Decision Report

Application for Works Approval

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

Works Approval Number	W2890/2025/1
Applicant	Viva Energy Australia Pty Ltd
ACN	004 610 459
Application number	APP-0026220
Premises	Viva Energy, Karratha Coolawanyah Road KARRATHA INDUSTRIAL ESTATE WA 6714 Legal description Lot 1 on Deposited Plan 71469 As defined by the premises map attached to the issued works approval
Date of report	4 July 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 W2890/2025/1 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://www.wa.gov.au/service/building-utilities-and-essential-services/integrated-essential-services/dwer-regulatory-documents.

2.2 Application summary and overview of premises

On 27 September 2024 Viva Energy 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 storage of chemicals at the premises. The premises is located within the Karratha Industrial Estate approximately four kilometres from the Karratha townsite.

The premises relates to the category and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W2890/2025/1. 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 W2890/2025/1.

2.2.1 Overview of premises

The applicant previously held a works approval for a lubricant depot on this site (W6386/2020/1) which expired in November 2023.

The applicant proposes to undertake works to establish the foundations for the lube oil storage tanks and a new transportable office, construction of a loading/unloading truck gantry with canopy cover, installation of lube oil storage tanks and bund, and installation of above-ground, steel transfer pipelines and a new section of underground drainage pipeline. A total of 14 above ground tanks will be installed, comprising ten 200 kilolitre (kL) tanks and 4 100 kL tanks.

The gantry will comprise a gantry platform with overhead shelter on a sealed, bunded concrete loading area (the gantry bays). Aboveground pipelines will be installed to transfer product between the gantry and storage tanks, and a new section of underground drainage pipeline will be installed to connect the bunded gantry area to the oily water treatment system.

A bunded waste storage area and flexi-tank storage area will be constructed and an Atlan Spillceptor system will be installed for removal of residual hydrocarbons from stormwater prior to discharge offsite.

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	Construction of foundations Installation of storage tanks, skids, aboveground transfer pipelines and gantry	Air / windborne pathway	No specific controls
Noise			Construction in daylight hours only.
Operation			
Leaks and spills of hydrocarbons and potentially contaminated water	Storage and handling of lube oil (Class C2 non DG)	Direct discharge to land, overland flow and infiltration	• Concrete bunding of tanks in accordance with AS1940 with a collection sump and bund capacity of 678.5 m^3 and wall height of approximately 1 m. • Lube storage tanks will be provided with overfill and leak detection systems. • Lube storage tank bund sump to contain an isolation valve remaining closed and opened to allow discharge after rainfall. • Atlan spillceptor oily water separator for treatment of potentially contaminated water from bunded areas prior to discharge. • All product transfers to occur in the concrete bunded gantry loading bays which meet the requirements of AS1940. • Waste and flexi-tank storage will occur within concrete bunded areas with a collection sump. • Empty (used) flexi-bags to be placed in hydrocarbon waste skip bins located in warehouse and collected and disposed by a licensed waste contractor

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 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**
Resort accommodation	2.6 km boundary to boundary northwest of premises
Single residence inside industrial area	640 metres boundary to boundary south of premises
Residential area	4km northwest of the boundary of the premises
Environmental receptors	**Distance from prescribed activity**
Groundwater	5 to 10 metres below ground level (Saline to Brackish)
Surface water	150 metres east of the premises. Gwen creek an intermittent flow tributary to Lulu creek

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 W2890/2025/1that accompanies this decision report authorises construction only. 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 registration is required 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.

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	Reasoning
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Construction								
Construction of foundations Installation of storage tanks, skids, aboveground transfer pipelines and gantry	Dust	Air / windborne pathway causing impacts to health and amenity	Personnel at surrounding industrial premises Residential dwelling located 640 m south of the premises	Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	NA	The Delegated Officer considers that the risk of dust emissions impacting air quality at receptors is low given the separation distance and the nature of the works required, short construction timeframe and occurring within an industrial area.
	Noise							The Delegated Officer considers that the risk of amenity impact due to noise at receptors is low given the separation distance and the works occurring within an industrial area during daytime hours. The Environmental Protection (Noise) Regulations 1997 are sufficient to regulate noise impacts during construction.
Operation								
Storage and handling of lube oil (Class C2 non-DG)	Leaks and spills of hydrocarbons and potentially contaminated water	Direct discharge to land, overland flow and infiltration causing contamination of soil and underlying groundwater.	Soil and groundwater underlying the premises	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 1	The delegated officer has had regard to the applicant's proposed controls to prevent and/or capture hazardous material releases (bunded areas and contaminated stormwater collection and treatment) and has determined that minor volumes of environmentally hazardous materials discharged to land are most likely to occur from transfer points or leaking joins and could occur at some time. The delegated officer considers that the applicant's controls are

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Reasoning
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
								sufficient to manage the risk of spills or leaks adversely affecting the environment and applied these as construction requirements in the works approval.
Discharge of treated stormwater from the oily water separator	Stormwater with potential residual hydrocarbons	Direct discharge to land, overland flow and infiltration causing contamination of soil and underlying groundwater.	Soil and groundwater underlying the premises.	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 1	The Atlan spillceptor is designed remove hydrocarbons at 99.99% efficiency. The delegated officer considers subject to the maintenance of the system and treatment of stormwater from potentially contaminated areas prior to discharge, contamination risk is adequately mitigated.

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
Application advertised on the department's website on 27 February 2025	None received	N/A
Local Government Authority advised of proposal on 26 February 2025	None received.	NA
Applicant was provided with draft documents on 13 June 2025	The applicant replied 27 June 2025 requesting that the requirement for isolation valves for the Loading gantry, Waste skip bin and flexi-tank storage be removed advising this was not a requirement AS/NZS 1940 where compounds drained directly to a separator that is designed for the expected flow.	The delegated officer agrees that as the loading gantry, waste skip bin storage and flexi-tank storage drain directly to an oily water separator requirements of the AS are met and has removed the requirements for an isolation valve on these compounds. Noting that an isolation valve was indicated in the premises plans for the lube storage tank bunded area and no change to this was requested, an isolation valve remains as a requirement for this bund in the works approval.

5. Decision

The delegated officer has determined that the proposal to construct and operate a lube oil storage facility at Lot 1 Coolawanyah Road in the Karratha Industrial Estate does not pose an unacceptable risk of impacts to public health or the environment. This determination is based on the following:

- Storage of hydrocarbons in accordance with Australian Standard 1940.
- Transfer of hydrocarbons to occur via a bunded gantry area.
- Installation, operation and maintenance of an oily water stormwater discharge.

Conditions have been imposed on the works approval based on the controls described above as they are considered reasonable and appropriate to maintain an acceptable level of risk. A registration is required to authorise emissions associated with the ongoing operation of the premises

6. 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.
4. Viva Energy Pty Ltd 2024, *Application for works approval*, Melbourne Victoria