Amendment Report

Application for Licence Amendment

Part V Division 3 of the Environmental Protection Act 1986

Licence Number L8780/2013/1

Licence Holder APT Parmelia Pty Ltd

ACN 078 902 397

File Number 2013/003894

Premises Mondarra Gas Storage Facility

Part of Lot 356 and Lot 123 on Deposited Plan 2993

MILO WA 6525

As defined by the coordinates in Schedule 2 of the Revised

Licence

Date of Report 2 June 2022

Decision Revised licence granted

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1. Decision summary

Licence L8780/2013/1 is held by APT Parmelia Pty Ltd (Licence Holder) for the Mondarra Gas Storage Facility (the Premises), located within Lots 356 and 123 on Deposited Plan 2993, Milo, approximately 20km southeast of Dongara.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Licence L8780/2013/1 has been granted.

The Revised Licence issued as a result of this amendment supersedes the existing Licence previously granted in relation to the Premises. The Revised Licence has been granted in a new format with existing conditions being transferred, but not reassessed, to the new format (refer to Table 7)

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at https://dwer.wa.gov.au/regulatory-documents.

2.2 Overview of the Premises and application summary

The Premises operates as a gas storage facility whereby gas taken from the Dampier-Bunbury Natural Gas Pipeline is injected into the depleted Mondarra reservoir for storage. Gas can later be extracted for transport to the market (Perth region) via the Parmelia Gas Pipeline (PGP) or Dampier to Bunbury Natural Gas Pipeline (DBNGP).

Injection and withdrawal of gas is estimated to be 70 terajoules per day (TJ/day) and 150TJ/day respectively via three operational wells located directly south of the processing facility; Mondarra 6 (M6), Mondarra 8 (M8) and Mondarra 9 (M9). Prior to transfer to the PGP or DBNGP, gas withdrawn from the reservoir undergoes conditioning to remove liquids (water and condensate).

On 9 March 2022, the Licence Holder submitted an application to the department to amend Licence L8780/2013/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The amendment relates to the receipt and handling (consolidation) of minor quantities of liquid waste and spent batteries prior to collection from site for disposal by a licenced controlled waste contractor. The amendment will allow the Premises to be listed as a transit facility under the Environmental Protection (Controlled Waste) Regulations 2004.

Waste proposed to be accepted at the Premises is generated at other sites operated by the Licence Holder and will be limited to the following types and quantities:

Table 1: Waste types and quantities to be accepted on the Premises

Waste type ¹	Description of waste	Quantity
J120 - Waste oil and water mixtures or emulsions, and hydrocarbon and water mixtures or emulsions	Condensate, water and detergent mix	1,500 litres per year
M130 - Non-halogenated organic chemicals	Coolant	450 litres per year
D221 - Used lead acid batteries	Used lead batteries	2 - 10 batteries per year

Waste type ¹	Description of waste	Quantity	
J170 – Used oil filters	Used oil filters (drained or undrained)	300kg per year (30 at any one time)	

Note 1: As described in the Environmental Protection (Controlled Waste) Regulations 2004.

Waste will be stored in an existing undercover bunded area on the Premises and only stored temporarily (up to 6 months) prior to being transported offsite for disposal.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guidance Statement: Risk Assessments* (DER 2017).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 2 below. Table 2 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Contaminated waste	Spills or leaks during storage and consolidation of waste	Direct discharge to land and overland runoff potentially contaminating soil or impacting Ejarno Spring. Seepage to groundwater	Minor volumes of waste to be accepted onsite. Waste to be stored temporarily (up to 6 months).
Stormwater contaminated with waste	Stormwater in contact with contaminated waste		Waste to be stored and consolidated in existing concrete bunded area with capacity to stored up to 10,000 litres. Bund situated undercover to prevent stormwater ingress. Spills kits available to clean up incidental spills. Groundwater monitoring occurs on an annual basis and includes monitoring for total recoverable hydrocarbons.
			Used oil filters containing free liquids to be stored in a leak-proof container on a concrete hardstand.

3.1.2 Receptors

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder's from its

assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 3 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (Guidance Statement: Environmental Siting (DER 2016)).

Table 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Closest residential receptor	1.4km from eastern edge of the Premises boundary
Environmental receptors	Distance from prescribed activity
Threatened/Priority fauna	Carbaby's cockatoo (<i>Calyptorhynchus latirostris</i>) recorded within in 350m of the waste storage area.
Ejarno Spring (groundwater dependent ecosystem)	1.4 km west of the waste storage area (see
Potential Aboriginal site of significance (not currently a registered site)	
Groundwater - located within the Arrowsmith Groundwater Area, Sub-areas Eneabba Plains and Twin Hills. Yarragadee-North aquifer, proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> . Superficial aquifer - Swan aquifer.	Standing water level encountered at approximately 36 m (based on data from the North Monitoring Bore located approximately 250m southwest of the storage area and 1.2km east of Ejarno Spring in March 2019). Beneficial uses include pastoral and mining uses.

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 4.

The Revised Licence L8780/2013/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e., Category 10 activities including the acceptance of specified waste.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 4. Risk assessment of potential emissions and discharges from the Premises operation

Risk Event					Risk rating ¹	Licence		
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Storage and consolidation of contaminated waste	Spills and leaks	Direct discharge to land and overland runoff potentially contaminating	ff Groundwater inating 36 mbgl	Refer to Section 3.1.1	C = Minor L = Rare Low Risk	Y	Condition 1, 2, 3, 4, 14, 20 Existing conditions relating to groundwater monitoring (condition 13)	Conditions 14 and 20 relating to monitoring (and reporting) of waste accepted onto the Premises and condition 2 and 2 requiring the removal of unauthorised wastes have been applied to verify waste acceptance limits are being adhered to.
	Stormwater contaminated with waste	soil or impacting Ejarno Spring. Seepage to groundwater	Ejarno Spring 1.4km west		C = Minor L = Rare Low Risk	Y		

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Guidance Statement: Risk Assessments (DER 2017).

Note 2: Proposed Licence Holder's controls are depicted by standard text. Bold and underline text depicts additional regulatory controls imposed by department.

4. Consultation

Table 5 provides a summary of the consultation undertaken by the department.

Table 5: Consultation

Consultation method	Comments received	Department response	
Licence Holder was provided with draft amendment on 24/05/2022	Confirmed that additional waste type will be received (J170) in leak proof containers and stored on a concrete hardstand.	Additional waste type included in the amended licence with controls as applied by the Licence Holder.	

5. Conclusion

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

In determining to grant the Revised Licence, the Delegated Officer has noted that only minor quantities of waste will be accepted onto the Premises and stored in an existing bunded containment area. Also noting that there is considerable separation to sensitive receptors including underlying groundwater and Ejarno Spring, the Delegated Officer has determined that the environmental risk of the proposal is low.

In granting the Revised Licence, the Delegated Officer has also determined to:

- update the format and appearance of the licence;
- remove redundant conditions and include additional conditions considered necessary for the effective administration of the licence (i.e. record keeping and reporting requirements);
- revise licence condition numbers and realign condition numbers for numerical consistency; and
- transfer all relevant existing regulatory controls and conditions to the replacement licence, and update the format of these conditions where necessary to reflect the current licence format and the specific operations and infrastructure on the Premises.

Obligations on the Licence Holder have not changed as a result of the updates and changes made.

5.1 Summary of amendments

Table 6 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Licence as part of the amendment process.

Table 6: Summary of licence amendments

Condition no.	Proposed amendments
1	Condition added specifying the type and volume of waste to be accepted onto the Premises. The conditions also sets operational specifications and acceptance requirements to ensure waste material is stored and handled to minimise environmental risk.
	Condition is aligned with proposed Licence Holder controls.
2 - 3	Conditions added setting requirements for waste that does not meet the acceptance criteria

	of condition 1 (i.e. it is removed from the Premises).		
4	Amended to specify the operational infrastructure requirements for containment infrastructure associated with the storage of waste (i.e. the Hazardous Materials Bund) to ensure risk of waste entering the environment is minimised.		
14	Condition added specifying requirements for recording waste volumes accepted onto the Premises to verifying compliance with the quantity limits set under condition 1.		
20	Condition amended to ensure that waste acceptance records are reported in the Annual Environmental Report (AER).		
Definitions	Inclusion of definitions for "Controlled Waste Regulations", "Delivery vehicle" and "waste type" to support the additional conditions above.		

A summary of administrative changes made to transfer the licence to the new format are detailed blow.

Table 7: Administrative changes made to the licence

Existing condition	Replacement licence condition	Description
N	Expiry Date: 26 January 2030	In accordance with the Notice of Amendment of Licence Expiry Dates (29/04/2016)
1.1.1, 1.1.2	Definitions	Definitions have been removed where no longer relevant or updated consistent with the current department licence format and moved to the back of the licence.
1.1.3, 1.1.4	Interpretation	Reference to Australian or other standard versions has been included within the interpretation section of the licence.
1.2.1	Condition 1 and Table 2	Conditions relating to unauthorised emissions and works have been removed as these requirements are considered redundant as they can be managed under the general provisions of the EP Act.
1.2.2	N/A	Requirements for maintenance of pollution control equipment, and storage and spill clean up requirements for
1.2.3		environmentally hazardous materials have been incorporated into specific operational requirements which reflect activities
1.2.4		and infrastructure on the Premises. Obligations on the licence holder have not changed as a result, rather have
1.2.5		been made sufficiently clear and enforceable. Storage of materials above placard quantities adequately regulated by the <i>Dangerous Goods Safety Act 2004</i> .
		Spills/discharges of materials are also regulated via the Environmental Protection (Unauthorised Discharges) Regulations 2004.
1.3.1 (Table 1.3.1)	Condition 4 (Table 2)	Revised to current licensing format.
1.3.2	Condition 5	Incorporated into Condition 4 (Table 2). No change to operational requirement.
1.3.3	Condition 15	No change to condition, only numbering change.
2.1.1	N/A	Requirement to investigate target or limit exceedances removed as the requirements are considered redundant as there are no targets of limits specified in the licence.

Existing condition	Replacement licence condition	Description		
2.2.1 (Table 2.2.1)	Condition 5 (Table 3)	Revised to current licensing format.		
2.2.2 (Table 2.2.3)	Condition 6 (Table 4)	No change to condition, only numbering change.		
2.3 – 2.6, 3.9 and 4	N/A	Redundant conditions, removed from licence.		
2.7, 2.8	N/A	Remove from licence as adequately covered by s.49 of the EP Act and Environmental Protection (Noise) Regulations 1997.		
3.1.1	Condition 12 (Table 12) Condition 13 (Table 6)	Revised to current licensing format. No change to obligations, conditions incorporated into the tables specifying monitoring requirements.		
3.1.2	Condition 7	Revised to current licensing format.		
3.1.3	N/A	Redundant condition due to ambiguity in requirement. Removed from licence. Monitoring requirements have been set throughout the licence. Overall Premises production is reported in the AACR.		
3.2.1 – 3.2.3 Conditions 9 (Table 5), 10 and 11		Revised to current licensing format.		
3.8.1 (Table 3.8.1)	Condition 13 (Table 6)	Monitoring locations for measuring flow into the Evaporation Pond have been specified more accurately to remove ambiguity.		
3.8.2 (Table 3.8.2)	Condition 12 (Table 12)			
3.8.3 (Table 3.8.3)				
5.1.1 Conditions 18 and 19		Conditions relation to complaints, records and annual reporting have been updated into the current licence format.		
5.1.3	Condition 17	reporting have been updated into the current licence format.		
5.1.4	Condition 16			
5.1.2	N/A	Condition relating to awareness of the conditions of the licence has been removed as it is not enforceable and therefore redundant.		
5.2.1 & 5.2.1	Condition 20 (Table 8)	Revised to current licensing format and to reflect changes in the licence.		
5.3.1 (Table 5.3.1)	Condition 21 (Table 9)	Condition relating to notification of pollution events removed as it duplicates reporting requirements already required under section 72 of the EP Act (duty to notify CEO of discharges of waste) therefore the requirements are considered to be redundant.		
Schedule 1: Maps	Schedule 1: Maps	Maps updated.		
Schedule 2: Reporting & notifications	N/A	Redundant attachment. Deleted from Licence. Forms accessed at www.dwer.wa.gov.au		

References

- 1. Department of Environment Regulation (DER) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
- 2. DER 2017, Guidance Statement: Risk Assessments, Perth, Western Australia.
- 3. DER 2015, Guidance Statement: Setting Conditions, Perth, Western Australia.
- 4. APA 2021, Mondarra Gas Storage Facility Operations Environment Plan (MON.MOND-PL-HSE-001), APA.