

ENVIRONMENTAL MANAGEMENT STRATEGY



13/09/2022

Environmental Management Strategy

Peak and New Cobar Complexes

Prepared for Peak Gold Mines Pty Ltd
September 2022

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Environmental Management Strategy

Peak and New Cobar Complexes

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Client

Peak Gold Mines Pty Ltd

Date

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Prepared by

Approved by



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Associate Environmental Engineer

13 September 2022



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13 September 2022

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Revision number	Author	Comment	Date	Authorised by
V1	Ellie Evans	Initial Document	June 2022	Laura Barnes
V2	Lahnie Cooper	Draft	30 August 2022	Paul Freeman
V3	Paul Freeman	Draft following DPE comments	8/9/22	Laura Barnes
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1 Introduction

1.1 Background

Peak Gold Mines Pty Ltd (PGM), a wholly owned and operated subsidiary of Aurelia Metals Limited (Aurelia), owns and operates the Peak Gold Mines operation south-east of Cobar, far western New South Wales (NSW).

The PGM operation comprises the New Cobar Complex located 3 kilometres (km) to the south-east of Cobar town centre and the Peak Complex located 10 km south-east of the town centre (Figure 1.1). Both complexes are located adjacent to Kidman Way, which connects Cobar to Bourke to the north and Hillston to the south.

Geologically, the area around Cobar comprises a series of polymetallic high-grade ore bodies dominated by gold, silver, copper, lead and zinc, with a long history of stable, large-scale, low-cost production that has produced more than 200,000 tonnes (t) of copper and 3,000,000 ounces (oz) of gold since mining began in the area in 1870.

PGM has been operational since modern mining commenced at the Peak Complex in 1991 and all current mining operates under development consents issued by Cobar Shire Council (CSC) for the Peak Complex, and the NSW Department of Planning and Environment (DPE) for the New Cobar Complex.

1.2 Purpose and scope

This environmental management strategy (EMS) has been prepared to manage environmental impacts as a result of PGM's operations at the Peak and New Cobar complexes and address Condition C1 of the development consent for the New Cobar Complex Project State Significant Development (SSD-10419).

This EMS is the overarching document in PGM's environmental management system, and has been developed to be generally consistent with ISO 14001:2015. Environmental Management Systems.

This EMS has been developed to provide a framework for other management plans and procedures to ensure activities at the Peak and New Cobar complexes are undertaken in an environmentally responsible manner. This EMS forms part of the hierarchy of documents that enables PGM to establish and sustain a high level of environmental performance in all facets of its business.

1.3 Objectives

The objectives of this EMS are to:

- provide a strategic framework for environmental management at PGM;
- provide an over-arching document hierarchy for the relevant approval conditions to be implemented through various environmental management plans (EMPs);
- reduce potential impacts on sensitive receptors from mine operation activities at the Peak and New Cobar complexes; and
- outline measures for achieving compliance with relevant legislation.

1.4 Application

This EMS applies to activities relating to approved mine operations at the Peak and New Cobar complexes. While the complexes operate separately, and under separate approvals, neither complex is independent of the other, and some aspects of operations cover activities at both complexes. Aspects of environmental management detailed within this plan should be taken to apply to both complexes, unless specified otherwise.

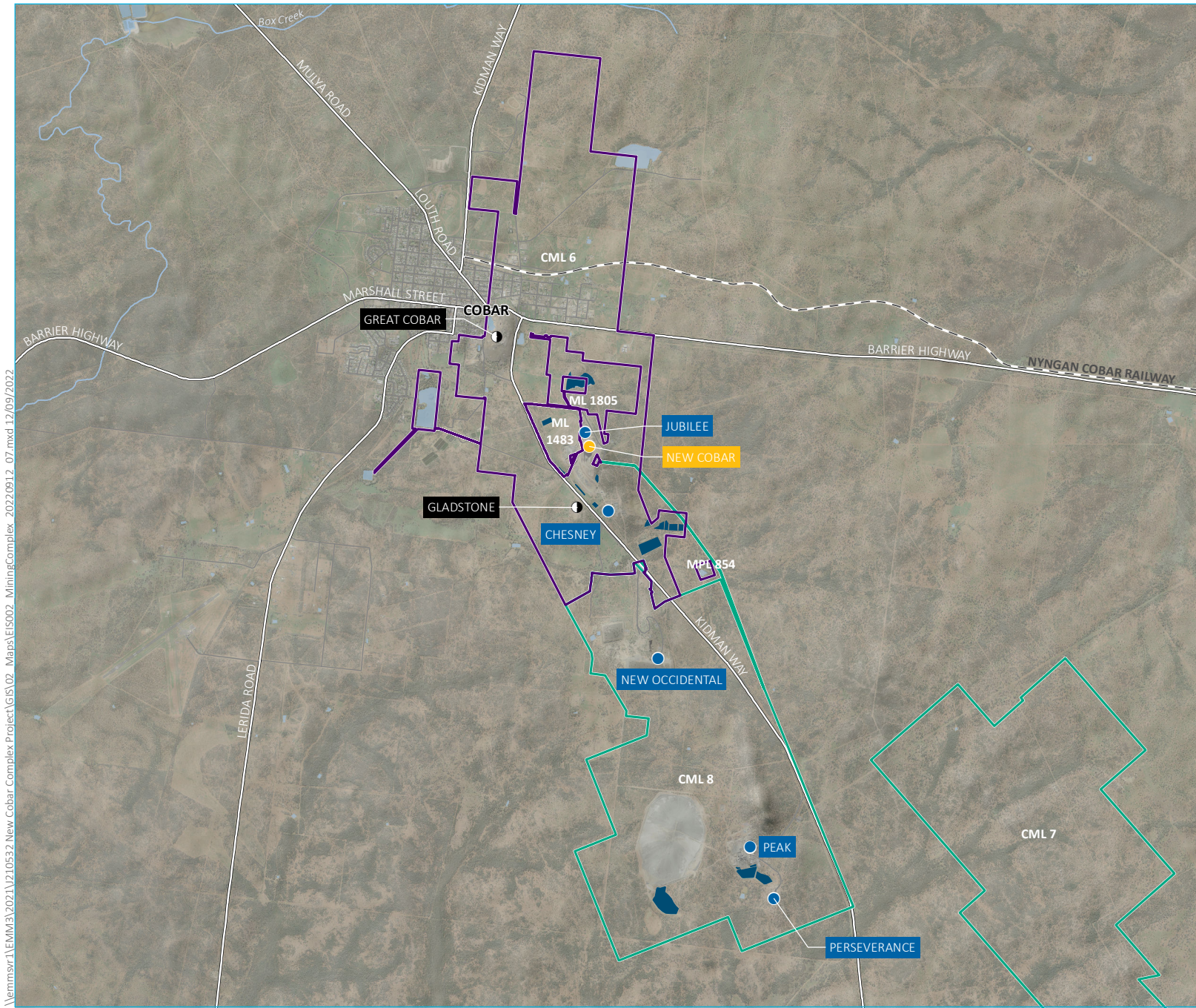
This EMS and other approval documents required by SSD-10419 will become applicable upon physical commencement of the New Cobar Complex Project development.

1.5 Qualifications and experience of the author

This EMS has been prepared by Ellie Evans of EMM Consulting. Ellie is an associate environmental scientist with fourteen years' experience specialising in environmental impact assessments and environmental management in Australia, Asia-Pacific region and the UK.

1.6 Approval of this strategy

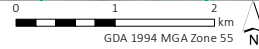
This EMS was approved by the Planning Secretary on **xxxx date** (Appendix A).



- KEY**
- Completed working
 - Current working
 - Future working
 - - - Rail line
 - Major road
 - Minor road
 - Named watercourse
 - Waterbody
 - Mine water management storage
 - Mining lease boundaries
 - New Cobar Complex
 - Peak Complex

\\lemmsvr1\EMM3\2021\12105372 New Cobar Complex Project\GIS\02 Maps\EL5002 MiningComplex 20220912_07.mxd 12/09/2022

Source: EMM (2022); DFSI (2017); GA (2011); DPE (2019)



Peak and New Cobar Complexes
Environmental Management Strategy
Figure 1.1



2 Project overview

The Peak Complex and the New Cobar Complex are underground metalliferous mining operations producing gold, copper, silver, lead and zinc.

Project details are presented in Table 2.1.

Table 2.1 Project overview

Component	Description
Approval period	Operations may be carried out at the New Cobar Complex until 31 December 2035. Operations at the Peak Complex may continue indefinitely.
Mining method	Underground stope mining with progressive backfill using waste from mine development and rock from the waste rock emplacement (WRE).
Mining leases (ML)	<ul style="list-style-type: none"> • Consolidated mining lease (CML) 6; • CML 7; • CML 8; • CML 9; • ML 1483, • ML 1805; and • Mining purposes lease (MPL) 854.
Processing	Approved to mine and process 800,000 tpa of ore to produce lead, zinc, copper, gold and silver from both the Peak and New Cobar complexes. Processing occurs at the Peak Complex.
Tailings	Disposed of at the tailings storage facility (TSF) at the Peak Complex.
Ore transport	Ore transported from New Cobar Complex to Peak Complex for processing in road legal trucks, up to 100 movements (50 return trips) per day averaged over a financial year.
Waste rock	<p>Waste rock generated from underground workings is used preferentially as backfill in previously mined underground stopes.</p> <p>Some waste rock material may be brought to the surface until it's required for use in construction or rehabilitation across the Peak and New Cobar Complexes.</p>
Hours of operation	<p>Mining operations permitted 24-hours per day, seven days a week.</p> <p>Road transport permitted between 7.00 am and 6.00 pm, seven days a week.</p>

3 Legislative and guideline requirements

The project will be undertaken in accordance with the applicable components of relevant legislation, development approval conditions, permits and licencing requirements. The following sections summarise those regulatory requirements that are most relevant in relation to this EMS.

3.1 Legislation

They key NSW and Commonwealth legislation which applies to PGM operations include (but are not necessarily limited to) the following:

- *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth) (EPBC Act);
- *National Greenhouse and Energy Reporting Act 2007* (Commonwealth);
- *Environmental Planning and Assessment Act 1979* (EP&A Act);
- State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries), 2007;
- Cobar Local Environmental Plan 2012;
- *Mining Act 1992*;
- *Protection of the Environment Operations Act 1997* (POEO Act);
- *National Parks and Wildlife Act 1974*;
- *Biodiversity Conservation Act 2016*;
- *Contaminated Land Management Act 1997*;
- *Biosecurity Act 2015*;
- *Dangerous Goods (Road and Rail Transport) Act 2008*;
- *Water Act 1912*; and
- *Water Management Act 2000*.

3.2 Project approval

PGM operations are permitted by a range of regulatory approvals and consents. These include:

- Both Peak and New Cobar complexes:
 - Environmental Protection Licence (EPL) 3596.
 - Water Access Licences (WAL): WAL31045 and WAL36334.
 - Peak Gold Mines Mining Operations Plan 1 August 2019 to 31 July 2022 approved by the Resources Regulator (expires on 2 July 2022 to be replaced with Rehabilitation Management Plan).
 - Conditions under the *Mining Act 1992* which apply to CMLs 6-9.

- New Cobar Complex only:
 - SSD-10419 The New Cobar Complex Project issued 22 April 2022 by DPE.
- Peak Complex only:
 - 27:89 The Peak Project issued 22 February 1990 by Cobar Shire Council (CSC).
 - 27:89 Mod 1 – Alter method of handling tailings and recycling waste water issued 5 March 1991 by CSC.
 - 2007/LDA/00080 Peak Gold Mines Box Cut and Surface Decline issued 12 November 2007 by CSC.
 - 2020/LD-00029 Construction of TSF stages 5, 6 and 7.

3.2.1 State Significant Development SSD-10419

State Significant Development approval (SSD-10419) was issued under section 4.12 of the EP&A Act by the delegate for the Minister for Planning (22 April 2022), and applies only to activities undertaken at the New Cobar Complex.

Conditions from that approval relevant to this EMS are detailed in Table 3.1, and the development consent is included as Appendix B.

Table 3.1 SSD-10419 EMS requirements

Condition number	Requirement	Where addressed
Environmental Management Strategy		
C1	The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:	This plan
a)	<ul style="list-style-type: none"> • be submitted to the Planning Secretary for approval prior to commencing construction under this consent; 	Section 1.6 and Appendix A
b)	<ul style="list-style-type: none"> • provide the strategic framework for environmental management of the development; 	Section 5.2
c)	<ul style="list-style-type: none"> • identify the statutory approvals that apply to the development; 	Section 2
d)	<ul style="list-style-type: none"> • set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development; 	Section 4.3
e) i)	<ul style="list-style-type: none"> • set out the procedures to be implemented to: <ul style="list-style-type: none"> – keep the local community and relevant agencies informed about the operation and environmental performance of the development; 	Section 4
e) ii)	<ul style="list-style-type: none"> – receive, record, handle and respond to complaints; 	Section 5.3
e) iii)	<ul style="list-style-type: none"> – resolve any disputes that may arise during the course of the development; 	Sections 5.3.3 and 5.3.4
e) iv)	<ul style="list-style-type: none"> – respond to any non-compliance and any incident; and 	Section 6.4
e) v)	<ul style="list-style-type: none"> – respond to emergencies; 	Section 6.3
f) i)	<ul style="list-style-type: none"> • include: <ul style="list-style-type: none"> – references to any strategies, plans and programs approved under the conditions of this consent; and 	Section 6.1
f) ii)	<ul style="list-style-type: none"> – a clear plan depicting all the sites where monitoring is to be carried out under the conditions of this consent. 	Appendix C

3.2.2 Guidelines and standards

While not a statutorily required guideline, this EMS has been prepared broadly in accordance with the DPE's *Environmental Management Plan Guideline, Guideline for Infrastructure Projects* (DPE 2020).

4 Environmental management framework

4.1 Environmental policy

Aurelia's Sustainability Policy is available on the website at <https://aureliametals.com/about/corporate-governance> and states the following:

Building and maintaining a trusted, sustainable, and beneficial presence in the areas in which we operate is essential to Aurelia's success. Our approach to sustainability is aligned with our Vision and Values and aims to deliver business and stakeholder value across all aspects of the business.

At Aurelia, we are committed to:

- *The health and safety of those impacted by our operations, including our employees, contractors, and host communities.*
- *Environmental stewardship including conservation of biodiversity, efficient use of resources, pollution prevention and minimisation of environmental impact.*
- *Building resilience to climate change risks and minimising and managing greenhouse gas emissions and other climate change impacts.*
- *Recognising and respecting the deep connection First Nation peoples have with the land and operating in a way that protects their cultural heritage.*
- *Building trusting, transparent, and long-term relationships with our communities.*
- *Contributing positively to our communities through programs that respect their aspirations.*
- *Respecting and promoting human rights.*
- *Applying ethical and transparent business practices.*
- *Complying with applicable laws, regulations, licences, and commitments.*

We will achieve this by:

- *Living by our values every day.*
- *Fostering a culture that aims for superior performance.*
- *Engaging in fair, honest, and transparent dealings with our stakeholders and considering their views in our decision making.*
- *Identifying and managing risks.*
- *Verifying compliance to our standards, systems, measures, and controls.*
- *Continuously improving the way we operate to prevent incidents and improve our performance.*
- *Transparently reporting on our sustainability objectives and results against an accepted industry framework.*

4.2 Environmental management system

PGM's environmental management system includes a collection of plans, programs and procedures, and is used to guide environmental management and compliance for PGM operations.

PGM's environmental management system is broadly aligned with the principles of ISO 14001:2015. Environmental Management Systems as follows:

- Commit: determine over-arching principles.
- Plan: establish objectives and processes required.
- Operate: implement the processes.
- Review: measure and monitor processes and report results.
- Act: Take action to continually improve performance.

PGM's environmental management framework is also underpinned by Aurelia's core values and code of conduct (The Aurelia Way), available on the website at <https://www.aureliametals.com/about/corporate-governance>, and the Green Rules, applied to each individual.

1. Disturbance. I will never breach the ground, disturb vegetation, or drive off formed roads unless authorised by the environment team.
2. Water Management. I will never intentionally discharge process/potentially contaminated water to the ground, outside of a bunded area.
3. Hazardous Materials. I will never intentionally discharge hydrocarbons or hazardous materials to the ground, outside of a bunded area
4. Wildlife. I will never intentionally harm or interfere with wildlife unless authorised by the environment team.

4.3 Roles and responsibilities

The roles and responsibilities in relation to the implementation of this EMS are set out below.

Table 4.1 Environmental management roles and responsibilities

Role	Responsibilities
General Manager	<ul style="list-style-type: none"> Accountable for the overall environmental performance of PGM operations, including the outcomes of the management plans. Must ensure adequate resources are available to enable implementation of this EMS and supporting plans.
Mine Manager	<ul style="list-style-type: none"> Responsible for ensuring all mining works are carried out in accordance with all relevant approvals and legislation. Accountable for ensuring all employees in the respective areas are committed to and implement the requirements of this EMS and supporting plans. Report any incidences or complaints immediately to the Environment Team.
Environment Team	<ul style="list-style-type: none"> Ensure the implementation of management plans and procedures (including this EMS) as part of PGM’s environmental framework. Maintain PGM’s environmental framework and ensure all relevant plans and procedures are reviewed and revised as required. Undertake or delegate required monitoring in accordance with relevant plans. Manage monitoring results and data. Notify incidents and non-compliances to the Mine Manager and relevant regulators. Implement trigger action response plans (TARPs) and other corrective and preventative actions. Manage reporting obligations, including incident, non-compliance and annual reports. Manage employee competence through inductions, training and awareness programs. Escalate and act on any complaints received by the emergency services officer (ESO), including dispute resolution, where required. Facilitate and attend CCC meetings. Manage community and stakeholder engagement. Manage accessible information on the Aurelia website. Certify monitoring equipment is setup in accordance with the Australian Standard. Confirm adequate amounts of monitoring equipment are available. Ensure monitoring data is appropriately stored on PGMs intranet. Monitor the prevailing and predicted weather conditions. Ensure the monitoring equipment is maintained, and results are routinely collected and monitored.
All Personnel (including employees, contractors and visitors)	<ul style="list-style-type: none"> Follow direction provided by the Environment Team, Mine Manager and General Manager. Abide by Aurelia’s Green Rules and The Aurelia Way. Show due care not to cause environmental harm. Notify Environment Team immediately of any actual or potential environmental non-compliance.

4.4 Training

The risk management process (which includes environmental risks) for the Peak and New Cobar complexes are communicated to all personnel during the mandatory site inductions. This includes the Aurelia Green Rules. In particular, all personnel are informed of the risk management tools at their disposal, incident reporting requirements and emergency response protocols. This ensures that any incidents are escalated, and management pleasures are implemented as required.

Each role has job-specific role requirements communicated during onboarding. Once employees and contractors are fully inducted, they are added to this database and assigned their role to see the competencies required. From there training matrices are created for the Trainers to develop a schedule to allow for employees to gain the experience/skills required. This system allows for automatic email notification if things are upcoming, due or outstanding.

4.5 Hold points

The following hold points apply to activities covered by SSD-10419:

- A5. The Applicant must notify the Department in writing of the date of commencement of each of the following phases of development, at least two weeks before that date:
 - physical commencement of development under this consent;
 - commencement of construction under this consent;
 - commencement of mining operations under this consent;
 - cessation of mining operations (ie mine closure); and
 - any period of suspension of mining operations (ie care and maintenance).
- B6. Construction must not commence until the Noise Management Plan is approved by the Planning Secretary.
- B14. Construction must not commence until the Blast Management Plan is approved by the Planning Secretary.
- B22. Construction must not commence until the Air Quality and Greenhouse Gas Management Plan is approved by the Planning Secretary.
- B25. Prior to the commencement of construction and for the life of the development, the Applicant must ensure that there is a suitable meteorological station operating in the vicinity of the site that:
 - complies with the requirements in the *Approved Methods for Sampling and Analysis of Air Pollutants in NSW* (EPA, 2022) and *Ambient Air Monitoring Guidance Note* (EPA, 2022); and
 - is capable of measuring meteorological conditions in accordance with the NSW Noise Policy for Industry (EPA, 2017), unless a suitable alternative is approved by the Planning Secretary following consultation with the EPA.
- B37. Construction must not commence until the Water Management Plan is approved by the Planning Secretary.
- B40. Prior to the commencement of construction, unless otherwise agreed by the Planning Secretary, the Applicant must upgrade the intersection of:
 - Kidman Way and construction access, to a:
 - i) Rural Basic Left-Turn (BAL) treatment to accommodate 19 m long design vehicle; and
 - ii) Rural Basic Right-Turn (BAR) treatment to accommodate 19 m long turning design vehicle and highway design vehicle length of 36.5 m; unless TfNSW and the Planning Secretary agree to a suitable alternative access arrangement for construction traffic;

- Kidman Way and New Cobar Complex entrance, to accommodate the turning movements of a 35.4 m B-Triple vehicle; and
- Kidman Way and Peak Way, to accommodate the simultaneous turning movements of 35.4 m B-Triple vehicles travelling between the Peak Complex and New Cobar Complex entrance.
- B48. Construction of road upgrades in B40 must not commence until the Traffic Management Plan is approved by the Planning Secretary.
- B55. Construction must not commence until the Aboriginal Cultural Heritage Management Plan is approved by the Planning Secretary.
- B58. Construction must not commence until the Historic Heritage Management Plan is approved by the Planning Secretary.
- B66. Prior to the commencement of construction, the Applicant must prepare a Fire Safety Study for the development, to the satisfaction of FRNSW and the Planning Secretary. The study must:
 - be consistent with the Department’s Hazardous Industry Planning Advisory Paper No. 2 ‘Fire Safety Study’ guideline; and
 - detail the fire prevention and mitigation measures for the site.
- C1(a) – The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must be submitted to the Planning Secretary for approval prior to commencing construction under this consent.
- D2. Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, the Applicant must: advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the fact sheet entitled “Mine Dust and You” (NSW Health, 2017); and advise the prospective tenants of the rights they would have under this consent, to the satisfaction of the Planning Secretary.

There are no relevant hold points applicable to the Peak Complex.

5 Communication and consultation

5.1 Community consultative committee

PGM has an established Community Consultative Committee (CCC) for the Peak and New Cobar complexes that operates in accordance with the DPE Community Consultative Committee Guideline for State Significant Projects (January 2019). The CCC is a forum to discuss the development and outcomes of monitoring programs.

The CCC meets four times a year and consists of an independent chair, representatives from the community, representatives from CSC and representatives from PGM.

Aspects pertaining to the EMS, including incidents, exceedances of criteria and community complaints are discussed within the CCC. Minutes of the CCC meetings are made available on the Aurelia website at <https://www.aureliametals.com/projects/peak/compliance>.

5.2 Access to information

Further to the public notification procedure described above, the following information and documents will be available on the Aurelia Metals website (www.aureliametals.com.au) once the project commences:

- all current statutory approvals for the development;
- all approved strategies, plans and programs required under SSD-10419;
- minutes of CCC meetings;
- regular reporting on the environmental performance;
- a comprehensive summary of monitoring results;
- a summary of the current phase and progress of the development;
- contact details for enquiries and complaints;
- a complaints register (updated monthly);
- Annual Reviews;
- audit reports prepared as part of any Independent Environmental Audit and PGM's response to the recommendations in any audit report; and
- any other matter required by the Planning Secretary.

5.3 Complaint management

Stakeholders are encouraged to raise any concerns they have using PGM's community complaints mechanism.

5.3.1 Receipt of complaints

PGM maintains a community complaints mechanism and register, and all complaints are received by the PGM Emergency Services Officer (ESO) on a 24-hour phone line: 02 6830 2265.

Relevant details of the complaint and complainant are recorded, and complaints are escalated to the Environment Team and followed up as soon as practicable.

5.3.2 Complaints register

PGM maintains the community complaints register to keep a record of complaints over time, and to identify longer term trends. The complaints register ensures that all complaints are recorded and managed in a timely manner to ensure active community consultation and positive relations are maintained with local residents.

5.3.3 Complaint response procedure

Any complaints submitted through the complaints mechanism are escalated to the Environment Team and the following is determined:

- details of the complaint (date, time, specifics, complainant’s contact details);
- which activities occurred during the complaint period to investigate the source of the complaint;
- whether the complaint was as a result of non-compliant activities; and
- what corrective or preventative actions are required to avoid the complaint recurring; and
- when corrective or preventative actions need to take place.

If the complainant requests follow up, this is completed within the requested timeframe where practicable.

If the complaint is relevant to an exceedance or non-compliance of approval criteria covered by a management plan, it will be managed as per the details of that plan.

If the actions above resolve the issues raised, no further action will be taken. If the complaint is not resolved, further investigations may be undertaken in accordance with the procedures identified in the relevant management plan.

Corrective and preventative actions identified as a result of a complaint will be communicated to all relevant personnel through toolbox meetings and/or company memorandums.

The record of a complaint will be kept for at least four years after the complaint was made and the record will be produced to any authorised officer if requested.

5.3.4 Dispute resolution

In the event of a disagreement between PGM and a member of the community, the Environment Team will implement the steps in Section 5.3.3 to reach a resolution. Should resolution of the dispute not be reached through this primary process, either party may refer the matter to the Planning Secretary.

As established by the relevant conditions of SSD-10419, the Planning Secretary can provide dispute resolution in the following situations:

- Planning Agreement – A15: If there is any dispute between the Applicant and Council in regards to condition A14 then either party may refer the matter to the Planning Secretary for resolution.
- Public Infrastructure – A24: If the Applicant and the public infrastructure owner cannot agree on whether damage to public infrastructure is attributed to the development or the measures to be implemented to repair or relocate public infrastructure, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.
- Compensatory Water Supply – B31: If the Applicant and the landowner cannot agree on whether the loss of water is attributed to the development or the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.

- Road Upgrades – B41: If there is any dispute between the Applicant and TfNSW in implementing the requirements of condition B40, then any of the parties may refer the matter to the Planning Secretary for resolution.

5.3.5 Independent review

If a landowner considers the development to be exceeding a noise, blast or air quality criteria in SSD-10419, they may ask the Planning Secretary in writing for an independent review of the impacts of the development on their residence or land.

If the Planning Secretary is not satisfied that an independent review is warranted, the Planning Secretary will notify the landowner in writing of that decision, and the reasons for it, within 21 days of the request for a review.

If the Planning Secretary determines that an independent review is warranted, within three months of the Planning Secretary's decision, or other timeframe agreed by the Planning Secretary, PGM must implement an independent review as per Condition D7 of SSD-10419.

6 Environmental management processes

6.1 Environmental management documents

A range of documents, plans and procedures are included in PGM’s environmental management framework, as set out below.

Plans include:

- this EMS;
- Air Quality and Greenhouse Gas Management Plan;
- Noise Management Plan;
- Blast Management Plan;
- Water Management Plan;
- Rehabilitation Management Plan;
- Aboriginal Cultural Heritage Management Plan;
- Historical Heritage Management Plan;
- Community and Stakeholder Engagement Strategy;
- Fire Safety Study;
- Traffic Management Plan; and
- Pollution Incident Response Management Plan.

This EMS and other plans above required by SSD-10419 will become applicable upon physical commencement of the New Cobar Complex Project development, or as per the conditions of the relevant consent. A summary of management and mitigation measures is detailed in Appendix E.

6.2 Monitoring

Environmental monitoring programs are typically addressed within the relevant management plan and have been prepared to address key environmental aspects. These aspects are air quality, noise, blasting, surface water and groundwater.

Figures depicting monitoring locations relevant to the plans above are included in Appendix C. The types of monitoring and frequency are summarised in and Appendix D.

For subsidence, the The geotechnical and subsidence assessment conducted by Beck Engineering found that Surface subsidence forecasts are less than 15 mm and are considered negligible given relatively strong rockmass conditions, small (narrow) stopes with a small footprint, low extraction ratio and use of backfill.

Rigorous subsidence monitoring such as regular surveying, laser scanning or InSAR is not required given the model forecasts and negligible amount of subsidence expected. Low levels of monitoring such as annual survey pick-ups of key locations will be undertaken. The ground control management measures are described in Appendix E.

6.3 Emergency response

A range of plans and procedures are in place to support a structured approach to emergency responses. These documents set out a framework for managing safety and environmental risks if an incident or emergency occurs, including roles and responsibilities, notification protocols, and community communication procedures.

The most relevant plan for the management of environmental emergencies is the Pollution Incident Response Management Plan (PLN-08-004) (PIRMP). The PIRMP has been prepared to address specific requirements in the POEO Act and the EP&A Act, and includes specific measures implemented to minimise the risk of an incident occurring due to spillage, storage of hazardous materials or fire. It includes a detailed risk assessment, hazardous substances inventory, communication procedures and safety requirements.

In general the following protocol for contacting relevant agencies will be followed in the event of an emergency:

Table 6.1 Emergency response protocol

Trigger	Agency	Contact Details
An incident that presents an immediate threat to human health or property.	Fire and Rescue NSW NSW Police NSW Ambulance Service	Call 000
An incident that: <ul style="list-style-type: none"> • does not require an initial combat agency; or • once the 000 call has been made. Notify the relevant authorities in the following order.	Environment Protection Authority NSW Health SafeWork NSW	Environment Line 131 555 Cobar District Hospital Phone (02) 6879 9500 Dubbo Base Hospital Phone (02) 6809 6809 Phone 13 10 50
Agencies to be contacted depending on type of pollution incident:	Cobar Shire Council	Business Hours (02) 6836 5888 After Hours 0419 281 115 (Peter Vlatko – General Manager)
	Agency	Contact Details
	Department of Planning, Industry and Environment – Resources Regulator	nswresourcesregulator@service-now.com 7-day report, under POEO act
	Dams Safety NSW	(02) 9842 8073 or 0403 681 645
	Natural Resources Access Regulator	1800 633 362
	Crown Lands Division	(02) 6836 3018

Note: Complying with these notification requirements does not remove the need to comply with any other obligations for incident notification, for example, those that apply under other environment protection legislation or legislation administered by SafeWork NSW.

6.4 Incident, exceedance and non-compliance reporting and notification

The development consent for SSD-10419 defines:

- an **‘incident’** to be “an occurrence or a set of circumstances that causes or threatens to cause material harm and which may or nor cause a non-compliance”.
- **‘Non-compliance** as “an occurrence, set of circumstances or development that is a breach of this consent”.

6.4.1 Incidents

In the event that there is an incident related to activities authorised by SSD-10419, the Environment Team will notify the Planning Secretary in writing via the Major Projects website immediately after becoming aware of the incident, in accordance with condition C7 of SSD-10419.

The notification will include the date, time and nature of the incident and any immediate actions that have been or will be implemented to respond to the incident. It will also include a summary of any consultation undertaken with EPA as necessary and the outcomes of the consultation.

Within seven days of identification of the incident, the Environment Team will submit a written report to the Planning Secretary via the Major Projects website in accordance with Appendix 5 of SSD-10419.

All incident reports will be retained for a period of no less than four years.

The findings of incident investigations and any changes to site process or protocols will be communicated to all personnel through toolbox meetings and/or company memoranda.

6.4.2 Exceedances and non-compliance

In the event that monitoring records an exceedance or non-compliance of the relevant criteria in the management plan, or other non-compliance, the Environment Team will contact relevant agencies to discuss the exceedance or non-compliance, before submitting a report to the Planning Secretary in writing via the Major Projects website within seven days of being made aware of the exceedance or non-compliance, in accordance with condition C8 of SSD-10419.

The report will document the date, time and nature of the exceedance and the site activities that were being undertaken at the time of exceedance. It will also document meteorological conditions which may have influenced the exceedance, and any actual or proposed activities undertaken to stop the exceedance and prevent further exceedances from occurring. It will also document if any consultation has been or will be undertaken with agencies and affected landowners and tenants in relation to the exceedance.

If any exceedance of air quality criteria is recorded which affects any private landowners or tenants, the affected landowner and/or tenant will also be provided with the fact sheet *Mine Dust and You* (NSW Health 2017).

6.4.3 Environmental harm notification

If environmental harm is detected, the Environment Team will notify the EPA by telephoning 131 555 in accordance with condition R2 of EPL3596. The Environment Team will submit a written report within seven days of notifying the EPA in accordance with condition R3 of EPL3596.

6.4.4 Controls

Preventative and mitigation controls are detailed in the sections below.

i Fuel

- All diesel fuel is stored in self bunded tanks.
- A compacted refuelling area is located adjacent to fuel tanks.
- All fuel storage is bunded to ensure 110% of the largest liquids stored can be captured within the bund.
- Spill kits are located at all fuel storages.
- SDS are located either at the fuel storage or in the Emergency Services Offices.

ii Hazardous Chemical Storage of liquids

- Bund and cover all liquid storage areas – ensure 110% of the largest liquids stored can be captured within the bund.
- Ensure chemicals have appropriate transport, handling, storage and application procedures to prevent chemical spillage.
- Store minimum volume of chemicals onsite as per requirement for the ongoing operation of the Mine.
- Personnel who use chemicals would be provided with the appropriate training in handling techniques.
- Ensure records are kept of water quality checks, discharges and any remedial actions taken.
- Where possible, install containment measures such as sandbags, booms, earth bunds or cut drains to capture and retain spilled material and prevent it from leaving site, entering watercourse or impacting on vegetation stands.
- The Emergency Response Team will be trained in clean-up of chemical/hazardous material spills.

iii Fire

Fires may be ignited as a result of truck accidents during transport of chemicals, vehicle collisions, equipment failure, use of electrical equipment, overhead power lines and grass fires in adverse weather conditions (hot and dry). Specific emergency response plans are detailed in the Emergency Management Plan. The below measures would be taken to minimise the risk of fires:

- Firefighting equipment is available on site to facilitate an immediate response to a fire incident and help ensure the safety of public and property including fire extinguishers in all vehicles.
- Equip personnel and vehicles involved in such activities with firefighting and safety gear.
- Conducting regular reviews and inspections of firefighting equipment to ensure it is operational.
- Site Mines Rescue Team trained in how to combat fires.

iv Dangerous Goods

Dangerous goods are handled and stored is done in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the Dangerous Goods Code. Explosives are managed in accordance with the requirements of the Resources Regulator.

Peak Site hazardous chemicals are detailed in [Table 6.2](#). All chemicals are accompanied by their Safety Data Sheets (SDS) as required by work, health and safety regulations. New Cobar hazardous chemicals are detailed in [Table 6.3](#).

v Fort Bourke Hill viewing platform

The Fort Bourke Hill viewing platform and its associated fencing and security are periodically checked for stability at least every two years or as necessary to maintain the Fort Bourke Hill viewing platform in a safe and serviceable condition for safe public access to the viewing platform, over the life of the development.

Table 6.2 Peak Site Dangerous Goods, Hazardous Substances, and Chemical Reagents

Hazardous Substance	Storage ID	Storage Type	Location	X Coordinate	Y Coordinate	Typical Quantity (L)	UN No.
Diesel	DGL 20	Above Ground Tank	Peak (Fuel Bay)	393,428	6,507,101	85KL	3082
Waste Oil	DGL 4	Above Ground Tank	Peak (Fuel Bay)	393,428	6,507,098	15KL	None Allocated
Sodium Cyanide	DGL 19	Above Ground Tank	Peak (Fuel Bay)	393,421	6,507,149	165KL	3414
Hydrochloric Acid	DGL 8	Above Ground Tank	Peak (Mill)	393,385	6,507,208	20KL	1789
Caustic Soda	DGL 7	Above Ground Tank	Peak (Mill)	393,427	6,507,206	20KL	1719
Copper Sulphate	DGLI	1 Tonne Bulk Bags	Peak (Mill)	393,420	6,507,148	30 Bags	3077
Liquefied Petroleum Gas	DGL 6	Above Ground Tank	Peak (Mill)	393,262	6,507,250	15KL	1075
Zinc Sulphate	DGLI	1 Tonne Bulk Bags	Peak (Mill)	393,411	6,507,132	30 Bags	3077
Oxygen	DGL 18	Above Ground Tank	Peak (Mill)	393,310	6,507,167	45KL	1073
Hydrated Lime	DGL 5	Above Ground Tank	Peak (Mill)	393,432	6,507,172	20KL	None Allocated
Nitric Acid 70%	DGL 22	20L Container	Peak (Mill)	393,332	6,507,153	0.05KL	2031
Ammonium Nitrate	DGL23	Above Ground Tank	Peak (magazine pad)	393,337	6,507,845	50KL	2067
Sodium Metabisulphate	DGL3	Above Ground Tank	Peak (Mill)	393,103	6,507,132	10KL	1759
Mixed solution	DGL 2	1 tonne bulk bag	Peak (Mill)	393,313	6,507,166	30 bags	2693

Table 6.3 New Cobar Site Dangerous Goods, Hazardous Substances, and Chemical Reagents

Hazardous Substance	Storage ID	Storage Type	Location	X Coordinate	Y Coordinate	Typical Quantity (L)	UN No.
Diesel	DGL 24	Above Ground Tank	New Cobar (workshop)	391,509	6,512,104	55KL	3082
Ammonium Nitrate	DGL25	Above Ground Tank	New Cobar (magazine pad)	391,952	6,511,727	50KL	2067

7 Reviews, updates and improvements

7.1 Annual reporting

7.1.1 Annual Review

All monitoring results, incidents and complaints records relating to the activities covered by SSD-10419 will be included in the Annual Review requirements in condition C9 of SSD-10419.

The Annual Review will include:

- a description of any corrective and preventative actions that were (or are being) implemented;
- an evaluation of compliance with the relevant criteria;
- identification any trends in the monitoring data;
- identification and analysis of any discrepancies between predicted and actual impacts; and
- a description of what measures will be implemented over the next year to improve the environmental performance of the development.

Copies of the Annual Review will be submitted to CSC and made available to the CCC and any interested person on request.

7.1.2 Annual Return

The Environment Team will prepare and submit an Annual Return to the EPA in the approved form, in accordance with condition R1 of EPL3596.

7.2 EMS review and revision process

In accordance with Condition C5 of SSD-10419, this EMS and relevant management plans will be reviewed and, if required, revised within three months of:

- the submission of an incident report under condition C7;
- the submission of an Annual Review under condition C9;
- the submission of an Independent Environmental Audit under condition C11;
- the approval of any modification of the conditions of this consent (unless the conditions require otherwise);
- notification of a change in development phase under condition A5; and
- or a direction of the Secretary under condition A3 of Schedule 2

The revision process will involve site environment personnel reviewing the site controls and management measures detailed in each of the management plans and confirming that they remain relevant to the aspect of the project. If any require to be updated, the Environment Team will recommend making necessary changes as are relevant. For example:

- for an incident report, a thorough review of the controls relating to the incident by site Environment Team;

- for an Annual Review, a review of management and mitigation measures in Appendix E will be undertaken;
- following the submission of an Independent Environmental Audit, the Environment Team will review the findings of the audit, the recommendations made by the auditor and any management procedure or process changes that are required to be implemented to maintain or improve the environmental performance of the site;
- following an approved modification, the review of management measures by site environment personnel and the inclusion of any relevant management measures relating to the modification; and
- following the notification of a development phase change, the management plans will be updated.

The information required in the review is to either improve the environmental performance of the development or cater for a modification or comply with a direction.

Where revisions are required to this EMS, the revised document will be submitted to the Planning Secretary for approval within six weeks of the review.

7.3 Independent Environmental Audit

Within one year of physical commencement of the development authorised by SSD-10419, and every three years thereafter, an Independent Environmental Audit will be conducted in accordance with conditions C11 and C12 of SSD-10419 and *Independent Audit Post Approval Requirements (NSW Government 2020)*. The audit report will be submitted to the Secretary within two months of the of undertaking the independent audit site inspection, unless otherwise agreed by the Secretary.

The audit will review site operations against:

- The conditions of consent in SSD-10419.
- Environmental Protection Licence (EPL) 3596.
- Water Access Licences (WAL): WAL31045 and WAL36334.
- Peak Gold Mines Mining Operations Plan 1 August 2019 to 31 July 2022 approved by the Resources Regulator (expires on 2 July 2022 to be replaced with Rehabilitation Management Plan).
- Conditions under the *Mining Act 1992* which apply to CMLs 6-9.

Following the audit, the Environment Team will review the audit findings and respond to the audit report to the satisfaction of the Secretary and provide a response to the Secretary and any agency that requests it. The response will include a timetable for the implementation of the audit recommendations which has been agreed with the Department of Planning and Environment, in accordance with condition C12 and *Independent Audit Post Approval Requirements (NSW Government 2020)*.

The audit report and responses to the report will be made publicly available no later than 60 days after its submission to the Secretary, in accordance with condition C11(d) of SSD-10419.

7.4 Adaptive management

In accordance with condition C3 of SSD-10419, where an exceedance of relevant monitoring criteria has occurred, the Environment Team will, at the earliest opportunity:

- a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not reoccur;

- b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to DPE describing those options and any preferred remediation measures or other course of action; and
- c) implement reasonable remediation measures as directed by the Planning Secretary.

As soon as practicable, and no longer than seven days after obtaining monitoring results showing an exceedance of relevant criteria, the Environment Team will provide the details of the exceedance to any affected landowners, tenants and the CCC.

7.5 Corrective and preventative actions

Activities at PGM have a dedicated Trigger Action Response Plan (TARP) where required under the conditions of consent which designates a specific response when a trigger level is exceeded. Details of these TARPs are included in the relevant management plans. In general the TARPs are based on principles whereby if a trigger level is met, then a corrective action process will be undertaken and reported on as described in the TARP.

In the event that an incident, exceedance or non-compliance not covered by a TARP is identified, the matter will be investigated to determine the likely cause. The investigation will seek to determine:

- whether the incident or exceedance of the criteria was directly related to a source associated with the project or if other factors contributed to the exceedance;
- the primary cause of the incident or exceedance;
- any contributing factors which led to the incident or exceedance;
- whether appropriate controls were implemented to prevent the incident or exceedance; and
- corrective and preventative measures that may be implemented to prevent a recurrence of the incident.

Corrective and/or preventative actions will be assigned to relevant PGM personnel. In addition, the operating conditions will be reviewed in light of the monitoring results and adjusted as required to ensure no further exceedance of the criteria.

This process will review whether any further reasonable and feasible engineering solutions are required to be implemented and the optimal implementation of the measures.

Actions will be communicated internally through planning meetings and toolbox talks and outstanding actions will be monitored for their effectiveness upon completion.

7.6 Contingency plans/ continual improvement

The individual management plans contain processes whereby management of any unpredicted impacts and their consequences can be implemented and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible. The TARPs and the incident response procedures form the framework to manage unforeseen impacts, should they arise.

The Annual Review undertaken for the site will report on the environmental performance of the site and provides the framework to investigate and implement continual improvements. The Annual Review and the Independent Audit findings will be used to determine if any improvements can be made to processes and procedures, to ensure continual environmental improvement at the site along with periodic reviews of management plans as required under SSD 10419.

8 References

DPE 2020. Environmental Management Plan Guideline, Guideline for Infrastructure Projects, Department of Planning, Industry and Environment, April 2020.

Appendix A

EMS Approval

Appendix B

State Significant Development Consent SSD-10419

Development Consent

Section 4.38 of the Environmental Planning and Assessment Act 1979

As delegate of the Minister for Planning, the Director Resource Assessments approves the development application referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

- prevent, minimise, or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development.



Stephen O'Donoghue
Director Resource Assessments
Energy, Resources and Industry Assessments

Sydney 22 April 2022

SCHEDULE 1

Application Number:	SSD 10419
Applicant:	Peak Gold Mines Pty Ltd
Consent Authority:	Minister for Planning
Site:	The land defined in Appendix 1
Development:	New Cobar Complex Project

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DEFINITIONS

Annual Review	The review required by condition C9
Applicant	Peak Gold Mines Pty Ltd, or any person carrying out any development under this consent
Approved disturbance area	The surface development areas identified as being approved under existing consents, approved under Section 23A of the Mining Act or proposed disturbance under SSD-10419 on Figure 1 in Appendix 2
Approved mining area	The area identified as existing or proposed mine workings and approved decline area on Figure 3 in Appendix 2
BCA	Building Code of Australia
BCS	Biodiversity, Conservation and Science Directorate within the Department
CCC	Community Consultative Committee required by condition A16
Conditions of this consent	Conditions contained in Schedule 2
Council	Cobar Shire Council
Construction	All physical works required to enable mining operations under this consent to be carried out, including demolition and removal of buildings or works and erection of buildings and other infrastructure permitted by this consent, but excluding pre-construction works and intersection upgrade works required by condition B40.
Date of commencement	The date notified to the Department by the Applicant under condition A5(a)
Day	The period from 7 am to 6 pm on Monday to Saturday, and 8 am to 6 pm on Sundays and Public Holidays
Decommissioning	The deconstruction or demolition and removal of works and buildings installed as part of the development
Demolition	The deconstruction and removal of buildings, sheds and other structures on the site
Department	NSW Department of Planning and Environment
Development	The development described in the document/s listed in condition A2(c), as modified by the conditions of this consent
Development Layout	The indicative development layout depicted in Appendix 2
DPE Crown Lands	Crown Lands Group within the Department
DPE Water	Water Group within the Department
EIS	The Environmental Impact Statement titled <i>New Cobar Complex Project, State Significant Development (SSD10419) Environmental Impact Statement</i> , prepared by EMM Pty Ltd on behalf of Peak Gold Mines, dated February 2021; the Applicant's <i>Response to Submissions Report</i> dated August 2021; the Applicant's <i>Amendment Report</i> dated February 2022 and the additional information provided by the Applicant on 29 September 2021, 18 November 2021 and 29 November 2021 in support of the application.
Environment	Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings
Environmental consequences	The environmental consequences of subsidence impacts, including, but not limited to: damage to built features; loss of surface water flows to the subsurface; loss of standing pools; slope changes to streams; adverse water quality impacts; development of iron bacterial mats; cliff falls; rock falls; landslides; damage to heritage items; impacts on biodiversity values or aquatic ecology; and ponding
EPA	NSW Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2021</i>
Evening	The period from 6 pm to 10 pm
Feasible	Means what is possible and practical in the circumstances
Financial year	A period of 12 months from 1 July to 30 June
Heavy vehicle	A vehicle that has a combined Gross Vehicle Mass or Aggregate Trailer Mass of more than 4.5 tonnes
Heritage NSW	Heritage Branch within the Department
Heritage item	An Aboriginal object, an Aboriginal place, or a place, building, work, relic, moveable object, tree or precinct of heritage significance, that is listed under any of the following: <ul style="list-style-type: none"> • the <i>National Parks and Wildlife Act 1974</i>;

	<ul style="list-style-type: none"> the State Heritage Register under the <i>Heritage Act 1977</i>; a state agency heritage and conservation register under section 170 of the <i>Heritage Act 1977</i>; a Local Environmental Plan under the EP&A Act; the World Heritage List; the National Heritage List or Commonwealth Heritage List under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth); or anything identified as a heritage item under the conditions of this consent
Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance
Land	Has the same meaning as the definition of the term in section 1.4 the EP&A Act, except for where the term is used in the noise and air quality conditions in PART B of this consent where it is defined to mean the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this consent
Material harm	Is harm to the environment that: <ul style="list-style-type: none"> involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment) This definition excludes "harm" that is authorised under either this consent or any other statutory approval
MEG	Regional NSW – Mining, Exploration and Geoscience
Mine closure	Decommissioning and final rehabilitation of the site following the cessation of mining operations
Mine Owned Land	Land owned by a mining, petroleum or extractive industry company (or its subsidiary or related party)
Mine water	Water that accumulates within, or drains from, active mining and infrastructure areas and any other disturbed and unrehabilitated areas
Minimise	Implement all reasonable and feasible mitigation measures to reduce the impacts of the development
Mining operations	The carrying out of mining and mining related activities, including stope development, extraction of ore, transportation of ore and waste rock to the surface, backfilling of stopes, and underground development necessary for mining operations to be carried out (including installation and use of electricity, water, communications and other services and infrastructure)
Minister	NSW Minister for Planning, or delegate
Minor	Not very large, important or serious
Mitigation	Activities associated with reducing the impacts of the development
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
Non-compliance	An occurrence, set of circumstances or development that is a breach of this consent
NRAR	NSW Natural Resources Access Regulator
Ore	Natural rock or sediment material containing metallic minerals
Planning agreement	Planning agreement within the meaning of the term in section 7.4 of the EP&A Act
Peak Complex	The land defined by the 'Peak Complex' boundary shown in Figure 1 in Appendix 2
Planning Secretary	Planning Secretary under the EP&A Act, or nominee
Pre-Construction works	Pre-construction works that may be required for the development, including surveys, acquisitions, fencing, investigative or geotechnical drilling or excavation, minor clearing, minor access roads, minor adjustments to services/utilities, works which allow isolation of the site so that access for construction can be provided (including service relocations)
Privately-owned land	Land that is not owned by a public agency or a mining, petroleum or extractive industry company (or its subsidiary or related party)
Public infrastructure	Infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone, telecommunications, etc, including Council-owned assets and infrastructure.
Rail Corridor	Means above, on or under the land comprised in Lot 1 DP 929604, Lot 2 DP 929604, Lot 7 DP 929604, Lot 1 DP 927063, Lot 3 DP 929604, Lot 1 DP 927064, Lot 1 DP 926797, Lot 2 DP

	926797, Lot 7 DP 234069, Lot 4 DP 234069, Lot 12 DP 135101, Lot 3 DP 927063 and Gazette Number 821 including any rail and associated infrastructure above, on or under the land
Reasonable	Means applying judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The restoration of land disturbed by the development to a good condition, to ensure it is safe, stable and non-polluting
Resources Regulator	NSW Resources Regulator within the Department of Regional NSW
Site	The land defined in Appendix 1 and shown within the 'Project area' boundary in Figure 1 in Appendix 2
Subsidence	The totality of subsidence effects, subsidence impacts and environmental consequences of subsidence impacts
Subsidence effects	Deformation of the ground mass due to mining, including all mining-induced ground movements, such as vertical and horizontal displacement, tilt, strain and curvature
Subsidence impacts	Physical changes to the ground and its surface caused by subsidence effects, including tensile and shear cracking of the rock mass, localised buckling of strata caused by valley closure and upsidence and surface depressions or troughs
TfNSW	Transport for NSW (incorporating the former NSW Roads and Maritime Services)

SCHEDULE 2

PART A ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

- A1. In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.

TERMS OF CONSENT

- A2. The development may only be carried out:
- in compliance with the conditions of this consent;
 - in accordance with all written directions of the Planning Secretary;
 - generally in accordance with the EIS; and
 - generally in accordance with the Development Layout.
- A3. Consistent with the requirements in this consent, the Planning Secretary may make written directions to the Applicant in relation to:
- the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Planning Secretary; and
 - the implementation of any actions or measures contained in any such document referred to in condition A3(a).
- A4. The conditions of this consent and directions of the Planning Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and the document/s listed in condition A2(c). In the event of an inconsistency, ambiguity or conflict between any of the document/s listed in condition A2(c), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.

NOTIFICATION OF COMMENCEMENT

- A5. The Applicant must notify the Department in writing of the date of commencement of each of the following phases of development, at least two weeks before that date:
- physical commencement of development under this consent;
 - commencement of construction under this consent;
 - commencement of mining operations under this consent;
 - cessation of mining operations (i.e. mine closure); and
 - any period of suspension of mining operations (i.e. care and maintenance).
- A6. If the development is to be further staged, the Department must be notified in writing at least two weeks prior to the commencement of each stage, of the date of commencement and the development to be carried out in that stage.

SURRENDER OF EXISTING CONSENTS OR APPROVALS

- A7. Within 12 months of the date of physical commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the Applicant must surrender the existing development consents in **Table 1** in accordance with the EP&A Regulation.

Table 1: Existing development consents

Application number	Development	Date of issue	Determining authority
98/99:8	Open pit, waste stockpiles, sedimentation trap and roading (Open cut mining)	24 September 1998	Cobar Shire Council
99/00:022	Open cut gold mine	29 June 2000	Cobar Shire Council
2004/LDA-00003	Underground gold mine	24 June 2004	Cobar Shire Council
2014/LD-00031	Jubilee raise bore and ventilation fan establishment	27 November 2014	Cobar Shire Council
2019/LD-00024	Great Cobar Pipeline Project	8 October 2019	Cobar Shire Council

A8. Upon the physical commencement of development under this consent, and before the surrender of existing development consents or project approvals required under condition A7, the conditions of this consent prevail to the extent of any inconsistency with the conditions of those consents or approvals.

Note: *This requirement does not extend to the surrender of construction and occupation certificates for existing and proposed building works under the former Part 4A of the EP&A Act or Part 6 of the EP&A Act as applies from 1 September 2018. The surrender should not be understood as implying that works legally constructed under a valid consent or approval can no longer be legally maintained or used.*

LIMITS OF CONSENT

Mining Operations

A9. Mining operations may be carried out on the site, within the approved mining area, until 31 December 2035.

Notes:

- *Under this consent, the Applicant is required to decommission and rehabilitate the site and carry out other requirements in relation to mining operations. Consequently, this consent will continue to apply in all respects other than to permit the carrying out of mining operations until the rehabilitation of the site and other requirements have been carried out to the required standard.*
- *Mining operations and rehabilitation are also regulated under the Mining Act 1992.*

Identification of Approved Disturbance Area

A10. Within three months of commencement of the development under this consent, or other timeframe agreed by the Planning Secretary, the Applicant must provide to the Department a survey plan and spatial files in a format agreed by the Planning Secretary of the boundaries of the approved disturbance areas.

Ore Extraction

A11. A maximum of 800,000 tonnes of ore may be extracted from the site in any financial year.

Hours of Operation

A12. The Applicant may:

- undertake mining operations 24 hours a day, 7 days a week; and
- transport ore and waste rock to and from the Peak Complex between 7 am and 6 pm, 7 days a week.

Construction Hours

A13. Construction must only be undertaken during standard construction hours (7 am to 6 pm, Monday to Friday and 8 am to 1 pm on Saturdays and no time on Sundays or public holidays), unless alternative hours are included within an approved Noise Management Plan or the Planning Secretary agrees otherwise.

PLANNING AGREEMENT

A14. Within six months of the date of physical commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the Applicant must enter into a planning agreement with Council in accordance with:

- Division 7.1 of Part 7 of the EP&A Act; and
- the terms of the Applicant's offer to Council in Appendix 4.

A15. If there is any dispute between the Applicant and Council in regards to condition A14 then either party may refer the matter to the Planning Secretary for resolution.

COMMUNITY CONSULTATIVE COMMITTEE

A16. The Applicant must operate the Community Consultative Committee (CCC) established for the development in accordance with the Department's *Community Consultative Committee Guidelines: State Significant Projects* (2019) during the life of the development, or other timeframe agreed by the Planning Secretary.

Notes:

- *The CCC is an advisory committee only.*
- *In accordance with the Guidelines, the Committee should comprise an independent chair and appropriate representation from the Applicant, Council and the local community.*

A17. With the approval of the Planning Secretary, the Applicant may combine the CCC required by this consent with any similar CCC required by a consent or approval for any adjoining mine subject to common, shared or related ownership or management.

EVIDENCE OF CONSULTATION

A18. Where conditions of this consent require consultation with an identified party, the Applicant must:

- consult with the relevant party prior to submitting the subject document for approval; and
- provide details of the consultation undertaken to the Planning Secretary, including:

- (i) the outcome of that consultation, matters resolved and unresolved; and
- (ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.

STAGING, COMBINING AND UPDATING STRATEGIES, PLANS OR PROGRAMS

- A19. With the approval of the Planning Secretary, the Applicant may:
- (a) prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);
 - (b) combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined);
 - (c) update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development); and
 - (d) combine any strategy, plan or program required by this consent with any similar strategy, plan or program required by other consents for the Peak Complex subject to common, shared or related ownership or management.
- A20. If the Planning Secretary agrees, a strategy, plan or program may be staged without addressing particular requirements of the relevant condition of this consent if those requirements are not applicable to the particular stage.
- A21. If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this consent.

APPLICATION OF EXISTING STRATEGIES, PLANS OR PROGRAMS

- A22. Prior to the approval of management plans under this consent, the Applicant must continue to implement any equivalent or similar management plan/s required under existing consents listed under condition A7, to the satisfaction of the Planning Secretary.

PUBLIC INFRASTRUCTURE

Protection of Public Infrastructure

- A23. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:
- (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by carrying out the development; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

Note: *This condition does not apply to any damage to roads caused as a result of general road usage or otherwise addressed by contributions made by the Applicant to the relevant Council or to damage subject to compensation under the Mining Act 1992.*

- A24. If the Applicant and the public infrastructure owner cannot agree on whether damage to public infrastructure is attributed to the development or the measures to be implemented to repair or relocate public infrastructure, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.

DEMOLITION

- A25. All demolition must be carried out in accordance with *Australian Standard AS 2601-2001 The Demolition of Structures* (Standards Australia, 2001), or its latest version.

STRUCTURAL ADEQUACY

- A26. All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the development must be constructed in accordance with the relevant requirements of the BCA.

Notes:

- *Under Part 6 of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.*

OPERATION OF PLANT AND EQUIPMENT

- A27. All plant and equipment used on site, or to monitor the performance of the development must be:
- (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

COMPLIANCE

A28. The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.

APPLICABILITY OF GUIDELINES

A29. References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of inclusion (or later update) of the condition.

A30. However, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Planning Secretary may, in respect of ongoing monitoring and management obligations, agree to or require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.

CROWN LAND

A31. The Applicant must consult with DPE Crown Lands prior to undertaking development on Crown Land or Crown Roads.

Notes:

- *Under section 265 of the Mining Act 1992, the Applicant is required to enter into a compensation agreement with DPE Crown Lands prior to undertaking any mining operations or related activities on Crown land or Crown roads within a mining lease.*
- *Under section 141 of the Mining Act 1992, the Applicant is required to enter into an access arrangement with DPE Crown Lands prior to undertaking any prospecting operations on Crown land or Crown roads within an exploration licence.*

PART B SPECIFIC ENVIRONMENTAL CONDITIONS

NOISE

Noise Criteria

- B1. The Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 2 at any residence on privately-owned land.

Table 2: Noise criteria

Noise Assessment Location	Day <i>L</i>_{Aeq (15 min)} dB(A)	Evening <i>L</i>_{Aeq (15 min)} dB(A)	Night <i>L</i>_{Aeq (15 min)} dB(A)	Night <i>L</i>_{Max} dB(A)
All privately-owned residences	40	35	35	52

- B2. Noise generated by the development must be monitored and measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the *NSW Noise Policy for Industry* (EPA, 2017).
- B3. The noise criteria in **Table 2** do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

Noise Operating Conditions

- B4. The Applicant must:
- (a) take all reasonable steps to minimise noise from construction and operational activities, including low frequency noise and other audible characteristics, as well as road noise associated with the development;
 - (b) take all reasonable steps to minimise the noise impacts of the development during noise-enhancing meteorological conditions;
 - (c) regularly assess the noise monitoring data, and modify or stop operations on the site to ensure compliance with the relevant conditions of this consent.

Noise Management Plan

- B5. The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
- (a) be prepared by a suitably qualified and experienced person/s;
 - (b) be prepared in consultation with the EPA;
 - (c) include an out-of-hours works protocol;
 - (d) describe the measures to be implemented to ensure:
 - (i) compliance with the noise criteria and operating conditions in this consent;
 - (ii) best practice management is being employed;
 - (e) include a monitoring program that:
 - (i) is capable of evaluating the performance of the development against the noise criteria;
 - (ii) monitors noise at the nearest and/or most affected residences;
 - (iii) includes a protocol for identifying any noise-related exceedance, incident or non-compliance and for notifying the Department and relevant stakeholders of any such event.
- B6. The Applicant must not commence construction until the Noise Management Plan is approved by the Planning Secretary.
- B7. The Applicant must implement the Noise Management Plan as approved by the Planning Secretary.

BLAST

Blast Criteria

B8. The Applicant must ensure that blasting on the site does not cause exceedances of the criteria in **Table 3**.

Table 3: Vibration Criteria

Location	Ground vibration (mm/s)	Allowable exceedance
Residence on privately-owned land *	10	0%
	5	5% of the total number of blasts over a financial year
Rail Corridor	10	0%

*Or other sensitive receiver location (e.g. a school or hospital)

B9. The blasting criteria in **Table 3** do not apply to a residence if the Applicant has an agreement with the owner/s of that residence or infrastructure to exceed the blasting criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

B10. The Applicant may carry out a maximum of:

- (a) 3 blasts per 24-hour period; and
- (b) 20 blasts per week.

B11. Condition B10 does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blast misfires or blasts required to ensure the safety of the mine, its workers or the general public.

Notes:

- For the purpose of this condition, a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the mine.
- Should an additional blast be required after a blast misfire, the additional blast and the blast misfire are counted as a single blast.

Blast Operating Conditions

B12. The Applicant must:

- (a) take all reasonable steps to:
 - (i) protect the safety of people and livestock in the areas surrounding blasting operations; and
 - (ii) protect public or private infrastructure and property in the surrounding area from damage from blasting operations;
- (b) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site; and
- (c) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent.

Blast Management Plan

B13. The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:

- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
- (b) be prepared in consultation with the EPA and Council;
- (c) describe the blast management system and the measures that will be implemented to ensure compliance with the blasting criteria and conditions of this consent;
- (d) include a monitoring program for evaluating and reporting on compliance with the relevant conditions of this consent;
- (e) include a protocol for identifying any blast-related exceedance, incident or non-compliance and for notifying the Department, the EPA and relevant stakeholders of these events;
- (f) includes a review mechanism and contingency measures if blasting causes amenity impacts at levels below the relevant criteria;

- (g) include public notification procedures to enable members of the public, particularly surrounding residents, to get up-to-date information on the proposed blasting schedule; and
- (h) include a protocol for investigating and responding to blast-related complaints.

B14. The Applicant must not commence construction until the Blast Management Plan is approved by the Planning Secretary.

B15. The Applicant must implement the Blast Management Plan as approved by the Planning Secretary.

AIR QUALITY AND GREENHOUSE GAS

Odour

B16. The Applicant must ensure that no offensive odours, as defined under the POEO Act, are emitted from the site.

Air Quality Criteria

B17. The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in **Table 4** at any residence on privately-owned land.

Table 4: Air quality criteria

Pollutant	Averaging period	Criterion
Particulate matter < 10 µm (PM ₁₀)	Annual	^{a, c} 25 µg/m ³
	24 hour	^b 50 µg/m ³
Particulate matter < 2.5 µm (PM _{2.5})	Annual	^{a, c} 8 µg/m ³
	24 hour	^b 25 µg/m ³
Total suspended particulate (TSP) matter	Annual	^{a, c} 90 µg/m ³
^d Deposited dust	Annual	^b 2 g/m ² /month ^a 4 g/m ² /month

Notes:

^a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).

^b Incremental impact (i.e. incremental increase in concentrations due to the development on its own).

^c Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agreed by the Planning Secretary.

^d Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.

B18. The air quality criteria in **Table 4** do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to exceed the air quality criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

Mine-owned Land

B19. Particulate matter emissions generated by the development must not exceed the criteria listed in **Table 4** at any occupied residence on mine-owned land (including land owned by another mining company) unless:

- (a) the tenant and landowner (if the residence is owned by another mining company) have been notified of any health risks associated with such exceedances in accordance with the notification requirements under PART D of this consent;
- (b) the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving reasonable notice;
- (c) air quality monitoring is regularly undertaken to inform the tenant and landowner (if the residence is owned by another mining company) of the likely particulate matter emissions at the residence; and
- (d) data from this monitoring is presented to the tenant and landowner in an appropriate format for a medical practitioner to assist the tenant and landowner in making informed decisions on the health risks associated with occupying the property.

Air Quality Operating Conditions

B20. The Applicant must:

- (a) take all reasonable steps to

- (i) minimise odour, fume, and particulate matter (including PM₁₀ and PM_{2.5}) emissions of the development, paying particular attention to minimising odour from ventilation shafts, wheel-generated haul road emissions, and emissions from the waste rock emplacements;
 - (ii) improve energy efficiency and reduce greenhouse gas emissions of the development;
 - (iii) minimise any visible off-site air pollution generated by the development;
 - (iv) minimise to the greatest extent practicable, the area of dust generating surfaces exposed on the site at any given point in time;
- (b) operate a comprehensive air quality management system that uses a combination of predictive meteorological forecasting and real-time air quality monitoring data to guide the day to day planning of mining operations and the implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent;
 - (c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see Note c to **Table 4** above);
 - (d) use all reasonable efforts to co-ordinate air quality management on the site with the air quality management at nearby mines to minimise cumulative air quality impacts;
 - (e) carry out regular air quality monitoring to determine whether the development is complying with the relevant conditions of this consent; and
 - (f) regularly assess the air quality monitoring data, and modify operations on the site to ensure compliance with the relevant conditions of this consent.

Air Quality and Greenhouse Gas Management Plan

B21. The Applicant must prepare an Air Quality and Greenhouse Gas Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:

- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
- (b) be prepared in consultation with the EPA, NSW Health and the CCC;
- (c) describe the measures to be implemented to ensure:
 - (i) compliance with the air quality criteria and operating conditions in this consent;
 - (ii) best practice management is being employed to:
 - minimise the development's air quality impacts;
 - minimise the development's Scope 1 and 2 greenhouse gas emissions; and
 - improve the development's energy efficiency; and
 - (iii) the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;
- (d) describe the air quality management system in detail; and
- (e) include an air quality monitoring program, undertaken in accordance with the *Approved Methods for Sampling and Analysis of Air Pollutants in NSW* (EPA, 2022) and *Ambient Air Monitoring Guidance Note* (EPA, 2022), or its latest version, that:
 - (i) uses monitors to evaluate the performance of the development against the air quality criteria in this consent and to guide day to day planning of operations;
 - (ii) adequately supports the air quality management system;
 - (iii) includes a protocol for distinguishing the dust emissions of the development from any neighbouring developments; and
 - (iv) includes a protocol for identifying any air quality-related exceedance, incident or non-compliance and for notifying the Department and relevant stakeholders of these events.

B22. The Applicant must not commence construction until the Air Quality and Greenhouse Gas Management Plan is approved by the Planning Secretary.

B23. Every three years during the life of mining operations, unless otherwise agreed by the Planning Secretary, the Air Quality and Greenhouse Gas Management Plan must be updated to include the following information in relation to Scope 1 and Scope 2 greenhouse gas emissions:

- (a) a review of abatement technologies relevant to the development's greenhouse gas emissions;
- (b) a detailed review of the feasibility of implementing various greenhouse gas abatement options, and economic considerations for the development; and
- (c) a 3-year action plan to investigate and implement reasonable and feasible measure to minimise greenhouse gas emissions.

B24. The Applicant must implement the Air Quality and Greenhouse Gas Management Plan as approved by the Planning Secretary.

METEOROLOGICAL MONITORING

B25. Prior to the commencement of construction and for the life of the development, the Applicant must ensure that there is a suitable meteorological station operating in the vicinity of the site that:

- (a) complies with the requirements in the Approved Methods for Sampling and Analysis of Air Pollutants in NSW (EPA, 2022) and Ambient Air Monitoring Guidance Note (EPA, 2022); and
- (b) is capable of measuring meteorological conditions in accordance with the NSW Noise Policy for Industry (EPA, 2017),

unless a suitable alternative is approved by the Planning Secretary following consultation with the EPA.

WATER

Offsite Water Discharges

B26. The Applicant must ensure that all surface discharges from the site comply with:

- (a) discharge limits (both volume and quality) set for the development in any EPL; or
- (b) relevant provisions of the POEO Act.

Water Supply

B27. The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of the development to match its available water supply.

B28. The Applicant must report on water extracted from the development each year (direct and indirect) in the Annual Review, including water taken under each water licence.

Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain all necessary water licences for the development, including during rehabilitation and post mine closure.

Compensatory Water Supply

B29. The Applicant must provide a compensatory water supply to any landowner of privately-owned land whose rightful water supply is adversely and directly impacted (other than an impact that is minor or negligible) as a result of the development, in consultation with DPE Water, and to the satisfaction of the Planning Secretary.

B30. The compensatory water supply measures must provide an alternative long term supply of water that is equivalent, in quality and volume, to the loss attributable to the development. Equivalent water supply should be provided (at least on an interim basis) as soon as practicable after the loss is identified, unless otherwise agreed with the landowner.

B31. If the Applicant and the landowner cannot agree on whether the loss of water is attributed to the development or the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.

B32. If the Applicant is unable to provide an alternative long term supply of water, then the Applicant must provide compensation, to the satisfaction of the Planning Secretary.

B33. However, conditions B29 to B31 do not apply if the Applicant has a compensatory water agreement with the owner/s of the land and the Applicant has advised the Department in writing of the terms of this agreement.

Notes:

- The Water Management Plan (see condition B36) is required to include trigger levels for investigating potentially adverse impacts on water supplies.
- The burden of proof that any loss of water supply is not due to mining impacts rests with the Applicant.

B34. In the event of any complaint related to a privately-owned licensed groundwater bore which may, in the opinion of the Planning Secretary, have been adversely and directly impacted as a result of the development (other than an impact that is minor or negligible), the applicant must, as soon as practicable, facilitate the provision of a temporary water supply, pending the outcome of any groundwater investigation and/or provision of an alternative long-term supply of water as required under condition B30, the satisfaction of the Planning Secretary.

Water Management Performance Measures

B35. The Applicant must ensure that the development complies with the performance measures in **Table 5**.

Table 5: Water management performance measures

Feature	Performance Measure
Water management – General	<ul style="list-style-type: none"> • Maximise water recycling, reuse and sharing opportunities

Feature	Performance Measure
	<ul style="list-style-type: none"> • Minimise the need for make-up water from external supplies, particularly the use of higher quality water used by other land users • Design, install, operate and maintain water management infrastructure in a proper and efficient manner • Minimise risks to the receiving environment and downstream water users
Aquifers	<ul style="list-style-type: none"> • Negligible impacts to fractured rock aquifers caused by the development beyond those predicted in the EIS, including: <ul style="list-style-type: none"> - negligible change in groundwater levels beyond those predicted; - negligible change in water quality beyond those predicted; - negligible impact to other groundwater users; and - no exceedance of the minimal impact considerations in the <i>NSW Aquifer Interference Policy</i>
Surface water resources	<ul style="list-style-type: none"> • Negligible impacts to surface water resources caused by the development beyond those predicted in the EIS; • Maximise, as far as reasonable and feasible, the diversion of all clean water around disturbed areas • Storages are suitably designed, installed and maintained to: <ul style="list-style-type: none"> - minimise discharge of mine water or sediment-laden water outside the off-site environment - minimise permeability, and prevent or minimise the migration of pollutants due to seepage
Waste Rock Emplacement	<ul style="list-style-type: none"> • Minimise, as far as reasonable and feasible, the potential for acid mine drainage
Flood mitigation	<ul style="list-style-type: none"> • Negligible change to off-site flood regime, including flows, levels, storage capacity or velocities
Chemical and hydrocarbon storage	<ul style="list-style-type: none"> • Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standard
Groundwater dependent ecosystems	<ul style="list-style-type: none"> • Negligible environmental consequences to groundwater dependent ecosystems

Water Management Plan

B36. The Applicant must prepare a Water Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:

- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
- (b) be prepared in consultation with DPE Water, EPA, Resources Regulator and Council;
- (c) include a:
 - (i) Site Water Balance that:
 - includes details of:
 - o predicted inflows and outflows;
 - o sources and security of water supply, including contingency planning for various climate scenarios and allocations;
 - o preferential water supply to prioritise internal and poorer quality water supplies over external and higher quality water supplies;
 - o water use and management;
 - o any off-site water transfers, including process water requirements at the Peak Complex; and
 - o reporting procedures, including the annual preparation of an updated site water balance; and

- investigates and implements all reasonable and feasible measures to minimise water use;
- (ii) Surface Water Management Plan, that includes:
- representative baseline data on surface water flows and quality in waterbodies that could be affected by the development;
 - a detailed description of the water management system, including the;
 - clean water capture and diversion system;
 - dirty water system (including sediment detention basins); and
 - mine water capture system;
 - detailed procedures for the characterisation and management of potentially acid forming materials;
 - detailed plans for the design and management for the emplacement of reject materials and acid or sulphate generating materials;
 - detailed objectives and performance criteria, including trigger levels for investigating any potentially adverse impacts associated with the development for:
 - the water management system;
 - downstream surface water flows and quality;
 - water supply for other water users;
 - stream and riparian health; and
 - post-mining water pollution from rehabilitated areas of the site;
 - a program to monitor and evaluate:
 - compliance with the relevant performance measures in Table 5 and the performance criteria established above;
 - the effectiveness of the water management system;
 - surface water flows and quality, stream and riparian health in waterbodies that could be affected by the development; and
 - impacts on water users;
 - reporting procedures for the results of the monitoring program; and
 - a plan to respond to any exceedances of the performance measures or performance criteria, and mitigate any adverse surface water impacts of the development, including contingency strategies for addressing:
 - any discharge of pollutants from on-site water storages, emplacements, infrastructure and processing areas (including pipelines); and
 - any identified impacts to waterbodies;
- (iii) Groundwater Management Plan, that includes:
- detailed baseline data on groundwater levels, yield and quality in the region that could be affected by the development, including privately-owned groundwater bores and groundwater dependent ecosystems;
 - a detailed description of the groundwater management system, including measures to minimise acid mine drainage from potentially acid forming material;
 - detailed objectives and performance criteria, including trigger levels for investigating any potentially adverse impacts associated with the development for:
 - the groundwater management system;
 - local and regional aquifers;
 - groundwater users bores;
 - groundwater inflows to the mining operations;
 - seepage/leachate from underground voids, water storages, emplacements, infrastructure and processing areas, and final void; and
 - groundwater dependent ecosystems;
 - a program to monitor and evaluate:
 - compliance with the relevant performance measures listed in Table 5 and the performance criteria established above;
 - potential acid mine drainage;
 - the effectiveness of the groundwater management system;
 - groundwater inflows to the mining operations;
 - any localised enhanced groundwater inflows associated with faults or other structures;
 - seepage/leachate from underground voids, water storages, emplacements, infrastructure and processing areas, and final void, including migration over the short and long term;
 - background changes in groundwater yield/quality against mine-induced changes;
 - impacts of the development on:
 - local and regional aquifers;
 - waterbodies;
 - groundwater supply of potentially affected landowners; and
 - groundwater dependent ecosystems; and
 - reporting procedures for the results of the monitoring program; and

- a plan to respond to any exceedances of the performance measures or performance criteria, and mitigate any adverse groundwater impacts of the development, including contingency strategies for addressing:
 - seepage/leachate of pollutants from underground voids, on-site water storages, emplacements, infrastructure and processing areas, and final void;
 - any localised enhanced groundwater inflows associated with faults or other structures; and
- (iv) a program to validate the water balance and groundwater model for the development every 3 years, and compare against monitoring results with modelled predictions.

B37. The Applicant must not commence construction until the Water Management Plan is approved by the Planning Secretary.

B38. The Applicant must implement the Water Management Plan as approved by the Planning Secretary.

SUBSIDENCE MANAGEMENT

Subsidence Performance Measures

B39. The Applicant must ensure that all stopes and associated backfilling maintains long term slope stability and that the development results in negligible subsidence impacts or environmental consequences.

TRANSPORT

Road Upgrades

B40. Prior to the commencement of construction, unless otherwise agreed by the Planning Secretary, the Applicant must upgrade the intersection of:

- (a) Kidman Way and construction access, to a:
 - (i) Rural Basic Left-Turn (BAL) treatment to accommodate 19 m long design vehicle; and
 - (ii) Rural Basic Right-Turn (BAR) treatment to accommodate 19 m long turning design vehicle and highway design vehicle length of 36.5 m;
 unless TfNSW and the Planning Secretary agree to a suitable alternative access arrangement for construction traffic;
- (b) Kidman Way and New Cobar Complex entrance, to accommodate the turning movements of a 35.4 m B-Triple vehicle; and
- (c) Kidman Way and Peak Way, to accommodate the simultaneous turning movements of 35.4 m B-Triple vehicles travelling between the Peak Complex and New Cobar Complex entrance.

The intersections must be upgraded in accordance with the relevant Austroads guidelines, Australian Standards and TfNSW specifications, to the satisfaction of TfNSW.

Notes:

- *The location of the affected intersections is depicted in Figure 5 of Appendix 2.*
- *Under the Roads Act 1993, the Applicant is required to obtain all necessary approvals and licences for the development, including approval under Section 138. The Applicant may also be required to enter into a Works Authorisation Deed with TfNSW and obtain a Road Occupancy Licence from TfNSW for the development.*

B41. If there is any dispute between the Applicant and TfNSW in implementing the requirements of condition B40, then any of the parties may refer the matter to the Planning Secretary for resolution.

Monitoring of Road Transport

B42. The Applicant must:

- (a) keep accurate records of the:
 - (i) amount of ore and/or waste transported from the site (on a daily basis); and
 - (ii) number of daily and annual truck movements generated by the development; and
- (b) publish a summary of these results in the Annual Review.

Rail Corridor

B43. Following notification from TfNSW that the Rail Corridor will or has become operational during the life of the development, the Applicant must prepare a Rail Infrastructure Management Plan for the development in consultation with TfNSW. This Plan must:

- (a) describe the measures to be implemented to ensure that the development does not impact the safety or serviceability of the Rail Corridor or associated infrastructure.
- (b) include a program for monitoring and repair of the Rail Corridor and associated infrastructure; and
- (c) include reporting and notification procedures.

B44. The Applicant must implement the Rail Infrastructure Management Plan in consultation with TfNSW.

Transport Operating Conditions

B45. The Applicant must ensure that:

- (a) truck movements transporting ore and waste rock to and from the site do not exceed 100 movements per day, averaged over a financial year, unless otherwise agreed by the Planning Secretary;
- (b) truck movements transporting ore and waste rock to and from the site do not exceed the maximum daily movements identified in the Traffic Management Plan required under condition B46, unless otherwise agreed by the Planning Secretary;
- (c) ensure that all laden trucks entering or exiting the site have their loads covered;
- (d) take all reasonable steps to minimise traffic safety issues and disruptions to local road users, including school buses.

Note: *The Applicant is required to obtain relevant permits under the Heavy Vehicle National Law (NSW) for the use of over-dimension vehicles on the road network.*

Traffic Management Plan

B46. The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:

- (a) be prepared by a suitably qualified and experienced person/s;
- (b) be prepared in consultation with TfNSW and Council;
- (c) include details of all transport routes and traffic types to be used for development-related traffic;
- (d) identify the maximum daily truck movements transporting ore and waste rock to and from the site. The nominated maximum daily truck movements must be based on an assessment of the impact of these movements on the capacity, safety and efficiency of the local road network;
- (e) include a program to monitor and regularly report on the daily and cumulative truck movements from the site;
- (f) include details of the measures to be implemented to:
 - (i) comply with the operating conditions in condition B45;
 - (ii) minimise traffic safety issues and disruption to local road users, including:
 - minimising potential for conflict with school buses;
 - installation of advance truck warning signage on Kidman Way;
 - a traffic management system for managing over-dimensional vehicles; and
 - implementation of temporary traffic controls, including detours and signage;
 - manage and coordinate haulage movements between the New Cobar and Peak Complexes;
 - (iii) notify the local community about development-related traffic impacts;
 - (iv) respond to any emergency repair requirements or maintenance during construction and/or decommissioning; and
- (g) include a Drivers' Code of Conduct that includes procedures to ensure that drivers:
 - (i) adhere to posted speed limits or other required travelling speeds;
 - (ii) adhere to the designated transport routes; and
 - (iii) implement safe driving practices, including during hazardous weather conditions.

B47. If the development is to be staged, the obligations in this condition apply to each stage of the development.

B48. The Applicant must not commence construction of the road upgrades required under condition B40 until the Traffic Management Plan is approved by the Planning Secretary.

B49. The Applicant must implement the Traffic Management Plan as approved by the Planning Secretary.

HERITAGE

Protection of Aboriginal Heritage

B50. The Applicant must ensure that the development does not cause any direct or indirect impact on any identified Heritage item located outside the approved disturbance areas, beyond those predicted in the document/s listed in condition A2(c).

Note: *If suspected human remains are discovered on the site, then all work surrounding the area must cease, and the area must be secured. The Applicant must immediately notify NSW Police Force and Heritage NSW, and work must not recommence in the area until authorised by NSW Police Force and Heritage NSW.*

B51. If any previously unknown Aboriginal object is discovered on the site, or suspected to be on the site:

- (a) all work in the immediate vicinity of the object or place must cease immediately;
- (b) a 10m buffer area around the object or place must be cordoned off; and

(c) Heritage NSW must be contacted immediately.

B52. Work in the immediate vicinity may only recommence if:

- (a) the potential Aboriginal object is confirmed by Heritage NSW, in consultation with the Registered Aboriginal Parties, not to be an Aboriginal object or Aboriginal Place;
- (b) the Aboriginal Cultural Heritage Management Plan is revised to include the Aboriginal object and appropriate measures in respect of it; or
- (c) the Planning Secretary is satisfied with the measures to be implemented in respect of the Aboriginal object and makes a written direction in that regard.

B53. The Applicant must ensure that all known Aboriginal objects or Aboriginal places on the site and within any offset areas are properly recorded, and those records are kept up to date, in the Aboriginal Heritage Information Management System (AHIMS) Register.

Aboriginal Cultural Heritage Management Plan

B54. The Applicant must prepare an Aboriginal Cultural Heritage Management Plan for the development. The plan must:

- (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Planning Secretary;
- (b) be prepared in consultation with Heritage NSW and Registered Aboriginal Parties;
- (c) describe the measures to be implemented on the site or within any offset area to:
 - (i) comply with the heritage-related operating conditions of this consent;
 - (ii) ensure all workers receive suitable Aboriginal cultural heritage training/inductions prior to carrying out any activities which may cause impacts to Aboriginal objects or Aboriginal places, and that suitable records are kept of these inductions;
 - (iii) protect, monitor and manage identified Aboriginal objects and Aboriginal places (including any proposed archaeological investigations of potential subsurface objects and salvage of objects within the approved disturbance area) in accordance with the commitments made in the document/s listed in condition A2(c);
 - (iv) provide for appropriate archaeological investigation and recording of all identified Aboriginal places within the approved disturbance areas, with a particular focus on the 'New Cobar Complex Background Scatter';
 - (v) undertake an archival and oral history study of the post contact shared histories associated with the nineteenth century Cornish Town mining village;
 - (vi) protect Aboriginal objects and Aboriginal places located outside the approved disturbance area from impacts of the development;
 - (vii) manage the discovery of suspected human remains and any new Aboriginal objects or Aboriginal places, including provisions for burials, over the life of the development;
 - (viii) maintain and manage reasonable access for relevant Aboriginal stakeholders to visit Aboriginal objects and Aboriginal places (outside of the approved disturbance area); and
 - (ix) facilitate ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site;
- (d) include a strategy for the care, control and storage of Aboriginal objects salvaged on the site, both during the life of the development and in the long term.

B55. The Applicant must not commence construction until the Aboriginal Cultural Heritage Management Plan is approved by the Planning Secretary.

B56. The Applicant must implement the Aboriginal Cultural Heritage Management Plan approved by the Planning Secretary.

Historic Heritage Management Plan

B57. The Applicant must prepare a Historic Heritage Management Plan for the development, in respect of all non-Aboriginal cultural heritage items, to the satisfaction of the Planning Secretary. This plan must:

- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
- (b) be prepared in consultation with Heritage NSW, Council and relevant landowners and in accordance with the relevant Heritage NSW guidelines;
- (c) describe how historic heritage values of the site would be recorded and preserved;
- (d) describe the measures to be implemented on the site to:
 - (i) ensure all workers on the site receive suitable heritage training/inductions prior to carrying out any activities which may cause impacts to historic heritage, and that suitable records are kept of these inductions;

- (ii) protect heritage items located outside the approved disturbance area from the impacts of the development, beyond those predicted in the document/s listed in condition A2(c);
- (iii) undertake photographic/archival recording of any items of heritage significance predicted to be impacted by the development, prior to disturbance;
- (iv) manage any new heritage items discovered during the life of the development;
- (e) include procedures for dealing with previously unidentified items or 'relics' of heritage significance; and
- (f) include a strategy for the care, control and storage of heritage relics salvaged from the site.

B58. The Applicant must not commence construction until the Historic Heritage Management Plan is approved by the Planning Secretary.

B59. The Applicant must implement the Historic Heritage Management Plan as approved by the Planning Secretary.

SOCIAL

Community and Stakeholder Engagement Strategy

B60. The Applicant must prepare and implement a Community and Stakeholder Engagement Strategy for the development. The strategy must:

- (a) be prepared in consultation with Council, the CCC, local affected communities and other interested stakeholders;
- (b) be submitted to the Planning Secretary and Council within six months of physically commencing development under this consent;
- (c) identify the potential and perceived positive and negative social impacts of the development;
- (d) identify opportunities to secure and enhance positive social impacts and measures to avoid, minimise and/or mitigate negative social impacts from the development;
- (e) include a Community and Stakeholder Engagement Strategy that promotes consistent and ongoing engagement with the local community and facilitates improved social cohesion;
- (f) include a Local Participation and Procurement Strategy to facilitate local sourcing of labour, goods and services and promote training and skills-enhancement opportunities; and
- (g) include a program to monitor, review and report on the effectiveness of these measures, including regular review of the strategy.

VISUAL

Visual Amenity and Lighting

B61. The Applicant must:

- (a) take all reasonable steps to minimise the visual and off-site lighting impacts of the development;
- (b) ensure no fixed outdoor lights shine directly above the horizontal or above the building line or any illuminated structure;
- (c) ensure no in-pit mobile lighting rigs shine directly above the pit wall and other mobile lighting rigs do not shine directly above the horizontal (except where required for emergency safety purposes);
- (d) ensure that all external lighting associated with the development complies with relevant Australian Standards including the latest version of *Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting*;
- (e) ensure that the visual appearance of all new buildings, structures, facilities or works which are visible from outside the site (including paint colours and specifications) is aimed at blending as far as possible with the surrounding landscape.

Fort Bourke Hill Viewing Platform

B62. Unless otherwise agreed by the Planning Secretary, the Applicant must:

- (a) maintain the Fort Bourke Hill viewing platform in a safe and serviceable condition; and
- (b) provide for safe public access to the viewing platform, over the life of the development.

WASTE

B63. The Applicant must:

- (a) take all reasonable steps to minimise the waste generated by the development;
- (b) classify all waste in accordance with the *Waste Classification Guidelines* (EPA, 2014);
- (c) dispose of all waste, except for waste rock, at appropriately licensed waste facilities;

- (d) manage on-site sewage treatment and disposal in accordance with the requirements of Council; and
- (e) monitor and report on the effectiveness of the waste minimisation and management measures in the Annual Review referred to in condition C9.

DANGEROUS GOODS

- B64. The Applicant must ensure that the storage, handling, and transport of:
- (a) dangerous goods is done in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the Dangerous Goods Code; and
 - (b) explosives are managed in accordance with the requirements of the Resources Regulator.

Bushfire Management

- B65. The Applicant must:
- (a) ensure that the development:
 - (i) provides for asset protection in accordance with the relevant requirements in the *Planning for Bushfire Protection* (RFS, 2019) guideline; and
 - (ii) ensure that there is suitable equipment to respond to any fires on the site; and
 - (b) assist the RFS and emergency services to the extent practicable if there is a fire in the vicinity of the site.

Fire Safety Study

- B66. Prior to the commencement of construction, the Applicant must prepare a Fire Safety Study for the development, to the satisfaction of FRNSW and the Planning Secretary. The study must:
- (a) be consistent with the Department’s *Hazardous Industry Planning Advisory Paper No. 2 ‘Fire Safety Study’ guideline*; and
 - (b) detail the fire prevention and mitigation measures for the site.

B67. The Applicant must implement the measures described in the Fire Safety Study approved by the Planning Secretary.

REHABILITATION

Rehabilitation Objectives

B68. The Applicant must rehabilitate the site in accordance with the conditions imposed on the mining leases(s) associated with the development under the *Mining Act 1992*. The rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the EIS (and shown conceptually in the Rehabilitation Plan in **Appendix 3**), and must comply with the objectives in **Table 6**.

Table 6: Rehabilitation objectives

<i>Feature</i>	<i>Objective</i>
All areas of the site affected by the development	<ul style="list-style-type: none"> • Safe, stable and non-polluting • Fit for the intended post-mining land use/s • Establish the final landform and post mining- land use/s as soon as practicable after cessation of mining • Minimise post-mining environmental impacts
Stopes	<ul style="list-style-type: none"> • Backfilled • Safe and stable • Negligible surface subsidence in the long term
Portals and vent shafts	<ul style="list-style-type: none"> • To be decommissioned and made safe and stable
Final Void	<ul style="list-style-type: none"> • Designed as a long-term groundwater sink to prevent the release of saline water into the surrounding environment, unless further mine planning and final landform design processes identify a more suitable outcome for the final void • Optimise the size and depth of final void to ensure the final landform is stable and non-polluting • Minimise to the greatest extent practicable: <ul style="list-style-type: none"> – the drainage catchment of final voids; and – any high wall instability risk; and • Maximise potential for beneficial reuse, where practicable
Waste Rock Emplacement	<ul style="list-style-type: none"> • Minimise the potential for acid mine drainage and erosion • Implement geomorphic landform design principles, where practicable

Feature	Objective
Mine water discharges following mine closure (from any location)	<ul style="list-style-type: none"> Negligible environmental consequence
Water Quality	<ul style="list-style-type: none"> Water retained on the site is fit for intended post-mining land use/s Water management is consistent with the regional catchment management strategy
Surface infrastructure	<ul style="list-style-type: none"> To be decommissioned and removed, unless Resources Regulator agrees otherwise
Community	<ul style="list-style-type: none"> Ensure public safety Minimise adverse socio-economic effects associated with mine closure

Rehabilitation Strategy

B69. The Applicant must prepare a Rehabilitation Strategy for the site to the satisfaction of the Planning Secretary. This strategy must:

- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
- (b) be prepared in consultation with the Resources Regulator, MEG, DPE Water, BCS, Council and the CCC;
- (c) be submitted to the Planning Secretary for approval within six months of the date of physical commencement of development under this consent, unless otherwise agreed by the Planning Secretary;
- (d) build upon the Rehabilitation Objectives in **Table 6**, describe the overall rehabilitation outcomes for the site, and address all aspects of rehabilitation including mine closure, final landform, final void outcomes, post-mining land use/s and water management;
- (e) align with strategic rehabilitation and mine closure objectives and address the principles of the *Strategic Framework for Mine Closure* (ANZMEC and MCA, 2000);
- (f) describe how rehabilitation will be integrated with:
 - (i) the mine planning process, including a plan to address premature or temporary mine closure; and
 - (ii) the Peak Complex;
- (g) include details of:
 - (i) how the waste rock emplacement area will be designed to meet the rehabilitation objectives in **Table 6**;
 - (ii) target vegetation communities and species to be established within the proposed revegetation areas; and
 - (iii) the design of the surface water drainage network on the final landform;
- (h) investigate opportunities to refine and improve the final landform over time, including the configuration of the waste rock emplacement;
- (i) include a post-mining land use strategy to investigate and facilitate post-mining beneficial land uses for the site, that:
 - (i) align with regional and local strategic land use planning objectives and outcomes;
 - (ii) support a sustainable future for the local community;
 - (iii) utilise existing mining infrastructure, where practicable; and
 - (iv) avoid disturbing self-sustaining native ecosystems, where practicable;
- (j) include a stakeholder engagement plan to guide rehabilitation and mine closure planning processes and outcomes;
- (k) investigate ways to minimise adverse socio-economic effects associated with rehabilitation and mine closure; and
- (l) include a program to report on the outcomes of the investigations required under this condition and review and update this strategy at least every five years.

B70. The Applicant must implement the Rehabilitation Strategy approved by the Planning Secretary.

Rehabilitation Management Plan

B71. The Applicant must prepare and implement a Rehabilitation Management Plan in accordance with the conditions imposed on the mining lease(s) associated with the development under the *Mining Act 1992*.

PART C ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

- C1. The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:
- (a) be submitted to the Planning Secretary for approval prior to commencing construction under this consent;
 - (b) provide the strategic framework for environmental management of the development;
 - (c) identify the statutory approvals that apply to the development;
 - (d) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
 - (e) set out the procedures to be implemented to:
 - (i) keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - (ii) receive, record, handle and respond to complaints;
 - (iii) resolve any disputes that may arise during the course of the development;
 - (iv) respond to any non-compliance and any incident; and
 - (v) respond to emergencies; and
 - (f) include:
 - (i) references to any strategies, plans and programs approved under the conditions of this consent; and
 - (ii) a clear plan depicting all the sites where monitoring is to be carried out under the conditions of this consent.
- C2. The Applicant must implement the Environmental Management Strategy as approved by the Planning Secretary.

Adaptive Management

- C3. The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and performance measures in this consent. Any exceedance of these criteria or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.
- Where any exceedance of these criteria or performance measures has occurred, the Applicant must, at the earliest opportunity:
- (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not reoccur.
 - (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
 - (c) implement reasonable remediation measures as directed by the Planning Secretary.

Management Plan Requirements

- C4. Management plans required under this consent must be prepared in accordance with relevant guidelines, and include where relevant:
- (a) summary of relevant background or baseline data;
 - (b) details of:
 - (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - (ii) any relevant limits or performance measures and criteria; and
 - (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
 - (c) any relevant commitments or recommendations identified in the document/s listed in condition A2(c);
 - (d) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;
 - (e) a program to monitor and report on the:
 - (i) impacts and environmental performance of the development; and
 - (ii) effectiveness of the management measures set out pursuant to paragraph (d);
 - (f) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
 - (g) a program to investigate and implement ways to improve the environmental performance of the development over time;
 - (h) a protocol for managing and reporting any:
 - (i) incident, non-compliance or exceedance of any impact assessment criterion or performance measure;

- (ii) complaint; or
- (iii) failure to comply with other statutory requirements;
- (i) public sources of information and data to assist stakeholders in understanding environmental impacts of the development; and
- (j) a protocol for periodic review of the plan.

Note: *The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.*

REVISION OF STRATEGIES, PLANS AND PROGRAMS

- C5. Within three months of:
- (a) the submission of an incident report under condition C7;
 - (b) the submission of an Annual Review under condition C9;
 - (c) the submission of an Independent Environmental Audit under condition C11; or
 - (d) the approval of any modification of the conditions of this consent (unless the conditions require otherwise);
 - (e) notification of a change in development phase under condition A5; or
 - (f) a direction of the Secretary under condition A3 of Schedule 2
- the suitability of existing strategies, plans and programs required under this consent must be reviewed by the Applicant.
- C6. If necessary, to either improve the environmental performance of the development or cater for a modification or comply with a direction, the strategies, plans and programs required under this consent must be revised, to the satisfaction of the Planning Secretary. Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review.

Note: *This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.*

REPORTING AND AUDITING

Incident Notification

- C7. The Planning Secretary must be notified in writing via the Major Projects website immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 5.

Non-Compliance Notification

- C8. The Planning Secretary must be notified in writing via the Major Projects website within seven days after the Applicant becomes aware of any non-compliance. A non-compliance notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

Note: *A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.*

Annual Review

- C9. By the end of September each year after the date of physical commencement of development under this consent, or other timeframe agreed by the Planning Secretary, a report must be submitted to the Department reviewing the environmental performance of the development, to the satisfaction of the Planning Secretary. This review must:
- (a) describe the development (including any rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year;
 - (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, including a comparison of these results against the:
 - (i) relevant statutory requirements, limits or performance measures/criteria;
 - (ii) requirements of any plan or program required under this consent;
 - (iii) monitoring results of previous years; and
 - (iv) relevant predictions in the document/s listed in condition A2(c);
 - (c) identify any non-compliance or incident which occurred in the previous financial year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence;
 - (d) evaluate and report on compliance with the performance measures, criteria and operating conditions of this consent;
 - (e) identify any trends in the monitoring data over the life of the development;

- (f) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
 - (g) describe what measures will be implemented over the next financial year to improve the environmental performance of the development.
- C10. Copies of the Annual Review must be submitted to Council and made available to the CCC and any interested person upon request.

Independent Environmental Audit

- C11. Within one year of the date of physical commencement of development under this consent, and every three years after, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. The audit must:
- (a) be prepared in accordance with the *Independent Audit Post Approval Requirements* (NSW Government 2020); and
 - (b) be submitted, to the satisfaction of the Planning Secretary, within two months of undertaking the independent audit site inspection, unless otherwise agreed by the Planning Secretary.
- C12. In accordance with the specific requirements of the *Independent Audit Post Approval Requirements* (NSW Government 2020), the Applicant must:
- (a) review and respond to each Independent Audit Report prepared under Condition C11 of this consent;
 - (b) submit a response to the Planning Secretary and any other NSW agency that requests it, together with a timetable for the implementation of the recommendations of the Independent Audit Report;
 - (c) implement the recommendations to the satisfaction of the Planning Secretary; and
 - (d) make each Independent Audit Report and response to it publicly available no later than 60 days after submission to the Planning Secretary.

Monitoring and Environmental Audits

- C13. Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit.

For the purposes of this condition, as set out in the EP&A Act, “monitoring” means monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an “environmental audit” means a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.

ACCESS TO INFORMATION

- C14. Within three months of the date of physical commencement of development under this consent, until the completion of all rehabilitation required under this consent, the Applicant must:
- (a) make the following information and documents (as they are obtained, approved or as otherwise stipulated within the conditions of this consent) publicly available on its website:
 - (i) the document/s listed in condition A2(c);
 - (ii) all current statutory approvals for the development;
 - (iii) all approved strategies, plans and programs required under the conditions of this consent;
 - (iv) minutes of CCC meetings;
 - (v) regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent;
 - (vi) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
 - (vii) a summary of the current phase and progress of the development;
 - (viii) contact details to enquire about the development or to make a complaint;
 - (ix) a complaints register, updated monthly;
 - (x) the Annual Reviews of the development;
 - (xi) audit reports prepared as part of any Independent Environmental Audit of the development and the Applicant’s response to the recommendations in any audit report; and
 - (xii) any other matter required by the Planning Secretary; and
 - (b) keep such information up to date, to the satisfaction of the Planning Secretary.

PART D ADDITIONAL PROCEDURES

NOTIFICATION OF TENANTS

- D1. Within one month of the date of this consent, the Applicant must:
- (a) notify the tenants of any mine-owned land of their rights under this consent; and
 - (b) send a copy of the fact sheet entitled "Mine Dust and You" (NSW Health, 2017) to the existing tenants of any land (including mine-owned land) where the predictions in the document/s listed in condition A2(c) identify that dust emissions generated by the development are likely to be greater than the relevant air quality criteria identified in condition B17 at any time during the life of the development.
- D2. Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, the Applicant must:
- (a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the fact sheet entitled "Mine Dust and You" (NSW Health, 2017); and
 - (b) advise the prospective tenants of the rights they would have under this consent,
- to the satisfaction of the Planning Secretary

NOTIFICATION OF EXCEEDANCES

- D3. As soon as practicable and no longer than 7 days after obtaining monitoring results showing an exceedance of any noise, blasting or air quality criterion in PART B of this consent, the Applicant must provide the details of the exceedance to any affected landowners, tenants and the CCC.
- D4. For any exceedance of any air quality criterion in PART B of this consent, the Applicant must also provide to any affected land owners and/or tenants a copy of the fact sheet entitled "Mine Dust and You" (NSW Health, 2017).

INDEPENDENT REVIEW

- D5. If a landowner considers the development to be exceeding any relevant noise, blasting or air quality criterion in PART B of this consent, they may ask the Planning Secretary in writing for an independent review of the impacts of the development on their residence or land.
- D6. If the Planning Secretary is not satisfied that an independent review is warranted, the Planning Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review.
- D7. If the Planning Secretary is satisfied that an independent review is warranted, within 3 months, or other timeframe agreed by the Planning Secretary and the landowner, of the Planning Secretary's decision, the Applicant must:
- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to:
 - (i) consult with the landowner to determine their concerns;
 - (ii) conduct monitoring to determine whether the development is complying with the relevant criterion in PART B of this consent; and
 - (iii) if the development is not complying with the relevant criterion, identify measures that could be implemented to ensure compliance with the relevant criterion; and
 - (b) give the Planning Secretary and landowner a copy of the independent review; and
 - (c) comply with any written requests made by the Planning Secretary to implement any findings of the review.

APPENDIX 1 SCHEDULE OF LAND

LOT	DP	OWNERSHIP
1	34263	Freehold
2	100950	Peak Gold Mines
52	755649	Peak Gold Mines
72	755649	Peak Gold Mines
73	755649	Cobar Shire Council
259	755649	The State of New South Wales
260	755649	The State of New South Wales
261	755649	The State of New South Wales
285	755649	Cobar Shire Council
255	755649	Cobar Shire Council
282	755649	Cobar Shire Council
92	755649	Peak Gold Mines
277	755649	The State of New South Wales
2	115138	Peak Gold Mines
4	234069	The State of New South Wales
1	511016	Freehold
62	755649	Peak Gold Mines
86	755649	Peak Gold Mines
12	135101	The State of New South Wales
87	755649	Peak Gold Mines
182	1036962	Peak Gold Mines
181	1036962	Cobar Shire Council
1	34288	Peak Gold Mines
32	1128958	Peak Gold Mines
34	1128958	Peak Gold Mines
31	1128958	Peak Gold Mines
33	1128958	Peak Gold Mines
6	1019612	Cobar Shire Council
7	1019612	Cobar Shire Council
3	1019612	Peak Gold Mines
7313	1170795	The State of New South Wales
7320	1170795	The State of New South Wales
1	165125	Cobar Shire Council
35	755649	The State of New South Wales
101	1216518	Freehold
102	1216518	Cobar Shire Council
100	1216518	Peak Gold Mines
992	1029946	Peak Gold Mines

APPENDIX 2 DEVELOPMENT LAYOUT PLANS

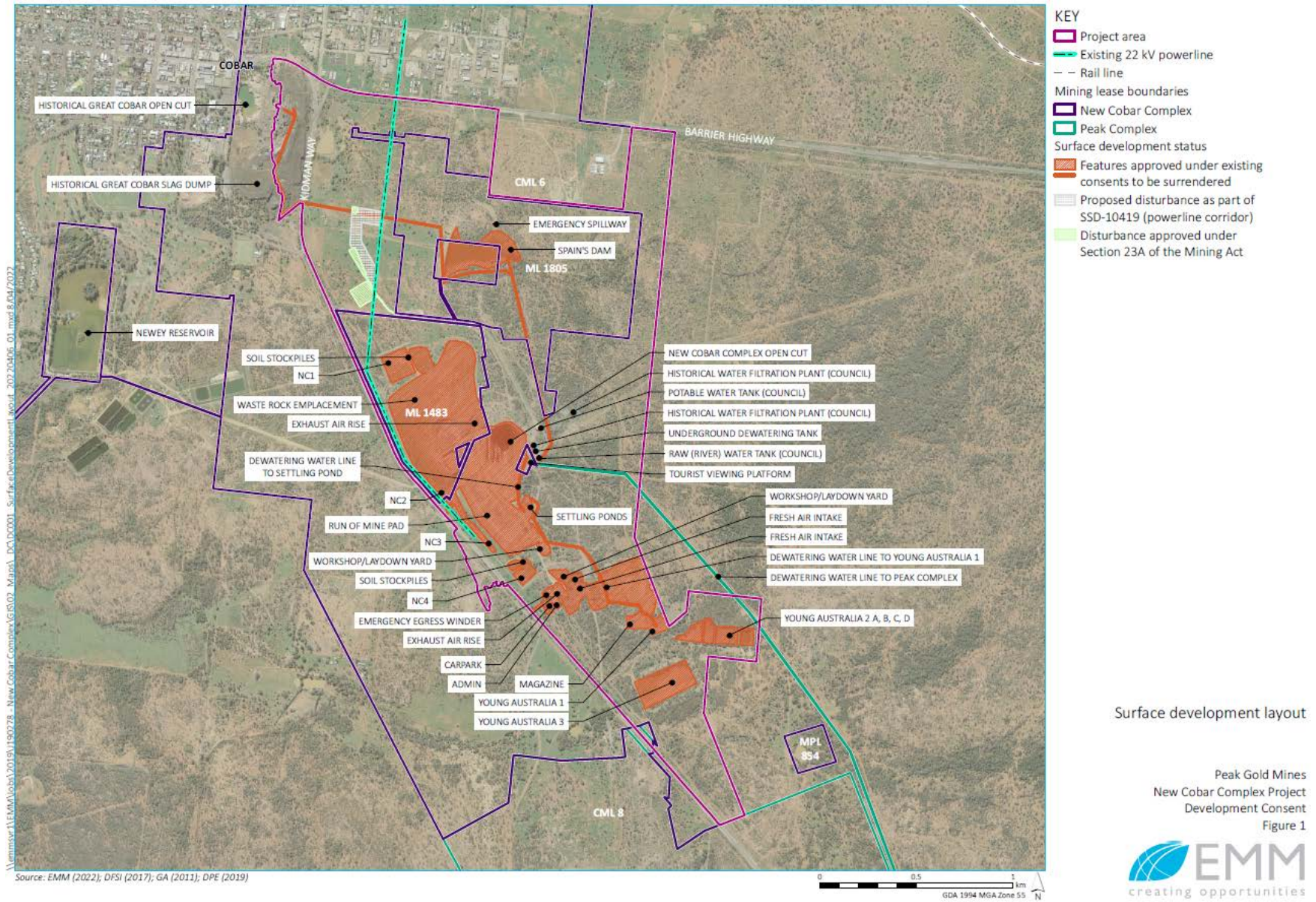


Figure 1: Surface Development Layout

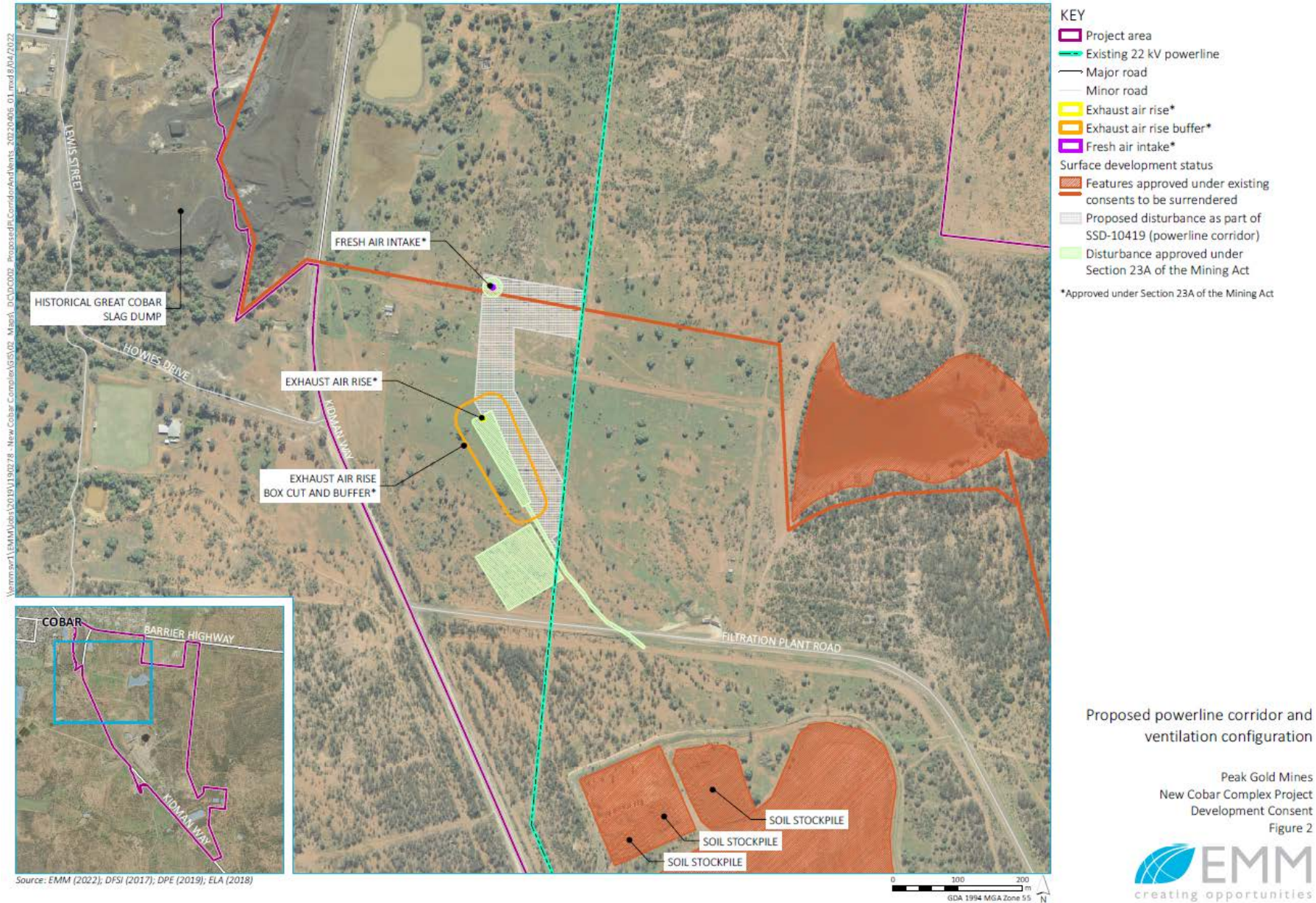
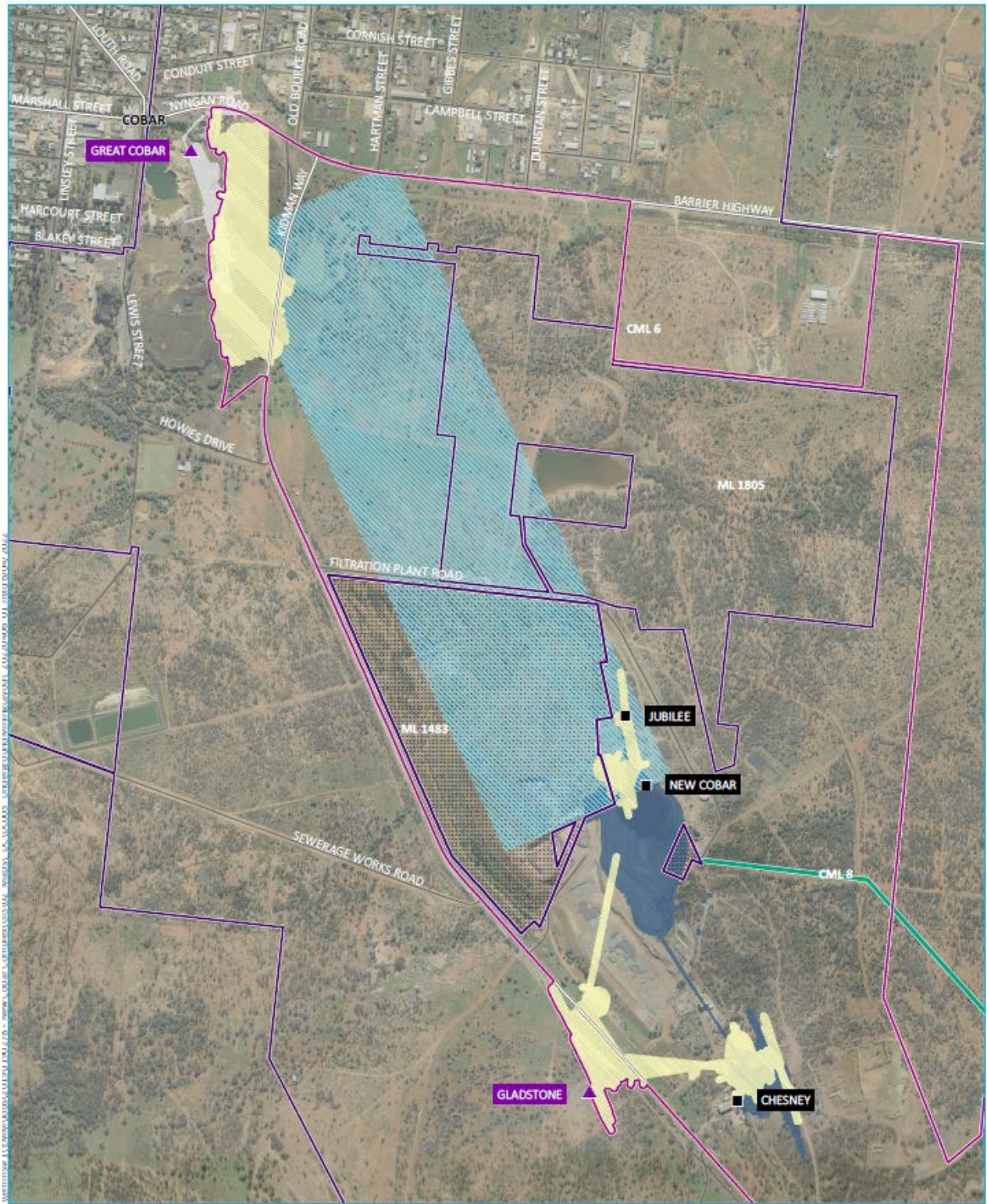


Figure 2: Proposed Powerline Corridor



Source: EMM (2022); DFSI (2017); GA (2011)

KEY

- | | | |
|-----------------------------------|----------------|-------------------------|
| Project area | Operating mine | Mining lease boundaries |
| Indicative proposed mine workings | Prospect mine | New Cobar Complex |
| Indicative approved decline area | Major road | Peak Complex |
| Historical mine workings | Minor road | ML 1483 |
| Existing mine workings | | |

Underground development layout

Peak Gold Mines
New Cobar Complex Project
Development Consent
Figure 3

Figure 3: Underground Development Layout

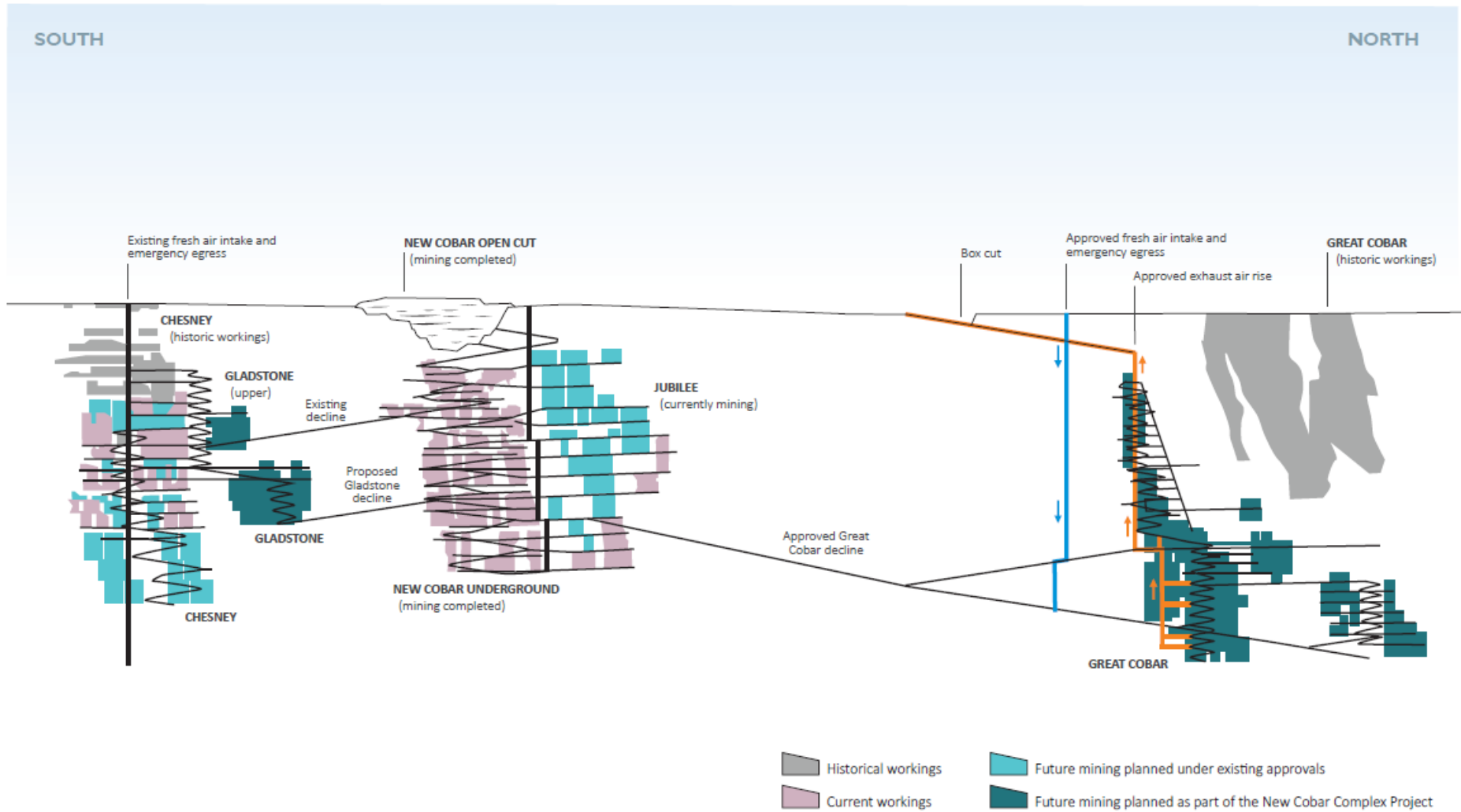


Figure 4: Conceptual Underground Development Long-section

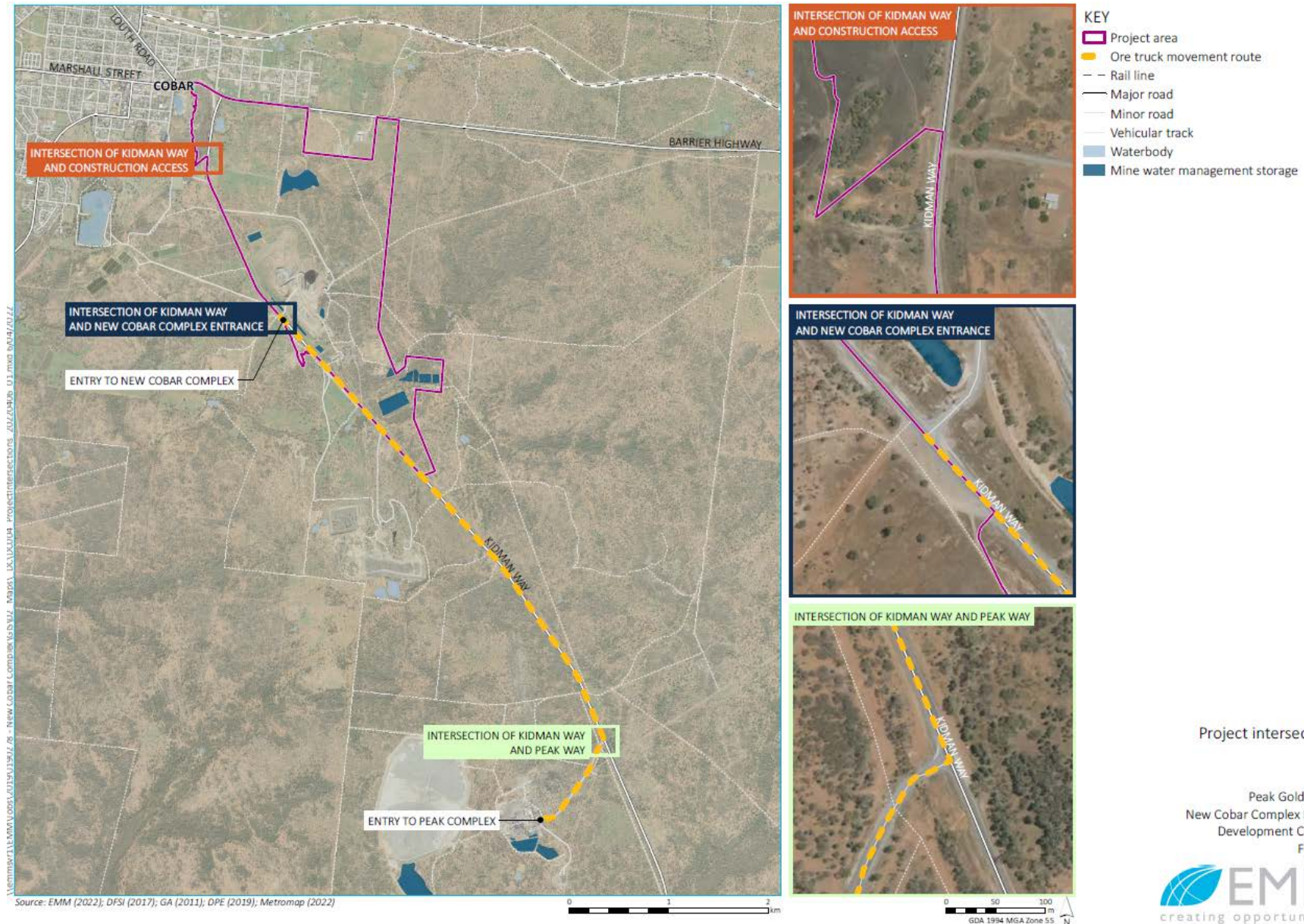


Figure 5: Project Intersections

APPENDIX 3 REHABILITATION PLAN

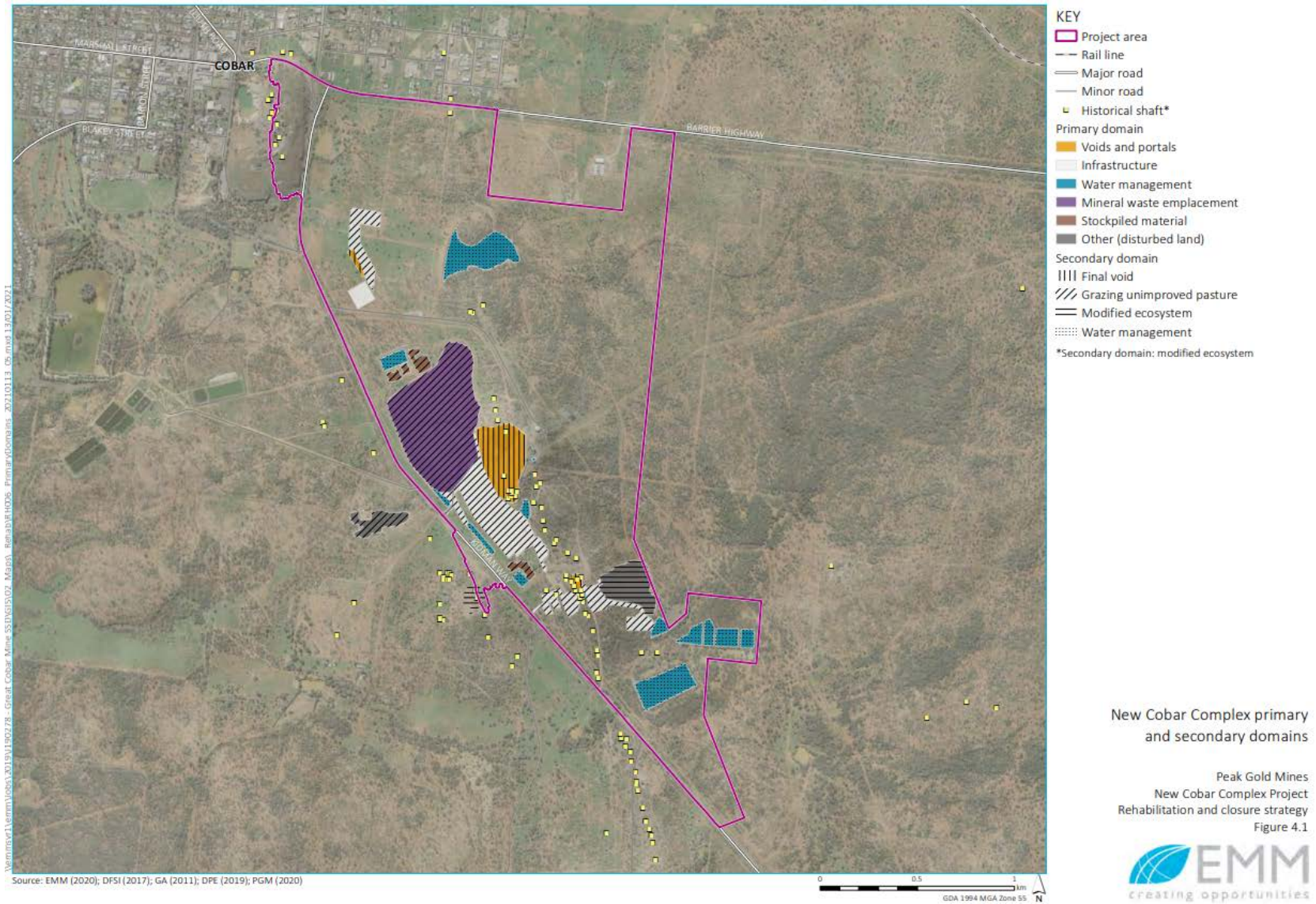


Figure 6: Conceptual Rehabilitation Plan

**APPENDIX 4 GENERAL TERMS OF APPLICANT'S PLANNING AGREEMENT OFFER
COBAR SHIRE COUNCIL**

<i>Applicant's Contribution</i>	<i>Timing</i>	<i>Intended Use</i>
\$75,000	Payable within 30 days of Council issuing a tax invoice to the Applicant	Initial sign-on amount
\$250,000 per annum ¹ for the life of mining operations under this consent	Initial annual contribution payable within 30 days of physical commencement of the development and Council issuing a tax invoice to the Applicant, then annual thereafter	<ul style="list-style-type: none"> • \$150,000 per annum to a Community Enhancement Fund, for application to projects aimed at attracting and retaining people within Cobar; • \$65,000 per annum to promote the viability and advancement of the Cobar Early Learning Centre; and • \$35,000 per annum to provide enhanced resource capacity to Council to oversee development consent management, other local consent management and this planning agreement.

¹ Subject to Consumer price Index (CPI) adjusted annual on the anniversary of the signing date.

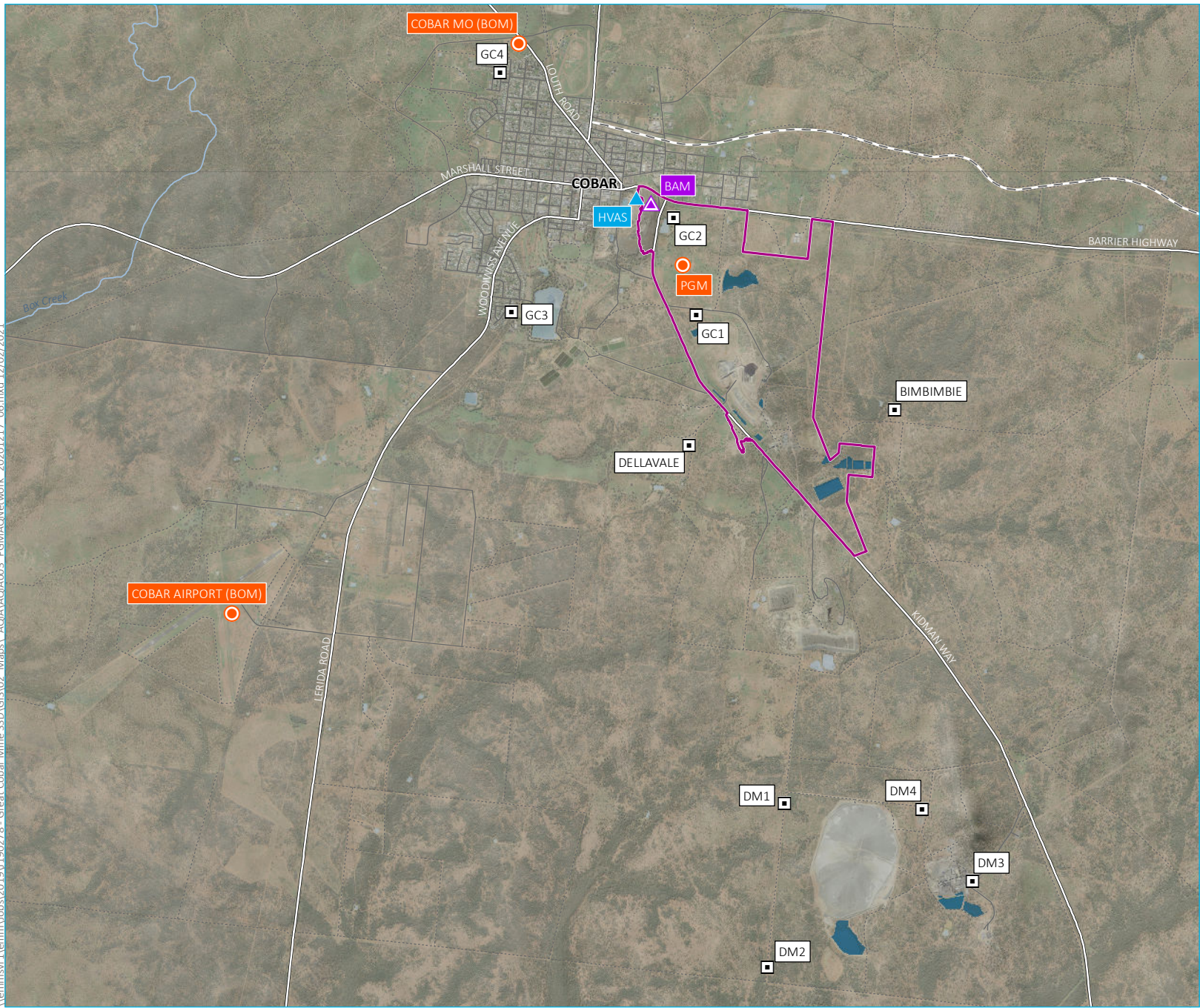
APPENDIX 5 INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS

WRITTEN INCIDENT NOTIFICATION REQUIREMENTS

1. A written incident notification addressing the requirements set out below must be submitted to the Planning Secretary via the Major Projects website within seven days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition C7 or, having given such notification, subsequently forms the view that an incident has not occurred.
2. Written notification of an incident must:
 - a. identify the development and application number;
 - b. provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
 - c. identify how the incident was detected;
 - d. identify when the Applicant became aware of the incident;
 - e. identify any actual or potential non-compliance with conditions of consent;
 - f. describe what immediate steps were taken in relation to the incident;
 - g. identify further action(s) that will be taken in relation to the incident; and
 - h. identify a project contact for further communication regarding the incident.
3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.
4. The Incident Report must include:
 - a. a summary of the incident;
 - b. outcomes of an incident investigation, including identification of the cause of the incident;
 - c. details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
 - d. details of any communication with other stakeholders regarding the incident.

Appendix C

Monitoring locations



- KEY**
- Project area
 - Rail line
 - Major road
 - Minor road
 - Vehicular track
 - Named watercourse
 - Waterbody
 - Mine water management storage
 - Monitoring network**
 - ▲ BAMB (PM₁₀)
 - ▲ HVAS (TSP and PM₁₀)
 - Dust deposition gauge
 - Weather station

PGM air quality monitoring network

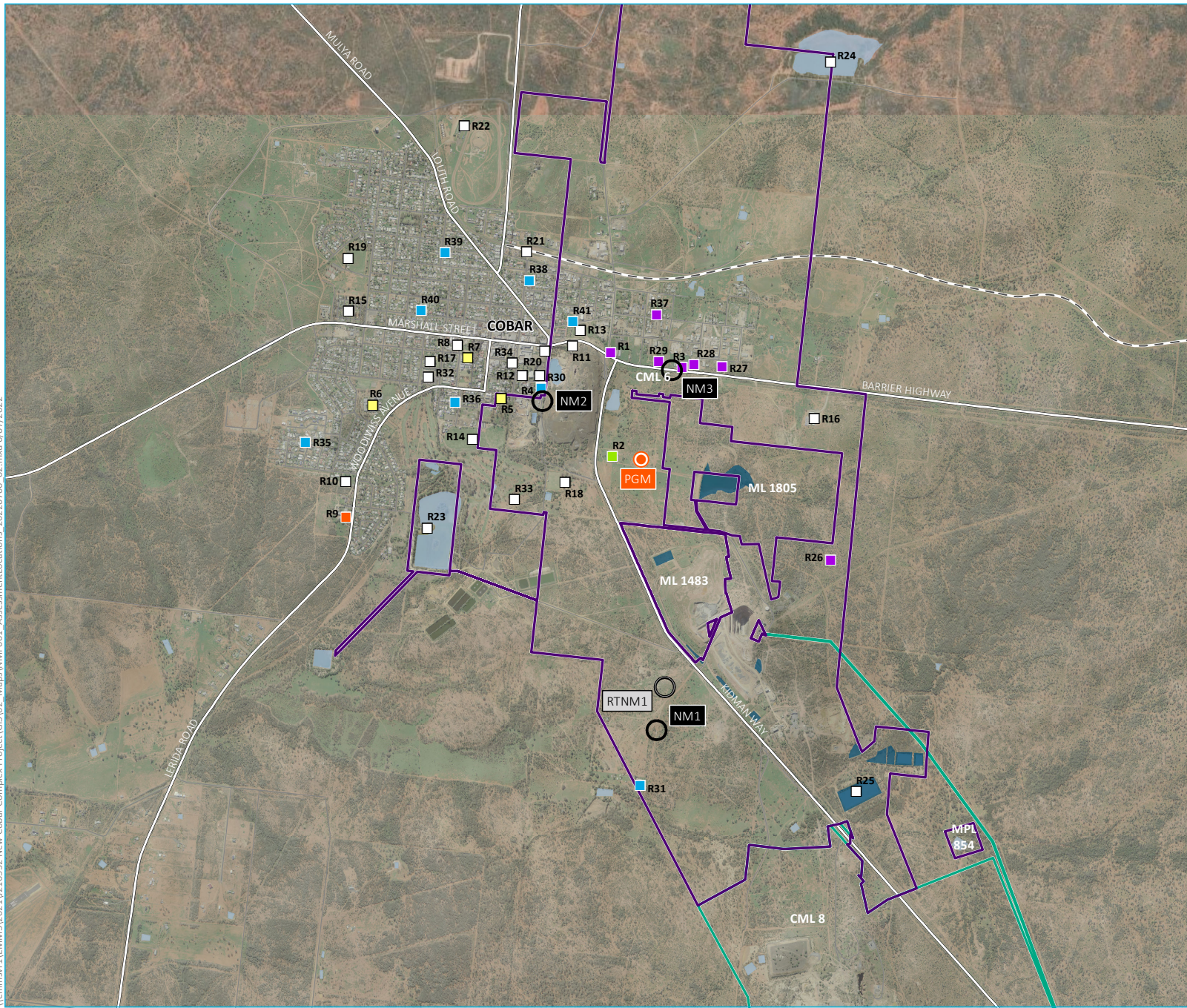
Peak Gold Mines
 SSD-10419 EMS
 Figure C1

\\lemmsvr1\emmm\jobs\2019\190278 - Great Cobbar Mine\SSD\GIS\02_Maps\AOI\AQIA003_PGM\AQNetwork_20201217_06.mxd 12/07/2021

Source: EMM (2021); PGM (2020); DFSI (2017); GA (2011)

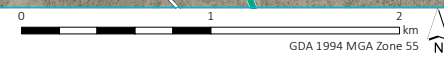


\\lemmsvr1\EMM3\2021\1210532 New Cobar Complex Project\GIS\02_Maps\NMP001_AssessmentLocations_20220706_02.mxd 6/07/2022



- KEY**
- Mining lease boundaries
 - New Cobar Complex
 - Peak Complex
 - Noise monitoring location
 - Real-time noise monitoring location
 - Weather station
 - Rail line
 - Major road
 - Minor road
 - Named watercourse
 - Waterbody
 - Mine water management storage
- Type of receiver**
- Hospital
 - Mine-owned residence
 - Privately-owned residence
 - Industrial
 - School
 - Other

Source: EMM (2022); DFSI (2017); GA (2011); PGM (2020)

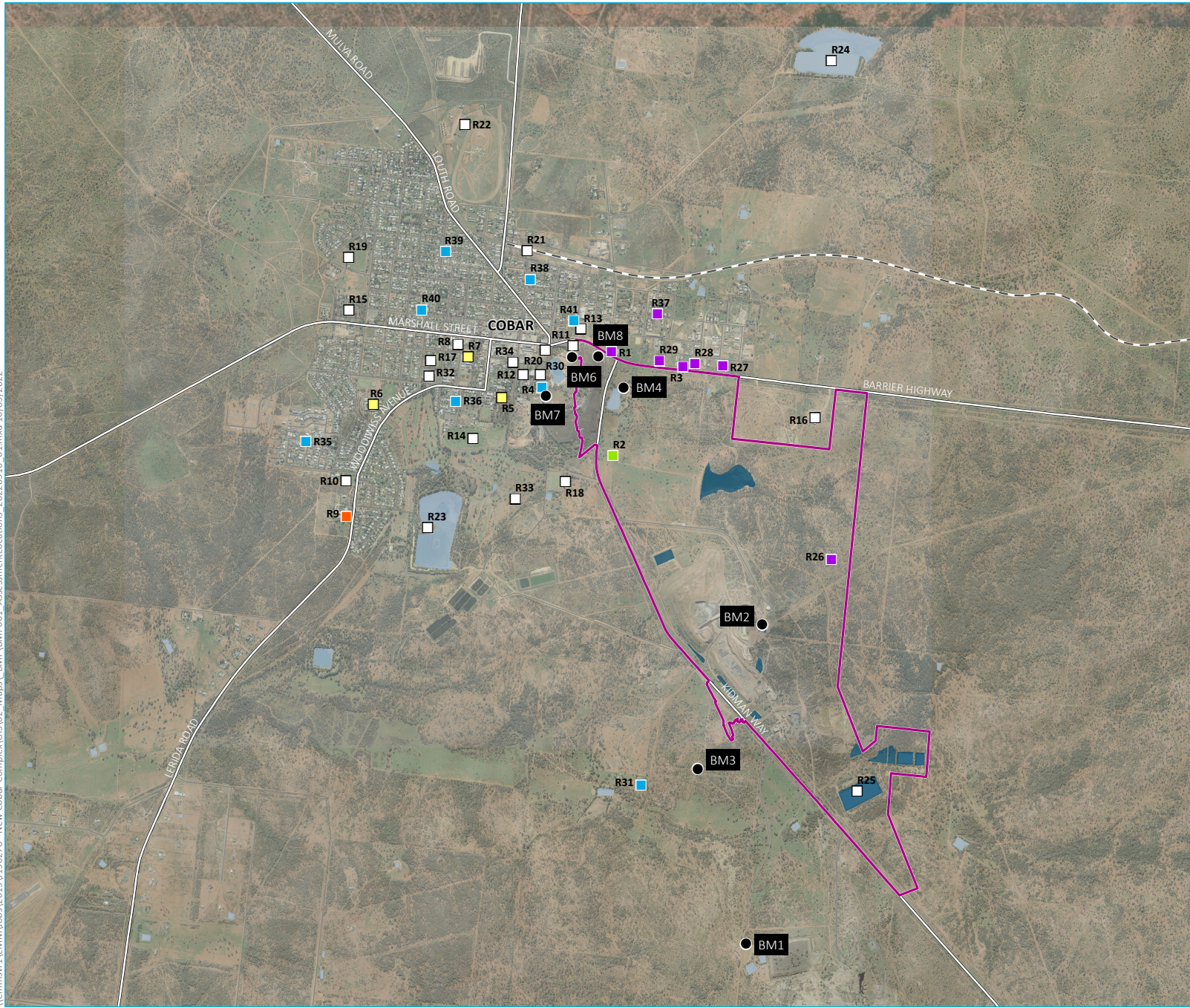


Noise monitoring and assessment locations

Peak Gold Mines
SSD-10419 EMS
Figure C2



\\lemmsvr1\EMM\Obs\2019\190278 - New Cobar Complex\GIS\02_Maps\BMP\BMP001_AssessmentLocations_20220510_01.mxd 10/05/2022

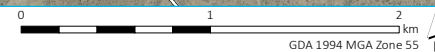


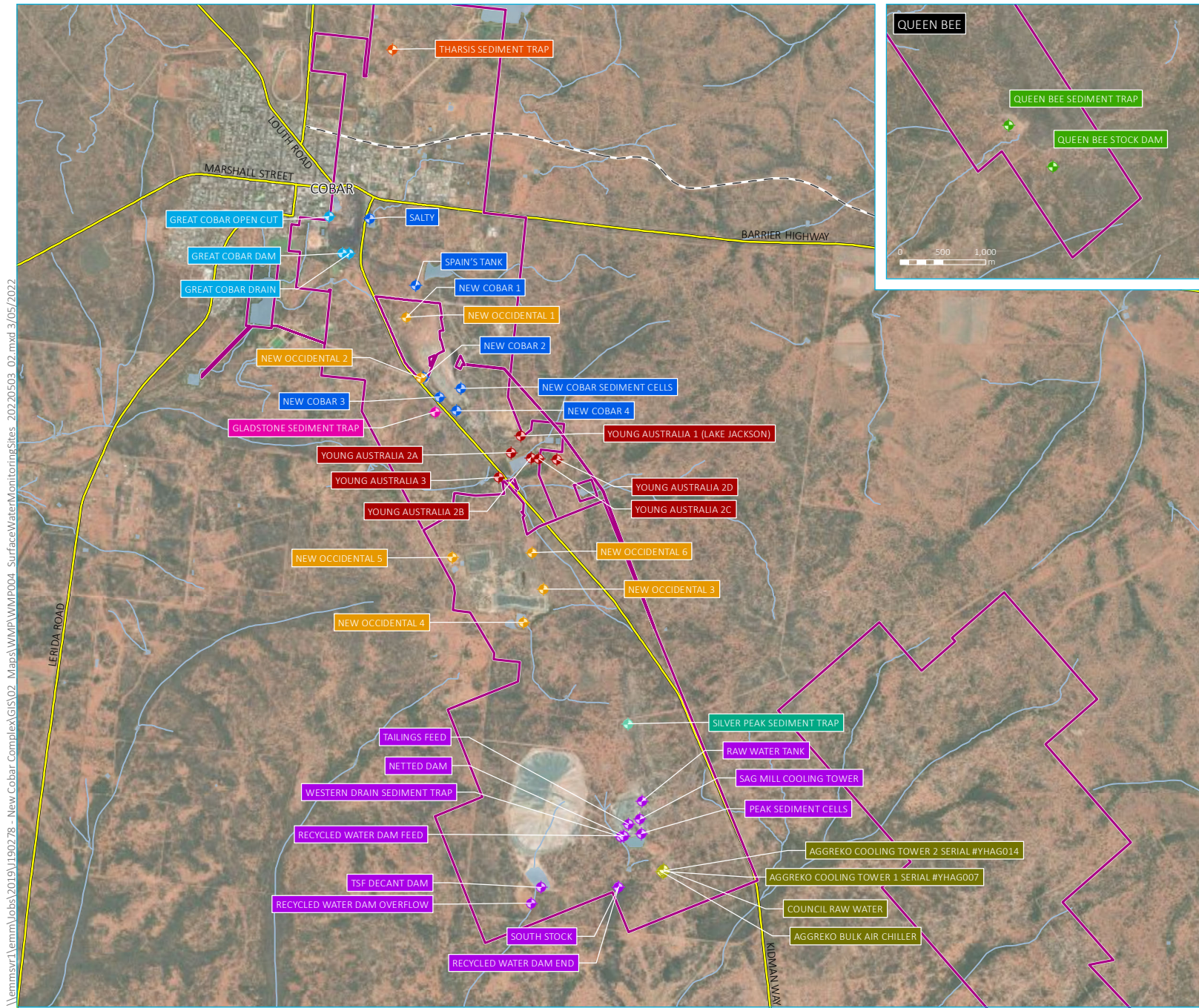
- KEY**
- Project area
 - Blast monitoring location
 - Rail line
 - Major road
 - Minor road
 - Named watercourse
 - Waterbody
 - Mine water management storage
- Type of receiver**
- Hospital
 - Mine-owned residence
 - Privately-owned residence
 - Industrial
 - School
 - Other

Surrounding residences and blast monitoring locations

Peak Gold Mines
SSD-10419 EMS
Figure C3

Source: EMM (2022); DFSI (2017); GA (2011); PGM (2020)





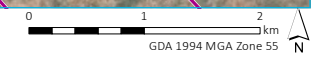
- KEY**
- Mining lease boundary
 - Rail line
 - Main road
 - Watercourse/ drainage line
 - Waterbody
- Surface water monitoring location**
- ◆ Peak
 - ◆ New Cobar
 - ◆ Great Cobar
 - ◆ Chesney
 - ◆ New Occidental
 - ◆ Perseverance
 - ◆ Queen Bee
 - ◆ Gladstone
 - ◆ Silver Peak
 - ◆ Tharsis

Surface water monitoring locations

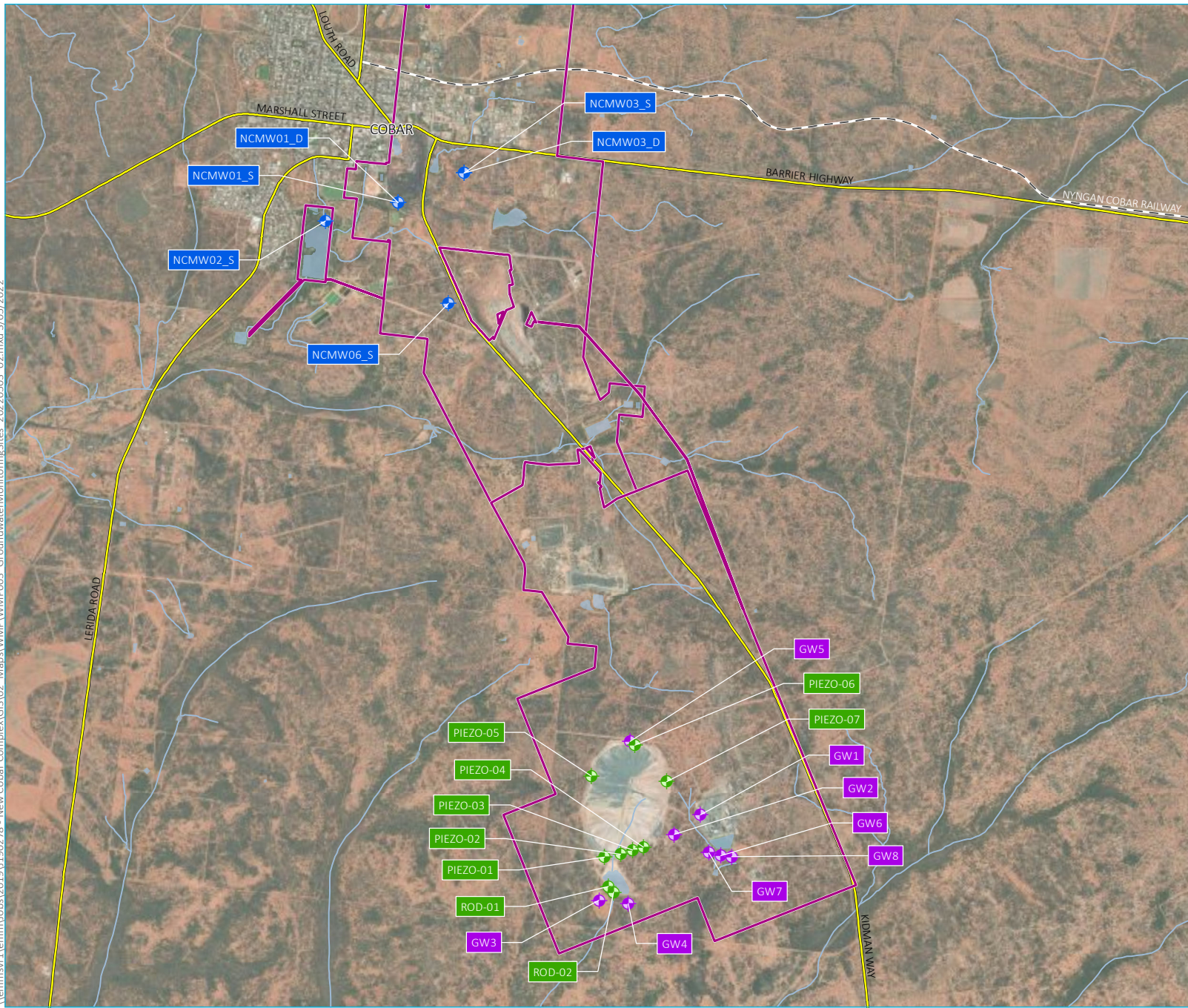
Peak Gold Mines
SSD-10419 EMS
Figure C4

\\lemmsvr1\emmm\Jobs\2019\190278 - New Cobar Complex\GIS\02 - SurfaceWaterMonitoring\Sites_20220503_02.mxd 3/05/2022

Source: EMM (2022); PGM (2020); DFSI (2017)



\\lemmsvr1\emmm\jobs\2019\190278 - New Cobar Complex\GIS\02 - Maps\WMP\WMP003 - GroundwaterMonitoringSites_20220503_02.mxd 3/05/2022



- KEY**
- Mining lease boundary
 - Rail line
 - Main road
 - Watercourse/ drainage line
 - Waterbody
- Groundwater monitoring locations
- ◆ New Cobar Complex monitoring bore
 - ◆ Peak Complex monitoring bore
 - ◆ Peak Complex piezometer

Groundwater monitoring locations

Peak Gold Mines
SSD-10419 EMS
Figure C5

Source: EMM (2022); PGM (2020); DFSI (2017)



Appendix D

Monitoring Plan

D.1 PGM Monitoring Plan

The following is a compendium of the monitoring undertaken at the site which corresponds with the monitoring network shown in the figures C1-C4 in Appendix C.

D.1.1 Monitoring

Environmental monitoring programs are typically addressed within the relevant management plan, and have been prepared to address key environmental aspects (eg air quality, groundwater etc).

Figures depicting monitoring locations relevant to the plans above are included in Appendix C. The types of monitoring and frequency are summarised below.

D.1.2 Air quality monitoring

The following table describes the air quality monitoring network and is reproduced from the Blast Management Plan (Peak, 2022).

Table D.1 PGM air quality monitoring network

Location ID	Instrumentation type	Location description	Coordinates (MGA55 S)		Sampling frequency	Parameters measured	Monitoring standard
			Easting	Northing			
DM 1	DDG	NW corner tailings dam	391651	6508050	30 days ± 2 days	Insoluble solids Metals	AS/NZS 3580.10.1:2016
DM 2		SW corner of tailings dam	391474	6506265			
DM 3		SE corner of PGM car park	393667	6507190			
DM 4		NE corner behind PGM magazine	393112	6507951			
Bimbimbie		1.2 km SW of New Cobar	392836	6512241			
Dellavale		1.3km ESE of New Cobar	390633	6511860			
GC1			390710	6513250			
GC2			390450	6514320			
GC3			388735	6513313			
GC4			388655	6515805			
BAM	BAM	Great Cobar Slag Dump	390231	6514451	Continuous 1-hour	PM ₁₀ PM _{2.5}	AS/NZS 3580.9.17:2018
HVAS TSP	HVAS	Great Cobar Heritage Centre	390073	6514511	24-hour, one-in-six days	TSP Lead	AS/NZS 3580.9.3:2015
HVAS PM ₁₀	HVAS	Great Cobar Heritage Centre	390073	6514511	24-hour, one-in-six days	PM ₁₀ Lead	AS/NZS 3580.9.6:2015

Table D.1 PGM air quality monitoring network

Location ID	Instrumentation type	Location description	Coordinates (MGA55 S)		Sampling frequency	Parameters measured	Monitoring standard
			Easting	Northing			
MET	Meteorological station	West of Great Cobar slag dump	390570	6513785	Continuous	Wind speed and direction (including sigma theta), temperature (2 m and 10 m), relative humidity, dew point temperature, solar radiation, rainfall, atmospheric pressure	AS/NZS 3580.14:2014

D.1.3 Noise monitoring

The following table describes the noise monitoring network and is reproduced from the Noise Management Plan (Peak, 2022).

Table D.2 Noise monitoring network

Monitor ID	Location	MGA 55J	
		Easting	Northing
RTNM1	Off Kidman Way (near access track to Dellavale)	390734	6512182
NM1	Representative of the nearest and most affected residence on Kidman Way (ie R31)	390680	6511855
NM2	Representative of the most southern residence to the south of the Cobar town (ie R4)	389863	6514204
NM3	Representative of residences located to the east of the Cobar town on the Barrier Highway (ie R1, R3, R27, R28 and R29)	390734	6512182

D.1.4 Blast monitoring

The following table describes the blast monitoring network and is reproduced from the Blast Management Plan (Peak, 2022).

Table D.3 Blast monitoring network

Monitoring Location	Identifier	Monitor ID	MGA 55J	
			Easting	Northing
BM1	New Occidental	UM13672	391311	6510329
BM2	Fort Bourke	UM13674	391427	6512605
BM3	Dellavale	UM13673	390967	6511576
BM4	Salty	UM15067	390440	6514294
BM6	Heritage Centre	UM15065	390071	6514512
BM7	Open Cut West	UM15066	389886	6514237

D.1.5 Surface water monitoring

The following table describes the surface water monitoring network and are reproduced from the Water Management Plan (Peak, 2022).

Table D.4 Surface water quality analytical suites

Suite	Category	Analytes to be tested	Analysis method
Extensive monitoring suite	Physico-chemical	pH, electrical conductivity, temperature, total dissolved solids, total suspended solids.	Analysis to be undertaken by a NATA certified laboratory
	Alkalinity	Bicarbonate, carbonate, hydroxide and total alkalinity as CaCO ₃ .	
	Nutrients	Nitrite (as N), nitrate (as N) and total oxidised nitrogen.	
	Major ions	Total anions, total cations, calcium, chloride, fluoride, sulphate, sodium, magnesium and potassium.	
	Metals	Aluminium (Al), Arsenic (As), Boron (B), Cadmium (Cd), Chromium (Cr), Copper (Cu), Lead (Pb), Molybdenum (Mo), Mercury (Hg), (Nickel (Ni), Selenium (Se) and Zinc (Zn).	
Cyanide monitoring suite	EPL cyanide monitoring requirement	Weak acid dissociable (WAD) ² , total and free cyanide ³ .	
EPL monitoring suite	EPL requirement	Total suspended solids, oil and grease.	

Notes: 1. Whether total or dissolved metals has been sampled varies across monitoring rounds.
 2. CN-1 recovery by ASTM Method D4282-95 and analysis by 20th Ed. APHA 4500-CN-1 method D or F.
 3. CN-1 recovery by 20th Ed. APHA 4500-CN-1 method I- Alternative method and analysis by 20th Ed. APHA 4500-CN-1 method E, D or F.

Table D.5 SSD10419 surface water monitoring program

Frequency	Site	Analysis
Quarterly	TSF Decant Dam (EPL ref #2)	<ul style="list-style-type: none"> • Extensive monitoring suite. • Cyanide monitoring suite.
	Discharge pipe to TSF (EPL ref #5)	<ul style="list-style-type: none"> • Cyanide monitoring suite.
Quarterly (during discharge)	Recycled Water Dam intake (EPL ref #1)	<ul style="list-style-type: none"> • Extensive monitoring suite. • Cyanide monitoring suite.
Bi-annually	Spains Dam (EPL ref #7)	<ul style="list-style-type: none"> • Extensive monitoring suite.
	Young Australia 1 (EPL ref #6)	<ul style="list-style-type: none"> • Cyanide monitoring suite.
Annually	NC 1	<ul style="list-style-type: none"> • Extensive monitoring suite. • EPL suite.
	NC 2	
	NC 3	
	NC 4	
	Salty	
	Young Australia 2 A, B, C, D	
	Young Australia 3	

D.1.6 Surface water trigger action response plan (TARP)

Table D.6 Surface Water TARP

Trigger	Action required	Response
Discharges		
Discharge of water offsite from Peak and New Cobar complexes	All discharges from the Peak and New Cobar complexes are to be reported to the Planning Secretary, NSW EPA and other relevant agencies.	<ol style="list-style-type: none"> 1. Implement PGM Pollution Incident Response Management Plan. 1. If safe to do so, undertake water quality sampling of the discharge for the water quality suite of the site. If water quality exceeds the discharge water quality criteria, then the exceedance protocol is to be followed.
Discharge of contaminated water (including cyanide contaminated water) from on-site water storages, emplacements, infrastructure or processing areas (including pipelines).	Stop water transfer to the storage that has spilled and avoid contact with the water.	<ol style="list-style-type: none"> 1. Implement PGM Pollution Incident Response Management Plan.

Table D.6 Surface Water TARP

Trigger	Action required	Response
Water quality		
Water quality objectives are exceeded in downstream monitoring location, The Salty.	<p>Identify if exceedance is naturally occurring or due to the mining operations by:</p> <ol style="list-style-type: none"> retesting the sample result; undertake opportunistic monitoring upstream of the Salty along Nyngan Road between Lean and Hartman Street; inspect the emergency spillway at Spain's Dam for evidence of recent discharges from the site, taking note of storage levels in the Spain's Dam. Undertake water quality monitoring of Spain's Dam; review baseline sampling data to determine if similar exceedances are known to occur; and review monitoring data from Steps 2 and 3 to determine whether the source is naturally occurring or potentially due to mining activities. 	<ol style="list-style-type: none"> If the source of exceedance is determined as occurring naturally, the occurrence will be recorded in the Annual Review and no other further action is required. If the source of exceedance is undetermined or identified as potentially due to mining activities, then: <ol style="list-style-type: none"> the exceedance will be recorded for consideration in future monitoring rounds; and continue opportunistic monitoring (at least monthly) of The Salty and upstream of the Salty when flows are present under Nyngan Road. If the source of the exceedance is determined to be attributed to mining activities, then the exceedance protocol is to be followed. <p>The details of any water quality exceedances are to be documented in the Annual Review.</p>

Table D.7 Water quality exceedance protocol

Protocol ID	Protocol	Action
1	Confirm exceedance	If the result appears to be erroneous then the laboratory will be contacted to ensure no error has been made in storing, analysing, or recording the sample or result. Should this investigation conclude the treatment, analysis and result recording for the sample are satisfactory, PGM will proceed to the notification step of the protocol.
2	Notification	<p>If a water quality exceedance at the New Cobar Complex is identified, the Environment Team will submit a report to the Planning Secretary in writing via the Major Projects website within seven days of being made aware of the exceedance or non-compliance, in accordance with condition C8 of SSD-10419.</p> <p>If the water quality exceedance is as a result of environmental harm the Environment Team will notify the EPA by telephoning 131 555 in accordance with condition R2 of EPL3596. The Environment Team will submit a written report within seven days of notifying the EPA in accordance with condition R3 of EPL3596.</p>

Table D.7 Water quality exceedance protocol

Protocol ID	Protocol	Action
3	Corrective action	<p>The following corrective action will be undertaken:</p> <ol style="list-style-type: none"> 1. A sample from the monitoring site from which the exceedance was recorded will be re-sampled where possible and re-assessed to confirm an exceedance of criteria. A compliant result following reassessment will be considered a sufficient response. However, the monitoring point and parameter will be noted for reference in the event a future exceedance is recorded. <p>A second non-compliant result will require the following further corrective action:</p> <ol style="list-style-type: none"> 1. PGM will prepare a corrective action plan to return the component of the operation to compliance. Preparation of the action plan may require the assistance of a specialist consultant in the relevant field. Details regarding the preparation of the corrective action plan will be included in the relevant Annual Review and EPL Annual Return and to the DPE prior to implementation, if requested. 2. In the event that corrective actions cannot be implemented, and exceedances continue at the monitoring site, a review of the impacts of the exceedance (and the applicability of the trigger level) may be undertaken by a specialist consultant. If the review determines there are no significant environmental impacts due to the exceedance the review is to be provided to the planning secretary, Unless the planning secretary advises otherwise, proceed to Step 5 and monitoring of the site can return to regular monitoring.
4	Reassessment	<p>Non-compliance with environmental criteria will require re-assessment to demonstrate a return to compliance by re-sampling and re-analysing the exceeded parameter(s) from the offending site following the completion of the action plan. Subsequent exceedances will require a return to Step 2 of the protocol.</p>
5	Notification of compliance	<p>PGM will notify EPA and other relevant stakeholders of the return to compliance following the successful completion of Step 4 or agreement reached in consultation with DPE in (or 3c.).</p>
6	Reporting	<p>The recorded exceedance, corrective actions and reassessment will be described in the Annual Review.</p>

i Groundwater monitoring

The following tables describe the groundwater monitoring network and are reproduced from the Water Management Plan (Peak, 2022).

Table D.8 Groundwater sampling frequencies and analytes

Station	Licence condition	Frequency ¹	Analysis
NCMW01–6 (D&S)	PGM monitoring	Six monthly	Groundwater depth pH, TDS, temperature & EC Dissolved metals (Ag, Al, As, Au, Cd, Cr, Cu, Fe, Pb, Mn, Ni, Zn) Nitrate & Nitrite Major ions (HCO, Cl, SO ₄ , Ca, Mg, K, Na, TDS, NH ₄ , NO ₃ , NO ₂ , PO ₄ , F)
CDRUFC (Rugby Club) bore	PGM monitoring	Six monthly ² (when not pumping from Great Cobar) Quarterly ² (when pumping from Great Cobar)	Groundwater depth pH and EC Dissolved metals (Ag, Al, As, Au, Cd, Cr, Cu, Fe, Pb, Mn, Ni, Zn) Nitrate & Nitrite Major ions (HCO, Cl, SO ₄ , Ca, Mg, K, Na, TDS, NH ₄ , NO ₃ , NO ₂ , PO ₄ , F)

1. Baseline frequency, assuming that trigger action responses are not required.

2. Contingent on PGM being able to reasonably access this 3rd party monitoring location. Groundwater depth measurements to be collected via a permanently installed water level transducer, such that disruption to the Rugby Club's operations is minimised.

Table D.9 Groundwater quality trigger levels

Analyte	Trigger value (mg/L) ¹	Trigger's basis
Major ions and physical parameters		
Electrical conductivity (µS/cm)	7692 ^A	EEM (2022), based on the ANZECC & ARMCANZ livestock drinking water guideline value
Calcium	1000	EEM (2022), based on the ANZECC & ARMCANZ livestock drinking water guideline value
Sulphate	2000	EEM (2022), based on the ANZECC & ARMCANZ livestock drinking water guideline value ²
Nutrients		
WAD Cyanide	0.5	EEM (2022), based on the ANZECC & ARMCANZ recreational guideline value
Ammonia as N	1.9	EEM (2022), based on the ANZECC & ARMCANZ ecological guideline value
NO ₃	10.6	EEM (2022), based on the ANZECC & ARMCANZ ecological guideline value
NO ₂	30	EEM (2022), based on the ANZECC & ARMCANZ livestock drinking water guideline value
Cyanide (WAD)	0.5	EEM (2022), based on the ANZECC & ARMCANZ recreational guideline value
Fluoride	2	EEM (2022), based on the ANZECC & ARMCANZ livestock drinking water guideline value

Table D.9 Groundwater quality trigger levels

Analyte	Trigger value (mg/L) ¹	Trigger's basis
Metals and metalloids		
Aluminium	5	EEM (2022), based on the ANZECC & ARMCANZ livestock drinking water guideline value
Cadmium	0.01	EEM (2022), based on the ANZECC & ARMCANZ livestock drinking water guideline value
Copper	0.5	EEM (2022), based on the ANZECC & ARMCANZ livestock drinking water guideline value
Lead	0.1	EEM (2022), based on the ANZECC & ARMCANZ livestock drinking water guideline value
Mercury	0.002	EEM (2022), based on the ANZECC & ARMCANZ livestock drinking water guideline value
Arsenic	0.1	EEM (2022), based on the ANZECC & ARMCANZ recreational guideline value
Chromium	0.5	EEM (2022), based on the ANZECC & ARMCANZ recreational guideline value
Nickel	0.2	EEM (2022), based on the ANZECC & ARMCANZ recreational guideline value
Manganese	1.9	EEM (2022), based on the ANZECC & ARMCANZ ecological guideline value
Zinc	0.161	EEM (2022), based on the ANZECC & ARMCANZ ecological guideline value

1. Units = mg/L, except for EC (µS/cm).

2. ANZECC & ARMCANZ list the trigger as 1000–2000 mg/L. EEM (2022) recommends that the upper limit value (2000 mg/L) be adopted.

A. The quoted guideline value is expressed as mg/L. The TDS concentration has been converted to EC via the generic formula $TDS = EC \times 0.65$.

Groundwater level triggers (Table D10) are based on water supply requirements (Rugby Club bore) and predicted drawdown responses (New Cobar monitoring bores, based on the drawdown predictions presented in the EIS EMM (2020a)).

Table D.10 Groundwater level triggers

Groundwater level monitoring location	Baseline levels ¹ (mbgl)	Trigger level
Rugby Club bore	13.7 ^A	15.7 ^C
NCMW01-S	11.5 ^B	12 ^D
NCMW01-D	11.8 ^B	12 ^D
NCMW02	2.7 ^B	1.5 ^D
NCMW03-S	21.0 ^B	8 ^D
NCMW03-D	20.1 ^B	8 ^D
NCMW06	30.6 ^B	3 ^D
NCMW08	30.1 ^B	11 ^D

A. Maximum groundwater depth, as recorded in EMM (2020a). Baseline groundwater levels are to be recorded during non-pumping periods of the Rugby Club's operational program.

B. Median groundwater level, based on the data presented in Table D.9.

C. Trigger level expressed as a maximum depth to groundwater (mbgl).

D. Trigger level expressed as maximum drawdown from baseline levels (see footnote B), based on the drawdown modelling assessment results presented in EMM (2020a).

D.1.7 Groundwater TARP

Table D.11 Groundwater TARP

Condition	Trigger	Action	Response
Groundwater level change at Rugby Club bore (based on AIP)	Drawdown exceeds the trigger level	<ul style="list-style-type: none"> Report exceedance to PGM's Environmental team. Re-sample to confirm result. Assess cause, such as bore-use, climate variability and PGM operations. 	<p>If assessments conclude that the trigger exceedance is due to PGM's water management: undertake make-good provisions, whereby water supply that is suitable for field irrigation is to be provided by PGM to the Rugby Club, as agreed upon by PGM and the Rugby Club.</p> <p>If PGM and the Rugby Club cannot agree on the cause of drawdown, either party may refer the matter to the Planning Secretary for resolution.</p> <p>Report and review the assessment and outcomes in accordance with WMP.</p>
Groundwater level change in New Cobar monitoring bores	Drawdown exceeds the trigger level	<ul style="list-style-type: none"> Report exceedance to PGM's Environmental team. Re-sample to confirm result. Assess cause, such as bore-use, climate variability and PGM operations. 	<p>Report and review the assessment and outcomes in the manner outlined in the WMP</p> <p>Bring forward the 'regular validation' requirements</p>
Groundwater quality change at Peak monitoring bores	Result exceeds trigger value	<ul style="list-style-type: none"> Report exceedance to PGM's Environmental team. Increase monitoring frequency to weekly. The increased monitoring frequency applies to the effected bore only and for the exceedance analyte only (unless additional analytes can provide additional data to assess the exceedance's cause). If the weekly sampling continues to highlight an ongoing trigger-exceedance issue: undertake a hydrogeological assessment of the trigger exceedance's cause(s). 	<p>Implement the recommendations and actions of the hydrogeological assessment.</p> <p>In the event that trigger exceedances continue and the hydrogeological assessment determines there is no significant environmental impact, the assessment will be provided to the planning secretary. Unless the planning secretary advises otherwise, monitoring is to return to the regular program.</p> <p>Report and review the assessment and outcomes in accordance with WMP.</p>
Regular validation	Three years' progression of mining operations	<ul style="list-style-type: none"> Validate the water balance and groundwater model for the development every three years. Compare against monitoring results with modelled predictions. 	<p>Report and review the assessment and outcomes in accordance with WMP.</p>

Appendix E

Summary of management measures

Table E.1 Summary of management measures

Air quality
<i>Ongoing air quality monitoring</i>
<ol style="list-style-type: none"> 1. The existing monitoring network will continue to be maintained for the life of the project. 2. The combination of continuous measurements of PM₁₀ by the installed BAM and the PGM meteorological station will allow PGM to undertake detailed investigations into any potential criteria exceedances (ie identify regional exceedance events through the pairing of PM₁₀ and wind speed/direction measurements). 3. Daily and annual average TSP and PM₁₀ concentrations and monthly average dust deposition results will continue to be recorded and reported in monthly and annual environmental management reports. 4. Monitoring results will continue to be made available to the public through Aurelia Metal’s website (https://www.aureliametals.com/).
<i>Continuation of existing particulate matter control measures</i>
<ol style="list-style-type: none"> 5. Existing particulate matter control measures adopted across the New Cobar Complex and Peak Complex include watering of material haulage routes and water sprays at the ROM stockpile and processing circuit, will continue to be implemented for the project.
Noise, vibration and blasting
<i>Continuation of blast ground vibration measures</i>
<ol style="list-style-type: none"> 6. Continue to implement mitigation measures currently in place at the New Cobar Complex to reduce the potential impact of blast ground vibration at nearby receivers. 7. Continue use of vibration prediction model during the planning process for blasting programs. If vibration levels are predicted to be too high, the blast design will be altered to reduce impacts on surrounding residents.
<i>Ongoing noise monitoring</i>
<ol style="list-style-type: none"> 8. Continuation of monthly noise monitoring to ensure compliance limits set out in the EPL 9. Monitoring results continue to be recorded in the AEMR and made available to the public on the Aurelia Metal’s website
<i>Complaints</i>
<ol style="list-style-type: none"> 10. A 24-hour, 7-days per week complaints line is available to all stakeholders and the greater Cobar community. The details of the complaints line is advertised in the local newspaper, in accordance with Condition M5 of PGM’s EPL.
Subsidence
<i>Update of Ground Control Management Plan</i>
<ol style="list-style-type: none"> 11. The GCMP will be updated post-approval to reflect the mitigation and management measures recommended within the full geotechnical and subsidence assessment (see Appendix H of the SSD 10419 EIS)
<i>Ground support management</i>
<p>The following ground support management measures will be applied as appropriate:</p> <ol style="list-style-type: none"> 12. Resin bolts with fibrecrete or weld mesh for long term accesses. 13. Friction bolts (or resin bolts) with fibrecrete or weld mesh for short term accesses. 14. Cablebolting of all intersections, wide spans and stope brows, including temporary brows. 15. Some stope hangingwalls may require cablebolting pending local ground conditions. Stope crowns below sill pillars may warrant cablebolting to reinforce the sill pillar and prevent potential unravelling of the sill pillar as this could result in significant dilution from rockfill in the previously mined stopes above. 16. Dynamic ground support would generally not be required as damaging levels of seismicity would not be expected at the mining depths of the New Cobar Complex. 17. An observational approach with continuous evaluation of rockmass response to mining and iterative adjustment of the mine plan, if required, as mining continues, and as additional geotechnical information becomes available.
<i>Monitoring</i>
<ol style="list-style-type: none"> 18. Present and future mining will be subjected to ongoing monitoring and stability assessments to ensure no subsidence occurs.

Table E.1 Summary of management measures

<p><i>Stability and deformation management</i></p> <p>19. Review mining of any stopes near the top of fresh rock boundary. Any stopes planned close to the oxidised layers should be risk assessed and have a stable crown pillar. A crown pillar stability assessment will be performed during the detailed design phase.</p> <p>20. Ongoing stope stability assessment and observation of stope performance. Adjustment of stope design may be required, including stope dimensions should instability and overbreak be excessive.</p> <p>21. A thorough risk assessment will be completed prior to the commencement of mining. Consideration may need to include not mining particular stopes or reducing the height of the stopes to allow for a larger crown pillar to be left in place.</p>
<p><i>Great Cobar deposits</i></p> <p>Stopes in the close out pillars are considered “higher” risk tonnes in terms of recovery and dilution. To address this risk:</p> <p>22. disciplined mining with careful geotechnical controls and monitoring will be adopted to maximise recovery;</p> <p>23. future mine scheduling will reflect more difficult mining conditions in these areas and reflect reduced productivity for the final stope on each level (ie the diminishing pillar); and</p> <p>24. the stope strike length will be adjusted so the final stope is smaller and less susceptible to overbreak and dilution.</p> <p>PGM will manage hangingwall overbreak through means such as appropriate stope sizing using geotechnical assessment of local ground conditions, timely filling of nearby stopes, ground support and careful drill and blast.</p>
<p><i>Gladstone deposits</i></p> <p>The two stopes closest to the top of fresh rock are short up hole stopes. As these stopes are up-hole stopes, backfilling of the stopes is not possible with rockfill. Potential for long term instability of these stopes is low, however to manage risk these stopes will be backfilled by either:</p> <p>25. developing an overcut drive and rock filling the stopes, including pushing up as much rockfill into the stopes as possible to minimise the unfilled void in the stope;</p> <p>26. if required, backfill with cemented hydraulic fill or another form of hydraulic fill via up-holes drilled from the access underground; and/or</p> <p>27. if required, backfill with cemented hydraulic fill or another form of hydraulic fill via down-holes from the surface.</p>
<p><i>New Cobar/Jubilee deposits</i></p> <p>It is generally advised not to mine stopes in or close to weak cover layers such as the oxidised zone at New Cobar due to the potential for stope chimneying. It is noted that stopes at other mines (not within the New Cobar or Peak Complexes) have chimneyed along faults and through the weak cover units to surface. Although the likelihood is low, these stopes have the potential to chimney to surface. PGM will undertake a detailed geotechnical assessment during the stope design stage, prior to mining these stopes. PGM will also undertake:</p> <p>28. crown pillar stability assessment;</p> <p>29. confirmation of the top of fresh rock boundary; and</p> <p>30. backfilling of the stopes. The stopes in the current design are up-hole stopes, which makes tight filling from underground difficult. Downhole drilling from surface for backfilling with hydraulic fill or another form of fill will be performed as required.</p>
<p><i>Chesney deposits</i></p> <p>During detailed design PGM will review the design and dimensions of rib pillars and sill pillars in the current mine design. Some rib pillars in the Chesney mine design are very narrow and have a greater risk of failure during stope production.</p>
<p>Groundwater</p> <p><i>Groundwater level changes</i></p> <p>31. Make good arrangements will be made to supply supplementary water to replace any reduction in pumping capacity that may occur at the Cobar District Rugby Club bore (GW803422).</p> <p>32. A TARP is included in the WMP outlining corrective actions if greater than 2 m drawdown occurs.</p>

Table E.1 Summary of management measures

Groundwater quality

PGM’s management of waste rock and tailings is designed to prevent adverse groundwater quality impacts by:

- 33. maintaining an inward groundwater gradient towards the Great Cobar void and limiting the pathways to the regional aquifer and any potential GDEs;
- 34. appropriately managing seepage from surface waste stockpiles, including the New Cobar WRE and the Peak Complex TSF; and
- 35. appropriately managing mine-impacted (‘contact’) water.

To prevent adverse impacts on groundwater quality from the New Cobar Complex WRE and other waste stockpile seepage, PGM will implement the following management measures:

- 36. preferential usage of PAF waste rock as backfill in underground voids. If voids are unavailable, transportation of PAF waste rock to the surface and storage in the New Cobar Complex WRE will be undertaken. PAF material may also be used in the construction of the TSF dam raises (on internal TSF walls only); and
- 37. NAF material will be used for capping and construction.

Continued implementation of Water Management Plan

- 38. The WMP will provide a program for reviewing and updating the numerical groundwater model as more data and information become available during the operation of the mine and will outline the reporting requirements against each of the project approvals.

Water quality monitoring

- 39. The groundwater monitoring network currently includes 23 monitoring locations across the New Cobar and Peak complexes and one existing / third-party bore. Details of monitoring analysis and frequency are outlined in the WMP. All water quality monitoring will be undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Water Pollutant in NSW*. The suite of water quality analytes (ie constituents) to be sampled and the frequency of sampling will be reviewed and updated in the existing PGM WMP.

Groundwater model verification and review

- 40. Future improvements to the numerical groundwater flow model will be undertaken as and when new data becomes available, particularly where there is a divergence of observed groundwater system response from that predicted. Groundwater monitoring data (including groundwater abstraction (sump pumping rates) and groundwater level observations), will be used to verify and validate the groundwater model predictions, with updated predictions re-forecasted if required.

Surface water quality

Continued implementation of Water Management Plan

- 41. Continue implementation of the existing WMP, which documents the proposed mitigation and management measures for approved activities, and includes the surface and groundwater monitoring program, reporting requirements, spill management and response, water quality trigger levels, corrective actions, contingencies, and responsibilities for management measures.
- 42. The WMP will be updated in consultation with the relevant government agencies and the review will consider submissions raised during the exhibition and approvals process of the project.

Monitoring program

- 43. Monitoring will continue to be undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Water Pollutants in New South Wales*
- 44. Sites will be monitored annually (with the exception of Spain’s Dam and Young Australia 1 which is bi-annual and annually through EPL monitoring). Physico-chemical properties (pH, EC and temperature) will be measured either in-situ using a water quality meter or undertaken by a National Association of Testing Authorities (NATA) certified laboratory.
- 45. Total suspended solids, oil, grease, major ions, nutrients and metals will be analysed by a NATA certified laboratory.
- 46. PGM will continue metering water transfers; flow meters are proposed to be read on a weekly basis.

Table E.1 Summary of management measures

<i>Surface disturbance</i>
<p>47. The site will utilise an internal approval process prior to surface disturbance occurring (eg through a Permit to Disturb / Dig or similar process).</p> <p>48. Water management during construction of the power line, including erosion and sediment control, will be undertaken in accordance with <i>Managing Urban Stormwater: Soils and Construction: Volume 1 – Soils and construction</i> (Landcom 2004), <i>Managing Urban Stormwater: Soils and Construction – Volume 2E – mines and quarries</i> (DECC 2008) and PGM’s ESCP (which is incorporated into the WMP) (PGM 2016).</p>
Flooding
<i>Measures to reduce potential flood risk</i>
<p>49. Where practical, upstream diversion drains will be sized to convey flows resulting from the 5% AEP flood event as per <i>Managing Urban Stormwater: Soils and Construction – Volume 2E – mines and quarries</i>;</p> <p>50. The elevation of the fresh air intake and exhaust air rise will be constructed above the probable maximum flood level or flood protection bunds (within the existing disturbance footprint) put in place as required;</p> <p>51. Equipment will be stored outside of areas affected by substantial flooding, such as adjacent to Young Australia 2 and Young Australia 3; and</p> <p>52. Sufficient flood refuge will be maintained for the length of the proposed mine schedule.</p>
Biodiversity
<i>Micro-siting of surface infrastructure</i>
<p>53. The exact alignment of the power line will be subject to detailed design after the EIS stage and refined to use already cleared areas and avoid the removal of native vegetation. Potential regrowth will be managed to ensure fire protection zones are maintained as appropriate.</p> <p>54. It is proposed that the location of power poles (the only works involving ground disturbance which would normally involve vegetation removal) and locating the subsequent power line corridor, will be micro-sited so as to avoid removal (power pole installation) or safety pruning (corridor) of any Mulga (<i>Acacia aneura</i>) and White Cypress Pine (<i>Callitris glaucophylla</i>).</p>
Aboriginal heritage
<i>Development and implementation of ACHMP</i>
<p>55. Prior to ground disturbance, an ACHMP must be developed by a heritage specialist in consultation with the RAPs to provide the post-approval framework for managing Aboriginal heritage within the project area.</p> <p>56. The ACHMP should include the following:</p> <ol style="list-style-type: none"> Processes, timing, and communication methods for maintaining Aboriginal community consultation and participation through the remainder of the project. Descriptions, methods, personnel and timing of any additional investigative and/or mitigative archaeological actions that may be required prior to works commencing or during the project. These should include, but not be limited to, cultural monitoring and artefact collection for any areas where the surface impacts of the project intersect the identified Aboriginal objects and/or sites; and the undertaking of oral history with key knowledge-holders to further understand the cultural values and history of Aboriginal people who lived at Cornish Town. Descriptions and methods of actions to avoid any direct or indirect impacts to the identified area of contemporary value during and following the proposed activity. This should include, but not be limited to, cultural inductions for personnel and subcontractors likely to encounter cultural items, outlining their location and significance, fencing and clear marking as a no-go zone, and any additional requirements identified by the Aboriginal community. A suitable regime of monitoring these activities should also be outlined, including locations, methods, personnel and timing. Description and methods for undertaking further Aboriginal heritage assessment, investigation and mitigation of any areas of the project footprint that have changed following completion of the ACHA and/or during the final design and construction phases of the project. Description and methods of post-excavation analysis and reporting of the archaeological investigations and activities implemented as part of the ACHMP. Procedures for managing the unexpected discovery of Aboriginal objects, sites and/or human remains during the project. Procedures for the curation and long-term management of cultural materials recovered as part of the works outlined in the ACHMP and any preceding stages associated with the project. Processes for reviewing, monitoring, and updating the ACHMP as the project progresses.

Table E.1 Summary of management measures

<p><i>Impacts to Aboriginal cultural objects and value</i></p> <p>57. Once determined, the proposed powerline easement and ancillary construction area will be identified on the ground (eg through flagging or pegging), and an opportunity provided for the Aboriginal stakeholders to inspect and recover any Aboriginal objects within this impact footprint. The Aboriginal stakeholders requested that the objects remain on country, and as such they would likely be relocated to an area immediately outside of the impact footprint.</p> <p>58. Development of an oral history to further understand the cultural values of the site to Aboriginal people should be undertaken. Consideration to implementing interpretation in suitable locations around the project area based on these results should be considered.</p>
<p><i>Consultation and reporting</i></p> <p>59. Consultation should be maintained with the RAPs during the finalisation of the assessment process and throughout the project.</p> <p>60. A copy of the ACHA should be lodged with AHIMS and provided to each of the RAPs.</p> <p>61. AHIMS Site Recording Forms for any newly identified Aboriginal objects and/or sites within the project area should be submitted to the AHIMS database.</p> <p>62. If any part of the project footprint is relocated outside the areas identified in this ACHA, or if any alteration is proposed that could result in additional impact to material culture, further assessment of these area(s) should be undertaken to identify and appropriately manage Aboriginal objects and/or sites that may be present.</p>
<p>Historical heritage</p> <p><i>Development and implementation of Historical Heritage Management Plan</i></p> <p>The following management measures are proposed:</p> <p>63. preparation of an oral history of Cornish Town in conjunction with cultural mapping of the landscape of and around Cornish Town;</p> <p>64. updated signage at the Fort Bourke Hill lookout interpreting the history of Cobar and its landmarks, in consultation with RAPs and local stakeholders;</p> <p>65. continued vibration monitoring of the Great Cobar Heritage Centre (Cobar Pastoral and Mining Technology Museum 1910) for impacts from blasting, as well as remediation measures of damage detected;</p> <p>66. development of and adherence to an unanticipated finds protocol; and</p> <p>67. development of and adherence to an encountered human skeletal remains protocol.</p>
<p>Traffic and transport</p> <p><i>Development and implementation of Traffic Management Plan</i></p> <p>The TMP will identify and provide management strategies to manage the impacts to project related traffic, including:</p> <p>68. heavy vehicle loads departing site will be covered;</p> <p>69. haulage of materials to and from the PGM sites via Kidman Way;</p> <p>70. the management and coordination of construction and other staff vehicle movements to and from site, and measures employed to limit disruption to other motorists;</p> <p>71. strategies and measures employed to manage the risks of driver fatigue, road hazards and driver behaviour,</p> <p>72. an ore haulage Driver Code of Conduct; and</p> <p>73. additional warning signage requirements for truck traffic movements on Kidman Way during wet weather and/or other poor visibility conditions eg, dust storms.</p>
<p>Rehabilitation and closure</p> <p><i>Rehabilitation</i></p> <p>74. Methods for rehabilitation will be confirmed at a later stage, but will take into account soil management, establishing vegetation, enhancement of fauna habitat, and erosion and sediment control.</p> <p>75. Refine and confirm rehabilitation criteria in the amended MOP and in the detailed closure plan as the project progresses towards closure.</p> <p>76. Rehabilitation monitoring will continue to be undertaken annually during operations and for five years following mine closure.</p> <p>77. Rehabilitation progress will be reported in the Annual Review.</p>

Table E.1 Summary of management measures

<p><i>Erosions and sediment control</i></p> <p>78. The highest risk area due to an existing erosion hazard for the project area is the WRE (approximately 14.9% slope on outer batters) however this was assessed as part of the New Cobar Open Cut approval (LDA99/00:022). There is some rill and gully erosion present on the northern and eastern slopes of the WRE where vegetation cover is low and some of the channel banks have breached. Runoff from this erosion is captured onsite in NC1, NC2 and NC3 limiting any potential impacts to the environment. NC1, NC2 and NC3 will be regularly maintained during the life of the project.</p> <p>79. PGM will undertake progressive rehabilitation of sections of the WRE not in use to achieve nominated stability and rehabilitation criteria. As part of this process, PGM will also undertake additional waste rock and soil characterisation, as well as erosion and landform evolution modelling during mining operations to inform the revised WRE batter stabilisation and rehabilitation approach.</p>
<p><i>Weeds</i></p> <p>Weeds will be managed in accordance with the PGM Biodiversity and Land Management Plan which will be updated for the rehabilitation and closure phases if necessary. Weed management measures will include but will not be limited to:</p> <p>80. If machinery to be used for rehabilitation is brought to the site from another site, and if there is a risk of weed seeds having been transported on the machinery, it will be washed down in an approved wash down area before entry to the project area.</p> <p>81. Herbicide spraying or scalping weeds from soil stockpiles will be undertaken prior to soil re-use</p> <p>82. Rehabilitation inspections to identify potential weed infestations will be undertaken within the complex on a regular basis, and prior to rehabilitation of any areas.</p> <p>83. Identifying and spraying existing weed populations together with ongoing weed spraying over the life of the project.</p>
<p><i>Hydrocarbons, chemicals and wastes</i></p> <p>84. To manage any potential contamination sources, waste management practices will be in accordance with the PGM environmental management system and will continue to be implemented during rehabilitation.</p>
<p>Visual amenity</p>
<p><i>New infrastructure</i></p> <p>85. The proposed emergency egress winder and headframe will be removed at the end of the project.</p>
<p><i>Rehabilitation of post closure landform</i></p> <p>86. The rehabilitation and landscape strategy identified that the batters of the WRE will undergo further revegetation with the planting mix analogous to pre-disturbance conditions.</p> <p>87. Progressive replanting to the batter slopes of the WRE will occur during the life of mine.</p> <p>88. The overriding objective of rehabilitation activities at the mine will be to return disturbed land to a condition that is safe, stable, and supports the proposed post-mining land use, which is primarily grazing on improved pasture. It is anticipated that the rehabilitated land will be incorporated back into land suitable for grazing:</p> <ol style="list-style-type: none"> remove all project-related infrastructure not required by the final land use; restore to a safe and stable landform; stabilise the WRE and other areas following removal of surface infrastructure; and establish a landscape that permits the land use of livestock grazing on improved pasture.

Table E.1 Summary of management measures

Lighting

89. Adhere to AS4282 Control of Obtrusive Effects of Outdoor Lighting for control of the obtrusive effects of outdoor lighting and recommended limits for relevant lighting levels.
90. No movement of ore trucks outside of daylight hours (in accordance with proposed ore haulage truck conditions).
91. A detailed assessment of potential light spill from the project will be undertaken if complaints are received, investigated, and found to be of substance. Lighting protocols derived from the assessment may include the following principles:
- a) establish operational protocols for setting up of mobile lighting plant such that lighting is directed away from external private sensitive receivers (this may include altering the alignment of internal roads);
 - b) establish design and operational protocols such that lighting sources will be hooded and directed (directional treatments) below the horizontal to minimise potential light spill;
 - c) design light systems that minimise light spill;
 - d) screening of lighting where possible for viewers external to the project;
 - e) avoiding lighting of light-coloured surfaces which have greater reflectivity;
 - f) installation of timed and zonal illumination methods whereby a structure or area is only illuminated when activity is occurring in that area; and
 - g) additional landscape treatments in the form of planting to screen views.

Hazards, public safety and health

Infrastructure design

Due to vegetation hazard being in proximity to these structures, and in accordance with PBP 2019, it is recommended:

92. a minimum 10 m APZ for the structures and associated buildings, and
93. APZs must be maintained to the standard of an Inner Protection Area (IPA) for the life of the mine.

This includes the explosives magazine and diesel fuel tanks. It is noted that the existing explosives magazine currently has an APZ of approximately 30 m.

Storage and handling of hazardous materials

94. Adequate storage and handling requirements for potentially flammable and combustible substances at the surface infrastructure will be in accordance with AS 1940 The storage and handling of flammable and combustible liquids, AS 1596 The storage and handling of LP gas and Australian Standard 2187.1:1998 Explosives – Storage, Transport and Use – Storage.

Bushfire risk

95. The proposed overhead power line should be designed and maintained so that it will not serve as a bushfire risk to surrounding bush, with no part of a tree being closer to a power line than the distance set out in ISSC3 Guideline for Managing Vegetation Near Power Lines.

Continued implementation of existing management plans and procedures

PGM has a portfolio of existing management plans and procedures relevant to the New Cobar Complex that will continue to be implemented and reviewed as part of the ongoing operation of the project. These include, but are not limited to:

96. Emergency Management Plan (PLN-06-040);
97. Emergency Preparedness Procedure (PRO-06-040-01);
98. Emergency Response Procedure (PRO-06-040-04);
99. Fire Prevention and Protection Procedure (PRO-06-040-02);
100. Incident and Crisis Management Procedure (PRO-08-028);
101. Fire and Explosion Control Plan; and
102. Waste Rock Management Plan.

Table E.1 Summary of management measures

Waste management	
<i>Continuation of measures consistent with the existing Waste Management Plan</i>	
Measures include:	
103.	waste streams will continue to be classified and managed in accordance with the Waste Classification Guidelines;
104.	waste streams will be appropriately segregated prior to reuse, recycling/composting or disposal;
105.	designated waste storage bins and areas will be appropriately sign posted and regularly inspected in accordance with the Waste Management Plan;
106.	volumes of wastes generated and disposed will be tracked and collated monthly; and
107.	waste disposal off site will be conducted by relevant appropriately licenced contractors, depending on the waste type.
<i>Continuation of principles in the Waste Rock Management Plan</i>	
To minimise the handling of PAF waste rock at the surface, implement the following:	
108.	preferential deployment of PAF waste rock underground, rather than being transported to the surface for stockpiling;
109.	if necessary, transfer of PAF waste rock to the surface for storage within the existing WRE; and
110.	re use of NAF material on site where possible following characterisation in accordance with the WRMP.
Social	
<i>Social impacts to way of life</i>	
111.	PGM has committed to make good arrangements to supply supplementary water to the Cobar District Rugby Club to replace any reduction in pumping capacity that may occur due to the drawdown of the water table. This will be done in consultation with the Cobar District Rugby Club to achieve a solution that is in all parties' best interests.
112.	Development and implementation of a community and stakeholder engagement strategy which includes provisions for information distribution and feedback mechanisms related to the ongoing operation and state of the rugby ground.
113.	Continued implementation of the WMP during operation of the project.
114.	Inclusion of information about water quality monitoring in any updates provided to the local community as part of the community and stakeholder engagement strategy.
<i>Maximising benefits</i>	
115.	Provision of training, apprenticeship and upskilling opportunities for the project workforce.
116.	Encourage and support further integration of the project workforce into the local community where possible.
117.	Development of a strategy for the enhanced identification and implementation of shared value opportunities within the local area.
118.	The development and implementation of a community and stakeholder engagement strategy would also increase transparency and provide clear expectations by communicating the intention for PGM to hire locally where possible.
119.	Encourage and support further integration of the project workforce into the local community where possible. A commitment to local procurement of goods and services in the form of a local business and local industry procurement strategy specific to the project.
<i>Health and community wellbeing</i>	
120.	Development and implementation of a consistent blasting notification procedure as part of the community and stakeholder engagement strategy.
121.	Continue to manage and monitor their community grievance mechanism (ie complaints register) and provide opportunities for community feedback related to air quality which may arise as a consequence of the project.
122.	Include information about heavy metals monitoring in any updates provided to the local community as part of their community and stakeholder engagement strategy.

Table E.1 Summary of management measures

<i>Monitoring and management framework</i>	
Develop a monitoring and management framework to ensure that the identified impacts (positive and negative) are monitored over time.	
It is proposed that the monitoring and management framework identifies the following key aspects:	
123.	track progress of mitigation and management strategies;
124.	assess actual project impacts against predicted impacts;
125.	identify how information will be captured for reporting to impacted stakeholders including landholders, communities and government on progress and achievements;
126.	key performance indicators, targets and outcomes;
127.	responsible parties; and
128.	mechanisms for ongoing adaption of management measures when and if required.
Economics	
<i>Maximising benefits of the project to the local community, local catchment and NSW, and minimising any potential adverse impacts</i>	
129.	To maximise local benefits derived from the project, and consistent with existing PGM policies, the proponent and contractors engaged by the proponent will be encouraged to source labour, including workforce and contractor labour, locally where possible and practical, and provide training opportunities where practical.
130.	PGM will continue to actively encourage workers to reside locally. More than half of the existing workforce at the Peak and New Cobar complexes reside within Cobar.
131.	PGM will monitor the local accommodation / housing market and demands placed on it by its workforce. If supply constraints are identified, PGM will work with Council to identify options for increasing supply as needed.