



<b>Works approval number</b>	W6706/2022/1
<b>Works Approval Holder</b>	BHP Nickel West Pty Ltd
<b>ACN</b>	004 184 598
<b>Registered business address</b>	Level 41 125 St Georges Terrace PERTH WA 6000
<b>DWER file number</b>	DER2020/000173~1
<b>Duration</b>	16/11/2022 to 26/11/2026
<b>Date of issue</b>	16/11/2022
<b>Premises details</b>	Mt Keith Operations WILUNA WA 6649 Legal description - Part mining tenements M53/165 and M53/56 as defined by the coordinates in Schedule 2.

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed design capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore	13,500,000 tonnes per year

This works approval is granted to the Works Approval Holder, subject to the attached conditions, on 16 November 2022, by:

A/MANAGER, RESOURCE INDUSTRIES  
*Officer delegated under section 20 of the Environmental Protection Act 1986*

# Interpretation

In this works approval:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this works approval:
  - (i) if dated, refers to that particular version; and
  - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

**NOTE:** This works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

# Works approval conditions

The Works Approval Holder must ensure that the following conditions are complied with:

## Construction phase

### Infrastructure and equipment

1. The Works Approval Holder must:
  - (a) construct and install the infrastructure and equipment;
  - (b) in accordance with the corresponding design, construction and/or installation requirements; and
  - (c) at the corresponding infrastructure locationas set out in Table 1.

**Table 1: Design, construction, and installation of requirements**

	Infrastructure	Design and construction / installation requirements	Infrastructure location
Stage 1.	Concorde Cell Circuit	<ol style="list-style-type: none"><li>(1) Layout to be in accordance with Figure 1, Schedule 1.</li><li>(2) To consist of:<ul style="list-style-type: none"><li>- Pre-circuit screen to remove trash</li><li>- Agitated rougher conditioning tank</li><li>- Rougher feed splitter box</li><li>- Two parallel Concorde Rougher cells, including independent feed hoppers and pumps</li><li>- Agitated Concorde Rougher concentrate conditioning tank</li><li>- Associated piping and launders for the Concorde rougher circuit items listed above</li><li>- One Concorde Cleaner cell including independent feed hopper and pump</li><li>- Cleaner tail hopper and pump</li><li>- Slimes final concentrate hopper and pump</li><li>- Concorde Blowers, shelter, and distribution</li><li>- Slurry transfer piping, valves, and piping tie-ins to existing plant</li><li>- Electrical and control equipment, instrumentation, cabling, terminations, earthing, area lighting and small power.</li></ul></li><li>(3) To be installed within a bunded area that can contain the loss of containment from the largest process circuit, plus a 24 hour 1% AEP rainfall event.</li></ol>	As Shown in Figure 1, Schedule 1.
Stage 2.	Module 1 Flash Flotation Circuit	<ol style="list-style-type: none"><li>(1) Layout to be in accordance with Figure 1, Schedule 1.</li><li>(2) Module to consist of:<ul style="list-style-type: none"><li>- Two ball mill module 1 cyclone clusters</li><li>- One underflow splitter to flash / ball</li></ul></li></ol>	As Shown in Figure 1, Schedule 1.

	Infrastructure	Design and construction / installation requirements	Infrastructure location
		<ul style="list-style-type: none"> <li>mill return</li> <li>- One rougher flash flotation cell</li> <li>- One flash float middling splitter to feed/discharge ball mill</li> <li>- One deslime cyclone cluster including feed hopper and pump</li> <li>- Two cleaner tank cells</li> <li>- One cleaner concentrate hopper and pump</li> <li>- Two flotation air blowers</li> <li>- Associated piping and launders for the circuit items listed above</li> <li>- Slurry transfer piping, valves and piping tie-ins to existing plant</li> <li>- Electrical and control equipment, instrumentation, cabling, terminations, earthing, area lighting and small power.</li> </ul> <p>(3) To be installed within a bunded area that can contain the loss of containment from the largest process circuit, plus a 24 hour 1% AEP rainfall event</p>	
Stage 3	Module 2 Flash Flotation Circuit	<p>(1) Layout to be in accordance with Figure 1, Schedule 1.</p> <p>(2) Module to consist of:</p> <ul style="list-style-type: none"> <li>- Two ball mill module 1 cyclone clusters</li> <li>- One underflow splitter to flash / ball mill return</li> <li>- One rougher flash flotation cell</li> <li>- One flash float middling splitter to feed/discharge ball mill</li> <li>- One deslime cyclone cluster including feed hopper and pump</li> <li>- Two cleaner tank cells</li> <li>- One cleaner concentrate hopper and pump</li> <li>- Two flotation air blower</li> <li>- Associated piping and launders for the circuit items listed above</li> <li>- Slurry transfer piping, valves and piping tie-ins to existing plant</li> <li>- Electrical and control equipment, instrumentation, cabling, terminations, earthing, area lighting and small power.</li> </ul> <p>(3) To be installed within a bunded area that can contain the loss of containment from the largest process circuit, plus a 24 hour 1% AEP rainfall event</p>	As Shown in Figure 1, Schedule 1.

## Compliance reporting

2. The Works Approval Holder must within 30 calendar days of each stage of infrastructure or equipment required by condition 1 being constructed and installed:
- (a) undertake an audit of their compliance with the requirements of condition 1; and

- (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
3. The Environmental Compliance Report required by condition 2, must include as a minimum the following:
- (a) certification by a suitably qualified geotechnical or civil engineer that the stage of infrastructure or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
  - (b) as constructed plans or photographs and a detailed site plan for each stage of infrastructure or component of infrastructure specified in condition 1; and
  - (c) be signed by a person authorised to represent the Works Approval Holder and contains the printed name and position of that person.

## Time limited operations phase

### Commencement and duration

4. The works approval holder may only commence time limited operations for each stage identified in condition 1 where the Environmental Compliance Report as required by condition 2 has been submitted by the works approval holder for that item of infrastructure.
5. The works approval holder may conduct time limited operations for a stage of infrastructure specified in condition 6 (as applicable):
- (a) For a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 4 for that item of infrastructure; or
  - (b) Until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 5(a).

### Time limited operations requirements and emission limits

6. During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

**Table 2: Infrastructure and equipment requirements during time limited operations**

Site infrastructure and equipment	Operational requirements	Infrastructure location
Stage 1: Concorde Cell Circuit	(1) Keep suitably stocked spill response equipment close to where spills of reagents and hydrocarbons may occur; and  (2) immediately recover, or remove and dispose of, spills of environmentally hazardous materials, whether inside or outside an engineered containment system.	As Shown in Figure 1, Schedule 1.
Stage 2: Module 1 Flash Flotation Circuit		
Stage 3: Module 2 Flash Flotation Circuit		

7. During time limited operations of stage 3, the works approval holder must undertake sampling and analysis of at least 10 individual representative tailings samples, including pore water, within 30 days of tailings deposition to the TSF commencing, to determine geochemical and geotechnical characteristics for the parameters as listed in Table 3.

**Table 3. Geochemical and geotechnical analysis of tailings**

Tailings	Parameter	units	Averaging period	Method
10 tailings samples during time limited operations of stage 3.  Samples to be collected at the tailings thicker pump discharge point.	pH	pH units	Spot sample	Sampling in accord with AS/NZS 5667.1;
	Total dissolved solids	mg/L		
	<u>Dissolved Major Cations and Anions:</u>  bicarbonate, bromide, carbonate, calcium, calcium carbonate, chloride, magnesium, nitrate, potassium, phosphorus, sodium and sulfate,			
	<u>Dissolved Meal(loid)s:</u>  aluminium, antimony, arsenic, boron, cadmium, cobalt, chromium, copper, total iron, lead, lithium, magnesium, manganese, mercury, nickel, selenium, strontium, thallium, vanadium, Zinc			
	<u>Geotechnical parameters:</u>  ▪ Particle size distribution  ▪ Settling test (drained and undrained)  ▪ Soil particle density  ▪ Air drying test  ▪ Hydraulic conductivity	N/A		

8. All sample analysis must be undertaken by laboratories with current accreditation from the National Association of Testing Authorities (NATA) for the relevant parameters, unless otherwise specified in Table 3.
9. The works approval holder must within 60 days of the sampling required by condition 7 being undertaken, submit to the CEO a report detailing the results of the tailings geochemical and geotechnical analysis.

### Time limited operations – compliance reporting

10. The works approval holder must submit to the CEO a report on the time limited operations within 30 days of the completion date of time limited operations for each stage or 30 days before the expiration date of the works approval, whichever is the sooner

- 11.** The works approval holder must ensure the report required by condition 10 includes the following;
- (a) a summary of the time limited operations, including timeframes and amount of ore processed;
  - (b) a review of performance and compliance against the conditions of the works approval; and
  - (c) where the specifications and the conditions of this works approval have not been met, what measures will the works approval holder take to meet them, and what timeframes will be required to implement those measures

## **Records and reporting (general)**

- 12.** The Works Approval Holder must record the following information in relation to complaints received by the Works Approval Holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
- (a) the name and contact details of the complainant, (if provided);
  - (b) the time and date of the complaint;
  - (c) the complete details of the complaint and any other concerns or other issues raised; and
  - (d) the complete details and dates of any action taken by the Works Approval Holder to investigate or respond to any complaint.
- 13.** The Works Approval Holder must maintain accurate and auditable books including the following records, information, reports, and data required by this works approval:
- (a) the works conducted in accordance with condition 1;
  - (b) monitoring programmes undertaken in accordance with condition 7; and
  - (c) complaints received under condition 12.
- 14.** The books specified under condition 13 must:
- (a) be legible;
  - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
  - (c) be retained by the Works Approval Holder for the duration of the works approval; and
  - (d) be available to be produced to an inspector or the CEO as required.

# Definitions

In this works approval, the terms in Table 4 have the meanings defined.

**Table 4: Definitions**

Term	Definition
AEP	Means Annual Exceedance Probability
AS/NZS 5667.1	AS/NZS 5667.1 means the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples.
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V Division 3 of the EP Act.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
environmental commissioning	means the sequence of activities to be undertaken to test equipment integrity and operation, or to determine the environmental performance, of equipment and infrastructure to establish or test a steady state operation and confirm design specifications.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the works approval.
EP Act	<i>Environmental Protection Act 1986</i> (WA).
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA).
premises	the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this works approval.
prescribed premises	has the same meaning given to that term under the EP Act.
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
Works Approval Holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.

## END OF CONDITIONS



# Schedule 1: Maps

## Premises map

The boundary of the prescribed premises (in red) is shown in the map below (Figure 1).

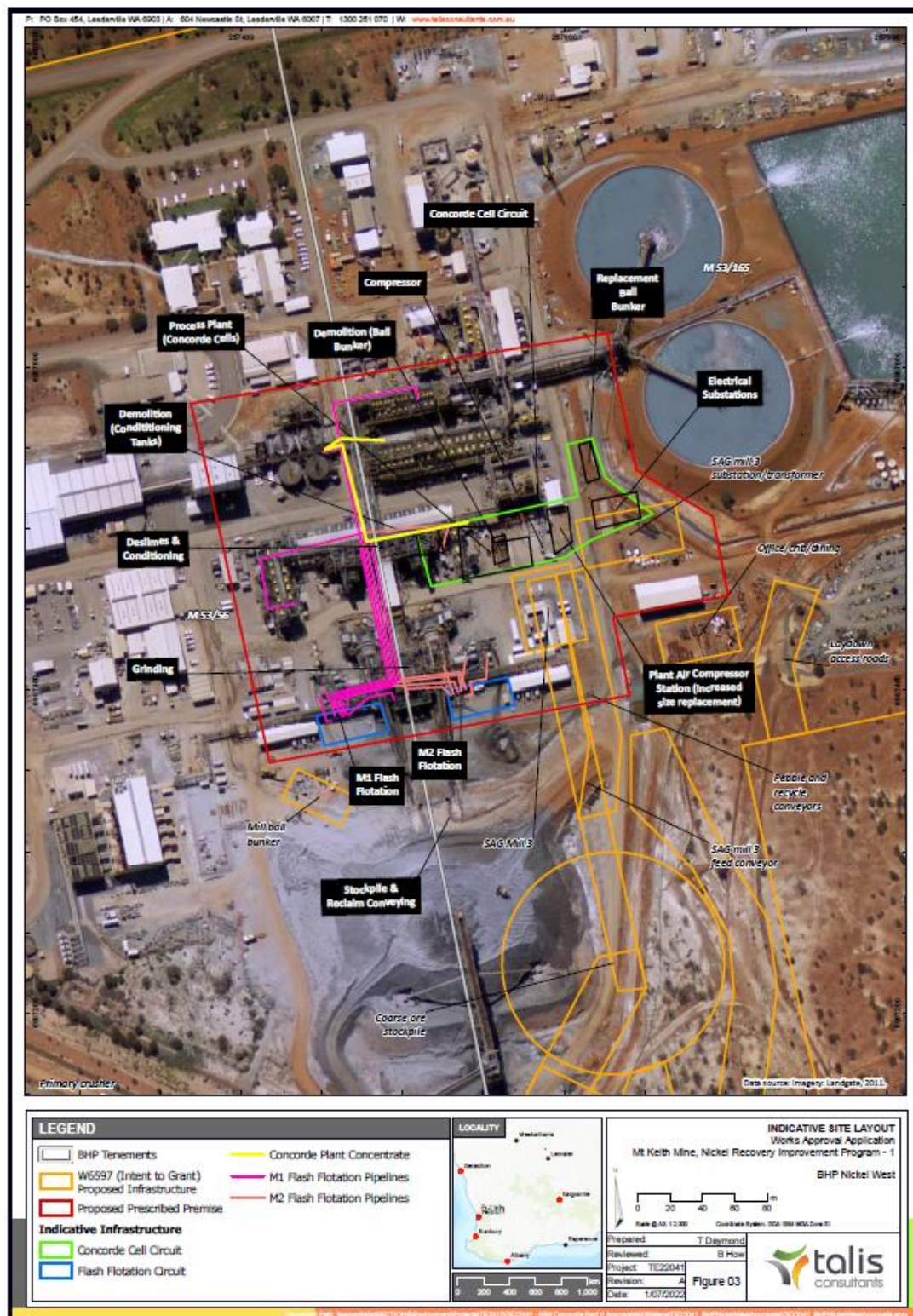


Figure 1: Map of the boundary of the prescribed premises and layout of infrastructure

## Schedule 2: Premises boundary

The premises boundary coordinates are listed in Table 5.

**Table 5: Premises boundary Coordinates (GDA, 2020)**

Easting	Northing
257632.6375	6987591.206
257644.6722	6987591.206
257691.9550	6987507.546
257701.6585	6987458.546
257630.2023	6987445.189
257639.3749	6987402.586
257416.2832	6987360.882
257376.9170	6987543.402
257368.7746	6987577.467
257626.7170	6987621.101
257632.6375	6987591.206