



<b>Works Approval Number</b>	W6403/2020/1
<b>Works Approval Holder</b>	Hamersley HMS Pty Ltd
<b>ACN</b>	008 694 246
<b>File Number:</b>	DER2020/000121~2
<b>Premises</b>	Hope Downs 4 Iron Ore Mine – Area 3 Mining Lease (ML) 282SA and ML5SA
<b>Date of Amendment</b>	23/02/2021

## Amendment

The Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) has amended the above Works Approval in accordance with section 59 of the *Environmental Protection Act 1986* (EP Act), as set out in this Amendment Notice. This Amendment Notice constitutes written notice of the amendment in accordance with section 59B(9) of the EP Act.

**Alana Kidd**

**MANAGER, RESOURCE INDUSTRIES  
INDUSTRY REGULATION**

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA).

## Definitions and interpretation

### Definitions

In this Amendment Notice, the terms in Table 1 have the meanings defined.

**Table 1: Definitions**

Term	Definition
Amendment Notice	means an amendment granted under s.59 of the EP Act in accordance with the procedure set out in s.59B of the EP Act.
AS 5667.1	means the Australian Standard AS 5667.1: <i>Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples.</i>
AS 5667.11	means the Australian Standard AS 5667.11: <i>Water Quality – Sampling – Guidance on sampling of groundwaters.</i>
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
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>
Condition	means a condition to which this Licence is subject under section 62 of the EP Act.
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.
DWER	Department of Water and Environmental Regulation.
EP Act	means the <i>Environmental Protection Act 1986 (WA)</i> .
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.
Spot sample	means a discrete sample representative at the time and place at which the sample is taken
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.

## Amendment Notice

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the Works Approval issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B(9) of the EP Act.

This notice is limited only to an amendment for sampling requirements and reporting date. No changes to the aspects of the original works approval relating to Category 5 have been requested by the Works Approval Holder.

The following guidance statements have informed the decision made on this amendment:

- *Guidance Statement: Setting Conditions* (October 2015)

## Amendment description

Hamersley HMS Pty Ltd is currently approved to commission three in pit TSFs – Kal 2, Kal 3 and Kal 4. The works approval was granted on 23 October 2020.

On 11 January 2021 the works approval holder submitted an amendment application requesting the following:

- The removal of Condition 24 (g) for the provision of a summary of Column Leach monitoring results obtained during time limited operations under Condition 21, in the Time Limited Operation Report;
- The removal of the requirement to have TDS tested by a NATA accredited laboratory under Condition 19 – Table 8.

Condition 23 of W6403/2020/1 requires that the works approval holder to submit to the CEO a report on the time limited operations 60 calendar days prior to the completion date of time limited operations. The report, Condition 24(g) must include the results of a 13 week leach testing of two saturated columns of representative waste fine/waste rock from the receiving Pit.

The Works Approval Holder stated that it will be not possible to comply with Condition 24(g) of W6403/2020/1 timeframe due to a state-wide backlog with the Laboratory.

Currently, there is only laboratory in WA who is equipped and available to carry out such tests and they only have one column leach test apparatus (6 columns in total). The Department has requested the Works Approval Holder to run column testing for other works approvals. Given the projects are commencing over similar timeframes and the limited capability of the laboratory it is unlikely there will be laboratory capacity to test another project until at least July 2021.

## Amendment history

Table 2 provides the amendment history for W6403/2020/1.

**Table 2: W6403/2020/1 amendments**

Instrument	Issued	Amendment
W6403/2020/1	23/02/2021	Amendment Notice 1 Change in leach test report submission date and change in frequency of TDS analysis.

## Decision

In consideration of the information provided by the Works Approval Holder, the Delegated Officer has determined that given the limitation in laboratory availability to undertake saturated column leach test analysis, the reporting date will be amended in the works approval.

The Delegated Officer also considers that total dissolved solids should be tested by NATA

accredited laboratory to verify on site results. However, the frequency of analysis will change from monthly to quarterly.

Therefore, the Delegated Officer has determined that an amendment is to be made to remove condition 24 (g) from the works approval. Condition 21 has been updated to include report submission within 30 days of the leach test results are produced.

## Works Approval Holder's comments

The Works Approval Holder was provided with the draft Amendment Notice on 16 February 2021. The Works Approval Holder responded on 18 February 2021 waiving the remaining comment period. No comments were submitted on the draft Amendment Notice 1.

## Amendment

1. Condition 19 Table 8 of the Works Approval is amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below:

- 19.** The works approval holder must record the results of all monitoring activity required by condition 18 and report against ANZECC criteria for a slightly to moderately disturbed ecosystem.

**Table 8: Monitoring during time limited operations**

Monitoring location	Parameter	Unit	Frequency	Averaging Period	Method	
					Sampling	Analysis
MB05HD4008 (shallow and deep) MB11HD4011 MB14HD4027 MB14HD4028 (reinstalled) MB15HD4002 MB15HD4004 MB16HD4002 MB16HD4003 MB16HD4004 MB17HD40006 MB17HD40007 MB18HD40008 WB14HD4017# WB15HD4001# WB15HD4003# New borehole X	Surface water level	mbgl	Monthly	Spot sample	AS/NZS 5667.1 AS/NZS 5667.11	N/A
	pH	pH units				In field
	Electrical Conductivity	µS/cm				
	Dissolved Oxygen	mg/L				
	<del>TDS</del>					
	<b>TDS</b>	mg/L	Quarterly	Spot sample	AS/NZS 5667.1 AS/NZS 5667.11	By a NATA accredited laboratory
	<b>Alkalinity CaCO3</b>					
	<b>Total Nitrogen</b>					
	<b>Major Ions: Ca, Cl, F, K, Mg, Na and SO4,</b>					
	<b>Metals / metalloids: Al, As, Ba, B, Cd, Co, Cr, Cu, Fe, Hg, Mn, Mo, Ni, Pb, Sb, Se, Si and Sn</b>					
<b>acrylamide</b>						
Vibrating Wire Piezometer (VWP) location HM18HD40002	phreatic surface	mbgl	Monthly	Spot sample	AS/NZS 5667.1 AS/NZS 5667.11	N/A

Note #: All parameters excluding surface water level

2. Condition 21 of the Works Approval is amended by the insertion of the bold text shown in underline below:

- 21.** The works approval holder shall conduct leach testing of two saturated columns of representative waste fine/waste rock from the receiving Pit samples for a minimum period of 13 weeks. The leaching test methodology shall be representative of the anoxic conditions likely to be present at the WFSF and

follow the protocol outlined in Watson *et al* 2016. The works approval holder shall analyse the concentrations of contaminants in the leachate and detail the methodology used, source of the samples and the results in a report.

**(a) Within 30 days of the completion of the test, the works approval holder shall submit the results in a report to the CEO.**

3. Condition 24 is amended by the deletion of the text shown in strikethrough and the insertion of the bold text shown in underline below:

**24.** The works approval holder must ensure the report required by condition 23 includes the following:

- (a) volume of waste fines deposited;
- (b) fines sold percentage
- (c) volume of seepage recovered;
- (d) calculated seepage
- (e) groundwater contours before and after discharge;
- (f) a summary of monitoring results and inspections obtained during time limited operations under conditions 19 and 20;
- ~~(g) condition 21 results;~~
- ~~(h)~~ **(g)** a review of performance against the in-pit TSF design; and
- ~~(i)~~ **(h)** where they have not been met, measures proposed to meet the manufacturer's design specification and/or conditions of this works approval, together with timescales for implementing the proposed measures.

## Appendix 1: Key documents

	Document title	In text ref	Availability
1	W6403/2020/1 – Hope Downs 4 – Area 3	W6403/2020/1	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
2	Works Approval W6403/2020/1 – Amendment Application		DWER records (DWERDT400326)
3	DER, October 2015. <i>Guidance Statement: Setting Conditions.</i> Department of Environment Regulation, Perth.	DER 2015b	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>