



<b>Licence Number</b>	L6110/1990/13
<b>Licence Holder</b>	Australian Gold Reagents Pty Ltd
<b>ACN</b>	009 140 121
<b>File Number:</b>	DEC4869/1
<b>Premises</b>	Australian Gold Reagents Part Lot 20 on Diagram 78086 Kwinana Beach Road KWINANA BEACH WA 6167  Legal description – Certificate of Title Volume 1918 Folio 244
<b>Date of Report</b>	20 January 2020
<b>Status of Report</b>	Final

# 1. Definitions and interpretation

## Definitions

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

**Table 1: Definitions**

Term	Definition
ACN	Australian Company Number
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 WA 6919 Telephone: (08) 6364 7000 Email: <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	Australian Gold Reagents Pty Ltd
MS	Ministerial Statement
Noise Regulations	<i>Environmental Protection (Noise) Regulations 1997 (WA)</i>
NOx	Oxides of nitrogen
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.

## 2. Application details and amendment description

Australian Gold Reagents Pty Ltd (the Licence Holder) applied for a licence amendment to Licence L6110/1990/13 on 13 November 2019. The Licence authorises emissions and discharges from a prescribed premises; a category 31 chemical manufacturing plant located on a portion of Lot 20 on Diagram 78086, Kwinana Beach Road, Kwinana (the premises).

Following the initial application, the Licence Holder changed the licence amendment application via email on 22 November 2019. The revised amendment application seeks to amend/remove some of the emission targets and limits specified on the licence and change start up conditions specified on the licence.

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend Licence L6110/1990/13.

Table 2 lists the documents submitted during the assessment process.

**Table 2: Documents and information submitted during the assessment process**

Document/information description	Date received
Licence amendment application dated 12 November 2019	13 November 2019
Email from Stephanie Felstead retracting part of the amendment application	22 November 2019

The guidance statements that have informed the assessment and decision outlined in this Amendment Report are listed in Appendix 1.

## 3. Premises Background

The Licence Holder operates a liquid and solid sodium cyanide plant in the Kwinana Industrial Area. The premises has two liquid sodium cyanide plants and one solid sodium cyanide plant. There is a Ministerial Statement (MS 0700) issued for the premises, which was amended on 8 November 2019 to allow an increase of production.

## 4. Licensing History

Table 3 provides the recent licensing history for L6110/1990/13.

**Table 3: Recent amendments**

Instrument	Issued	Amendment
L6110/1990/13	21/03/2014	Licence reissue
L6110/1990/13	29/04/2016	Notice of amendment of licence expiry dates, extending expiry date to 27 March 2022
L6110/1990/13	06/02/2017	Amendment Notice to change the registered business address of the Licence Holder.

## 5. Location and receptors

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

**Table 4: Receptors and distance from premises boundary**

Residential and sensitive premises	Distance from Prescribed Premises
Owner/Occupier of the bottle shop near Wells Park	1,200m
Medina, residential area to the east	2,000m
Calista, residential area to the east	2,400m
East Rockingham, residential area to the south	3,000m

Table 5 below lists the relevant environmental receptors in the vicinity of the prescribed premises which may be receptors relevant to the proposed amendment.

**Table 5: Environmental receptors and distance from activity boundary**

Environmental receptors	Distance from Prescribed Premises
<i>Cockburn Sound (State Environmental (Cockburn Sound) Policy 2015)</i>	1 km to the west

## 6. Amendment description

The Licence Holder has applied for the following changes to the licence:

1. Remove the word “target” from condition 2 and as a consequence remove the requirement to provide an exceedance report to the CEO when a target has been exceeded.
2. Remove the target for oxides of nitrogen (NO<sub>x</sub>) from Table 3 of the Licence.
3. Remove the limit and requirement to report annual combined cyanide emissions for the two emission points.
4. Change of the start up conditions to adjust the 50 to 215 degrees arc to 70 to 215 degrees arc in line with the Human Health Risk Assessment (HHRA) recently provided as part of a Part IV process under MS 0700.
5. Remove the pH target for wastewater delivered to CSBP Limited.
6. Remove the reference to pH in Condition 18 as per information under Condition 17.
7. Inclusion of production capacity in the licence.
8. Include reporting of data recorded under condition 15 as part of the annual report required by condition 6.

As part of any amendments, the Delegated Officer has also:

- consolidated the previous Amendment Notices in the licence as listed in Table 3;
- removed conditions that are redundant or out of date; and
- made administrative and format updates to the licence conditions.

The following section provides further detail on the amendments listed above.

1. Remove requirement for target exceedance reports

The Licence Holder has requested this change to reduce the administrative burden on the Licence Holder when targets are exceeded. The Licence Holder notes that it will still notify the Director before 5pm the next usual business day of a target exceedance, as required per condition 1, but believes that the requirement to prepare an exceedance report is not necessary. Furthermore, if several target exceedances cause the Department to request additional information from the Licence Holder then this information will be provided.

2. Removal of target for NOx

The licence currently contains condition (condition 11):

*The Licensee shall, while the SCP1 and SCP2 and the Solids Plant are operating in steady state balance, ensure that the emitted wastes do not exceed the parameters specified in Table 3.*

Table 3: Atmospheric Emission Limits

Parameter	Licensed Emissions g/s				
	SCP1 & SCP2 Incinerators		Solids Plant		Annual average total for all stacks
	Limit	Target	Limit	Target	Limit
NOx equal to or more than 95% operating time over the previous 12 months	5.0	<4.5	n/a	n/a	n/a
NOx equal to or less than 5% of operating time over the previous 12 months	12.0	5.0	n/a	n/a	n/a
Ammonia	n/a	0.60	n/a	1.5	n/a
Total Cyanide	0.58	0.35	0.58	0.35	1.0

The Licence Holder has stated that the targets for NOx do not add additional emission controls to reduce environmental risks during operations and are causing administrative burden on the Licence Holder. The rolling average limits for 95% and 5% of the time ensure that the emissions are already managed at a level lower than 5.0 g/s under normal circumstances.

3. Remove the limit and requirement to report annual combined Total Cyanide emissions for the three emission points.

The Licence Holder has stated that compliance with the limits and/or targets for each individual plant specified under condition 11 (Table 3) provides sufficient control for the plants. It is also noted that the annual average combined total for all stacks is lower than the three individual limits of the three stacks combined.

4. Change of the start-up conditions to adjust the 50 to 215 degrees arc to 70 to 215 degrees arc in line with the HHRA recently provided as part of an EP Act Part IV process.

On 8 November 2019 the Licence Holder's Ministerial Statement 0700 was amended by the Chairman of the Environmental Protection Authority. As part of this amendment the Licence Holder provided air emission modelling and a HHRA that was reviewed by a toxicologist. A recommendation from the HHRA was to adjust the start-up arc as described in condition 12 of the licence to ensure that the wind during start-up under low wind speeds does not bring the emissions to Wells Park. This is a slightly tighter control and a reduction of risk of potential negative impact.

5. Remove the target for pH for the wastewater delivered to CSBP Limited.

The wastewater from the premises is delivered to CSBP Limited to be processed with the wastewater from CSBP in the nutrient stripping wetlands prior to discharge to the Sepia Depression via the Sepia Depression Ocean Outlet Landline (SDOOL). CSBP Limited is mentioned in the Ministerial Statement for the SDOOL (MS 665) as an industrial premises that is allowed to discharge to the SDOOL. The Licence Holder is not mentioned as an industrial premises in MS 665. The Licence Holder currently monitors the pH of the wastewater delivered to CSBP Limited to ensure it does not cause issues with the wetlands. There are no management controls linked to the pH target in the Licence.

6. Remove the reference to pH in condition 18 as per information under Condition 17.

By removing the target for pH the requirement to record the monitoring of pH can be removed too.

7. Inclusion of production capacity in the licence.

The Licence Holder has requested to have the production capacity for premises included in the licence. Total maximum production of all plants combined is 136,000 tonnes per annum.

8. Include reporting of data recorded under condition 15 as part of the annual report required under condition 6.

Condition 6 states that an annual report needs to be provided and specifies what information needs to be included. However it does not state that the data recorded under Condition 15 needs to be provided with the annual report. Condition 15 requires the Licence Holder to record the date, time, duration and the action taken in accordance with the approved management plan for each shut-down and start-up and states that the information needs to be provided in the annual report. It would be clearer to include all reporting data under Condition 6 and remove the reference to the annual report in Condition 15.

## 7. Decision

This section details the Delegated Officer's reasons and decisions regarding the requested licence amendments.

1. The Delegated Officer accepts this reasoning and is of the opinion that the environmental risk does not change if the Licence Holder no longer needs to prepare and submit exceedance reports for target exceedances. The Delegated Officer is of the view that condition 2 can be amended to no longer require exceedance reports for targets.
2. As there are no management controls prescribed in the licence conditions related to a target exceedance the Delegated Officer agrees with the Licence Holder that the targets do not add any emission controls. The Delegated Officer has therefore amended condition 11 to remove the targets for NO<sub>x</sub>.
3. The Delegated Officer notes that the current individual stack limit for Total Cyanide has been set at 0.58 g/s and that the annual average total limit for all stacks combined is 1.0 g/s. As the combined limit is less than twice the limit of a single stack it may be deemed *ultra vires*. The Delegated officer agrees that the continuous limit for Total Cyanide is preferred and that the column 'Annual average total for all stacks' in Table 3

(condition 11) should be removed. This includes the removal of the combined limit of 1.0 g/s.

4. The Delegated Officer agrees that the change of the arc is an improvement and therefore this can be amended. As the wording of the current condition is not 100% clear the condition has been rewritten to ensure it reflects the intention including the proposed change by the Licence Holder.
5. The Delegated Officer agrees that the removal of the pH target for wastewater discharged to CSBP Limited does not change the risk to the environment as the final discharge to SDOOL is monitored for pH in accordance with the requirements of MS 665. The Delegated Officer therefore agrees to remove the pH target associated with the wastewater discharged to CSBP Limited.
6. In line with the decision under point 5 the Delegated Officer agrees to remove the reporting requirement for pH monitoring of the wastewater discharge to CSBP Limited.
7. The Delegated Officer considers the inclusion of the production capacity an administrative matter and has therefore approved this request.
8. The Delegated Officer considers the inclusion of reporting of the data under Condition 15 in Condition 6 an administrative matter and has therefore approved this request.

Previous Amendment Notices listed in Table 3 will also be consolidated into the amended licence along with the changes summarised in Table 6.

**Table 6: Other licence amendments**

Condition No.	Proposed amendments
-	Definition of Director replaced with CEO and updated Department's name and address.
-	Changes to groundwater monitoring requirements to include 3 additional off-site wells and changes to parameter suite.
9	This condition was not required as stack testing is only able to be conducted according to the required standard under normal steady operation. Condition was already marked for removal in the licence. Condition has been removed.
20, Attachment 3	The Annual Audit Compliance Report condition has been updated to reflect the new form used by DWER, which can be downloaded from DWER's website. Attachment 3 is therefore removed.
Attachment 1	Premises map updated with coordinates as the premises boundary is not the same as a cadastral lot but part of a lot.

## 8. Consultation

The draft Amendment Report and the draft Amended Licence were sent to the Licence Holder for comment on 9 January 2020. The Licence Holder provided comments as follows:

1. Correct 'Environment' 'Environmental' when referring to DWER;
2. Remove the reference to 'total emission limit' in the definitions as that has been deleted from Table 3; and
3. Delete condition 9 as the intent is captured in condition 11. If condition 9 is to be retain, delete the wording in the condition within brackets.

The Delegated included the corrections identified in points 1 and 2.

In respect of point 3, condition 9 reads *"The Licensee shall only conduct the manual tests required by condition 8 when the plant is operating at steady state balance (to be removed as this is already captured under the method)."* Condition 9 was retained in the licence, however the Delegated Officer agreed to delete the bracketed wording in the condition.

## 9. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that an Amended Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

**Chris Malley**  
**A/Manager, Process Industries**

*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 L6110/1990/13	L6110/1990/13	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
2	Licence amendment application	-	DWER records (DWERDT223344)
3	Email from Stephanie Felstead regarding changing the amendment application dated 22 November 2019	-	DWER records (A1844052)
4	Ministerial Statement 700	MS 700	accessed at <a href="http://www.epa.wa.gov.au/">www.epa.wa.gov.au/</a>
5	DER, July 2015. <i>Guidance Statement: Regulatory principles</i> . Department of Environment Regulation, Perth.	DER 2015a	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
6	DER, October 2015. <i>Guidance Statement: Setting conditions</i> . Department of Environment Regulation, Perth.	DER 2015b	
7	DER, May 2016. <i>Guidance Statement: Publication of Annual Audit Compliance Reports</i> . Department of Environment Regulation, Perth.	DER 2016a	
8	DER, February 2017. <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.	DER 2017b	
	DWER, June 2019. <i>Guideline: Decision Making</i> . Department of Water and Environmental Regulation, Perth.	DWER 2019a	
9	DWER, June 2019. <i>Guideline: Industry Regulation Guide to Licensing</i> . Department of Water and Environmental Regulation, Perth.	DWER 2019b	