



Application for Works Approval

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

Works Approval Number W3025/2025/1

Applicant HazRad Australia Pty Ltd

ACN 626 763 782

File number APP-0029318

Premises Name of premises
HazRad Australia Pty Ltd

Legal description
Eastern third of Lot 4, Plan 18018; Volume 117;
Folio 833

Date of report 22 October 2025

Decision Works approval granted

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1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the premises. As a result of this assessment, works approval W3025/2025/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) 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 and overview of premises

On 30 May 2025, the applicant, HazRad Australia Pty Ltd (the applicant) submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake construction works relating to a waste management, storage and processing facility at the premises. The premises is located within the Wattleup industrial zone.

The premises relates to categories 61,61A and 62 and assessed production / design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W3025/2025/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in works approval W3025/2025/1.

2.2.1 Construction of Infrastructure

The following infrastructure is proposed to be constructed and / or installed to facilitate operation at the premises:

- Existing Infrastructure: The site already includes sealed roadways, utilities (water, power, telecommunications), stormwater control systems, and perimeter security fencing with gates.
- New Installations: Planned infrastructure includes lighting, bunded and covered areas for vehicle loading/unloading and waste handling, Dangerous Goods (DG) storage containers, ablution and emergency shower facilities, and security cameras.
- Facility Layout: Operational areas will be built using sea-container dome shelters placed on the surface. Areas handling liquid waste will include free-standing bunds, lined wedge (spading) pits, or bunded hardstands.
- Excavation Requirements: Construction of wedge pits will involve limited subsurface excavation, which must comply with the Site Management Plan and be supervised by the site owner due to contamination controls.

2.2.2 Operational aspects

The applicant is proposing the following methodologies for the storage and treatment of accepted waste types:

Storage Methodologies

- Segregate Storage: Waste will be stored in designated, bunded, and covered areas based on classification such as combustible, corrosive, toxic, environmentally hazardous, or non-dangerous.
- Dangerous Goods (DG) Storage: DGs will be stored in bunded sea containers compliant with relevant safety regulations.
- Asbestos Storage: Asbestos waste will be stored in a dedicated 12 m³ skip bin and laydown area, securely wrapped and labelled.
- Liquid Waste Storage: Liquid-controlled wastes will be stored in low-permeability bunded areas with spill containment capacity of at least 110% of the largest container.
- General Waste Storage: Packaged waste will be stored in sealed containers to prevent leaks, odour, and contamination.

Treatment Methodologies

- **Solidification/Stabilisation**

Liquid and sludge wastes will be treated to become spadable and compliant for landfill disposal through the mechanisms of Absorption, Adsorption and Encapsulation. Treated waste will be tested for pH stability and compliance with landfill contaminant threshold (CT) and leachability criteria before disposal.

Typical waste streams may include:

- Acidic and alkaline sludges
- Heavy oil-contaminated solids and emulsions
- Metal-bearing ash or sludges
- Semi liquid grit or screening waste from WWTP
- Other aqueous or semi-solid wastes that cannot be traditionally treated to sewer discharge

Treatment is undertaken in controlled batches. The selection of additives is based on compatibility and requirement to render material within landfill guidelines, and the main additives include:

- Organic absorbents (e.g. sawdust, shredded organics) to bind free liquids
- Inorganic absorbents/adsorbents (e.g. clays, zeolites) for contaminant uptake
- Cementitious or lime-based reagents to stabilise sludges, immobilise metals, and increase pH where required
- Other mineral additives (e.g. fly ash, gypsum, phosphorus, silicates) where compatibility dictates
- Absorption is achieved through the incorporation of free liquids into absorbent media until no visible liquid remains – rendering it 'spadable'. Immobilisation/Stabilisation is achieved through the addition of lime and/or cementitious reagents, which are blended into sludge to encapsulate contaminants and reduce solubility.

- **Product Destruction Unit (PDU)**

The PDU will securely destroy packaged food and beverage waste. Outer packaging will be separated and recycled and Inner packaging will be shredded; liquids will be pumped

into holding tanks and solids will be sent to composting or landfill.

- **Drum/IBC Cleaning (HotWash)**

Residual contents will be emptied into a receiving tank, containers will be rinsed using high- pressure water and vacuum attachments, rinsate will be treated as hazardous waste and disposed of appropriately, and all cleaning activities will be conducted in bunded and covered areas to prevent stormwater ingress and accidental discharge.

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 construction and operation which have been considered in this decision report are detailed in Table 1 below. Table 1 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 1: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Movement of plant and equipment. Handling of dry materials	Air/windborne pathway	<ul style="list-style-type: none"> • Conformance to the site specific SMP and an Asbestos removal control plan (ARCP) if subsurface excavation is performed. This may include the relevant regulatory reporting and monitoring requirements.
Noise and vibration	Machinery, vehicles	Air/windborne pathway	<ul style="list-style-type: none"> • Works will be undertaken per the HazRad HSEQ Management System noise management procedures. • Affected adjacent land users will be notified when work is likely to cause Speed limits will be implemented on-site.
Operation			
VOC's emission	Handling (unloading, processing and waste storage) of VOC containing substances.	Air/windborne pathway	<ul style="list-style-type: none"> • All VOC wastes will be stored in sealed in packages and tanks. • A complaint management procedure, will be employed at the site as part of the Site Based Management Plan, including the maintenance of a complaints register.

Emission	Sources	Potential pathways	Proposed controls
<p>Smoke and gases (CO, CO₂, CH₄)</p> <p>Heavy metals (Burning electronics, batteries, painted materials)</p>	<p>Accidental or deliberate burning of waste</p>	<p>Air/windborne pathway</p> <p>Soil and water contamination through leachate, seepage, infiltration</p>	<ul style="list-style-type: none"> • A Fire and Emergency Management Plan will be in place at the facility • A Site Emergency Response Plan will be in Place for the facility • No burning of vegetation or other materials will be permitted on site. • Health and safety and incident management procedures will be employed at the site through the HazRad HSEQ Management System. • All staff will be inducted prior to the operations commencing and made aware of the HazRad HSEQ Management System, Site Based Management Plan, health and safety and fire risks. • Appropriate safety programs will be implemented including nominated medical arrangements, firefighting equipment, evacuation procedures and first aid provision. • Storage areas for Dangerous Substances/ Goods will be compliant with the relevant legislation. • All site workers will have appropriate training in the handling of Dangerous Substances/ Goods and Hazardous materials and chemicals.
<p>Dust</p>	<p>Processing and handling of dry waste materials</p> <p>Miling activities</p> <p>Traffic movements</p>	<p>Air/windborne pathway</p>	<ul style="list-style-type: none"> • All mill processing of contaminated waste will be within and enclosed space and shrouded structure • Wet exhaust scrubbers will be located on the plastic shrouds to ensure any dust contaminant is contained • General housekeeping practices will be implemented to prevent the accumulation of waste materials that may generate dust. • All traffic areas are sealed • Complaint management procedures, which are currently employed at the site, as a part of the HazRad HSEQ Management Plan, including the maintenance of a complaints register, will be implemented in order to identify areas if dust management becomes a problem.

Emission	Sources	Potential pathways	Proposed controls
Odour	Waste storage and processing	Air/windborne pathway	<ul style="list-style-type: none"> • Odour will be managed at the site according to the HazRad Wattleup Odour Management Plan • Packaged and bulk waste to be stored in sealed containers • Waste materials accepted to be risk assessed prior to acceptance to identify odour or other risks • General housekeeping practices will be implemented to prevent the accumulation of waste materials that may generate odour. • Community notification will be undertaken where appropriate when work is likely to cause odour impact on the public.
Noise and vibration	Waste Transfer Operations	Air/windborne pathway	<ul style="list-style-type: none"> • Works will be undertaken in accordance with the HazRad HSEQ Management System noise management procedures for the site. • Speed limits will be implemented on site to control noise generation from traffic movements.
Chemicals Heavy metals Biological hazards Microplastics	Spillage, leakage, or accidental release of pollutants outside of designated waste processing areas.	Air/windborne pathway Soil and water contamination through leachate, seepage, infiltration	<ul style="list-style-type: none"> • All operational activity to occur in covered and bunded hardstand areas • All waste process areas will be covered and bunded to prevent stormwater ingress. • Storage areas for oils, and chemicals will be bunded per the relevant Australian Standards for the storage of Dangerous Goods. • Refueling plant and equipment will be undertaken within bunded areas. • Vehicle washdown will be undertaken in designated bunded areas or off-site • Cleaning of equipment will be undertaken in appropriate areas, which prevents or minimizes pollution waters. • All work at site will be undertaken in accordance with the HazRad HSEQ Management System spill management procedures for the site. • Storage areas will be available clearly labelled with the quantity and characteristics of chemical stored. Safety Data Sheets (SDS) will be

Emission	Sources	Potential pathways	Proposed controls
			<p>available which indicate the appropriate action to be taken in the event of a spill.</p> <ul style="list-style-type: none"> • Site workers will have appropriate training in the handling of Hazardous materials, chemicals and spill response. • Spill containment equipment kits will be available on site. • All spills or incidents must be reported to the General Manager and, if required, to the appropriate Regulatory Authority. • Daily site inspections will record any spills or non-compliances and the corrective action taken.

3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020), the Delegated Officer has excluded the applicant's employees, visitors, and contractors 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 and **Error! Reference source not found.** 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
██████████ ████████████████████	Approximately 210 m west of the premises boundary.
Industrial premises	The prescribed premises is surrounded by industrial premises on all sides except the south, with some sharing common boundaries.
Environmental receptors	Distance from prescribed activity
Threatened Ecological Communities, priority 3, Endangered.	Approximately 380 m southwest of the premises boundary.
<i>Lerista Lineata</i> (Perth lined skink)	Mapped approximately 445 m northeast of the premises boundary
<i>Isodon fusciventer</i> (Western brown bandicoot)	Mapped approximately 500 m northwest of the premises boundary
Banganup Lake	Approximately 2.6 km southeast of the premises

boundary

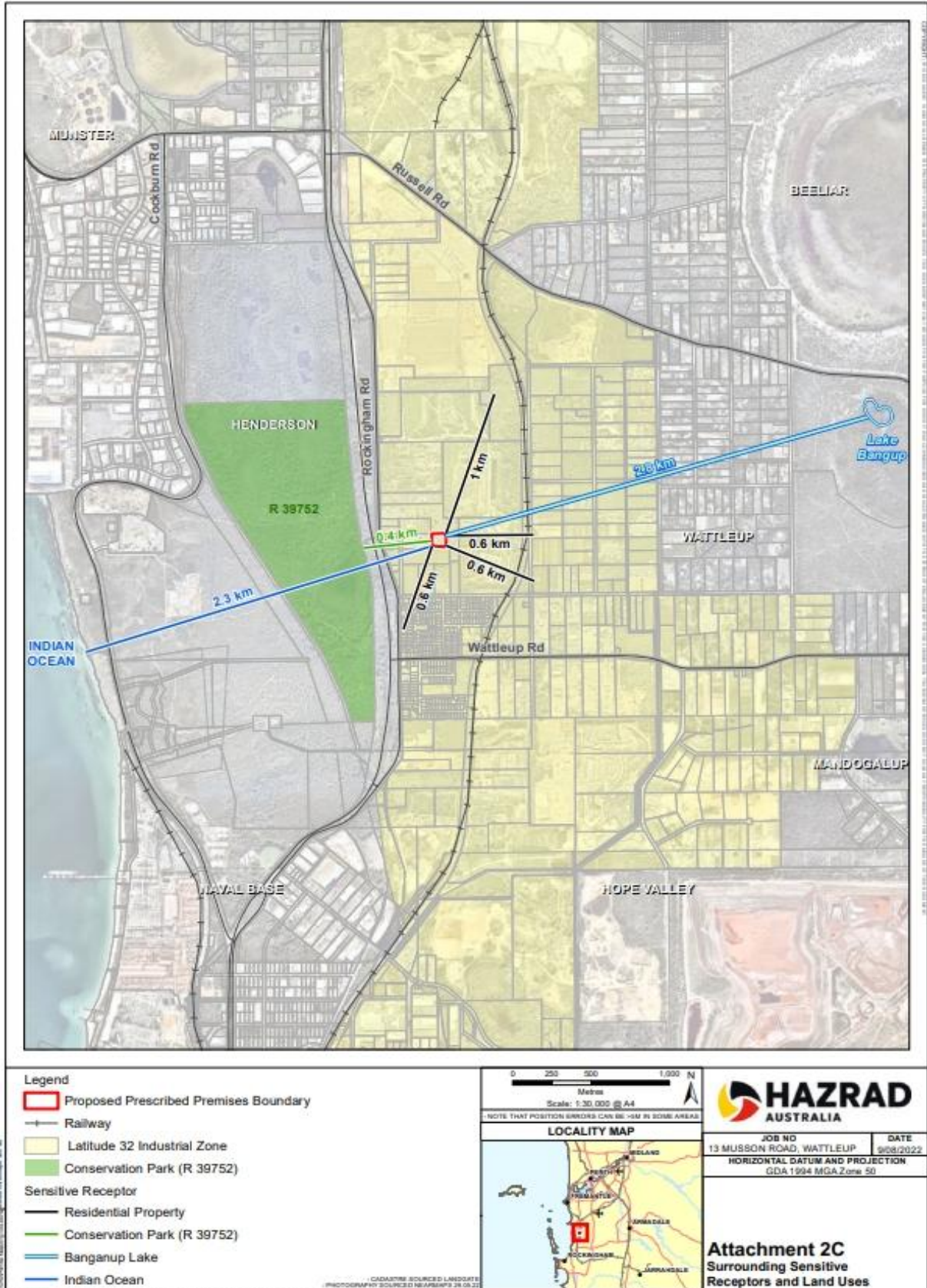


Figure 1: Distance to sensitive receptors

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source 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 applicant 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 applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

Additional regulatory controls may be imposed where the applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

Works approval W3025/2025/1 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the premises. A risk assessment for the operational phase has been included in this decision report, however licence conditions will not be finalised until the department assesses the licence application.

Table 3: Risk assessment of potential emissions and discharges from the premises during construction and operation

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Construction								
Movement of plant and equipment. Handling of dry materials.	Dust	Air / windborne pathway causing impacts to health and amenity	Residences Approximately 210 m west of the premises boundary. The prescribed premises is surrounded by industrial premises on all sides except the south, with some sharing common boundaries.	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Conditions 1 and 2	N/A
Machinery, vehicles	Noise and vibration	Air / windborne pathway causing impacts to health and amenity	Residences approximately 210 m west of the premises boundary. The prescribed premises is surrounded by industrial premises on all sides except the south, with some sharing common boundaries. <u>Lerista Lineata</u> (Perth lined skink), approximately 440 m northeast of the premises boundary. <u>Isodon fusciventer</u> (Western brown bandicoot), approximately 500 m northwest of the premises boundary.	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	Conditions 1 and 2	N/A
Operational Phase (including time limited operations)								
Handling (unloading, processing and waste storage) of VOC containing substances.	VOC's emission	Air / windborne pathway causing impacts to health and amenity	Residences Approximately 210 m west of the premises boundary. The prescribed premises is surrounded by industrial premises on all sides except the south, with some sharing common boundaries.	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Conditions 1 and 2	N/A

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Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Accidental or deliberate burning of waste	Smoke and gases (CO, CO ₂ , CH ₄) Heavy metals (Burning electronics, batteries, painted materials)	Air/windborne pathway Soil and water contamination through leachate, seepage, infiltration	Residences approximately 210 m west of the premises boundary. The prescribed premises is surrounded by industrial premises on all sides except the south, with some sharing common boundaries. Banganup Lake, approximately 2.6 km southeast of the premises boundary.	Refer to Section 3.1	C = Significant L = Likely High Risk	Y	Conditions 1 and 2	N/A
Processing and handling of dry waste materials Miling activities Traffic movements	Dust	Air/windborne pathway causing impacts to health and amenities	Residences approximately 210 m west of the premises boundary. The prescribed premises is surrounded by industrial premises on all sides except the south, with some sharing common boundaries.	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Conditions 1 and 2	N/A
Waste storage and processing	Odour	Air/windborne pathway causing impacts to health and amenities	Residences approximately 210 m west of the premises boundary. The prescribed premises is surrounded by industrial premises on all sides except the south, with some sharing common boundaries.	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Conditions 1 and 2	N/A

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Waste Transfer Operations	Noise and vibration	Air/windborne pathway causing impacts to health and amenities	Residences approximately 210 m west of the premises boundary. The prescribed premises is surrounded by industrial premises on all sides except the south, with some sharing common boundaries. <u>Lerista Lineata</u> (Perth lined skink), approximately 440 m northeast of the premises boundary. <u>Isoodon fusciventer</u> (Western brown bandicoot), approximately 500 m northwest of the premises boundary.	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	Conditions 1 and 2	N/A
Storage of chemicals and hazardous substances	Spillage, leakage, or accidental release of pollutants outside of designated waste processing areas.	Soil and Groundwater contamination through leachate, seepage, infiltration	Banganup Lake, approximately 2.6 km southeast of the premises boundary. Threatened Ecological Communities, approximately 380 m southwest of the premises boundary.	Refer to Section 3.1	C = Significant L = Likely High Risk	Y	Conditions 1 and 2	N/A

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Solid waste inappropriately stored or secured.	Gases (CO, CO ₂ , CH ₄) Heavy metals Oduor Biological hazards	Air/windborne pathway Soil and water contamination through leachate, seepage, infiltration	Residences approximately 210 m west of the premises boundary. The prescribed premises is surrounded by industrial premises on all sides except the south, with some sharing common boundaries. <u>Lerista Lineata</u> (Perth lined skink), approximately 440 m northeast of the premises boundary. <u>Isoodon fusciventer</u> (Western brown bandicoot), approximately 500 m northwest of the premises boundary. Banganup Lake, approximately 2.6 km southeast of the premises boundary. Threatened Ecological Communities, approximately 380 m southwest of the premises boundary.	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	Conditions 1 and 2	N/A

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

Note 2: Proposed applicant controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

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 (City of Cockburn) advised of proposal on 22 July 2025	None received	N/A
Dangerous Goods Safety Branch, advised of proposal 22 July 2025	None received	N/A
Department of Fire and Emergency Services advised of proposal 22 July 2025	None received	N/A
Applicant provided draft documents on 19 September 2025.	The applicant advised that they would like to wave the comment period and proceed to the granting of the instrument.	Noted.

5. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that a works approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

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.