



<b>Licence Number</b>	L8698/2012/1
<b>Licence Holder</b>	Andy Well Mining Pty Ltd
<b>ACN</b>	158 108 895
<b>File Number:</b>	2012/007203
<b>Premises</b>	Andy Well Gold Project Mining Tenement M51/870 MEEKATHARRA WA 6642
<b>Date of Report</b>	23/04/2020
<b>Decision</b>	Licence amendment granted

# 1 Definitions and interpretation

## 1.1 Definitions

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

**Table 1: Definitions**

Term	Definition
AACR	Annual Audit Compliance Report
ACN	Australian Company Number
AER	Annual Environment Report
Amendment Report	refers to this document
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 6919 <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
Delegated Officer	an officer under section 20 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	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
Licence holder	Andy Well Mining Pty Ltd
Prescribed premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Amendment Report applies, as specified at the front of this Amendment Report.
Revised Licence	the amended Licence issued under Part V, Division 3 of the EP Act, with changes that correspond to the assessment outlined in this Amendment Report.

## 2 Amendment description

Andy Well Mining Pty Ltd (licence holder) applied for a licence amendment to L8698/2012/1 on 9 August 2019. The application proposes reduced monitoring and sampling commitments due to the mine being into Care and Maintenance (C&M), and the licence holder has ceased mine dewatering and discharge activities at Andy Well Gold Project. No mining and processing has been undertaken at the premises since November 2017. The proposed amendments, including DWER initiated changes, are described in detail below.

### 2.1 Infrastructure inspection

The current licence requires the licence holder in Table 1.3.4 to perform daily inspections of infrastructure associated with dewatering, the tailings storage facility and the Suzie open pit.

The licence holder proposes to amend daily inspections to be only undertaken during operations, to reduce the commitment while the premises is in C&M.

### 2.2 Monitoring of emissions to land

The monitoring of emissions to land were amended to manage the expansion of the ridgeline discharge pipeline in Amendment Notice 3. Since no discharge is currently occurring, the licence holder seeks to reduce the monitoring commitment to be required only when the site is operational, as set out in Table 3.2.1 in the current licence.

### 2.3 Monitoring of ambient groundwater quality

The current licence describes quarterly monitoring of the ambient groundwater quality and the comparison to data from previous years. The licence holder seeks to limit monitoring commitments to be annual during C&M and continue quarterly monitoring during operations.

### 2.4 Non-annual reporting

Inspection records of infrastructure and resulting management actions are currently reported to the department on a quarterly basis (Table 4.2.2 in current licence). The licence holder proposes the amendment to report on an annual basis.

### 2.5 Consolidation of licence

As part of this amendment package DWER has consolidated the licence by incorporating changes made under the following Amendment Notices:

- Amendment Notice 1, granted 27 January 2017- lift of Tailings Storage Facility (TSF), and
- Amendment Notice 2, granted 13 June 2018- increase in dewatering water discharge to land (up to 1000 000 kL/year) into Suzie pit
- Amendment Notice 3, granted 1 May 2019- extension to the ridgeline discharge point pipeline to the south, change of licence holder and CEO initiated amendment to Category 6

The obligations of the licence holder have not changed in consolidating the licence. DWER has not undertaken any additional risk assessment of the premises related to previous Amendment Notices.

In consolidating the licence, the CEO has:

- updated the format and appearance of the licence;
- deleted the redundant AACR form set out in schedule 1 of the previous licence and

advise the licence holder to obtain the form from the Department's website;

- revised licence condition's numbers, and removed any redundant conditions and realigned condition numbers for numerical consistency; and
- corrected clerical mistakes and unintentional errors.

Previously issued Amendment Notices will remain on the DWER website for future reference and will act a record of DWER's decision making.

### 3 Amendment history

Table 2 provides the amendment history for L8698/2012/1.

**Table 2 Licence amendments**

Instrument	Issued	Amendment
L8698/2012/1	07/06/2013	Licence amendment to add category 5.
L8698/2012/1	31/10/2013	Licence amendment to correct an administrative error.
L8698/2012/1	21/11/2013	Licence amendment to increase throughput.
L8698/2012/1	17/07/2014	Licence amendment to increase throughput and to convert to new licence template.
L8698/2012/1	25/09/2014	Licence amendment to change groundwater monitoring requirements.
L8698/2012/1	21/01/2016	Licence amendment to increase the total dissolved solids limit for mine dewatering discharge to land and the removal and replacement of monitoring bore references.
L8698/2012/1	27/01/2017	Licence amendment to allow for a lift at the TSF.
L8698/2012/1	13/07/2018	Licence amendment to allow an increase in dewatering water discharge to land (up to 1000 000 kL/yr) during C&M period and into the Suzie pit.
L8698/2012/1	1/05/2019	Licence amendment to extent ridgeline discharge point pipeline to the south (by 250 m) and change of licence holder. A CEO initiated amendment to Category 6 included additional monitoring requirements for the dewatering discharge area to minimise waterlogging impacts to the ridgeline.
L8698/2012/1	23/04/2020	Licence amendment to reduce monitoring and inspection frequencies after ceasing discharging and dewatering, and DWER initiated amalgamation of previous Amendment Notices 1-3.

### 4 Location and receptors

Table 3 below lists the relevant sensitive land uses in the vicinity of the prescribed premises which may be receptors relevant to the proposed amendment.

**Table 3: Receptors and distance from activity boundary**

Residential and sensitive premises	Distance from prescribed premises
Karalundi Aboriginal Education Community	Approximately 10 km to the north of the Project
Killara Homestead	25 km to the south east of the Project

Table 4 below lists the relevant environmental receptors in the vicinity of the prescribed premises which may be receptors relevant to the proposed amendment.

**Table 4: Environmental receptors and distance from activity boundary**

Environmental receptors	Distance from prescribed premises
Surface water – Yalgar River non-perennial tributary / drainage lines	The Yalgar River is a 120 km long tributary of the Murchison River. It arises near the Great Northern Highway approximately 50km north of Meekatharra. Minor non-perennial tributaries of this river are located near to the project area. The closest of these being approximately 2 km east and south of the ridgeline surface discharge site.
Groundwater	A staged hydrological investigation and dewatering assessment of the Project area was undertaken by RPS Aquaterra during 2011. It was found that depth to groundwater in the Project area is relatively uniform and has been measured at approximately 5 - 12 meters below ground level (mbgl). Regional groundwater flow is expected to be to the west into the Yalgar River and Murchison River drainage systems.
Vegetation	The vegetation type found in the area of the dewatering discharge is described as Mulga ( <i>Acacia aneura</i> ) or <i>Acacia</i> semi-desert scrub, consisting of <i>Acacia</i> groves within a flat hardpan wash plain with low open scrub of <i>Eremophila</i> species (Mattiske Consulting, 2011).  A flora and vegetation survey conducted in 2011 found; ten plant communities within the survey area which also occurs throughout the region, no threatened flora species, no plant species listed under the <i>Environmental Protection Biodiversity Conservation Act 1999</i> and no priority species (Mattiske Consulting, 2011).

## 5 Decision

The Delegated Officer (DO) considers that the reduced monitoring of emissions to land and inspection of infrastructure should be granted. No mining or processing has taken place since November 2017, and dewatering and discharging activities have now been completed. The amendment alters conditions relating to the frequency of infrastructure inspections and the frequency of land emissions monitoring and groundwater quality monitoring.

The DO considers that the proposed change of ambient groundwater quality monitoring should be refused to be granted.

The reasoning for the decision is outlined below.

### 5.1 Infrastructure inspection

Dewatering and discharging activities undertaken at the premises have been assessed previously and were found to be Moderate risk (Amendment Notice 2). To mitigate risk of adverse impacts on groundwater and surrounding vegetation, the licence prescribes daily inspections of discharging and dewatering pipelines, and visual confirmation of adequate freeboard available in the TSF and the Suzie Open Pit (Table 1.3.4 in licence).

Related activities have ceased at the premises, and the infrastructures is therefore not used. The frequency of inspections have been amended to require daily inspections during operation only.

## 5.2 Monitoring of emissions to land

Previous dewatering has resulted in stressed or dead vegetation and waterlogging at discharge locations. Frequent monitoring of water quality of the discharge is prescribed in Table 3.2.1 in the current licence. No dewatering is currently undertaken, and therefore no discharge released into the environment.

The licence was amended to clarify frequent monitoring to be only required during activities resulting in discharge.

## 5.3 Monitoring of ambient groundwater

The licence holder is currently required to monitor the ambient groundwater quality in TSF groundwater monitoring bores on a quarterly basis. Elevated total dissolved solids (TDS) levels have previously been identified and investigations suggested the source to be a combination of seepage from the TSF, underground dewatering activities, condensing ions in solution and/or disturbance of a saline lens beneath the TSF.

A review of the 2018 Annual Environmental Report (Andy Well Mining Pty Ltd, 2019) indicated the TDS in groundwater monitoring bores TSFMB08-13 is still elevated when compared to 'canary bores' TSFMB07 and MB 06 (Figure 1).

As dewatering activities have ceased, and no mining or processing activities have been undertaken since 2017, no obvious decrease of TDS has been observed. The TSF remains a potential source of seepage, and monitoring of ambient groundwater is therefore still required at the current quarterly monitoring schedule. It is important to record consistent monitoring data for future assessments and further investigations.

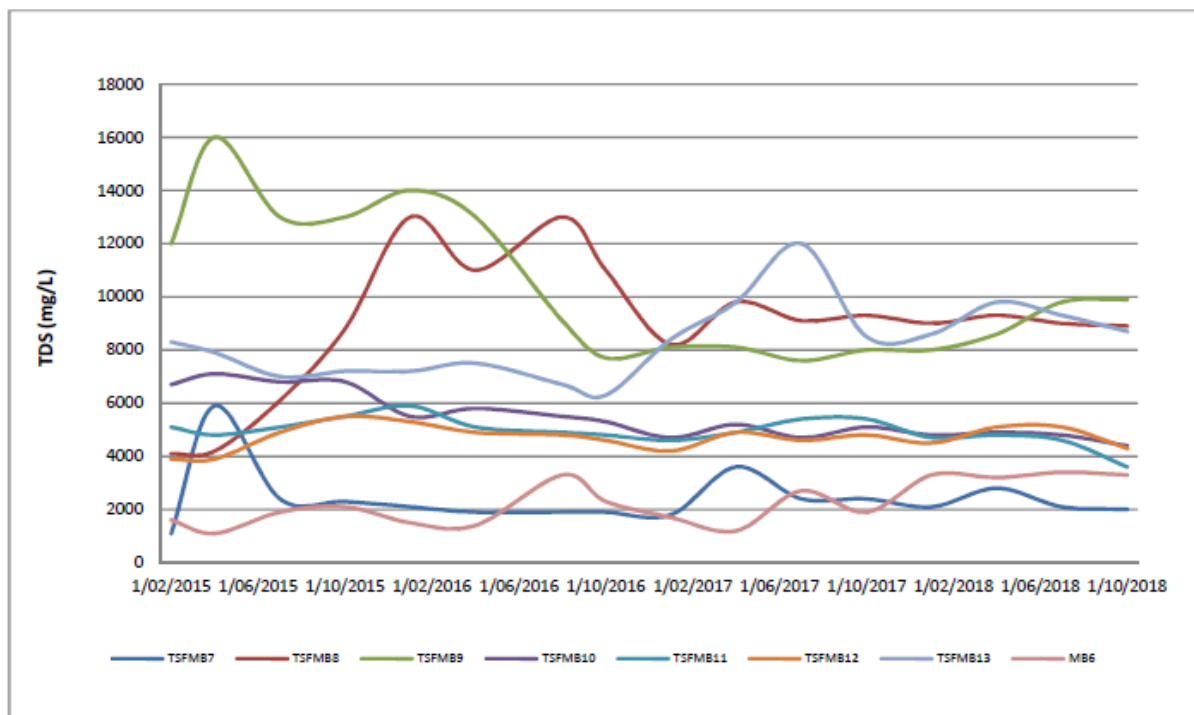


Figure 1 TSFMB07-13 and MB06 Total Dissolved Solids (mg/L) readings since February 2015 (Andy Well Mining Pty Ltd, 2019)

## 5.4 Non-annual reporting

The current licence requires quarterly reports of ridgeline pipeline and spigot inspection records including management actions to the department (Table 4.2.1 in current licence). Due to past history of waterlogging and vegetation death by the discharge of effluent, quarterly reporting allows the department to closely monitor any adverse impact and ensure the implementation of appropriate management actions by the licence holder.

While little or no discharge will occur during C&M, the reporting frequency was updated to be annually with the AER. Quarterly reporting requirements are still required during operations.

## 6 Summary of amendments

Table 5 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

**Table 5: Licence amendments**

Condition No.	Proposed amendments
Table 1.3.4	The frequency of inspections of the pipelines and freeboard were updated to be required only when discharging or operational
Table 3.2.1	The frequency of monitoring emissions to land has been updated to be required only when discharging.
Table 4.2.2	The required reporting period for ridgeline pipeline and spigot inspection records and management actions was updated to quarterly during discharge and annually during Care and Maintenance.
All conditions	Reference to Licensee has been deleted and replaced with licence holder as per new template
Schedule 2 Reporting & notification forms Table 4.2.1	Removed form LR1 and AGWQ1, and changed required form in Table 4.2.1 to 'None specified'

## 7 Consultation

The licence holder was provided with the draft amendment report on 7 February 2020 for review and comment. The licence holder responded on 21 April 2020. No comments were submitted on the draft amendment report.

## 8 Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has amended licence L8698/2012/1 in accordance with section 59 of the EP Act. The licence document has been updated accordingly to reflect this amendment.

This report is limited only to the assessment for an amendment of monitoring and sampling conditions.

This amendment has been informed by the department's Regulatory Framework which is available at <https://dwer.wa.gov.au/regulatory-documents>.

**Lauren Fox**  
**A/SENIOR MANAGER RESOURCE INDUSTRIES**  
**REGULATORY SERVICES**

*An officer delegated by the CEO under section 20 of the EP Act*



## Appendix 1: Key documents

	Document title	In text ref	Availability
1	Licence L8698/2012/1	L8698/2012/1	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
2	Licence amendment application form	Application	DWER records (DWERDT188135)
	Amendment Notice 1	Amendment Notice 1	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
	Amendment Notice 2	Amendment Notice 2	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
3	Amendment Notice 3	Amendment Notice 3	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
4	DWER, February 2017, <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation	-	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
5	RPS Aquaterra. (2011) Preliminary Hydrological Assessment – Andy Well. PRS Aquaterra, 21 February 2011	RPS Aquaterra. 2011	Provided by Applicant
6	Mattiske Consulting (2011) Flora and Vegetation of the Andy Well Survey Area, Mattiske Consulting Pty Ltd, June 2011.	Mattiske Consulting, 2011	Provided by Applicant
7	Andy Well Mining Pty Ltd (2019) 2018 Annual Environmental Report, March 2019	Andy Well Mining Pty Ltd, 2019	DWER records (DWERDT234384)