

# Works Approval

Works approval number W6869/2023/1

Works approval holder BHP Nickel West Pty Ltd

**ACN** 004 184 598

Registered business address Level 42, 125-137

St Georges Terrace

PERTH WA 6000

**DWER file number** DER2023/000724

**Duration** 10/01/2025 to 09/01/2030

Date of issue 10/01/2025

Premises details Wedgetail Project

Legal description -

Within Mining Tenements: L53/244, M53/55, M53/949, M53/35 M53/36, M53/238, M53/239, M53/240, M53/241, M53/242, E53/1243, L53/109, M53/56, M53/165, M53/371, M53/411, M53/462, M53/463, M53/487, M53/488, L53/247 and M53/949

WILUNA WA

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed design capacity
Category 6: Mine dewatering: premises on which water is extracted and discharged into the environment to allow mining of ore.	2,200,000 tonnes per year

This works approval is granted to the works approval holder, subject to the attached conditions, on 10 January 2025, by:

#### A/MANAGER, RESOURCE INDUSTRIES INDUSTRY REGULATION (STATEWIDE DELIVERY)

Officer delegated under section 20 of the Environmental Protection Act 1986

## Works approval history

Date	Reference number	Summary of changes
10/01/2025	W6869/2023/1	Works approval granted.

## 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 and construction / installation requirements; and
  - (c) at the corresponding infrastructure location as set out in Table 1.

Table 1: Design and construction / installation requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location
1.	Settling Pond 1, Settling Pond 2, Collection Pond and Transfer Pond	<ul> <li>(a) Ponds to be lined with a high density polyethylene (HDPE) liner of a nominal thickness of 2 mm;</li> <li>(b) Ponds are to have batter slopes of 3H:1V;</li> <li>(c) Ponds are to have pathways for maintenance and removal of sediment;</li> <li>(d) Crest of embankment to be graded inwards to drain water into pond;</li> <li>(e) Pond boundaries are to be fenced prevent fauna ingress;</li> <li>(f) Fauna egress matting installed within ponds;</li> <li>(g) Overflow between pipes via buried HDPE pipe as per Schedule 2: Drawings, Figure 5; and</li> <li>(h) Ponds are to have the following holding capacity: <ul> <li>(i) Each of the two Settling Ponds – 2,500 kiloliters (kL);</li> <li>(ii) Collection Pond – 1,300 kL; and</li> <li>(iii) Transfer Pond – 6,050 kL.</li> </ul> </li> </ul>	Within the prescribed premises as detailed in Schedule 1: Maps Figure 3.
2.	Dewatering pipeline	<ul> <li>(a) Pipeline route to be as depicted within Figure 1</li> <li>(b) Sensors to be fitted at each end of the pipeline with local telemetry;</li> <li>(c) Manual shut-off valves installed at a maximum of a 3 km spacing along the pipeline;</li> <li>(d) Pipeline installed in V drain adjacent to existing road and windrow when not underground;</li> <li>(e) Pump motor to be installed to automatically cut-out in the event of pipe failure; and</li> <li>(f) Pipeline to be buried where it passes under creeks and roads to align with 10% Annual Exceedance Probability Rainfall modelling.</li> </ul>	Within the prescribed premises as detailed in Schedule 1: Maps Figure 1

	Infrastructure	Design and construction / installation requirements	Infrastructure location
3.	J Pit	(a) A visual line to be marked on wall of J Pit at the freeboard of 95.42 meters below ground level (mbgl) (430 meters reduced level) (mRL).	

#### **Compliance reporting**

- 2. The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 being constructed and/or 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 an Engineer that the items 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 and a detailed site plan for each item 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.

### **Environmental commissioning phase**

- 4. The works approval holder may only commence environmental commissioning of an item of infrastructure listed in condition 5 once the Environmental Compliance Report has been submitted for that item of infrastructure in accordance with condition 2 of this works approval.
- **5.** Any environmental commissioning activities undertaken for an item of infrastructure specified in Table 2 may only be carried out:
  - (a) in accordance with the corresponding commissioning requirements; and
  - (b) for the corresponding authorised commissioning duration.

Table 2: Environmental commissioning requirements

Item	Infrastructure	Commissioning requirements	Authorised commissioning duration
1	Settling Pond 1, Settling Pond 2, Collection Pond and Transfer Pond	Wedgetail Stage 1 Dewatering	For a period not exceeding 50 calendar days in aggregate.
2	Dewatering pipeline	Commissioning Plan.	

6. The works approval holder must submit to the CEO an Environmental Commissioning Report within 30 calendar days of the completion date of environmental commissioning for each item of infrastructure specified in Table 2.

- 7. The works approval holder must ensure the Environmental Commissioning Report required by condition 6 of this works approval includes the following:
  - (a) a summary of the environmental commissioning activities undertaken, including timeframes;
  - (b) a summary of the environmental performance of each item of infrastructure as constructed;
  - (c) a review of the works approval holder's performance and compliance against the conditions of the works approval; and
  - (d) where they have not been met, measures proposed to meet the manufacturer's design specifications and the conditions of this works approval, together with timeframes for implementing the proposed measures.

### Time limited operations phase

#### Commencement and duration

- **8.** The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 10.
  - (a) where the item of infrastructure is not authorised to undertake environmental commissioning, the Environmental Compliance Report as required by condition 2 has been submitted by the works approval holder for that item of infrastructure;
  - (b) where the item of infrastructure is authorised to undertake environmental commissioning under condition 4, the Environmental Commissioning Report for that item of infrastructure as required by condition 6 has been submitted by the works approval holder.
- **9.** The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 10 (as applicable):
  - (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 8 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 9(a).
- **10.** During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 3 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 3.

Table 3: Infrastructure and equipment requirements during time limited operations

	Site infrastructure and equipment	Operational requirement	Infrastructure location
1.	Settling Pond 1, Settling Pond 2, Collection Pond and Transfer Pond	<ul> <li>(a) Fencing and fauna egress matting surrounding and within the ponds to be fit for purpose and maintained;</li> <li>(b) Freeboard of 0.3 m or a 1 in 100 year/72 hour storm event to be maintained and monitored;</li> <li>(c) 24 hourly inspections on ponds for</li> </ul>	Within the prescribed premises as depicted in Schedule 1: Maps Figure 3.

	Site infrastructure and equipment	Operational requirement	Infrastructure location
		fauna, leaks or spills;	
		(d) Pond overflow pipes clear of sediment; and	
		(e) HDPE liner to be maintained.	
2.	Dewatering Pipeline	(a) Shut-off valves and telemetry along pipeline to be operational and maintained;	Within the prescribed premises as depicted in Schedule 1: Maps
		(b) Pipelines maintained and fit for operational use; and	Figure 3.
		(c) Undertake weekly visual inspections of the pipeline to ensure integrity.	
3.	J Pit	(a) A visual line to be maintained on the pit wall at the freeboard of 95.42 mbgl (430 mRL);	Within the prescribed premises as depicted in Schedule 1: Maps
		(b) Freeboard within J-Pit to remain below 95.42 mbgl (430 mRL); and	Figure 1
		(c) Undertake monthly visual inspections to ensure the freeboard is not breached.	

**11.** The works approval holder must ensure that the emissions specified in Table 4, are discharged only from the corresponding discharge point and only at the corresponding discharge location.

**Table 4: Authorised discharge points** 

Emission	Discharge point	Discharge location
Hypersaline dewater from Wedgetail project	Raw water pond at the Mount Keith Operations	As shown in Schedule 1: Maps, Figure 2
	J Pit	

### **Monitoring during time limited operations**

**12.** The works approval holder must undertake the monitoring during time limited operations in accordance with Table 5 and Table 6.

Table 5: Pit lake monitoring during time limited operations

Monitoring Location	Parameter	Unit	Frequency
J Pit	Volume of water pumped into J Pit	kL	Continuous
	pH <sup>1</sup>	-	Monthly

Electrical conductivity <sup>1</sup>	μS/cm	
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Note 1: In-field non-NATA accredited analysis permitted.

Table 6: Groundwater monitoring during time limited operations

Monitoring Location	Parameter	Unit	Frequency
Groundwater monitoring bores:	Standing water level <sup>1</sup>	Meters below ground level	One sampling event prior to discharge of
MKRC725		(mbgl)	hypersaline dewater from Wedgetail
and	pH <sup>1</sup>	-	project.
MKRC731	Electrical conductivity <sup>1</sup>	μS/cm	and
As reference in Schedule 1: Maps, Figure 4.	Licenteal conductivity	po/cm	Quarterly during time limited operations.

Note 1: In-field non-NATA accredited analysis permitted.

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

- 13. 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.
- **14.** 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) any maintenance of infrastructure that is performed in the course of complying with condition 10:
  - (c) monitoring programmes undertaken in accordance with condition 12; and
  - (d) complaints received under condition 15.
- **15.** The books specified under condition 14 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 7 have the meanings defined.

**Table 7: Definitions** 

Term	Definition
Assessment of Site Contamination NEPM	means the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended from time to time
AS1726	means the Australian Standard AS1762 Geotechnical site investigations, as amended from time to time;
ASTM D5092/D5092M- 16	means the ASTM international standard for Standard practice for design and installation of groundwater monitoring wells (Designation: ASTM D5092/D5092M-16), as amended from time to time.
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 Environmental Protection Act 1986 Locked Bag 10 Joondalup DC WA 6919  info@dwer.wa.gov.au
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.
EC	means electrical conductivity.
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 Commissioning Report	means a report on any commissioning activities that have taken place and a demonstration that they have concluded, with focus on emissions and discharges, waste containment, and other environmental factors.
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	Environmental Protection Act 1986 (WA).
EP Regulations	Environmental Protection Regulations 1987 (WA).
HDPE	means high density polyethylene

Term	Definition
kL	means kiloliter
mRL	means meters reduced level
monthly period	means a one-month period commencing from the first day of a month until the fist day of the immediately following month.
	e.g. "means a one-month period commencing from the seventh day of a month until the sixth day of the immediately following month."
NATA	means National Association of Testing Authorities.
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.
time limited operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.
Wedgetail Stage 1 Dewatering Infrastructure Establishment Commissioning Plan	refers to the document BHP Wedgetail Stage 1, Dewatering Infrastructure Establishment, Commissioning Plan, WDG-PLN-00014, Rev 0.  Record Number: DWERDT921566
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 is shown in the map below (Figure 1).

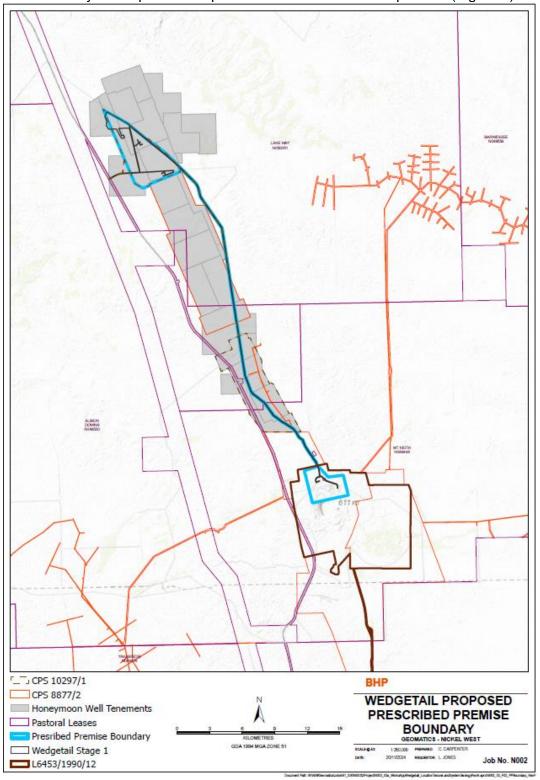


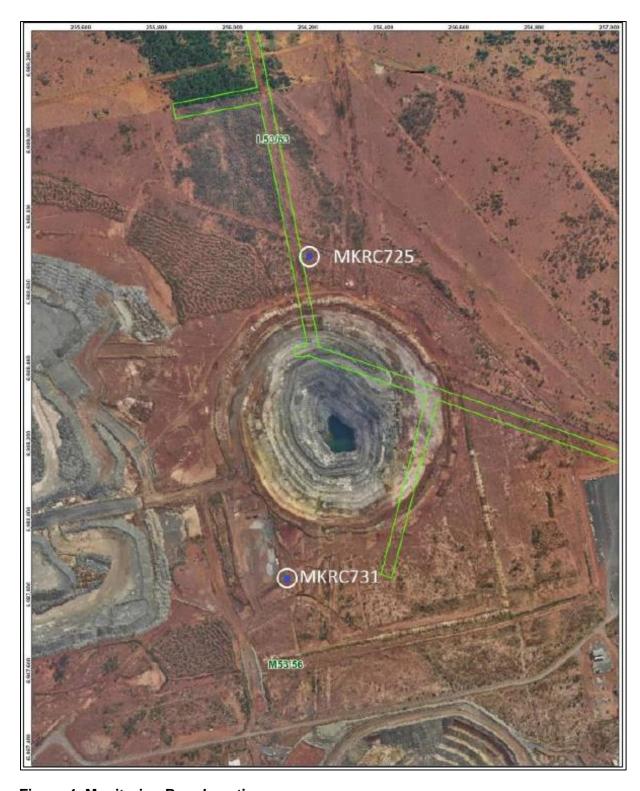
Figure 1: Map of the boundary of the prescribed premises and pipeline corridor



Figure 2: Pipeline leading to J Pit and Raw Water Pond at Mount Keith Operations



Figure 3: Wedgetail water ponds process and arrangement



**Figure 4: Monitoring Bore Locations** 

# **Schedule 2: Drawings**

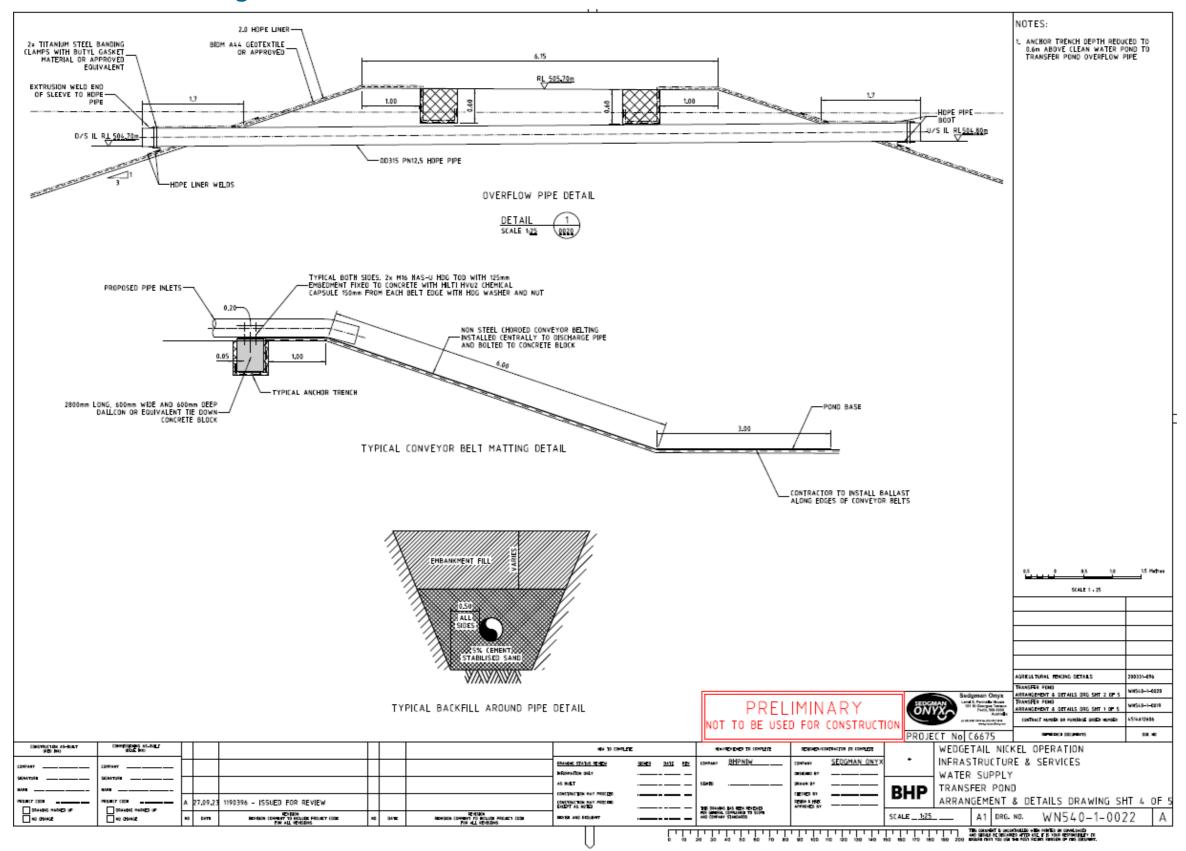


Figure 5: Pond to pond transfer pipe arrangement and detailed drawings