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	L9329/2022/1
Licence Holder	Penny Operations Pty Ltd
ACN	618 514 944
File Number	INS-0002201 (APP-0029093)
Premises	Penny Gold Project M57/180 and M57/196 Shire of Sandstone 6639
Date of Report	14 October 2025
Decision	Revised licence granted

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1. Decision summary

Licence L9329/2022/1 is held by Penny Operations Pty Ltd (licence holder) for the Penny Gold Project (the premises), located on mining tenements M57/180 and M57/196 in the Shire of Sandstone, Western Australia.

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 L9329/2022/1 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 Application summary

On 14 May 2025, the licence holder submitted an application to the department to amend licence L9329/2022/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Change to the design capacity of Category 64 from 1,200 tonnes per annum (tpa) to 5,000 tpa.
- Construction and operation of a Class II putrescible landfill within the Penny West Waste Rock Dump (WRD); and
- Construction and operation of a used tyre disposal cell within the landfill on the Penny West WRD.

This amendment is limited only to the changes to Category 64 activities to licence L9329/2022/1. No changes to the aspects of the existing licence relating to Category 6 and 85 have been requested by the licence holder.

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

Table 1: Proposed design capacity changes

Category	Current design capacity	Proposed design capacity	Description of proposed amendment
Category 64: Class II or III putrescible landfill site: premises (other than clean fill premises) on which waste of a type permitted for disposal for this category of prescribed premises, in accordance with the *Landfill Waste Classification and Waste Definitions 1996*, is accepted for burial.	1,200 tpa	5,000 tpa	Construction of an additional Class II putrescible landfill located within the Penny West WRD.

2.2.1 Category 64 activities

The licence holder is proposing to construct and operate a new Class II landfill cell within the Penny West WRD for the acceptance of inert waste type 2 and putrescible waste under Category 64 on mining tenement M57/180.

The proposed landfill will operate under the existing Category 64 on licence L9329/2022/1, with a proposed increase in design capacity from 1,200 tpa to 5,000 tpa.

The landfill will only accept Class II (putrescible) waste materials, as defined in *DWER's Landfill Waste Classification and Waste Definitions* (DWER 2019) document.

The landfill design will include a sequenced construction of a series of trenches and will not exceed 5 m deep, 50 m wide and 100 m long (as specified in Figure 1). There will be one active cell open at a time and will be backfilled before a new one is prepared in the same location. The primary construction materials will include calcrete, mottled clay and saprolite material.

2.2.2 Used tyre disposal cell in the Penny West landfill.

Used tyre disposal/storage will only be accepted within the specified tyre disposal cell in the Penny West landfill (as shown in Figure 1). No more than 99 tyres will be stored within the Penny West landfill at any one time, therefore Category 57: Used tyre storage will not be required to be added to the licence. The disposal of the tyres will be regulated under inert waste type 2 in the existing Category 64 on licence L9329/2022/1.

Used tyres will be stored and disposed of only in the specified tyre disposal cell in the Penny West landfill. Storage of used tyres at the Penny West landfill will be in stacks that are no more than 60m^2 and 3.7 m high and arranged in an overlapping manner to create a woven or laced arrangement in accordance with the Department of Fire and Emergency Services Guidance Note 2 (DFES 2020). Stacks of tyres should have a minimum spacing of 2.5 m between the base of each stack and there must be a minimum spacing of 18 m between every four stacks of tyres.

Commencement of burial, tyres will be laid horizontally to ensure stability of the waste rock dump. Used tyres must be covered with a minimum of 100 mm of clean fill material on a fortnightly basis as specified in the *Environmental Protection (Rural Landfill) Regulations 2002*. Landfilling of the used tyres will be in accordance with requirements specified under Part 6 of the *Environmental Protection Regulations 1987*.

A 3-metre-wide trafficable firebreak will be maintained around the landfill site, which will allow for emergency access in the event of a fire.

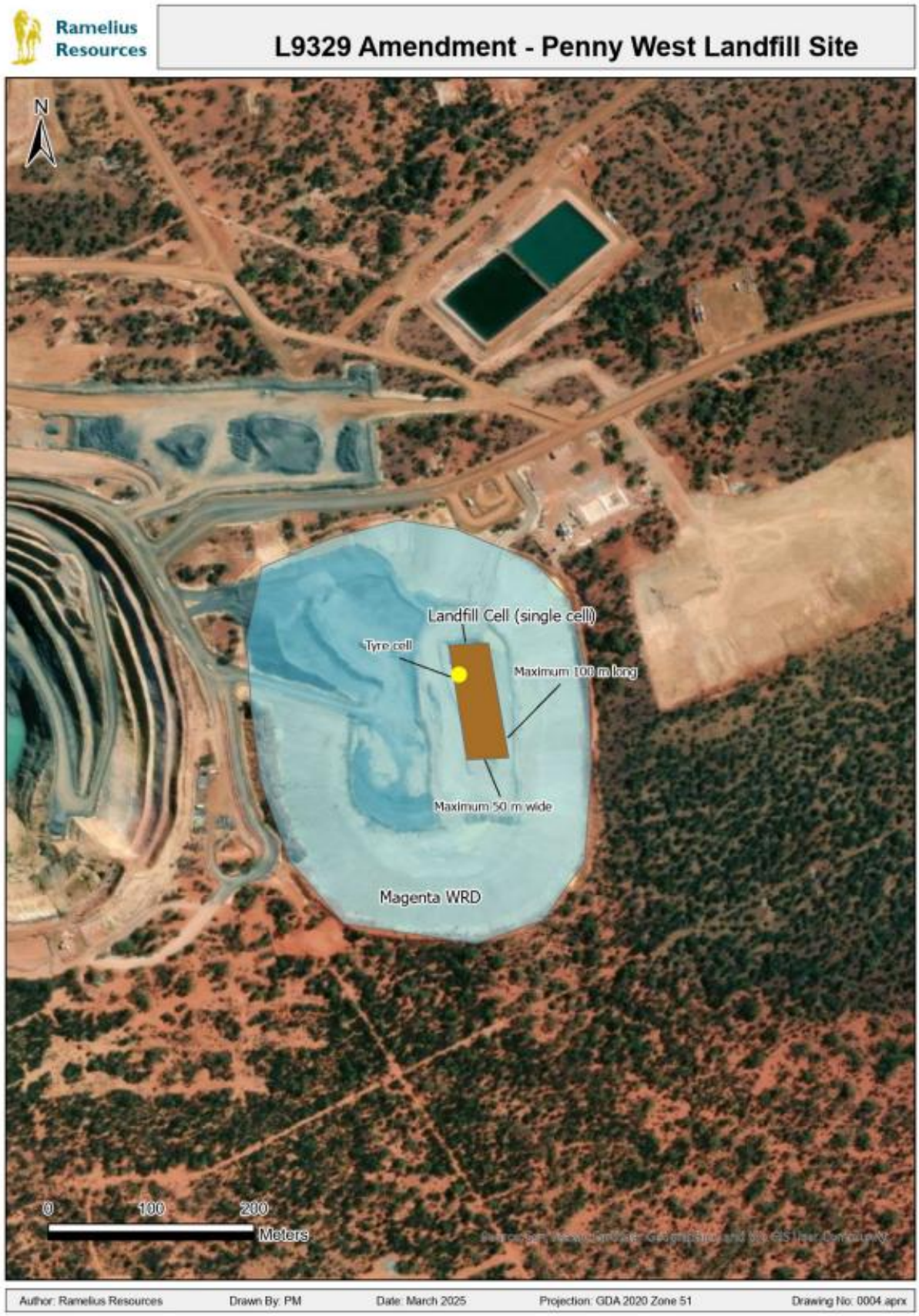

Figure 1: Penny West landfill within the WRD.

2.2.3 Management of Penny West landfill

Waste Management

The trench will be filled with waste and periodically covered before the next trench is excavated. The active tipping area will be maintained to less than 30 m long and covered at a frequency and method consistent with Section 6 of the *Environmental Protection (Rural Landfill) Regulations 2002*. The landfill trenches under Category 64 in licence L9329/2022/1 will not exceed the maximum design capacity of 5,000 tonnes of waste per annual period.

The landfill site will be signposted with details of the types of waste that can be disposed of. A waste management plan will be maintained and up to date and will include details for the disposal of all waste streams on-site.

A visual inspection of the landfill will be conducted weekly, and any windblown waste will be collected and redisposed to the landfill site.

Water Management

Groundwater management will be in accordance with the licence GWL 205133(2) granted by the Minister under section 5(c) of the *Rights in Water and Irrigation Act 1914*.

Monitoring of groundwater will be in accordance with licence L9329/2022/1.

Baseline water levels underlying the premises range from 30-40 m below the natural ground surface. The materials used to construct the cells have low permeability and therefore, the risk of seepage and leachate migrating more than 50 m to the baseline water level is considered very low.

Windrows will be constructed to divert surface water runoff away from the Penny West landfill cell. The top surface of the WRD will be slightly concave, and a crest bund will be constructed to minimise runoff down the outer slopes. 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 2020a).

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. Risk assessment

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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 pathways 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	Disposal of waste to Class II landfill, application of cover to deposited wastes	Air/wind dispersion	• No additional controls proposed by the licence holder. • Existing controls in the licence include that the active disposal faces must be minimised, and deposited waste must be covered at least fortnightly.
Noise	Disposal of waste to Class II landfill, application of cover to deposited wastes	Air/wind dispersion	No controls proposed by licence holder.
Odour	Disposal of waste to Class II landfill, decomposition of putrescible wastes	Air/wind dispersion	Waste deposited will be covered with material and as often as specified in Section 6 of the *EP (Rural Landfill) Regulations 2002*.
Windblown Waste	Disposal of waste to Class II landfill	Air/wind dispersion	• Waste deposited will be managed in accordance with Section 6 of the *EP (Rural Landfill) Regulations 2002* including specified coverage frequencies and materials; • Windblown waste will be returned to the landfill; and • Visual inspection of the landfill conducted weekly.
Leachate	Decomposition of putrescible wastes and contaminated materials within Class II landfill cells	Leaching causing impacts to underlying soils and groundwater	• Visual inspections of the landfill conducted weekly; and • Construction of landfill cell using calcrete, mottled clay and saprolite material with low permeability to minimise seepage. • Existing controls in the licence include emissions and discharge monitoring conditions
Contaminated stormwater	Decomposition of putrescible wastes and contaminated materials within Class II landfill	Seepage and runoff causing impacts to underlying soils and groundwater	• Visual inspections of the landfill conducted weekly. • Stormwater will be directed away from landfill cell via

Emission	Sources	Potential pathways	Proposed controls
	cells		windrows and crest bunds.
Fire/Smoke	Disposed tyres Operation of landfill facility	Air/wind dispersion	• Used tyres will be stored and disposed of at a designated tyre disposal cell location. • A 3 m trafficable firebreak will be maintained around the perimeter of the landfill. • Landfill design will allow emergency vehicle access in the event of a fire. • No more than 99 used tyres will be stored on the landfill area at any one time; and

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020a), the delegated officer has excluded employees, visitors and contractors of the licence holders from its assessment. Protection of these parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.

The nearest human receptors, being a public road, are located 1.6km from the tenement boundary. As a result, impacts from the proposed landfill activities are not likely to impact on human receptors, and therefore these receptors are not considered in this risk assessment. As a result, while noise and odour emissions may be generated from the proposed activities, there are no receptors likely to be impacted, and these emissions have not been considered.

Table 3 below provides a summary of potential environmental and cultural receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises *(Guideline: Environmental siting* (DWER 2020b)).

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

Environmental receptors	Distance from activity / prescribed premises
Native vegetation – Open Low Mulga Woodland	Immediately adjacent from the eastern and southern border of proposed activity premises. No priority or threatened vegetation within a 2 km radius
Groundwater - East Muchison groundwater area Brackish to saline (1000 to 3000 TDS mg/L)	Underlying proposed premises. 30-40 meters below ground level (mbgl)
Cultural receptors	**Distance from activity / prescribed premises**
Aboriginal Cultural Heritage – Penny Bore Artefacts/Scatter	900 m east from eastern boundary of proposed activity.

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020a) 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 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 L9329/2022/1 that accompanies this amendment report authorises emissions associated with the operation of the premises i.e. Category 6, 64 and 85. 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 discharged from the premises

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**				
Construction of Class II putrescible landfill site								
Construction of new landfill cell within the Penny West WRD	Dust	Air/wind dispersion causing impacts to health and amenity	Surrounding vegetation immediately east and south of premises	N/A	C = Slight L = Unlikely **Low Risk**	Y	N/A	Duration of the construction activity is expected to be short and the Delegated Officer determined dust emissions from the activity will not significantly impact nearby sensitive receptors.

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**				
Operation of Category 64 – Class II putrescible landfill site								
Operation of unlined landfill Disposal of waste to Class II landfill, application of cover to deposited wastes	Dust	Air/wind dispersion causing impacts to health and amenity	Surrounding vegetation immediately east and south of premises	N/A	C = Slight L = Unlikely **Low Risk**	Y	Condition 1 (Table 1): Infrastructure operational requirements Condition 8: Records and reports of complaints	Dust emissions are expected to have a minimal impact given the distance between the premises and sensitive receptors.
	Windblown waste	Air/wind dispersion causing impacts to health and amenity	Surrounding vegetation immediately east and south of premises	Refer to section 3.1	C = Slight L = Possible **Low Risk**	Y	Condition 1 (Table 1): Infrastructure operational requirements	Potential impacts resulting from the disposal of waste will be mitigated due to the licence holder controls and the distance between the premises and sensitive receptors.
Potential fire generation from the result of tyre storage and landfilling.	Smoke and air emissions containing contaminated particulates Fire wash waters containing contaminants generated in the event of a tyre fire.	Air/wind dispersion causing loss of vegetation and destruction to fauna habitats	Surrounding vegetation immediately east and south of premises	Refer to section 3.1	C = High L = Rare **Medium Risk**	N	**Condition 1 (Table 1):** Infrastructure operational requirements Condition 8: Records and reports of complaints	Additional conditions added for suitable storage of tyres. Additional controls have been extracted from the *Environmental Protection (Rural Landfill) Regulations 2002, DFES Guidance Note 2* and advice from DMPE to mitigate the risk of fire within the landfill.

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**				
Decomposition of putrescible wastes, tyres contaminated materials within Class II landfill cells	Leachate	Seepage and runoff causing impacts to underlying soils and groundwater	Underlying groundwater – 30-40 mgbl	Refer to section 3.1	C = Moderate L = Rare **Low Risk**	Y	Condition 1 (Table 1): Infrastructure operational requirements Condition 6 (Table 6): Emissions and discharge monitoring conditions	N/A
	Contaminated stormwater		Surrounding vegetation immediately east and south of premises	Refer to section 3.1	C = Slight L = Unlikely **Low Risk**	Y	Condition 1 (Table 1): Infrastructure operational requirements Condition 6 (Table 6): Emissions and discharge monitoring conditions	The groundwater monitoring outlined in the existing licence is considered to be adequate; no additional monitoring is proposed.

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

Note 2: Proposed licence holder's controls are depicted by standard text. **Bold and underlined text** depicts additional regulatory controls imposed by the department.

4. Consultation

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

Table 5: Consultation

Consultation method	Comments received	Department response
Department of Mines, Petroleum and Exploration (DMPE) advised of proposal on 31 July 2025.	DMPE provided the following comments on 05 September 2025; 1. The works described have not been included in the recent Mining Proposals reviewed (Reg ID 92653, 97424 and 101257). However, the placement of material within the WRD and its ongoing management can be regulated under Part V of the *EP Act*. 2. The Geochemical characterisation report for the WRD indicated that waste rock is predominantly non-acid forming (NAF), but with a low acid neutralising capacity. It is stated that the waste is generally non-problematic fresh rock. Given this, there are no immediate concerns with the placement of the cell within WRD and there appears to be sufficient competent material for cover. 3. DMPE advises that the licence holder may already be disposing in the WRD as a landfill according to aerial imagery. 4. DMPE recommends tyres be laid horizontally and spaced apart to allow material to settle between the tyres. Tyres should not be stacked unless a layer of competent rock material is placed between each tyre. Tyres should be disposed of in a manner that does not impact the stability of the dump, cause erosion of topsoil or allow tyres to reach the surface of the dump. 5. DMPE expresses the general concern of the landfill cells within WRDs is the incorrect placement and management of waste rock cover on landforms could result in unstable landforms which will not meet closure criteria. The applicant is reminded of their closure obligations under the *Mining Act 1978*.	Noted. In response to Point 4, the licence holder has proposed storage controls in line with the Department of Fire and Emergency Services (DFES) B*ulk Storage of Rubber Tyres Guidance Note* and *Part 6 of the EP Regulations 1987.* The department has added burial controls as requested by DMPE response. Controls have been implemented in Condition 1 of revised licence L9329/2022/1.
The licence holder was provided with the draft amendment on 24 September 2025.	See Appendix 1.	See Appendix 1.

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 a record of implemented changes. All proposed changes have been incorporated into the revised licence as part of the amendment process.

Table 6: Summary of licence amendments

Condition no.	Proposed amendments
Cover page	Added Environmental Online file number. Included date of amendment. Updated assessed design capacity of Category 64 to 5,000 tonnes per annual period in the premises categories table. Updated descriptions of categories.
Licence history	Added amendment to summary of changes.
Table 1: Infrastructure, operational requirements and location	Updated Infrastructure locations with correct figure numbers Added an Item column to number each infrastructure. Updated Item 3: landfill trenches to include the Penny West Landfill and operational requirements. Added Item 4: used tyre storage – Penny West Landfill with operational requirements. Added Item 5: used tyre disposal cell – Penny West Landfill with operational; requirements,
Table 2: Production or design capacity limits	Changes to premises production or design capacity limits for Category 64- Class II putrescible landfill site from 1,200 tonnes per annual period to 5,000 tonnes per annual period.
Table 3: Authorised discharge points	Updated discharge point to include Penny West landfill. Added used tyres as an emission Updated correct figure numbers under discharge point location.
Table 5: Monitoring of inputs	Update input to include Inert waste type 2

Condition 12	Added Table 4 and Table 6 conditions to Annual Environmental Report requirements
Table 7: Annual Environmental Report	Update AER requirement to include a record of Table 5.
Definitions	Added definition of ‘class II landfill’, ‘clean fill’, ‘inert waste type 1’ and ‘inert waste type 2’.
Schedule 1: Maps	Added Figure 5: Landfill within Magenta WRD

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Fire and Emergency Services (DFES) 2020, *Guidance Note 02: Bulk storage of rubber tyres including shredded and crumbed tyres,* Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2019, *Landfill Waste Classification and Waste Definitions 1996*, Perth, Western Australia
4. Department of Water and Environmental Regulation (DWER) 2020a, *Guideline: Risk Assessments*, Perth, Western Australia.
5. Department of Water and Environmental Regulation (DWER) 2020b, *Guideline: Environmental Siting*, Perth, Western Australia.
6. Government of Western Australia 2002, *Environmental Protection (Rural Landfill) Regulations 2002,* Western Australia
7. Ramelius Resources Limited 2022, *Environment Policy*, Perth, Western Australia

Appendix 1: Summary of licence holder's comments on risk assessment and draft conditions

Condition	Summary of licence holder's comment	Department's response
Licence Table 1, Item 3	The licence holder was to confirm the name for the northern landfill trenches already constructed under L9329/2018/1. The licence holder confirmed the name Northern Landfill trenches will be acceptable.	Noted and updated.
Licence Table 1: Item 5	Licence holder confirmed tyres will be stacked using the laced/woven method during storage according to the DFES Storage of Rubber Tyres GN02 The licence holder confirmed tyres will be placed horizontally commencing burial in accordance with DMPE advice.	Noted.
Licence Schedule 1, Figure 1	Licence holder provided an updated figure of the site layout.	Accepted and updated.
Amendment report Section 2.2.2	Licence holder confirmed tyres will be stacked using the laced/woven method during storage according to the *DFES Storage of Rubber Tyres GN02* The licence holder confirmed tyres will be placed horizontally commencing burial in accordance with DMPE advice.	Noted.
Amendment report Section 2.2.3	The licence holder confirmed there are no permanent surface water diversions nearby Penny West landfill The licence holder stated stormwater runoff is managed via windrows and toe bunds. A figure of the new monitoring bores and surface water on the premises was provided. The licence holder will prepare an amendment application to include the newly installed monitoring bores on the premises.	Noted.

Condition	Summary of licence holder's comment	Department's response
Amendment report Section 4: Table 5	Licence holder confirmed construction of the Penny West landfill has completed and the disposal of inert construction waste has commenced. Operations has since paused to ensure the facility is licenced correctly. Licence holder advised no tyres, putrescible waste, asbestos or other controlled waste have been disposed. The base of the landfill was constructed with compact inert waste rock overlain with compacted clay and confirms the cell has been constructed to the design limits specified in the draft licence and amendment report.	Noted. Non-compliance of construction and operation without a licence has been reported to the department's internal Assurance branch.
Amendment report Section 4, Table 5	Licence holder confirms stacking and burial methods stated above. Licence holder confirms closure criteria under the Mine Closure Plan will be met.	Noted.