting period. Groundwater standing water level monitoring details have been included in Appendix C.

16. Voluntary information

Barton Gold is actively building relationships with neighbouring stakeholders and regular communication is on-going. During the reporting period Barton Gold has engaged in regular dialogue with Mobella Station regarding its operations and use of shared infrastructure (roads).

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Appendix A Public liability insurance

DUAL

Certificate of Currency

Class of Business: Resource Industry Public & Products Liability

Policy Number: P-RL/0/300878/20/L-6

Policyholder: **Barton Gold Pty Ltd; Roma Resources SA Pty Ltd; Challenger 2 Pty Ltd; Tunkillia 2 Pty Ltd; Tarcoola 2 Pty Ltd; Jumbuck Equipment Pty Ltd**

Business Description: Mineral Exploration including Mine on Care & Maintenance

Insurance Period: From 4:00pm on 31/10/2020 to 4:00pm on 31/10/2021
Australian local time in the State or Territory where this **policy** was purchased

Indemnity Limit: Section A: $ 20,000,000
Section B: $ 20,000,000
Section C: $ 20,000,000

Deductibles: Worker to Worker Excess $ 25,000
Other Excess: $ 5,000

Territorial limits: Worldwide excluding USA and Canada

Insurer: DUAL Australia Pty Ltd on behalf of certain underwriters at Lloyd's

Signature:

Damien Coates - Chief Executive Officer, DUAL Asia Pacific

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Certificate of Currency

The policy referred to is current as at the date of this certificate and whilst a due date has been indicated it should be noted that the policy may be cancelled in the future. Accordingly, reliance should not be placed on the expiry date.

Policy Number:	10M 8272185		
Insured:	Barton Gold Pty Ltd, Roma Resources SA Pty Ltd, Challenger 2 Pty Ltd, Tunkillia 2 Pty Ltd, Tarcoola 2 Pty Ltd, Jumbuck Equipment Pty Ltd		
Period of Insurance:	*(From)*	31 October 2020	at 4:00pm local time at the place of issue
	(To)	31 October 2021	at 4:00pm local time at the place of issue
Policy Type:	Excess Liability		
Limit of Liability:			
Public Liability:	$30,000,000	any one Occurrence in excess of $20,000,000	
Advertising Liability:	$30,000,000	any one Occurrence in excess of $20,000,000	
Products Liability:	$30,000,000	any one Occurrence and in the aggregate for any one Period of Insurance in excess of $20,000,000	
Wording:	CGU Excess Liability Insurance Policy CID0343 REV1 0918		
Interest Noted:	It is noted and agreed that this Policy is endorsed to include the interests of: N/A		
Remarks:	The above is subject always to the terms, conditions, exclusions and endorsements of the Policy.		

Signed for and on behalf of Insurance Australia Limited trading as CGU Insurance.



Tami Sorensen
Technical Liability Underwriting Manager
Southern Region, Australia Division
04/11/2020

Appendix B Exploration on mining leases

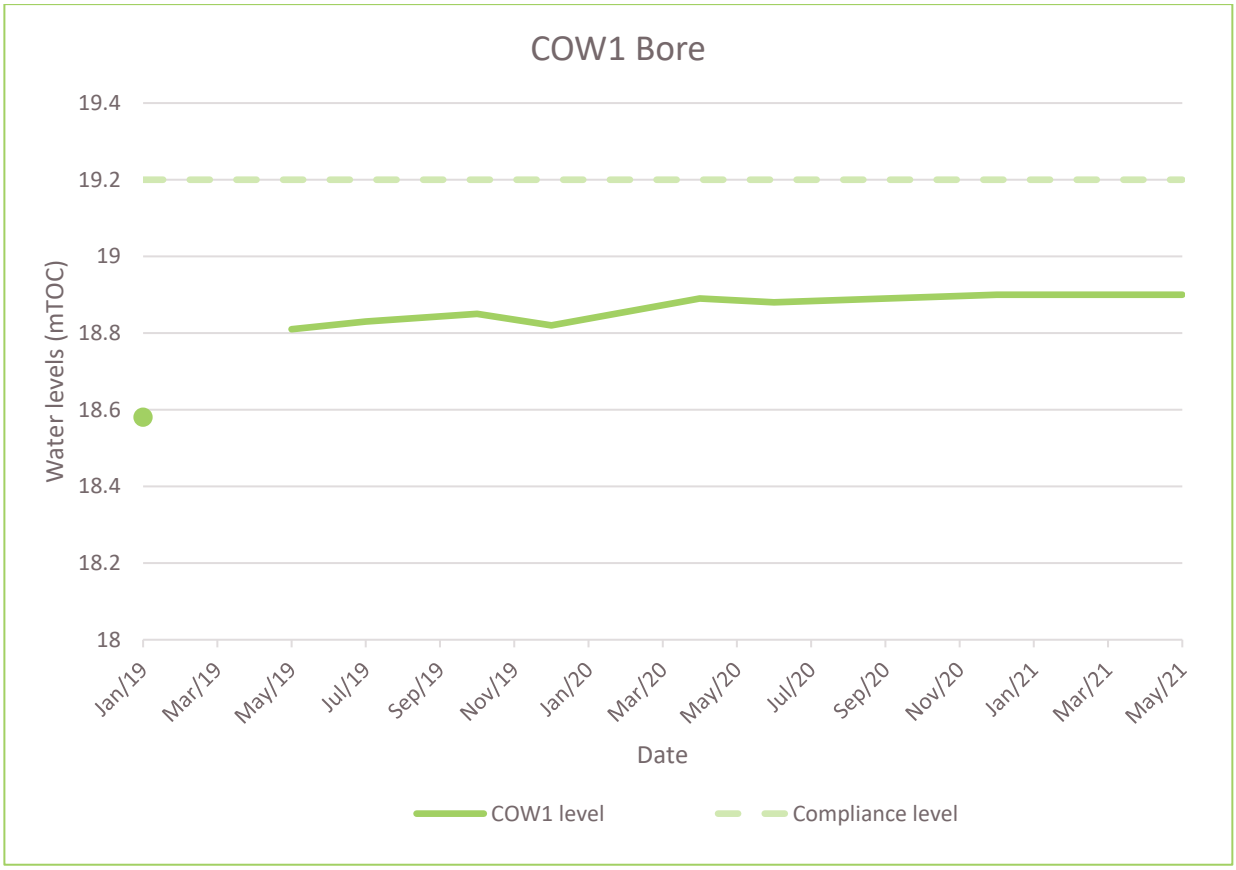
Exploration activities, exploration rehabilitation, exploration liabilities on the mining lease

Have any exploration activities been conducted during the current reporting period?	No	If yes, complete all sections of Appendix B (MG3)
Have rehabilitation activities been undertaken during the reporting period?	**No**	
Is there any outstanding rehabilitation from current or previous reporting periods to be undertaken?	**No**	

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Appendix C Groundwater summary

Figure 4 COW1 bore readings





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