

Decision Report

Application for Works Approval

Part V Division 3 of the Environmental Protection Act 1986

Works Approval Number W6786/2023/1

Applicant Milne AgriGroup Pty Ltd

ACN 008 919 579

File number DER2023/000086

Premises Milne Feeds

103 – 105 Welshpool Rd WELSHPOOL WA 6106

As defined by the premises map attached to the issued works

approval

Date of report 2 June 2023

Decision Works approval granted

Amine Fisher
A/MANAGER, PROCESS INDUSTRIES
REGULATORY SERVICES

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

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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 two ingredient storage tanks at the Milne AgriGroup Pty Ltd feed mill located at 103 – 105 Welshpool Road, Welshpool (the premises). As a result of this assessment, works approval W6786/2023/1 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 January 2023, Milne AgriGroup Pty Ltd (Milne, 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 relates to the installation of two storage tanks within the premises boundary of their existing feed mill located at 103 – 105 Welshpool Rd, Welshpool, which operates under licence L7438/2000/9. The two tanks are proposed to be used for storage of molasses and wastewater which will be delivered to the premises and used as ingredients in the feed manufacturing process.

The molasses storage tank will be constructed from Hexathene polyethylene (PE) with a capacity of 30,000 L and will allow for bulk storage of molasses which is currently stored within intermediate bulk containers (IBCs) on the premises. The storage tank will be self-bunded and connect to an existing pump system.

The wastewater storage tank will be constructed from Linear Low-Density Polyethylene (LLDPE) with a capacity of 32,000 L. The wastewater is classified as K200 food and beverage processing waste under the Environmental Protection (Controlled Waste) Regulations 2004 (Controlled Waste Regulations). The wastewater will be delivered to the premises by a licenced controlled waste carrier in standard deliveries of 20,000 L three to four times a week. The acceptance of this volume of wastewater meets the criteria for a category 61: liquid waste facility under Schedule 1 of the Environmental Protection Regulations 1987 (EP Regulations). Wastewater will be transferred from the wastewater storage tank into an existing dosing tank located within the feed mill that feeds the mixer. Chemical analysis of the wastewater was undertaken, and the wastewater is characterized by a high biological oxygen demand (BOD >5000 mg/L) and high nutrient load.

The premises relates to the categories and assessed production capacity under Schedule 1 of the EP Regulations which are defined in works approval W6786/2023/1. 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 2020b) are outlined in works approval W6786/2023/1.

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 2020b).

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	Establishment of two new storage	Air / windborne	No controls proposed.				
Noise	tanks and construction of associated bunds and pads.	pathway					
Operation	Operation						
Odour	Transfer of wastewater from	Air / windborne pathway	Inspection of truck on weighbridge prior to entering site.				
	truck to storage tank.		Inspection of truck transfer equipment prior to transfer.				
	Wastewater		Trucks will park in a designated unloading area.				
	containment breaches.		Trained staff will be on-site to assist with unloading, and have a standby person ready shut down transfer.				
Wastewater high in nutrients and biological	Containment breach of storage tanks. Spills and leaks	Overland runoff and/or infiltration causing contamination of shallow groundwater or surface water.	Tank to be manufactured in guidance with Australian Standard AS4766:2006 Polyethylene storage tanks for water and chemicals.				
oxygen demand (BOD)	during transfer.		Tank will be located within an existing bund at the feed mill.				
(===)			Rainwater captured in wastewater tank bund will be pumped into the wastewater tank.				
			Spill kits will be kept on premises to recover spills.				
Molasses			Tank to be manufactured in guidance with Australian Standard AS4766:2006 Polyethylene storage tanks for water and chemicals. Tank is self bunded.				
			i ank is seit bunded.				

3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020b), 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 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 2020a)).

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

Human receptors	Approximate distance from proposed wastewater storage tank		
Surrounding Industrial businesses	140 m east of the nearest industrial receptor		
Residential dwellings	730 m south-east of nearest residential receptor		
Bentley Health Service	1100 m south		
Environmental receptors	Approximate distance from proposed wastewater storage tank		
Environmental receptors Perth groundwater area			

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020b) for each identified emission source and take 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 W6786/2023/1 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 amendment to L7438/2000/9 is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with ongoing operation of the two new storage tanks and acceptance of liquid waste onto 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 amendment application.

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

Risk events			Risk rating ¹						
Sources / activities		Potential emission	Potential pathways and impact	Receptors Applicants controls	C = consequence L = likelihood	Applicant controls sufficient?	Conditions ^{2, 3} of works approval	Justification for regulatory controls	
Construction									
Establishment of two new storage tanks and construction of associated bunds and pads.		Dust	Air / windborne pathway causing impacts to health and amenity	Surrounding industrial businesses	ial	C = Slight L = Unlikely Low Risk	Y	N/A	Given the nature and scale of the construction works, with the works occurring within an existing industrial area and there being adequate separation in place to nearby residential receptors (>700 m), the delegated officer does not reasonably foresee off-site receptors being impacted by noise and dust emissions associated with construction works relating to the tank installation.
		Noise		Residential proposed premises 730 m south-east	proposed.				
Operation (inc	luding time-limite	ed-operations ope	rations)						
Liquid waste acceptance	Transfers and storage	Odour	Air/windborne pathway causing impacts to amenity	Surrounding industrial businesses Residential premises 730 m south-east	Refer to Section 3.1	C = Minor L = Rare Low Risk	Υ	causing impact storage tank. Geduring transfer to 3-4 times a weather tank (>140 means and construction requirements) Condition 6 (Time limited operations requirements) The delegated controls to continued within conditioned the officer included indicator and a risk of overfilling relating to deliving operational continued to storage or process at the process at	Due to the nature of the wastewater, there is a risk of odour causing impacts to surrounding receptors during transfer into the storage tank. Given the applicant's controls to prevent spillage during transfer and storage, frequency of deliveries being limited to 3-4 times a week on average, and location of the wastewater tank (>140 m east of the nearest industrial receptor), the delegated officer does not reasonably foresee off-site receptors being impacted by odour from the wastewater acceptance, storage or processing. Furthermore, odour emissions are not expected to be significantly different or increasing from the existing odour profile from the animal feed manufacturing process at the premises.
	Containment breach during transfers or storage (overfilling, spills and/or leaks)	Liquid waste high in nutrients and BOD	Overland runoff and/or infiltration causing contamination of groundwater	Soils and groundwater 5 m below the ground surface	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk			The delegated officer determined that the applicant's proposed controls to contain wastewater in an enclosed tank manufactured according to the relevant Australian standard, and contained within a bund are generally reasonable and conditioned these as construction requirements. The delegated officer included an additional requirement for a high-level indicator and alarm or an automatic pump cut-off to mitigate the risk of overfilling during transfers. The applicant's controls relating to delivery of the wastewater have also been included as operational controls to mitigate the likelihood of containment loss during transfers.
		Odour	Air/windborne pathway causing impacts to amenity	Surrounding industrial businesses Residential premises 730 m south-east		C = Minor L = Rare Low Risk	N		
Bulk storage of molasses	Containment breach; (spills and/or leaks)	Molasses	Direct discharge to ground	Soils within the premises	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Condition 1 (Design and construction requirements)	The delegated officer determined that the applicant's proposed controls to contain molasses in an enclosed self bunded tank manufactured according to the relevant Australian standard will sufficiently mitigate the risk of containment loss and associated contamination therefore the applicant's controls have been conditioned within the works approval as construction requirements.

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

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

Note 3: Conditions 2, 3, 4, 5, 7, 8, 9, and 10 are all department imposed conditions required for compliance reporting, authorising time limited operations, waste acceptance and general complaint and record keeping requirements.

4. Decision

The delegated officer has determined that the proposal for the construction of two additional storage tanks and the acceptance and use of K200 liquid waste at the premises does not pose an unacceptable risk of impacts to off-site receptors. This determination is based on the tanks being manufactured according to Australia standard *AS4766:2006 Polyethylene storage tanks for water and chemicals, and* having appropriate secondary containment. Conditions have been imposed on the works approval based on the controls described in section 3.1 and Table 3 above as they are considered essential to maintaining an acceptable level of risk.

Time limited operations are permitted for a period of 90 days to enable the applicant to operate the two storage tanks once constructed. During this period, the applicant may submit a licence amendment application for the continued operation of the two storage tanks under licence L7438/2000/9 and ongoing acceptance of K200 liquid waste onto the premises. Additionally, on receipt of this works approval the Works Approval Holder should submit a Form CW14 – Application to list a waste facility to the department to seek registration as a waste facility on the department's Controlled Waste Tracking System.

5. 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 23 March 2023	None received.	N/A
Local Government Authority advised of proposal on 23 March 2023	 The City of Canning replied on 24/03/2023 a summary of comments is provided below: Confirmed that the proposed works will not require development approval. Redactions within the application relating to the wastewater addition makes it difficult to comment on potential environmental impacts. No concerns with the storage of molasses having environmental impact being situated within a bunded area. The City noted that local laws stipulate that land owners/occupiers are required to take all practical measures to prevent liquid waste from escaping the premises, request the business to implement spill capture devices/practices. 	Noted. The Delegated officer has considered this information in determining to grant this works approval.
Seven adjacent business advised of the application on 23 March 2023	One stakeholder expressed concerns about Milne's current conduct and compliance with Licence L7438/2000/9 and questioned why granting further approvals would improve their compliance.	Comments received do not directly relate to the subject of the proposal. The department is currently conducting a licence review of licence L7438/2000/9

		focussed on fugitive dust emissions.
Applicant was provided with draft documents on 18 May 2023	Applicant commented that the proposed location of the wastewater tank has changed to be within the main mill building bund.	Table 1, Table 2 and Figure 2 of Schedule 1 have been updated within the works approval to reflect this change and the distance to receptors has been updated within this decision report.

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) 2020a, *Guideline: Environmental Siting*, Perth, Western Australia.
- 3. DWER 2020b, Guideline: Risk Assessments, Perth, Western Australia.
- 4. Milne AgriGroup Pty Ltd (Milne) 2023, Application for a Works Approval under the Environmental Protection Act 1986 (including application form and attachments), Welshpool, Western Australia