Government of Western Australia
Department of Water and Environmental Regulation

Amendment Report

Application for Licence Amendment

Part V Division 3 of the *Environmental Protection Act 1986*

Licence Number	L8759/2013/1
Licence Holder	Chevron Australia Pty Ltd
ACN	086 197 757
File Number	DWERVT16517
Premises	Wheatstone Waste Management Site Legal description - Part of Lot 1577 on Deposited Plan 72843 Certificate of Title Volume 2779 Folio 398 As defined by the coordinates in Schedule 2
Date of Report	18 February 2025
Decision	Revised licence granted

Grace Heydon

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Grace Heydon

MANAGER WASTE INDUSTRIES

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

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1. Decision summary

Licence L8759/2013/1 is held by Chevron Australia Pty Ltd (licence holder) for the Wheatstone Waste Management Site (the premises), located at part Lot 1577 on Deposited Plan 72843, Talandji.

This Amendment Report documents the assessment of potential risks to the environment and public health from the storage of additional liquid and solid waste at the Premises. As a result of this assessment, Revised Licence L8759/2013/1 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises. The Revised Licence has been granted in the new format.

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 Amendment summary

On 22 November 2024, the Licence Holder submitted an application to the department to amend Licence L8759/2013/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- An increase from the current licenced Category 61 design capacity of 10,000 to 23,000 tonnes per annual period; and
- Acceptance of new type of waste at the Premises; Special Waste Type 3.

This amendment encompasses changes to both Category 61 and Category 61A activities from the existing licence. No changes to the aspects of the existing licence relating to Category 57 have been requested by the Licence Holder.

Table 1 below outlines the proposed changes to the existing licence.

Table 1: Proposed design or throughput capacity changes

Category	Current design capacity	Proposed design capacity	Description of proposed amendment
61	10,000 tonnes per annual period	23,000 tonnes per annual period	Increasing, industrial wash water component from 5,000 tonnes per annual period to 12,000 tonnes per annual period. Increasing Hazardous Waste (liquid) component from 4,500 tonnes per annual period to 10,500 tonnes.
61A	40,000 tonnes per annual period	No change	Additional of Special Waste Types 3 (PFAS contaminated wastes) acceptance.

2.3 Overview of premises

In accordance with the existing Licence the premises acts as a waste transfer station (WTS)

accepting a variety of waste types for storage, processing, or consolidation for transportation off site. Waste delivered to the premises is inspected to confirm its category, recorded and directed to its designated area for unloading.

Individual waste streams are stored in designated storage areas, includin, solid and liquid hazardous wastes and non-hazardous solid wastes. Non-hazardous solid wastes arrive in containers and depending on the nature of the material are either unloaded onto the WTS floor or loaded directly into a B-Double, Hooklift, Skip bin or similar, stored in its existing container.

Containers that hold waste at the Site include but are not limited to the following:

Solid/hazardous wastes:

- Skip bins;
- Hook-lift bins;
- Sea containers;
- Reefers (freezer sea containers);
- Mobile garbage bins (MGBs);
- Steel framed cages;

Liquid/hazardous wastes:

- Intermediate bulk containers (IBCs);
- Barrels and self bunded pallets; and
- Isotainers.

In addition to being stored in the above containers, hazardous wastes at the premises are stored in a bunded area, on a bunded pallet or self-bunded. The bunds are designed in accordance with relevant standards and constructed of impermeable material such as concrete or high-density polyethylene (HDPE) plastic.

2.4 Proposed amendment

The following information has been summarised from the application.

2.4.1 Amendment to Category 61 production design capacity

An increase to the Industrial Wash Water component within the currently permitted acceptance volumes for liquid wastes has been requested, from 5,000 tonnes per annual period to 12,000 tonnes per annual period. This is due to the wastewater tank having produced larger volumes of industrial wash water over time than previously described. During rain periods, much larger volumes of industrial wash water are produced (i.e. in FY2021 there was 4,300 tonnes of water from first flush sumps that were redirected to the wastewater tank).

An increase to the Hazardous Waste (liquid) component within the currently permitted acceptance volumes for liquid wastes has been requested, from 4,500 tonnes per annual period to 10,500 tonnes per annual period due to the addition of M270 (per- and poly-fluoroalkyl substances (PFAS)) where up to 6,000 tonnes may be received annually.

The primary source of the PFAS-impacted wastewater is stormwater which collects in the Class 2 drainage system of the liquefied natural gas (LNG) Plant. The historical use of PFAS containing firefighting foams has potentially impacted parts of the drainage system. It is suspected that low concentrations of PFAS may leach from the walls of impacted sumps when in contact with stormwater. In addition to stormwater, other sources of clean water such as fire water (not containing firefighting foam) and demineralised water (produced by the site-based water treatment system) may be directed to these sumps from time to time. Where there is an identified potential for contamination, PFAS- impacted wastewater is analysed using a source-specific sampling plan. Wastewater that is found to meet specification for treatment is processed in the filtration skid and containerised treatment system on the Licence's Holder's other

premises being the Wheatstone LNG Project (Stage 1 and 2) which is regulated by DWER under Licence L9225/2019/1. Wastewater that will not meet the specification for treatment at the Wheatstone LNG Project treatment system will be transported to the WTS at the premises before being disposed off-site at a licensed facility.

2.4.2 Amendment to existing Category 61A

The Licence Holder requests the acceptance of Special Waste Type 3 at the premises to faciliate the acceptance of 13.5 tonnes per year of PFAS contaminated solid waste. It is estimated that 3.5 tonnes of used filter cartridges and 10 tonnes of filter media (sand/gravel) will be received annually from the filtration skid and containerised treatment system (located on the L9225/2019/1 prescribed premise). The requested volume is within the existing assessed premises capacity of 40,000 tonnes per annual period.

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
Dust	Liquid Waste acceptance, handling (during unloading), storage and loading for distribution to clients locally. Vehicle movements	Air/windborne pathway	Premises speed limit. The Delegated Officer is aware that the provisions of section 49 of the EP Act are sufficient to regulate dust emissions during operation.
Noise		Air/windborne pathway	The Delegated Officer is aware that the activities at the Premises will need to comply with the *Environmental Protection (Noise) Regulations 1997.*
Odour		Air/windborne pathway	The Delegated Officer is aware that the provisions of section 49 of the EP Act are sufficient to regulate odour emissions during operation.

Emission	Sources	Potential pathways	Proposed controls
Spillages/ Breach of containment causing discharge to land/ Contaminated runoff as a result of rainwater interacting with any liquid waste spilt or tracked out of the storage area	Industrial wash water PFAS liquid waste	Overland runoff and infiltration to groundwater	Adequate existing storage capacity to accommodate for the increased volumes of wastewater. Storage within sealed ICBs or ISO tanks and within bunded area. Liquid wastes accepted at the premises will be stored in containers such as Intermediate Bulk Containers (IBCs) barrels/drums, sludge bins and isotainers which in additional are to be stored within a dedicated bunded hardstand pad. Stored temporarily prior to disposal (waiting for timely sampling/analysis, classification and reporting). Licence condition 5 requires adequate management of stormwater. Licence condition 1 requires the maintenance of drains and sumps to ensure the continued performance of the stormwater and drainage systems. Licence condition 4, table 3 restricts how liquid waste should be received and stored onsite- only allows storage in designated bins and bunded area prior to transport offsite. Licence condition 2, table 2 allows for the types of waste that could be accepted at the premises Licence condition 1, table 1 requires the storage areas to be bunded concrete lined impervious hardstand, with a permeability of less than 1 x 10-9 m/s and a drainage gradient of 0.5% minimum
Contaminated water	Disposal of solid waste from Filtration skid and containerised treatment system	Overland runoff and infiltration to groundwater	The storage areas are bunded to divert stormwater away into existing stormwater management infrastructure. The bunded storage areas all have a dedicated sump to collect and retain any contaminated stormwater. Licence condition 1 requires the maintenance of drains and sumps to ensure the continued performance of the stormwater and drainage systems. Licence condition 1, table 1 requires the storage areas to be bunded concrete lined impervious hardstand, with a permeability of less than 1 x 10^{-9} m/s and a drainage gradient of 0.5% minimum

Emission	Sources	Potential pathways	Proposed controls
			Filter cartridges will be stored in impervious containers (such as IBC containers with their tops removed) that are managed to prevent rain/water ingress. Filter media will be stored in skip bins and properly covered. Management of all waste streams (including discharge, reuse and recycling) will be conducted in compliance with: • Relevant licences under Part V of the Environmental Protection Act 1986; • Relevant approvals from the Department of Health; • Environmental Protection (Controlled Waste) Regulations 2004. PFAS contaminated waste (Special Category 3 solid waste) will be handled, consolidated and sorted, and stored within a bunded area at the Waste Transfer Station. Special Waste Type 3 (in the form of used filters and filter media (containing PFAS solid waste from the Oleology skid)) will be transported in impervious containers to the Waste Management Site and will be stored / contained using bunded storage areas where the bund is: • impervious and chemically resistant • protected from rainfall (where required) • kept dry and clear of sediment, debris and water • inspected regularly. Waste receptacles will be labelled to identify waste stream. Solid and liquid PFAS waste is managed through an approved waste service provider (Pilbara Environmental Services), following the process of lab analysis for waste classification and then disposal at a liquid waste management facility or at an approved landfill.

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**
Wheatstone accommodation camp	Adjacent to the west of the Premises
Nearest Residential receptors (Town of Onslow)	16 km north of the Premises
Industrial Premises – Onslow Salt	Salt ponds located 5km north of the Premises
Industrial premises – Macedon Gas Plant	7km northwest of the Premises
Environmental receptors	**Distance from prescribed activity**
Groundwater	Local groundwater is highly saline. Natural depth to groundwater is relatively shallow. Groundwater in the project area is located at a depth of 2 m below ground level (mBGL). The site has been built up to approximately 6m AHD. Groundwater quality is brackish to hypersaline. No beneficial uses of groundwater in the site vicinity. There is no drinking water source in the area.

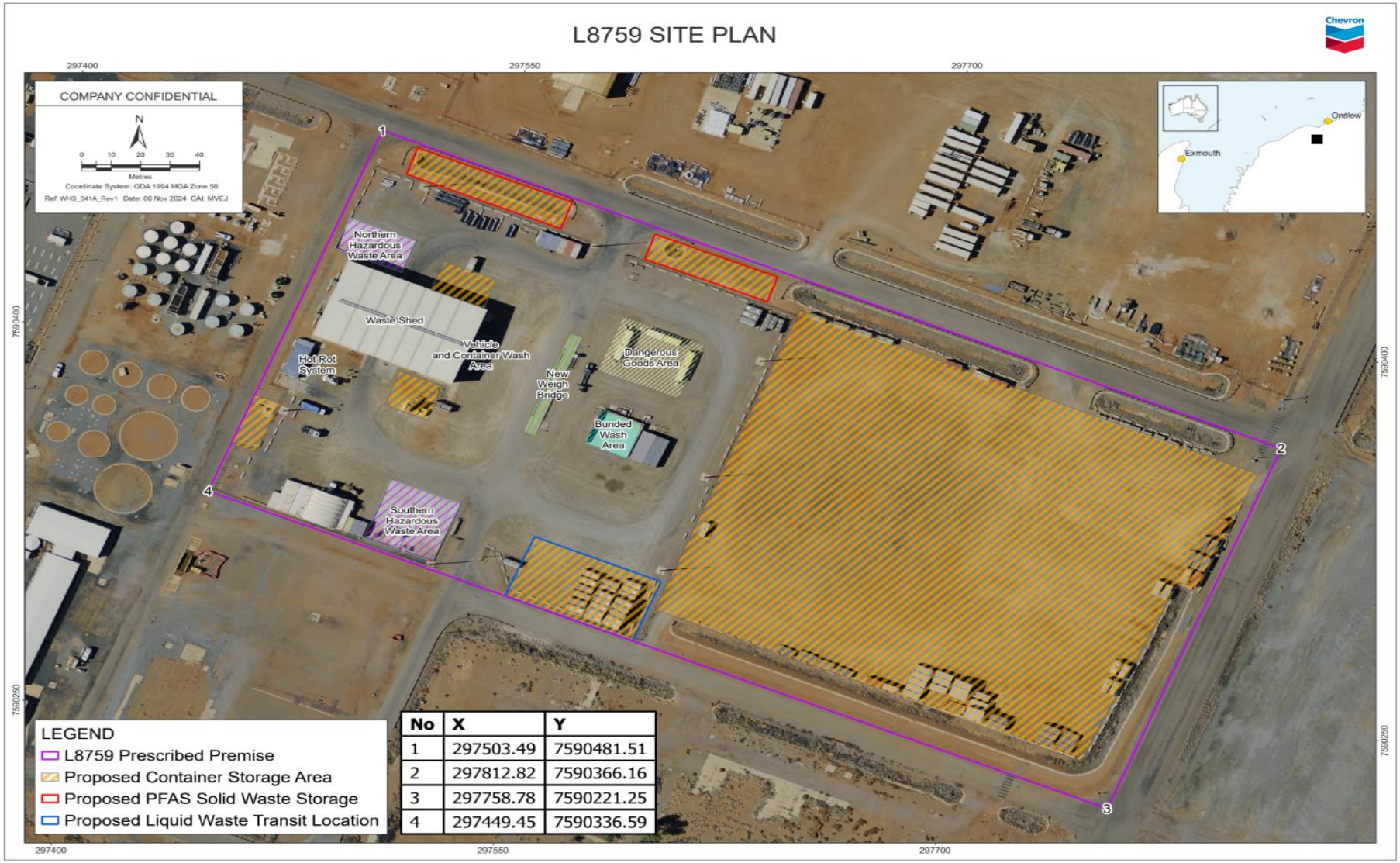

Figure 1: Site plan

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 L8759/2013/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. prescribed premises activities associated with categories 61 defined under the EP Regulations.

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 during operation

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions[2] of Licence	Justification for additional regulatory controls
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence Holder's controls**				
Lift-off from transfer of control waste. Heavy vehicle movements	Dust	Air/windborne pathway causing impacts to health and amenity	Human and environmental receptors listed in Table 3	Refer to Table 2	C = Slight L = Unlikely **Low Risk**	Y	N/A	N/A
Noise from control waste drop-off, storage and removal and Heavy vehicle movements	Noise				C = Slight L = Unlikely **Low Risk**	Y	N/A	N/A
Storage of waste oils	Odour				C = Slight L = Unlikely **Low Risk**	Y	N/A	N/A
	Spillages/ Breach of containment causing discharge to land/ Contaminated runoff as a result of rainwater interacting with any liquid waste spilt or tracked out of the storage hardstand	Overland flow and subsurface seepage causing impacts on human health, soil and groundwater quality	Human and environmental receptors listed in Table 3	Refer to Table 2	C = Moderate L = Unlikely **Medium Risk**	Y	Condition 1, 2, 3, 4, 5, 10, 12, 13, 14, 15 and 16.	Condition 4, Table 3 allows for the receipt, handling and storage of Special Waste Type 3 prior to off-site disposal. No additional licence conditions for operations are required for the amendment.

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 12/02/2025	Licence Holder responded on 13/02/2025 advising they are happy to waive the comments period and have the Licence issued at your earliest convenience.	Noted.

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.

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 Revised Licence as part of the amendment process.

Table 6: Consolidation of Licence conditions in this amendment

Existing condition	Proposed amendments
Cover page	Category 61 design capacity changed from 10,000 to 23,000 tonnes.
Condition 2 Table 2	Addition of special waste type 3 (M270) to Waste Acceptance at rate of 13.5 tonnes per year
Condition 2 Table 2	Addition of special waste type 3 to hazardous liquid waste. Changed Hazardous Waste (liquid) acceptance rate from 4,500 tonnes per annual period to 10,500 tonnes per annual period due to the addition of special waste type 3.
Condition 2 Table 2	Changed Industrial wash water design limit from 5,000 tonnes to 12,000 tonnes per annual period.
Condition 4 Table 2	Addition of special waste type 3 (M270) to Waste processing.
Schedule 1: Maps.	New site plan figure 2 showing the location of the PFAS solid waste storage area.

References

1. DER July 2015. *Guidance Statement: Regulatory principles*. Department of Environment Regulation, Perth. Accessed at www.dwer.wa.gov.au

2. DER, October 2015. *Guidance Statement: Setting conditions*. Department of Environment Regulation, Perth. Accessed at www.dwer.wa.gov.au

3. DER, August 2016. *Guidance Statement: Licence duration*. Department of Environment Regulation, Perth. Accessed at www.dwer.wa.gov.au

4. DER, November 2016. *Guidance Statement: Environmental Siting*, Perth, Western Australia. Accessed at www.dwer.wa.gov.au

5. DER, February 2017. *Guidance Statement: Risk Assessments*. Department of Environment Regulation, Perth. Accessed at www.dwer.wa.gov.au

6. DWER, June 2019. *Guideline: Decision Making*. Department of Water and Environmental Regulation, Perth. Accessed at www.dwer.wa.gov.au

7. DWER, June 2019. *Guideline: Industry Regulation Guide to Licensing*. Department of Water and Environmental Regulation, Perth. Accessed at www.dwer.wa.gov.au