



Application for Works Approval

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

Works Approval Number	W6368/2020/1
Applicant	NewCo Mills Pty Ltd
ACN	616 455 808
File number	DER2020/000087
Premises	NewCo Mills Pty Ltd Animal Feed Manufacturing Facility 46 Gaston Road BULLSBROOK WA 6084 Legal description - Lot 1780 on Deposited Plan 106107 As defined by the coordinates in Schedule 2 of the Works Approval
Date of report	01/12/2022
Decision	Works approval granted

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1. Decision summary

NewCo Mills Pty Ltd (applicant, NewCo) submitted an application for a works approval for the construction of an animal feed manufacturing facility (premises) on Lot 1780 on Deposited Plan 106107, Bullsbrook.

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 W6368/2020/1 has been granted.

The department's assessment and decision making on the application was deferred for a substantial period at the applicant's request while the applicant sought to resolve separate planning approvals.

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

On 14 February 2020, 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 animal feed manufacturing for the domestic and export markets at the premises. The premises is approximately 5 km southeast from the town of Muchea.

The premises relates to the category 23 animal feed manufacturing and an assessed design capacity of 215,000 tonnes per annum under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6368/2020/1. 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 W6368/2020/1.

The premises will operate for 24 hours per day, 5 days a week, commencing on Monday at 6 am and finishing at 10 pm on Friday night and will operate at a production capacity of 100,000 tonnes per annum.

2.3 Overview of premises and key steps in the process

2.3.1 Operational and process description

The proposed premises comprises of two processing lines operating in parallel manufacturing grain-based animal feed on site.

Intake:- Bulk raw ingredients used in the manufacturing process will be transferred into an intake hopper from trucks. The transfer of raw materials into the intake hopper will take place within a fully enclosed building to minimise dust generation and product wastage. A baffle system mounted under the hopper grid will encapsulate the air and dust displaced when the raw materials are transferred into the hopper and prevent the escaping of dust emissions. A drum cleaner will separate grains from impurities using a scalper screen. Impurities smaller than the raw material will be separated using a sand screen. Dust and other particles separated from the raw feed will be removed by a built-in aspiration system. Impurities screened by the process will be collected in waste bins for disposal at a local landfill.

Raw material dosing:- Separate silos will be utilised to store raw material products prior to dosing. The raw materials used in the production of animal feed will be conveyed to the grinding circuit by enclosed discharge conveyors and will be weighed in 2 batch weighing bins mounted on load cells.

Grinding and mixing:- The grinding mills are to be filled and dosed with an enclosed feeding auger. An enclosed discharge conveyor will empty the mills continuously. The ground ingredients will then be mixed in a horizontal single-shift paddle mixer prior to the addition of liquids. The paddle mixer is designed to achieve full homogeneity within 90 seconds. The mixer will incorporate both a pre-mixing bin and a discharge bin, which will act as buffers and allow the mixer's capacity to be fully utilised. Once the dry raw materials have been ground and mixed, small quantities of ingredients such as vitamins and minerals (stored within bins) will be added to the animal feed product lines. Some of the above ingredients will be supplied in liquid form and these ingredients will be stored at the premises within banded areas.

Pelleting:- The mixed meal feed will then be processed into pellets. Four steam conditioners will be constructed within the pellet circuit, with two steam conditioners operating in tandem on each line. The mixed meal feed will be dosed into the steam conditioner to heat treat and gelatinise the meal feed. The steam will be supplied by one steam boiler with a net equivalent steam production of 4,500kg per hour. Two pellet presses (one for each line of animal feed production), will pelletise the mixed and steam-treated meal feed. After the meal feed has been pressed through the pellet presses, the hot pellets fall directly into one of two counterflow coolers (one per line of animal feed production). These coolers are designed to reduce pellet temperature from 80°C to near ambient temperature.

Finished product:- The finished products will be stored in 34 sealed silos to be situated in an enclosed storage shed. This storage area will include a truck-loading area, designed to allow trucks to drive directly under the silos, which will reduce both pellet damage and dust generation during truck-loading activities.

Solid waste:- All grain material is screened for contaminants. Impurities are collected in waste bins held within the processing building and taken to landfill.

Wastewater:- Wastewater comprises of dosed water with Ibissolve-OS that is blown down from the boiler and captured and cooled within a heatproof tank. The cooled wastewater is stored in a 22,000 L tank until evaporated within an open-ended tank. Wastewater is removed off-site in winter when evaporation and storage are unviable by an authorised contractor.

2.3.2 Exclusions to the scope of assessment

Truck movements and noise on public roads outside the boundary of the premises are beyond the scope of assessment and regulatory control through a works approval. The wastewater management infrastructure serving the workforce at the premises will be managed by the local government authority and has also not been considered in this assessment.

2.3.3 Planning

A previous planning application for a stock feed grain mill was lodged in March 2020 and refused by the Joint Development Assessment Panel (JDAP) in August 2020 principally on land zoning issues. The application was further lodged and assessed through the State Significant Development Assessment Unit (SDAU). It was assessed by the Department of Planning, Lands and Heritage (with advice from the City of Swan) and received development approvals from the Western Australian Development Commission in July 2022. The department temporarily paused its assessment of the works approval application at the point of JDAP refusal, pending the outcome of further planning decisions.

2.4 Noise modelling

The applicant submitted two noise modelling reports dated May 2020 and a revised modelling report dated September 2021 by Reverberate Consulting to model the noise emissions from the premises at the seven closest residential sensitive receptors.

The main noise sources identified within the reports are from the processing mill, bucket elevator, boiler, fire pump room, trucks, and light vehicle movements. The noise modelling applied noise levels established from their current activities in the Upper Swan Feedmill in 2019, other than boiler data that used the manufacturers supplied data. No adjustments to characteristics of emitted noise more than 500 m were required based on the Upper Swan data.

A worst-case scenario was applied to the modelling for day, evening, and night-time noise levels.

The delegated officer considered that the methods, assumptions, and modelling results for the seven closest residential sensitive receptors and formed the view that the modelling was a reliable prediction of expected compliance with the day, evening, and night-time assigned noise levels prescribed within the *Environmental Protection Noise Regulations 1997* (Noise Regulations), subject to the proposed noise controls being implemented.

The applicant’s noise modelling contours shown in Appendix 1 indicated that LA1 and LA10 noise emissions at sensitive receptors would comfortably comply with daytime and night-time assigned levels in the Noise Regulations.

The applicant planned to undertake testing of noise emissions once the feed mill is constructed and operating. The delegated officer noted the conservative modelling with the proposed controls indicated that there was a sufficient margin for noise compliance to the closet residential receptor (see Appendix 1). The delegated officer determined that compliance with the Noise Regulations is predicted, and further noise verification monitoring appears unwarranted.

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	Vehicle and equipment movements on unsealed access roads and areas. Construction of new buildings, plant and infrastructure	Air / windborne pathway	Wetting unsealed surfaces on dry days Seal main traffic roads Traffic and vehicle movements restricted to designated access and speed limits.
Noise			No controls

Emission	Sources	Potential pathways	Proposed controls
Operation			
Odour	The processing and treatment of raw ingredients and the production of animal feed product lines.	Air / windborne pathway	<p>Manufacturing within enclosed shed. Cold process manufacturing. No meat-based products in the manufacturing process.</p>
Noise			<p>All processing is contained with an enclosed shed. Noise modelling demonstrate meeting Noise Regulations. Operating 7:00am to 10:00 pm Friday. Doors to the boiler room and mill to be kept closed at night. Reversing of trucks minimised to avoid activation of reversing beeping. Broadband or white noise reversing beepers for delivery trucks. Collection of refuse to occur between 7 am and 7 pm Mon to Saturday. Boiler access doors to face north. Fire pump room air intake louvre to be located on the eastern wall of building External pump room walls to be constructed from masonry or concrete Testing of fire pump room to occur during day 7 am to 7 pm Monday to Saturday. Mill wall and door must have an attenuation barrier comprised of high-density glass wool insulation blanket to reduce acoustic transmission to external spaces. Mill external wall must have a weighted sound reduction index (Rw) of 36 . Mill roof and wall must have a Rw of 20 Mill windows must have an Rw of 30 Mill enclosed panel must have a Rw of 33 . The only permitted opening in the mill building are the access doors on the north façade. Maximum dimensions 6 m high x 10 m wide. No gaps permitted on the eastern western and southern faces. Noise verification monitoring during initial operations. Silencers/ hood on dust extraction equipment (cyclones). Investigate all complaints.</p>
Dust			<p>Wetting unsealed surfaces on dry days Seal main traffic roads Traffic and vehicle movements restricted to designated access and speed limits All processing of animal feed is within an enclosed shed. Dust filtration systems (cyclone with surface cloth) and aspiration points within manufacturing process to remove captured dust back into feed process through blow back cleaning. Dust filtration system will contain at least 11m² of filter material Dust filtration system will service at least 2,500m³ of air flow per hour Aspiration points are equipped with spot filters designed to capture dust down to 2.5 microns in size All discharges from the filtration system and aspiration systems are released inside the enclosed building All raw ingredients and end products contained within enclosed sealed containers. Movement of raw product stored in silos is via enclosed elevators and conveyors. In take hopper has a baffle system to capture dust</p>

Emission	Sources	Potential pathways	Proposed controls
			<p>Finished product are stored in silos in the Grain Terminal (34 sealed silos and truck loading area)</p> <p>All unsealed roads will maintain cover either grass or woodchip.</p> <p>Total enclosed inline process.</p> <p>Steam heating ingredients.</p> <p>Grain unloading and handling within enclosed augers, conveyors and stored in fully enclosed silos.</p> <p>Dust from grinding and cooling processes are extracted to filter cyclones and augered back into processing lines.</p>
Potentially contaminated blowdown water	Removal of blowdown water from the boiler used for steam production at the premises.	Seepage through the underlying soil profile.	<p>Blow down water directed to a blow down cooling tank, 3 times the size of the boiler and capable of holding high temperature water.</p> <p>Cooled blow down water is transferred to a 22,000L storage tank. That can hold 80 days of water.</p> <p>Water is evaporated from an open ended</p> <p>In winter when evaporation and storage is not viable the wastewater will be removed from site by an authorised contractor.</p>
Hydrocarbons and chemicals	Hydrocarbon and chemical storage.		<p>Liquid petroleum gas (LPG) stored above ground in a 10 tonne cylinder.</p> <p>No bulk storage of petrol or diesel.</p> <p>Oil and lubricants and LPG will be stored to:</p> <ul style="list-style-type: none"> ○ Australian Standard 1940-2004: The storage and handling of flammable and combustible liquids; and ○ Australian Standard 1692-2006: Steel tanks for flammable and combustible liquids <p>All bunding established at the premises will be able to contain 110% of the volume of the largest container stored within the bund, or 25% of the total storage volume of all containers in the bund, whichever volume is larger.</p>
Contaminated stormwater.	Stormwater derived from the hardstand areas established at the premises.	Overland flow into surface water receptors.	<p>All hardstand areas will direct and treat stormwater in a retention swale with a capacity of approximately 1,410m³.</p> <p>Retention swale-treated stormwater to a 1 in 10 annual exceedance probability (AEP) rainfall event.</p> <p>Processing of animal feed inside enclosed shed.</p> <p>All chemical/hydrocarbons stored within bunded areas.</p>

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 below provides a summary of potential human and environmental receptors that may be impacted because 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
Rural dwellings	<ul style="list-style-type: none"> • Residence A: Situated approximately 830 metres northeast of the premises boundary • Residence B: Situated approximately 520 metres northeast of the premises

	<p>boundary:</p> <ul style="list-style-type: none"> • Residence C: Situated approximately 600 metres east southeast of the premises boundary • Residence D: Situated approximately 580 metres southeast of the premises boundary: • Residence E: Situated approximately 670 metres south of the premises boundary • Residence F: Situated approximately 670 metres southwest of the premises boundary • Residence G: Situated approximately 540 metres west of the premises boundary.
Muchea town site	5 km northwest of the premises boundary
Environmental receptors	Distance from prescribed activity and value
Geomorphic Wetlands, hydraulically linked	<p>The premises boundary is immediately surrounded by the Ellen Brook floodplain (multiple use palusplain), with the floodplain encroaching into the premises boundary's north-eastern extent.</p> <p>An unnamed conservation palusplain with a is situated approximately 1.3 kilometres east of the premises boundary</p>
Threatened Ecological Communities Priority Ecological Communities Priority Fauna Priority flora	<p>Two threatened plant communities 2.3 km east and southeast from the premises boundary.</p> <p>Priority Fauna 1.7 km south and 2.5 km east from the premises boundary</p> <p>Priority Flora 2 km east of the premises boundary.</p> <p>No threatened or priority communities are close receptors.</p>
Gnangarra mound ecological linkage	<p>The premises is situated within a corridor of the Gnangarra mound ecological linkage. These ecological linkages were designed as part of the Gnangarra Sustainability Strategy to achieve two objectives:</p> <ul style="list-style-type: none"> • To design ecological linkages that allow for landscape level connectivity; and • To design ecological linkages of importance at a subregional level that are focused on key assets. <p>The premises has been historically cleared and utilised for agriculture purposes. The proposed premises is therefore not anticipated to have priority fauna movement through the landscape or support priority flora.</p>
Watercourse – Ellen Brook tributaries	<p>A minor tributary which feeds into Ellen Brook is situated approximately 50 metres to the south of the premises boundary at its closest point. Addition tributary 290 m southeast of premises. The watercourses flow into the Swan River.</p> <p>The tributaries have been dammed to supply water for agricultural operations and have been cleared of most of their associated riparian vegetation.</p>
Groundwater managed under <i>Rights to Water and Irrigation Act 1914</i> (RIWI Act). Swan Groundwater Area, managed under the Gnangarra Groundwater Areas Allocation Plan.	<p>The applicant advises that initial geotechnical investigations suggest that groundwater is intersected approximately 2 metres below ground level in the local area.</p> <p>Groundwater is used to support agriculture and industries.</p>
Soil – Yanga 8x phase soil system.	Soil is sand based, with a minimum permeability of 15 metres per day (high permeability)

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source and considers 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 W6368/2020/1 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 i.e. feed manufacturing activities. 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	Applicant controls sufficient?	Conditions ² of works approval	Reasoning / Justification for additional regulatory controls	
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood				
Construction									
Construction of the animal feed manufacturing facility infrastructure	Vehicle and equipment movements on unsealed access roads and areas.	Noise	Air / wind dispersion, affecting amenity	Local residences situated between 520 and 830 metres from the premises	No controls	C = Slight L = Unlikely Low Risk	Y	N/A	The delegated officer considered the distance to receptors, the short nature of the works, undertaken of construction in daylight hours and determined the risk to be low. The Noise Regulations regulate noise emissions associated with works on a construction site.
	Construction of new buildings, plant and infrastructure.	Dust			Seal main trafficable roads, wetting unsealed surfaces on dry days and adhere to speed limits to reduce dust.	C = Slight L = Unlikely Low Risk	Y	N/A	The delegated officer considered the distance to receptors, the nature/scale of proposed works, the applicant's controls and the duration of works and determined the risk to be low. The delegated officer formed the view that specific conditions related to construction dust control were not required.
Operation (including time-limited-operations operations)									
Operation of animal feed manufacturing facility	The processing and treatment of raw ingredients and the production of animal feed product lines.	Odour	Air / windborne pathway causing impacts to health and amenity	Local residences situated between 520 and 830 metres from the premises	Processing and loading and unloading with enclosed building, silos, conveyors, augers, and elevators. Cold process manufacturing. Grain feed manufacturing only. Refer to Section 3.1	C = <i>Minor</i> L = <i>Rare</i> Low Risk	Y	No conditions	Taking into account receptor distance and the proposed controls including process enclosure, the delegated officer expects the risk of unreasonable odour impacts to be low. The applicant proposed no meat-base products will be processed therefore this assessment has only considered grain manufacturing. Should the applicant consider meat-based processing this would constitute a certain change to the prescribed premises requiring assessment and approval under s53 of the EP Act. The delegated officer formed the view that specific conditions relating to the operation of the facility were not required.
		Noise			All processing is contained with an enclosed shed. Doors to the mill to be kept closed at night. Collection of refuse to occur between 7 am and 7 pm Monday to Saturday. Noise reduction design criteria to reduce noise. Testing of fire pump room to occur during day 7 am to 7 pm Monday to Saturday. Investigate all complaints. Refer to Section 3.1	C = <i>Minor</i> L = <i>Unlikely</i> Medium Risk	Y	Condition 1 Condition 6	The delegated officer considered the distance to the nearest residential receptors, the noise modelling reports indicating that the Noise Regulations would be met, the applicant's control's for construction and operations and assessed the risk as medium. The applicants' controls were assessed and considered sufficient to mitigate the risk of noise emissions whilst operating. The delegated officer applied the applicant's controls and considered that they were critical for maintaining an acceptable level of risk and conditioned within the works approval to minimise noise emissions. The applicant's design and construction requirements are conditioned including sound-weighted insulation materials and specified construction designs for the orientation of external building fittings. Key operational noise controls from the applicant have been conditioned including operations of waste vehicle movements and door operations. The operations will be required to comply with the Noise Regulations.
		Dust			All loading, unloading and processing of feed is within an enclosed sheds or silos and elevators/ augers/buckets enclosed. Dedicated dust filtration systems and aspirations points. Dust filtration system will contain at least 11m2 of filter material. Dust filtration system will service at least 2,500m3 of air flow per hour. Aspiration points are equipped with spot filters designed to capture dust down to 2.5 microns in size. All discharges from the filtration system and aspiration systems are released inside the process systems within the enclosed building. Refer to Section 3.1	C = <i>Minor</i> L = <i>Unlikely</i> Medium Risk	Y	Condition 1 Condition 1 Condition 6 Condition 6	The delegated officer considered the distance to the nearest receptor, the applicant's control's for construction and operations and assessed the risk as medium. The applicants' controls were assessed and considered insufficient to mitigate the risk of dust emissions. The delegated officer applied the applicant's controls and considered that they were critical for maintaining an acceptable level of risk and conditioned within the works approval for minimising dust emissions. The applicant's design and construction controls to reduce dust emissions have been regulated including the dust filtration systems, hopper baffle system, enclosed material transfer and equipment located within buildings. Operations controls have included location and storage of products and operation of the filtration particulate system. The delegated officer considered it necessary to regulate the fitting and maintenance of alarms on the filtration systems to detect malfunctioning or non-operating systems to minimise the discharge of particulate matter emissions.
	Removal and treatment of blowdown water from the boiler used for steam production at the premises.	Potentially contaminated blowdown water	Seepage contaminating soil and groundwater and hydraulic linked wetlands	Groundwater 2 metres below ground level hydraulically linked to multiple use palusplain wetlands within and adjacent to	Blow down water directed to a cooling tank, stored, and then evaporated or removed from site. Refer to Section 3.1	C = Slight L = Unlikely Low Risk		Condition 1 Condition 6	The delegated officer has considered the dosing of the boiler water, distance to groundwater, users of the groundwater, the proximity of the floodplain, distance to surface watercourses, hydraulic connectivity of the groundwater/wetlands and surface water and the applicant controls including tank size, evaporation method and offsite disposal and assessed the risk as low. The applicants' controls were assessed as sufficient to mitigate the risk of spills and leaks of blowdown water from the boiler and storage infrastructure. The delegated officer applied the applicant's controls and considered that they were critical for maintaining the risk to sensitive receptors. This is: Construction

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Reasoning / Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
			premises.					<ul style="list-style-type: none"> Cool down tank must be 3 times the size of the boiler capacity and must be capable of holding heated water. Storage tank must be capable holding 80 days of accumulative blowdown water. Evaporation tank must have an open top with a mesh screen. Operational <ul style="list-style-type: none"> All blowdown water must be directed to the cooldown tank and then must be transferred to the storage tank. Wastewater must be transferred off-site by an authorised wastewater contractor to prevent overtopping and spilling in the storage tank. The discharge of blowdown water to land has not been assessed to the environment. Should the applicant consider discharge of blowdown water to land authorisation should be sought through an amendment.
	Hydrocarbon and chemical storage.	Hydrocarbons and chemicals spills and leaks	Overland runoff potentially causing impacts to water quality and ecosystem disturbance and seepage contaminating soils and groundwater	Ellen Brook tributary 50 metres south, multiple use palusplain wetlands within and adjacent to premises hydraulically linked to downstream conservation wetlands. Groundwater 2 metres below ground level	Oil and lubricants will be stored to: AS1940-2004 and AS1692-2006. All bunding established at the premises will be able to contain 110% of the volume of the largest container stored within the bund, or 25% of the total storage volume of all containers in the bund, whichever volume is larger. Refer to Section 3.1	C = Moderate L = Rare Medium Risk	Y	Condition1 Condition 6 The delegated officer has considered the distance to groundwater, users of the groundwater, the proximity of the floodplain, distance to surface watercourses, hydraulic connectivity of the groundwater/wetlands and surface water and the applicant controls including bunding of containers, storage to Australian standards AS1940 and AS1692 and assessed the risk as medium. The applicants' controls were assessed as sufficient to mitigate the risk of spills and leaks of hydrocarbon and chemical storage. The delegated officer applied the applicant's controls and considered that they were critical for maintaining the risk to sensitive receptors. This is: <ul style="list-style-type: none"> All oil, and lubricants must be stored to AS1940:2004 and AS1692:2006. All bunding of oil lubricants must be able to contain 110% of the volume or 25% of the total storage volume of all containers in the bund, whichever is the greater volume. All containers are stored above ground.
Stormwater management	Stormwater derived from hardstand areas.	Potentially contaminated stormwater	Overland runoff potentially causing impacts to water quality and ecosystem disturbance and seepage contaminating soils and groundwater.	Ellen Brook tributary 50 metres south, multiple use palusplain wetlands within and adjacent to premises hydraulically linked to downstream conservation wetlands. Groundwater 2 metres below ground level.	All hardstand areas will direct and treat stormwater in a retention swale with a capacity of approximately 1,410m ³ . Retention swale treated stormwater to a 1 in 10 annual exceedance probability (AEP) rainfall event. Processing of animal feed inside enclosed shed. All chemical/hydrocarbons stored within bunded areas. Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Condition1 Condition 6 The delegated officer has considered the distance to groundwater, users of the groundwater, the proximity of the floodplain, distance to surface watercourses, hydraulic connectivity of the groundwater/wetlands and surface water and the applicant controls including retention swale, enclose building for operations and enclosed vessels for storage of raw and manufactured material and assessed the risk as medium. The applicants' controls were assessed as sufficient to mitigate the risk of contaminated stormwater contaminating sensitive receptors. The delegated officer applied the applicant's controls and considered that they were critical for maintaining the risk to sensitive receptors. This is: <ul style="list-style-type: none"> Retention swale must have a holding capacity of 1,410 m³ All hardstand stormwater must be directed to the retention swales.

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. **Underlined 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 17 March 2020	Eight submissions received See section 4.1	See section 4.1
Applicant provided with copies of the draft decision on 11 November 2022.	Applicant replied on the 28 November 2022 providing updated site plans. Advised that the boiler room had been moved to the south of the feedmill building indicating that the blow down sump and tank will be located within the area. The applicant was still waiting on information from the manufacturer on the volume of the boiler.	The delegated officer noted this information. The site map will be updated within the works approval. The change in location of the boiler room will be updated in the infrastructure and operations tables, no changes to the proposed conditions of the works approval.

4.1 Public consultation

DWER received eight written submissions from residents and community groups. Points raised were summarised against identified emission or environmental risk theme in Table 5.

Table 5: Submissions received by DWER

Issue and the number times raised	Description of issue raised	Delegated officers' response	
Agricultural biosecurity	1	A concern was raised that vehicle movements associated with the premises could introduce pathogens onto nearby farms.	Truck movements on public roads and biosecurity matters are beyond the scope of regulation under Part V of the EP Act. Truck movements are a planning consideration. The management of biosecurity risk is undertaken by the Department of Primary Industries and Regional Development.
Ground water table depth and – hydraulic linked communities including Gngarra Mound Ecological Linkage, and impacts to wetlands and associated fauna species	4	Concerns were raised that the base of the premises will be less than 1.5 metres from the highest standing groundwater table level and the effects on the Gnagarra Mound Ecological linkages, and impact on the ecosystem value of local wetlands.	The delegated officer considered potential source-pathway and receptor linkages (Table 2), applicant controls (Table 1) and addressed these risks within the risk assessment (see Table 3) Conditions have been placed in the works approval to minimise impacts on groundwater and hydraulically linked wetland ecosystems.
Vegetation communities of conservation significance including priority flora and fauna and Tumulus Springs.	4	Concerns were raised on the impacts to Bush Forever Area, Tumulus Spring's TECs, Priority fauna and flora.	The delegated officer considered potential source-pathway and receptor linkages for emissions (Table 2 and Table 3). Taking into account the distance to these receptors and the works approval requirements imposed, the delegated officer does not expect any risk of impacts on these receptors.
Community consultation	5	Concerns were raised that the description of the community consultation activities provided by the applicant do not represent actual meetings between the applicant and residents.	The department encourages an applicant to engage directly with stakeholders in an open and transparent manner, however it is voluntary. While applicant's may opt to detail its records of stakeholder engagement in the application, this information is not material to the department's assessment or decision making on an application. The department undertakes its own public advertising of applications and consultation with

Issue and the number times raised		Description of issue raised	Delegated officers' response
			stakeholders, responses to which are given due consideration in assessment and decision making.
Fire Risk	1	A concern was raised that the premises will increase the risk of fire in a high fire risk area.	While the department can take into account fire risk from a prescribed premises in the context of potential impacts from contaminated smoke and firewater, broader regional fire risk concerns raised are considered through planning approval processes and subject to requirements under other legislation.
Groundwater demand	3	Concerns were raised that groundwater abstraction associated with the premises will cause the local water table to recede.	Groundwater abstraction is subject to approvals under the <i>Rights to Water and Irrigation Act 1914</i> (RIWI Act). It is understood a licence for groundwater abstraction has been issued under the RIWI Act.
Production of meat-based animal feed products	5	Concerns were raised that the premises will be used to produce meat-based animal feed product lines, with subsequent odour emission impacts on residents.	The applicant did not propose the production of meat-based feed products and therefore the department has not assessed the application on this basis. Changes to existing prescribed premises is regulated under Section 53 of the EP Act, therefore should the applicant wish to produce meat-based products in the future, it will need to make an application and seek approval.
Rural amenity	7	Concerns were raised about the impact of the premises on local amenity (dust, odour and noise emissions and loss of visual amenity).	This assessment has considered emissions and potential impacts of dust, odour and noise emissions on the health and amenity of receptors. On the basis of risk assessment, conditions have been imposed in a works approval that the delegated officer considers reasonable and adequate to control the risk of unacceptable impacts. Visual amenity is considered through planning approval processes and outside the regulatory scope of the department under Part V of the EP Act.
Site placement and land zoning	5	Concerns were raised that the premises will be placed in an area not appropriately zoned for this development.	The department assesses the risk of emissions on a site specific basis at the location proposed by the applicant. Matters concerning zoning and land use compatibility are considered through planning approval processes.
Storm water management	3	Concerns were raised about the use of unsealed areas to capture storm water flowing off site and the potential for such flows to impact groundwater quality.	The delegated officer considered potential source-pathway and receptor linkages, and the applicants' controls. See risk assessment Table 3. The delegated officer determined stormwater to be a low risk and applied conditions to minimise contamination of receiving water resources.
Traffic conditions	5	Concerns were raised that heavy vehicle traffic associated with the premises will degrade local traffic conditions and endanger local road users.	Traffic impacts on public roads outside of the prescribed premises boundary is outside the department's regulatory scope for works approvals and licences under Part V of the EP Act.
Unacceptable changes to lifestyle and local development opportunities	2	Concerns were raised that the premises could restrain development on private property, lower local property values and limit development opportunities in the local area.	Potential impacts on land use planning, property value and future development are planning matters and beyond the regulatory scope of Part V of the EP Act.
Sewerage wastewater management	2	Concerns were raised that the premises proposed sewerage wastewater treatment system will not be adequately sized.	The size, scale and type of system meant it was excluded from assessment and is subject to relevant approvals under health legislation for sewerage apparatus through local government and/or the Department of Health.

5. Decision

The delegated officer has determined to approve the proposal to construct an animal feed manufacturing in Bullsbrook, with an assessed annual production capacity of 100,000 tonnes per annum. This determination is based on the following:

- The applicant has provided evidence of planning approvals for the premises.
- A risk assessment taking into account the sources of emissions, pathways and distance to receptors.
- The applicants proposed controls, in particular noting the enclosed nature of the proposed facility including in line operations of the processing and packaging, the covered unloading area for the raw material and the enclosed shed for loading of finished animal feed pellets.
- Applicant controls to minimise dust, noise, odour, and stormwater impacts to sensitive receptors.
- The assessment of the applicant's noise modelling predicting compliance with the Noise Regulations.

The delegated officer determined that the risk to sensitive receptors was medium to low and the applicants' controls were conditioned to minimise emissions.

Controls will be imposed on the works approval to specify infrastructure design and construction and time limited operational requirements, to ensure the proposal does not result in unacceptable risk to public health, amenity, and the environment. Conditions were consistent with the applicants controls that were deemed appropriate within the risk assessment. The delegated officer did however regulated controls for the construction and operation, for the fitting and maintenance of alarms on the dust filtration system to minimise dust emissions when malfunctioning occurs.

6. Licence controls

The applicant has been authorised time limited operations for 180 days, on the submission of their environmental compliance certificates. The applicant will need to apply and be subject to a licence for any ongoing operations of the facility beyond the time-limited operations. A licence application and assessment will be subject to compliance certificates and reporting. The delegated officer expects that controls on the future licence to be consistent with the time-limited operation controls subject to a risk assessment.

7. 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 determining 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. NewCo Mills Pty Ltd 2020, Application and supporting documents, Perth Western Australia

5. Newco Mills Pty Ltd 2020, Noise Modelling Assessment: Reverberate Consulting May 2020, Perth Western Australia.
6. Newco Mills Pty Ltd 2021, Noise Modelling Assessment: Reverberate Consulting September 2021, Perth Western Australia.
7. Newco Mills Pty Ltd 2021, Works Approval supporting Document – Confidential Addendum: 360 Environmental February 2020, Perth Western Australia.
8. Newco Mills Pty Ltd 2021, Stock Feed Grain Mill: URBIS April 2021, Perth Western Australia.

Appendix 1: Applicant's predicted noise contours

Both figures sourced from: Newco Mills Pty Ltd 2021, *Noise Modelling Assessment*. Reverberate Consulting September 2021, Perth Western Australia.

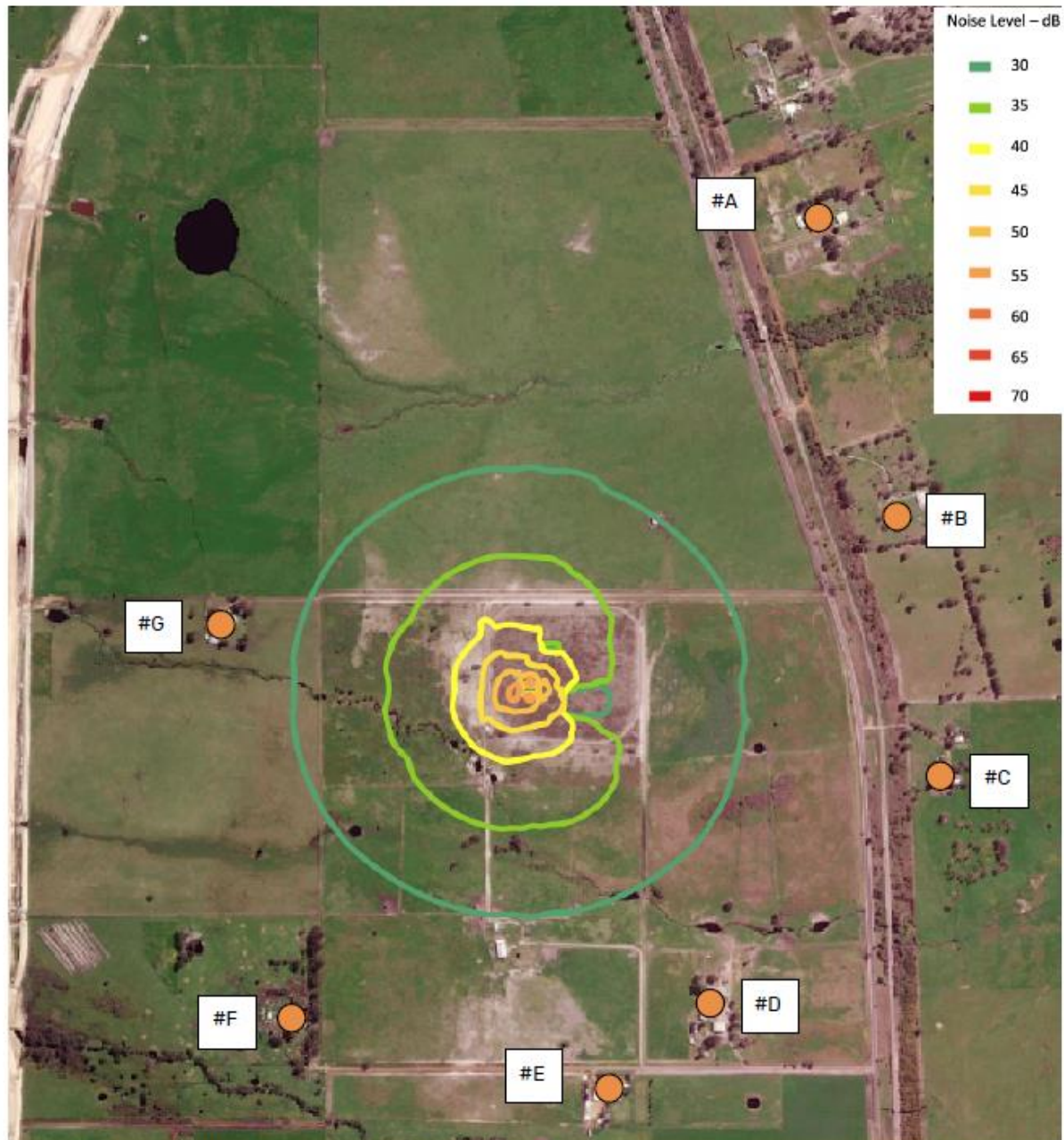


Figure 3 – Forecast Night-time LA_{10} noise emission from site
(Note LA_{10} Assigned Level = 35 dB)

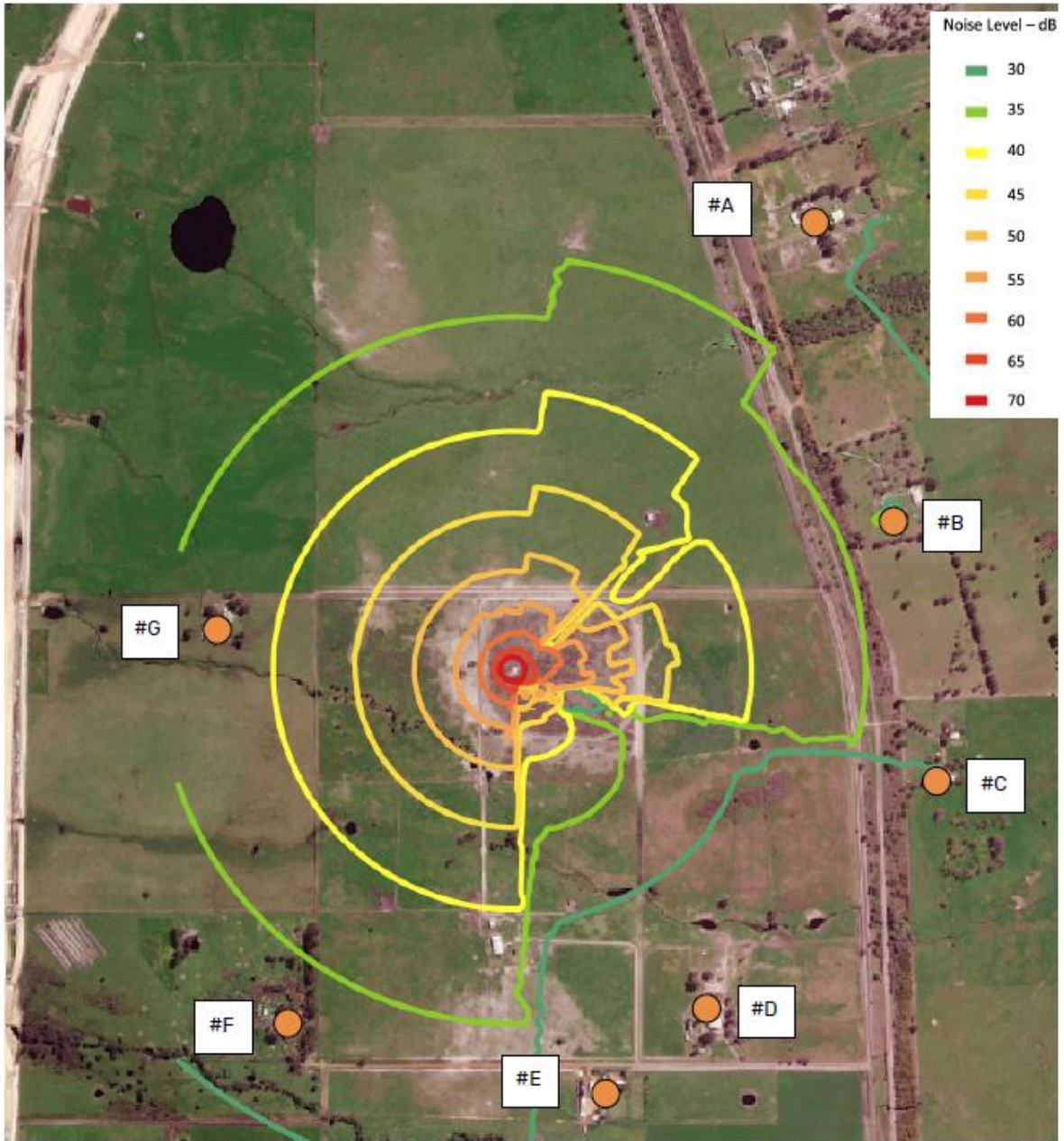


Figure 4 – Forecast Night-time LA1 noise emission from site

(Note LA1 Assigned Level = 45 dB)