

Amendment Report

Application for Licence Amendment

Part V Division 3 of the Environmental Protection Act 1986

Licence Number	L9323/2022/1
Licence Holder	Australia Western Railroad Pty Ltd
ACN	094 792 275
File Number	DER2022/000061
Premises	Aurizon Kalgoorlie Rail Depot West Kalgoorlie Road WEST KALGOORLIE WA 6430
	Legal description –
	Part of Lot 500 on Deposited Plan 58897
	Certificate of Title Volume LR3161 Folio 909
	As defined by the coordinates in Schedule 2 of the revised licence
Date of Report	7 November 2023
Decision	Revised licence granted

Abbie Crawford A/MANAGER, WASTE INDUSTRIES an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Table of Contents

1.	Decision summary1					
2.	Scope	e of assessment	1			
	2.1	Regulatory framework	1			
	2.2	Amendment summary	1			
3.	Risk a	assessment	2			
	3.1	Source-pathways and receptors	2			
		3.1.1 Emissions and controls	2			
		3.1.2 Receptors	4			
	3.2	Risk ratings	5			
4.	Consu	ultation	8			
5.	Concl	usion	8			
	5.1	Summary of amendments	8			
Refe	rences	3	9			
Арре	endix 1	1: Application validation summary1	0			

Table 1: Proposed throughput capacity changes	1
Table 2: Licence holder controls	3
Table 3: Sensitive human and environmental receptors and distance from prescribed activity.	4
Table 4. Risk assessment of potential emissions and discharges from the premises during operation	6
Table 5: Consultation	8
Table 7: Summary of licence amendments	8

1. Decision summary

Licence L9323/2022/1 is held by Australia Western Railroad Pty Ltd trading as Aurizon Operations Pty Ltd (licence holder) for the Aurizon Kalgoorlie Rail Depot (the premises), located on West Kalgoorlie Road, West Kalgoorlie.

This amendment report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during operation of the premises. As a result of this assessment, revised licence L9323/2022/1 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

The licence holder transports controlled waste by rail from their Kwinana depot to their Kalgoorlie depot for final disposal at an appropriately licensed facility. Due to occasional train delays and reasonably foreseeable logistical issue, controlled waste occasionally needs to be temporarily stored on the premises.

In April 2023, a flood event in the Goldfields region closed access to the receiving end-of-life waste disposal facility causing a backlog of controlled waste at the premises. Consequently, waste was stored on the premises in exceedance of the permitted storage capacity limits and holding time as per the licence. As a similar emergency or extenuating circumstance is reasonably foreseeable in the future, the licence holder is seeking an amendment to licence L9323/2022/1 to increase throughput capacities and holding times for waste on the premises.

Additionally, the licence holder is seeking an amendment to increase the storage capacity for asbestos and asbestos containing waste.

On 29 May 2023, the licence holder submitted an application to the department to amend licence L9323/2022/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act).

On 7 August 2023, the licence holder requested additional changes be included in the amendment relating to further increases to storage capacity and holding times and storage of waste on a compacted area.

Table 1 below summarises all of the proposed changes to the existing licence.

Condition	Current condition	Proposed amendment
All waste types accepted under Category 61	Combined total of 10,000 tonnes per annual year	Combined total of 30,000 tonnes per annual year
All waste types accepted under Category 62	Combined total of 10,000 tonnes per annual year	Combined total of 30,000 tonnes per annual year
Condition 3	The licence holder must not store more than a total of 300 tonnes of waste at the premises	The licence holder must not store more than a total of 1,000 tonnes of waste at the

Table 1: Proposed throughput capacity changes

Licence: L9323/2022/1

Condition	Current condition	Proposed amendment
	at any one time	premises at any one time
Condition 6	No more than 50 kg of special waste type 1 (asbestos) to be stored on site at any one time	No more than 200 tonnes of special waste type 1 (asbestos) to be stored on site at any one time
Condition 6	Waste must be stored and handled on a hardstand area.	Waste must be stored and handled on a hardstand or compacted area.
Condition 8	The licence holder must ensure that waste does not remain on the premises for more than 72 hours from arrival.	The licence holder must ensure that waste does not remain on the premises for more than five days from arrival.
N/A	N/A	In times of emergency or unforeseen circumstances outside of the licence holder's control, the licence holder is permitted to store no more than a total of 3,000 tonnes of waste at the premises at any one time.
N/A	N/A	In times of emergency or unforeseen circumstances outside of the licence holder's control, the licence holder is permitted to store waste on the premises for no more than 14 days for unlined containers and 31 days for lined containers.
Definitions	N/A	Include a definition for hardstand.

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 2 below. Table 2 also details the proposed control measures the licence holder has proposed to assist in controlling

these emissions, where necessary.

Emission	Sources	Potential pathways	Proposed controls
Dangerous or hazardous waste materials (spills and leaks)	Acceptance, handling and storage of waste material	Overland runoff / migration Seepage into soil and groundwater	 All waste packaged in closed sealed containers and tanks; All waste to be stored and handled on a hardstand area or a compacted area; Some waste stored in lined containers; Safety and Emergency Response Plan (SERP) in place for the premises; Spill response equipment available on the premises; Fire and Emergency Services – Emergency Response Guide (FES-ERG); Trained and experienced personnel; and
Contaminated stormwater / firewater	Acceptance, handling and storage of waste material	Overland runoff / migration Seepage into soil and groundwater	 Project Environment Planning Assessment (PEPA) Tool. All waste packaged in closed sealed containers and tanks; All waste to be stored and handled on a hardstand; Safety and Emergency Response Plan (SERP) in place for the premises; Spill response equipment available on the premises including collapsible spill bunds; Fire and Emergency Services – Emergency Response Guide (FES- ERG); Trained and experienced personnel; and Project Environment Planning Assessment (PEPA) Tool.
Toxic gases / smoke (fire)	Acceptance, handling and storage of waste material	Air/windborne pathway	 All waste packaged in closed sealed containers and tanks; All waste to be stored and handled on a hardstand; Safety and Emergency Response

Table 2: Licence holder controls

Emission	Sources	Potential pathways	Proposed controls
			Plan (SERP) in place for the premises;
			 Fire and Emergency Services – Emergency Response Guide (FES- ERG);
			 Trained and experienced personnel; and
			 Firefighting equipment available at the premises.
Dust (asbestos fibres)	Acceptance, handling and storage of asbestos waste material	Air/windborne pathway	• All waste is packaged as per the Guideline: Managing asbestos at construction and demolition waste recycling facilities (April 2021);
			 Waste remains in sealed containers on the premises and waste is not handled on the premises; and
			 If loss of containment occurs, dust suppression will be applied using fire hydrants or water carts.

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 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 (*Guideline: Environmental siting* (DWER 2020)).

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

Human receptors	Distance from prescribed activity
Residential premises	Approximately 420 m north-west of premises and 470 m north-east of premises
Industrial area	Immediately adjacent on all sides of the premises
Environmental receptors	Distance from prescribed activity
Underlying groundwater	No data could be found. The depth to water in Kalgoorlie varies, however, in general the depth to groundwater in the Kalgoorlie area ranges from 50 to 200 metres below ground level. Groundwater is considered to be saline.
Goldfields Groundwater Area – <i>Rights in</i> <i>Water and Irrigation Act 1914</i> (RIWI Act)	Within proclaimed groundwater area.

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 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 L9323/2022/1 that accompanies this amendment report authorises emissions associated with the operation of the premises.

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

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	Ju
Operation				•	•	·		·
	Dangerous or hazardous waste materials (spills and leaks)	Overland runoff / migration into stormwater potentially causing ecosystem disturbance or impacting surface water	Industrial area immediately adjacent surrounding premises Underlying groundwater	Refer to Section 3.1	C = Major L = Possible High Risk	Y	Condition 3, 4, 9 & 21 <u>Condition 10</u>	In an email that waste in month and u The original waste on the foreseeable for waste to nature of the waste will be The facility a disposal at a does not de for extended sensitive red officer has a on the prem normal oper the storage of emergend
Acceptance, handling and storage of waste material	Contaminated stormwater / firewater	Localised contamination of soil Infiltration into groundwater potentially impacting off site groundwater users and causing ecosystem disturbance		Refer to Section 3.1	C = Major L = Possible High Risk	N	Existing conditions 16 & 17 <u>Condition 11</u> <u>Definition included</u> for hardstand	In an email that waste b compacted non-enginee by reach sta minimise du non-enginee managemen natural low p hardstand a Due to the n types of was given time. destined for the high-risk receptors, th appropriate non-enginee stormwater storm event of contamin determines prevent an u or firewater been include hardstand a stormwater
	Toxic gases / smoke (fire)	Air/windborne pathway causing impacts to health and amenity	Residences 420 m north-west and 470 m north-east of premises Industrial area immediately adjacent	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 3, 4, 9, 10 & 21	N/A

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

Licence: L9323/2022/1

Justification for additional regulatory controls

ail dated 7 August 2023, the licence holder requested e in lined containers be permitted to be stored for one d unlined containers be stored for two weeks.

hal intention of the licence was to permit the storage of the premises in the instance of reasonably ble logistical issues and train delays during transport to the end-of-life waste disposal facility. Due to the the premises, it is difficult to predict what types of be stored and at what quantities at any given time. ty accepts and transports waste that is destined for at a Class IV or Class V landfill. The delegated officer deem it appropriate for high-risk waste to be stored ded periods of time (1 month) in close proximity to receptors under any circumstance. The delegated amended condition 9 to permit waste to be stored emises for no more than 5 days during times of peration and has included condition 10 which limits ge of waste on the premises to 14 days during times ency or unforeseen circumstance.

ail dated 7 August 2023, the licence holder requested e be permitted to be stored on non-engineered ed hardstand areas to increase storage capacity. The neered sections of hardstand are repeatedly traversed stackers and sprayed with a chemical additive to dust generation thereby increasing compaction. The neered hardstand area does not have a stormwater nent system with stormwater either draining towards w points in the area or draining onto the engineered d and into the surface water collection system.

e nature of the premises, it is difficult to predict what vaste will be stored and at what quantities at any e. The facility accepts and transports waste that is for disposal at a Class IV or Class V landfill. Due to isk nature of the waste and proximity of sensitive the delegated officer does not determine it to be te for waste types to be permitted to be stored on neered hardstand areas without appropriate er containment measures. In the event of a fire or ent which results in the generation of large quantities inated stormwater or firewater, the delegated officer es that there are not enough controls in place to in unauthorised discharge of contaminated stormwater er from the premises. A definition for hardstand has uded and condition 11 has been added to ensure all areas have the ability to contain contaminated er / firewater to prevent off-site discharge.

Risk Event					Risk rating ¹	Licence	Conditions ² of	
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder's controls	C = consequence L = likelihood	holder's controls sufficient?	licence	J
			surrounding premises					
Acceptance, handling and storage of asbestos waste material	Dust (asbestos fibres)	Air/windborne pathway causing impacts to health and amenity	Industrial area immediately adjacent surrounding premises	Refer to Section 3.1	C = Severe L = Unlikely High Risk	Y	Existing: Conditions 1, 5, 6, 8 & 9 New: Condition 7 & 11	N/A

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Guideline: Risk assessments (DWER 2020).

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 9 October 2023	The licence holder provided an email response on 2 November 2023 with no comments on the draft amendment	N/A

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 licence as part of the amendment process.

Condition no.	Proposed amendments
N/A	Increased the assessed design capacity for Category 61 and Category 62 from 10,000 tonnes per annual period to 30,000 tonnes per annual period.
1	Increased rate at which waste is received from a combined total of 10,000 tonnes per annual period of all liquid wastes and a combined total of 10,000 tonnes per annual period of all solid waste to a combined total of 30,000 tonnes per annual period for liquid waste and a combined total of 30,000 tonnes per annual period of all solid waste.
3	Changes to condition wording for capacity limits to apply only during times of normal operations.
4	Inclusion of new waste storage capacity limit for times of emergency or unforeseen circumstances.
7	Increase capacity limit for amount of asbestos waste permitted to be stored on site at any one time from 50 kg to 200 tonnes.
9	Changes to condition wording for maximum waste holding time to apply only during times of normal operations.
10	Inclusion of new maximum waste holding time for times of emergency or unforeseen circumstances.
11	Inclusion of a water cart as a required piece of equipment.
21	Inclusion of reporting requirements for when emergency or unforeseen circumstances conditions (4 & 10) are triggered
Definitions	Inclusion of definition for emergency and unforeseen circumstances Inclusion of definition for hardstand

Table 6: Summary of licence amendments

Licence: L9323/2022/1

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. Department of Water and Environmental Regulation (DWER) 2021, *Guideline: Managing asbestos at construction and demolition waste recycling facilities*, Perth, Western Australia.
- 4. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Risk Assessments*, Perth, Western Australia.

Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMMARY							
Application type							
Works approval							
		Relevant works approval number:		None			
		Has the works appr with?	Yes 🗆	No 🗆			
Licence		Has time limited operations under the works approval demonstrated acceptable operations?		Yes 🗆 No 🗆 N/A 🗆			
		Environmental Com Critical Containmen Report submitted?	Yes 🗆 No 🗆				
		Date Report received:					
Renewal		Current licence number:					
Amendment to works approval		Current works approval number:					
Amendment to licence	\boxtimes	Current licence number:	L9323/2022/1				
		Relevant works approval number:		N/A			
Registration		Current works approval number:		None			
Date application received		29 May 2023					
Applicant and Premises details							
Applicant name/s (full legal name/s)		Aurizon Operations Pty Ltd					
Premises name		Aurizon Kalgoorlie Rail Depot					
Premises location	Part of Lot 500 on Deposited Plan 58897 79 West Kalgoorlie Road, WEST KALGOORLIE						
Local Government Authority		City of Kalgoorlie-Boulder					
Application documents							
HPCM file reference number:	DER2022/000061~2						
Key application documents (addition application form):	 1A - CoT 1B - ASIC West Kalgoorlie Site Emergency Response Plan SERP 1C - Authorised representative 2 - West Kalgoorlie Depot Map 2A - Premises boundary coordinates 2B - Premises boundary 3B - Proposed amended activities PTA letter of authority 5 - Other Approvals 7 - Siting and location 8 - Additional information Power of Attorney 						

Licence: L9323/2022/1

	FESERG		
	Dangerous Goods Licence		
Scope of application/assessment			
	Licence amendment to increase:		
	 annual storage capacity limit (solid and liquid waste); 		
Summary of proposed activities or changes to existing operations.	 limit for waste that can be stored on site at any one time lid and liquid waste); 		
	 temporal limit on how long waste can be stored on site for (72 hours to 5 days) (solid and liquid waste); and 		
	limit of asbestos waste than can be stored on site annually.		
Category number/s (activities that cau	use the premises to become prescribed premises)		

Table 1: Prescribed premises categories

		essed production or gn capacity			Proposed changes to the production or design capacity (amendments only)	
Category 61: Liquid waste facility 10,00		000 tpa		:	30,000 tpa	
(50		,000 tpa) kg of asbestos waste per nual period)		er	30,000 tpa (200 tonnes of asbestos waste per annual period)	
egislative context and other appro.	vals					
Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?		Yes □	No 🖂	Referral decision No: N/A Managed under Part V □ Assessed under Part IV □		
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?		Yes □	No 🖂	Ministerial statement No: N/A EPA Report No: N/A		
Has the proposal been referred and/or assessed under the EPBC Act?		Yes 🗆	No 🛛	Reference No: N/A		
Has the applicant demonstrated occupancy (proof of occupier status)?		Yes ⊠			eneral lease □ Expiry: ining lease / tenement □ Expiry:	
Has the applicant obtained all relevant planning approvals?		Yes 🗆	No □ N/A ⊠	Ex If ap	oproval: N/A oproval: N/A N/A explain why? No planning oprovals are required for the	

with

activity as it falls within the boundaries of existing rail freight consistent

operations within a railway reserve

operations

Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes 🗆 No 🛛	CPS No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes 🗆 No 🖂	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes 🗆 No 🖂	Application reference No: N/A Licence/permit No: N/A Licence / permit not required.
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes □ No ⊠	 Name: Goldfields Groundwater Area Type: Proclaimed Groundwater Area Has Regulatory Services (Water) been consulted? Yes □ No □ N/A ⊠ Regional office: Goldfields
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes □ No ⊠	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to <u>WQPN 25</u>)? Yes □ No □ N/A ⊠
Is the Premises subject to any other Acts or subsidiary regulations (e.g. Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx)	Yes ⊠ No □	Dangerous Goods Safety Act 2004 Environmental Protection (Controlled Waste) Regulations 2004
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes □ No ⊠	N/A
Is the Premises subject to any EPP requirements?	Yes □ No ⊠	N/A

Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?		Classification: possibly contaminated – investigation required (PC–IR)	
	Yes ⊠ No □	Date of classification: 1 February 2008	
		As, Co, Cr, Cu, Mg and Ni concentrations have been found in the soil above EILs. As in soil also exceeded HILs. No GW investigations have been carried out.	