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Application for Licence Amendment

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

Licence Number	L8765/2013/1
Licence Holder	Veolia Environmental Services (Australia) Pty Ltd
ACN	051316584
File Number	2013/003439-1
Premises	NWA Karratha Waste Handling and Transfer Station 2864 Pyramid Road, Karratha Industrial Estate KARRATHA 6714 Legal Description – Lot 2864 on Deposited Plan 184127
Date of Report	23 October 2024
Decision	Revised licence granted

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

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1. Decision summary

Licence L8765/2013/1 is held by Veolia Environmental Services (Australia) Pty Ltd (Licence Holder) for the NWWA Waste Handling and Transfer Station (the Premises), located at 2864 Pyramid Road, Karratha Industrial Estate.

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 L8765/2013/1 has been granted.

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 4 July 2024, the Licence Holder submitted an application to the department to amend Licence L8765/2013/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act).

The following amendments were sought:

- Update Premise Name from 'NWWA Waste Handling and Transfer Station' to 'NWA Karratha Waste Handling and Transfer Station'
- Update Registered Business Address to 'Level 4, 65 Pirrama Road, PYRMONT NSW 2009'
- Category 61 - Amendment to Waste Processing conditions to enable neutralisation of acidic waste (B100) within current capacity
- Category 61A - Addition of Waste Code C100 (Basic solutions or bases in solid form) within current existing capacity.

In amending the licence, the Delegated Officer has also:

- updated the format and appearance of the Licence;
- revised licence condition and table numbers, removed any redundant conditions and definitions, and realigned condition numbers for numerical consistency; and
- corrected clerical mistakes and unintentional errors.

The obligations of the Licence Holder have not changed in these administrative revisions to the licence.

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 *Guideline: Risk assessments* (DWER 2020).

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 1 below.

Table 1 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 1: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Fugitive emissions to air of waste treatment byproducts.	Chemical neutralisation (pH correction) of acidic wastes through the addition of a basic reagent	Air/windborne pathway	<p>Neutralisation process only carried out by a suitably qualified chemist in adherence to the licence holder's Work Instruction, including:</p> <ul style="list-style-type: none"> • Treatment processes developed, trialled, and supervised • Inspecting the reaction vessel for defects such as splits, cracks, excessive sun damage & rust • Decanting waste to a sealed steel reaction vessel via a diaphragm pump • Reagent added slowly until tested pH is stable between 6 and 8 • Temperature and pH are monitored during treatment reactions to prevent air emissions • Neutralised waste is transferred and stored in labelled IBCs before being transferred to landfill as D300 controlled waste.
Containment loss or spills to ground of hazardous wastes	Acceptance, handling, consolidation, treatment, and storage of liquid and solid wastes	Overland flow, stormwater and seepage potentially causing ecosystem disturbance impacting surface and ground water quality	<p>Waste received and stored in impervious containers within dangerous goods storage containers on existing bunded hardstand areas.</p> <p>Acidic waste decanting and neutralisation processing is undertaken within existing 113m³ bunded hardstand area.</p> <p>Spill kits available and stocked for immediate cleanup of any spills</p>

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), 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 2 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 (*Guideline: Environmental siting* (DWER 2020)).

Table 2: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
H1 - Nearest sensitive receptor Residential Premises - 1968 Anderson Road, Karratha Industrial Estate.	140 m south of the Premises boundary
H2 - Karratha Kart Club - Anderson Road, Karratha Industrial Estate	240m south east of the Premises boundary
H3 - Kingway Motel, 1069 King Way, Karratha Industrial Estate	1.3 km northwest of Premises boundary
Nearest industrial receptors	Adjacent to northern, western and southern Premises boundaries
Environmental receptors	Distance from activity / prescribed premises
Groundwater Pilbara fractured rock aquifer (unconfined)	The water table in the Pilbara fractured rock aquifer is generally within 5 – 10 m of the surface. Regional groundwater flow is inferred to be north to northeast towards Nickol Bay. There are two licensed groundwater users within 5km of the Premises, with the nearest being 1.3 km south west Premises boundary Private extraction well (GWL202093 - Norwest Sand and Gravel Pty Ltd, drawing from Pilbara fractured rock aquifer), shown as E1 in Figure 1.
E2 - Minor non-perennial watercourse Tributary of Gwen Creek	Approximately 195 m east of the Premises boundary.
Priority 1 Ecological Community Roebourne Plains gilgai grasslands	Approximately 900 m west of the Premises boundary. The buffer area of the PEC extends onto the Premises. The PEC has not been considered further as a receptor in the risk assessment due to the distance to the physical location of the PEC.
Priority 3 Ecological Community Horseflat Land System	Approximately 1.5 km west of the Premises boundary. The buffer area of the PEC extends onto the Premises. The PEC has not been considered further as a receptor in the risk assessment due to the distance to the physical location of the PEC.

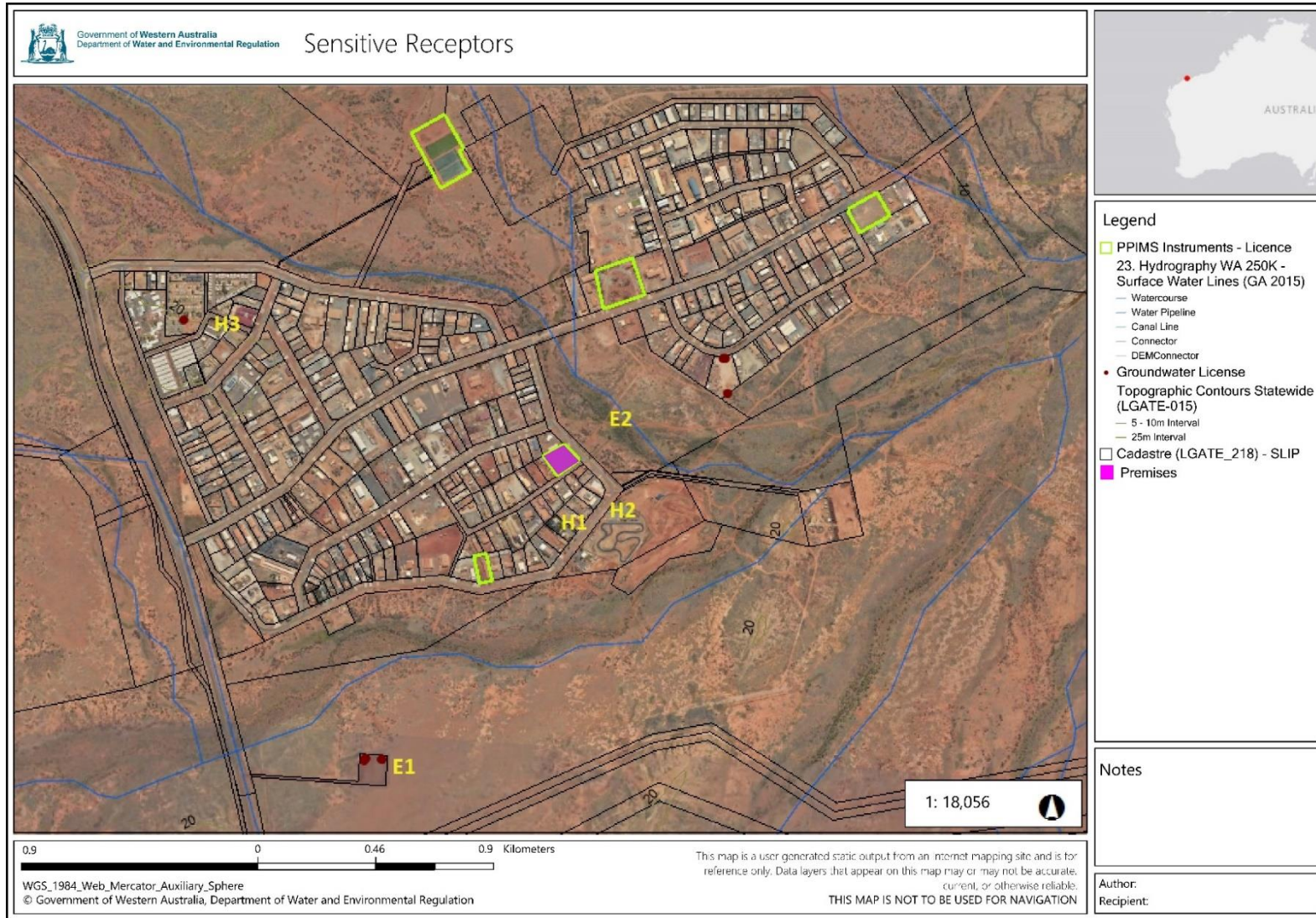


Figure 1: Distance to sensitive receptors

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IR-T15 Amendment report template v3.0 (May 2021)

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) 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 incomplete 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 3.

The Revised Licence L8765/2013/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. solid and liquid waste facilities.

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

Table 3. Risk assessment of potential emissions and discharges from the Premises during operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions of licence ²	Justification for additional regulatory controls
Source / Activities	Potential emissions	Potential pathways and impact	Receptors	Applicant controls				
Chemical Neutralisation (Waste Processing) of liquid 'B100' acidic wastes through the addition of a basic reagent	Fugitive emissions to air of waste treatment byproducts.	Air/windborne pathway causing impacts to health and amenity	Residential receptor 140 m south of the Premises boundary Karratha Kart Club 240m south east of the Premises boundary Industrial premises adjacent to northern, western and southern	Refer section 3.1.1 Table 3	C = Moderate L = Unlikely Medium Risk	No	<u>Condition 3, Table 2 – Acidic solutions (B100)</u>	Specific waste streams to be processed through pH neutralisation have been limited to those listed in Condition 8, Table 2, based on additional information provided by the licence holder. Additional regulatory control has been added to the Licence by the Delegated Officer limiting reagents to those that do not produce gaseous emissions, and for the reaction vessel to be maintained in accordance with AS 3790-2008.

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Risk Event					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions of licence ²	Justification for additional regulatory controls
Source / Activities	Potential emissions	Potential pathways and impact	Receptors	Applicant controls				
			Premises boundaries					
	Seepage, leaks and spills of waste from processing area during processing and/or storage	Contamination of land, surface water or groundwater through direct discharge, runoff or infiltration	Minor non-perennial watercourse 195 m east of the Premises boundary. Groundwater 5-10 m bgl	Refer section 3.1.1 Table 3	C = Moderate L = Unlikely Medium Risk	Yes	Existing Conditions 1, 3, 11	Discharges to the environment may also be regulated under the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> .
	Contaminants such as heavy metals, present in processed waste					No	<u>Condition 3, Table 2 – Acidic solutions (B100)</u>	The Delegated Officer considers the inclusion of verification and testing requirements on the Licence to be necessary to ensure these processes are being undertaken at the premises. This will in turn ensure that treated waste leaving the premises is suitable for its final disposal location.
Acceptance, handling, consolidation, treatment, and storage of 'C100' liquid and solid wastes	Containment loss or spills to ground of hazardous wastes	Contamination of land, surface water or groundwater through direct discharge, runoff or	Minor non-perennial watercourse 195 m east of the Premises boundary.	Refer section 3.1.1 Table 3	C = Moderate L = Unlikely Medium Risk	No	Existing Conditions 1, 3, 11 <u>Condition 1, Table 1</u>	Specific solid and liquid waste streams to be received under the C100 waste code have been listed in Condition 6, Table 1, based on additional information provided by the licence holder.

Risk Event					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions of licence ²	Justification for additional regulatory controls
Source / Activities	Potential emissions	Potential pathways and impact	Receptors	Applicant controls				
		infiltration	Soil and groundwater 5-10 m bgl					

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

2: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk assessments* (DWER 2020)

4. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

Table 4: Consultation

Consultation method	Comments received	Department response
Local Government Authority advised of proposal on 20 August 2024	Development Approval was issued 26 July 2013 for “Additional Temporary Facilities – Waste Management”, being a Noxious Industry. Please note that the reference to ‘temporary’ is in relation to the existence of the lease held by Veolia over Lot 2864. The Development Approval is not time limited and therefore is still current. No further comments.	No response required. The Licence Holder has provided a copy of their current lease for the Premises, which expires on 25 November 2025 with an exclusive option to renew.
Licence Holder was provided with draft amendment on 17 October 2024	No comments, remainder of the consultation period waived.	No response required.

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 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: Summary of licence amendments

Reference	Proposed amendments
Cover page	Registered business address updated Date of Amendment added Premises name updated
Licence history	Updated to include this amendment
All	Reference to ‘shall’ updated to ‘must’ as per current licensing wording. Footnote numbering updated to revised licensing format. Minor wording changes to update conditions into current licensing format with no changes to requirements or intentions of conditions. Table numbering updated following deletion of redundant conditions. Correction of grammatical and typographical errors.
Condition 1 (previous)	Redundant condition deleted from the licence.

Condition 2 (previous)	Redundant condition deleted from the licence.
Condition 3 (previous)	Redundant condition deleted from the licence – duplication of requirements for the storage and handling of dangerous goods as regulated by the <i>Dangerous Goods Safety Act 2004</i> .
Condition 4 (previous)	Redundant condition deleted from the licence – duplication of requirements outlined in the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> .
Condition 5 (previous)	Revised to condition 11 within 'Emissions' conditions set for formatting purposes.
Condition 1, Table 1	Updated to include Sodium hydroxide and Sodium Hypochlorite (as Controlled waste C100 type) to be received as solid and liquid hazardous wastes
Condition 3, Table 2	Updated to include the processing (neutralisation) of specific B100 liquid hazardous wastes, including annual process limits, reagent and treatment vessel specifications in order to suitably manage risks to receptors. Wastes limited to: <ul style="list-style-type: none"> a) Hydrochloric acid b) Acetic acid c) Sodium bisulfite d) Fluorosilicic acid
'Information' subheading	Changed to 'Records' as per current licensing format
Condition 19 (previous) – now Condition 15	Condition reordered to Condition 15 and restructured as per current condition wording with no changes made to requirements or intentions of conditions.
Condition 20 (previous)	Deleted – redundant condition
Condition 21 (previous) – now Condition 17	Condition reordered to Condition 17 and restructured as per current condition wording with no changes made to requirements or intentions of conditions. AARC reporting date aligns with <i>Notice of amendment and schedule of licences with amended reporting conditions (published 16/5/22)</i>
Condition 22 (previous) – now Condition 16	Condition restructured and reordered as condition 16 as per current condition wording with no changes made to requirements or intentions of conditions
'Reporting' subheading	Subheading included as per current licensing format
Condition 23 (previous)	Deleted as AER no longer required as per <i>Notice of amendment and schedule of licences with amended reporting conditions (published 16/05/2022)</i> .
Condition 24 (previous) – now condition 18	Condition reordered to condition 18 and restructured as per current licensing format and condition wording with no changes made to requirements or intentions of conditions. N1 forms are no longer available on website, included as Schedule 3
Definitions	Definitions added: 'AS 3780-2008', 'neutralisation', 'suitably qualified chemist' Definitions updated: 'hardstand'

	Definitions removed: 'fugitive emissions'
Schedule 1	Figure 1 updated
Schedule 3: Forms	Added to include N1 form no longer available on website.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia