



Application for Licence

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

Licence Number	L9301/2021/1
Applicant	Omya Australia Pty Ltd
ACN	001 682 533
File number	DER2021/000433
Premises	26-28 Tomlinson Road WELSHPOOL WA 6106 Lot 13 on Plan 8957 Certificate of Title Volume 1917 Folio 862
Date of report	27/09/2022
Decision	Licence granted

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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 operation of the premises. As a result of this assessment, licence L9301/2021/1 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 July 2021, Omya Australia Pty Ltd (the applicant) submitted an application for a licence to the department under section 57 of the *Environmental Protection Act 1986* (EP Act).

The application seeks a licence relating to the blending of limestone to make granulate products using a packaged granulation processing plant at the premises. The premises is located in an industrial area at Omya Australia, Tomlinson Road, Welshpool (the premises).

The premises has existing mineral processing infrastructure and equipment that was operated for many years by Commercial Minerals Limited under Registration R374/1967/1. The existing infrastructure includes a number of buildings and an external hardstand.

A works approval to install two packaged granulation processing plants at the premises was issued on 28 July 2020, with the required compliance report submitted on 2 February 2021 (see section 2.5). The applicant advised the department on 9 May 2022 that only one of the granulation processing plants was built, and therefore the applicant is seeking a licence to operate only one granulation processing plant.

The premises relates to prescribed activity category 33: chemical blending or mixing and an assessed production capacity of 17,250 tonnes per year under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations). As described in section 2.4, Category 70 activities that are currently operated under R374/1967/1 have not been incorporated onto the licence.

2.3 Operational aspects

The applicant proposes to operate a modular granulation plant for granulation of agricultural products, namely limestone. The granulation plant consists of 12 pre-fabricated modules. The modular plant has a maximum output of two tonnes of dry product per hour, resulting in a maximum site annual output of 17,250 tonnes per year.

Granulation is a mechanical process that allows larger diameter parts (granules) to be achieved by adhering smaller product particles (powder) to one another. The granulation plant uses wet granulation technology, as shown in the process flow in Figure 1.

Ground natural limestone (CaCO_3) powder (approx. 20 μm) is dried using an energy efficient gas fired fluid bed dryer process to remove any excess water. Undercover storage of raw materials is maximised to enhance dryer fuel efficiency. A liquid binder consisting of a mixture of water and molasses (the biodegradable by-product of sugar cane refining) is then added and a granulation pan processes the limestone molasses material into granules.

The purpose of the modular granulation system is to create granules between 2 – 6 mm in

diameter to be used in the agricultural industry to increase the fertility of soil by changing the pH, and for other applications in agriculture.

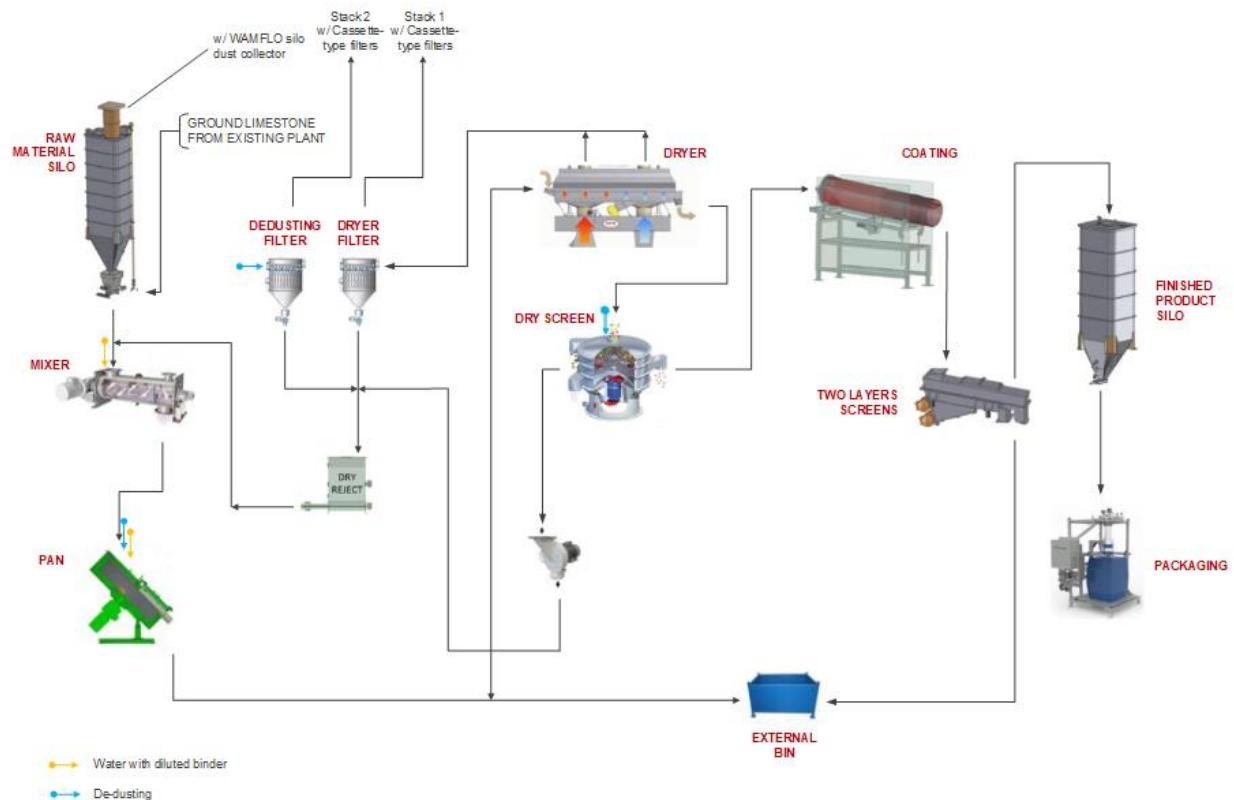


Figure 1: Omya granulation plant process flow diagram

2.4 Exclusions to this assessment

The premises is already registered under R374/1967/1 for Category 70 activities. The existing Category 70 operations carried out at the premises involve input materials being deposited onto a mill using a front end loader. The material is processed and grinded down, and then pneumatically conveyed from the mill into the granulation’s raw material feed silo.

The *Guideline: Industry Regulation Guide to Licensing* (DWER 2019) indicates that where an activity in Schedule 1 Part 2 of the EP Regulations is situated within the boundary of a licensed premises, it will be included in an existing licence without requiring a separate registration. While the delegated officer had intended to include the Category 70 activities under registration R374/1967/1 on the new licence, information provided by the applicant late in the decision making process indicated that the production and design capacity of the screening activities registered under R374/1967/1 are of a volume that constitutes Category 12 activities rather than Category 70, and therefore requires a licence.

Based on insufficient time and information, consideration of screening activities was not part of the scope of this assessment. The applicant will need to apply for a licence amendment for Category 12 activities and provide sufficient supporting information, particularly on the existing infrastructure and emission controls in place, for the department to assess the activities.

2.5 Compliance with works approval

The applicant was granted works approval W6373/2020/1 for the installation, commissioning and time-limited operations of the premises. The works approval was subsequently amended on 5 August 2021 by the CEO to extend the period of time limited operations.

The applicant submitted an Environmental Compliance Report on 2 February 2021. The report

concluded that the works had been constructed to the requirements specified in condition 1 of W6373/2020/1. The department has reviewed the Environmental Compliance Report and is satisfied that although only one plant was constructed, the infrastructure was otherwise constructed in compliance with the requirements specified in condition 1 of W6373/2020/1.

The applicant submitted a stack testing report on 23 April 2021 as required by condition 9 of the works approval. The report concluded that particulate matter emitting from the discharge points Stack 1 (dryer dust filter) and Stack 2 (general dust filter) of W6373/2020/1 did not exceed the limit specified in condition 6 of W6373/2020/1. The detected values of particulate matter were well below the 50 mg/m³ limit, at <2 mg/m³ and <2.6 mg/m³ at Stack 1 and Stack 2 respectively. The department reviewed the stack testing report and is satisfied the results demonstrate compliance with the limit for particulates specified condition 6 of W6373/2020/1.

3. Risk assessment

3.1 Determination of emission, pathway and receptor

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.

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises 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
Operation			
Dust	Blending of limestone to produce granules	Air / windborne pathway	Dryer dust filter (Stack 1): Cassette-type filter collects exhaust gas from the dryer and filters it, with maximum design flow rate of 6,500 m ³ /h. Filter ensuring emissions from the stack are less than 50 mg/m ³ . Filter is fitted with an alarm system, and the cleaning phase and status is monitored electronically.
			General dust filter (Stack 2): Cassette-type filter treats exhaust gas from the granulation pan and dry screen, with maximum design flow rate of 7,000 m ³ /h. Filter ensuring emissions from the stack are less than 50 mg/m ³ . Filter is fitted with an alarm system, and the cleaning phase and status is monitored electronically. The general dust filter treats emissions and exhaust air from the granulation process. These are dust particulates originating from the conveyor, bagging machine and screening machine.
			Raw feed silo dust filter: Round silo dust collector with vertically mounted filter elements and air jet cleaning system. Maximum design flow rate of 1,515 m ³ /h and filter ensuring emissions from the stack are less than 50

Emission	Sources	Potential pathways	Proposed controls
			mg/m ³ . Filter is fitted with an alarm system, and the cleaning phase and status is monitored electronically.
Noise	Blending of limestone to produce granules	Air / windborne pathway	All machinery used for blending is within an enclosed weatherproof modular plant structure.

3.1.2 Siting and location

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.

The premises is in an industrial area in Welshpool about 12 kilometres south-east of the Perth CBD. The premises is triangular, positioned between Tomlinson Road to the south. There are industrial receptors immediately adjacent to the premise, to the east and west. The northern tip of the premises abuts a drainage easement. The closest residential premises are approximately 790 m to the north-west of the premises.

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020a) for each identified emission source and takes into account identified potential source-pathway and receptor linkages. Where linkages are in-complete they have not been considered further in the risk assessment. Where the applicant has proposed mitigation measures/controls, 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 the below table.

3.3 Risk assessment table

The table below (Table 2) describes the risk events associated with the proposal consistent with the *Guideline: Risk Assessments* (DWER 2020). The table identifies whether the risk events are acceptable and tolerated, or unacceptable and not tolerated, and the appropriate treatment and degree of regulatory control, where required.

Table 2: Risk assessment summary

Risk Event				Consequence rating ¹	Likelihood rating ¹	Risk ¹	Applicant controls sufficient?	Reasoning	Regulatory controls
Source/ Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls						
Blending of limestone to produce granules	Noise	Unreasonable interference with the health, welfare, convenience, comfort or amenity of nearby sensitive receptors (residences 790m; industrial receptors immediately adjacent)	Refer to section 3.1.1	Minimal level impacts to amenity on local scale Slight	The risk event may only occur in exceptional circumstances Rare	Low Acceptable, generally not subject to controls	Y	The delegated officer considers there is sufficient separation in place (790m to nearest residence), and therefore does not foresee that noise will impact on the amenity or health of off-site receptors.	<u>Licence controls:</u> <ul style="list-style-type: none"> • Condition 1 – infrastructure controls • The Environmental Protection (Noise) Regulations 1997 apply
	Dust		Refer to section 3.1.1	Low level impacts to amenity on local scale Minor	The risk event may only occur in exceptional circumstances Rare	Low Acceptable, generally not subject to controls	Y	Due to the applicant controls and demonstrated compliance with W6373/2020/1 condition 6, the delegated officer does not foresee that dust will impact on the amenity or health of off-site receptors.	<u>Licence controls:</u> <ul style="list-style-type: none"> • Condition 1 – infrastructure controls

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

4. Consultation

Table 3 provides a summary of the consultation undertaken by the department.

Table 3: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website on 3 November 2021	None received	N/A
Local Government Authority advised of proposal on 4 November 2021	None received	N/A
Applicant was provided with draft documents on 17 May 2022	The applicant responded to the department's highlighted comments that required clarification on 5 August 2022.	The department has noted the applicant's response to the department's comments. The department updated section 2.4 of the decision report and removed Category 70 from the licence.

5. Decision

The delegated officer has determined the proposal to operate the new granulation processing plant at the premises, with an assessed maximum output of 17,250 tonnes per year of limestone granules, does not pose an unacceptable risk of impacts to public health or the environment. This determination is based on the following:

- the location of the premises being within an existing premises and within an existing industrial area; and
- the licence holder has installed the infrastructure as required for works approval W6373/2020/1 and recorded dust levels that were well below the limit required for condition 6 of the works approval W6373/2020/1.

The delegated officer has had regard for the *Guidance Statement: Licence Duration*, and, noting that the lease for the premises expires in 2025 with the possibility of extension to 2031, issued the licence for a period of 9 years.

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

5.1 Registration R374/1967/1 – screening activities

The applicant currently holds registration R374/1967/1 for Category 70 screening activities on the premises as outlined in section 2.4. Applicant information indicates the production or design capacity of screening activities triggers Category 12 rather than Category 70. The addition of Category 12 to the licence requires further supporting information, assessment and potentially additional conditions on the licence. Due to time constraints for the grant of licence L9301, the delegated officer deferred the addition of Category 12 to the licence pending a licence amendment application.

The applicant is expected to submit an application for licence amendment for the addition of Category 12. The application will need to detail information related to screening activities,

including information about emissions and discharges and their control.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. DER 2016, *Guidance Statement: Licence duration*, Perth, Western Australia
3. Department of Water and Environmental Regulation (DWER) 2019, *Guideline: Industry Regulation Guide to Licensing*, Perth, Western Australia.
4. DWER 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
5. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.