



Works approval number W6490/2021/1

Works approval holder Derby Industries Pty Ltd
ACN 009 033 612
Registered business address 6 Short Street
FREMANTLE WA 6160
DWER file number DER202/000621-1

Duration 16/06/2022 to 15/06/2025

Date of issue 16/06/2022

Premises details Talloman Rendering Facility
Lot 115 Lakes Road
HAZELMERE WA 6055
Legal description -
Lot 20 on DP73040 and Lot 116 on DP4553
Certificate of Title Volume 2814 Folio 696 and
Certificate of Title Volume 1243 Folio 89

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production capacity
Category 16 Rendering operations: premises on which substances from animal material are processed and extracted	180,000 tonnes per annual period

This works approval is granted to the works approval holder, subject to the attached conditions, on 16 June 2022, by:

Caron Goodbourn

MANAGER, PROCESS INDUSTRIES

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

Interpretation

In this works approval:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this works approval:
 - (i) if dated, refers to that particular version; and
 - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

Works approval conditions

The works approval holder must ensure that the following conditions are complied with:

Construction phase

Infrastructure and equipment

1. The works approval holder must:
 - (a) Construct and install the infrastructure, and equipment
 - (b) in accordance with the corresponding design, construction and installation requirements;
 as set out in Table 1.

Table 1: Design, construction and installation requirements

	Infrastructure	Design, construction and installation requirements
1.	New enclosed poultry rendering shed building (Dimensions 60m x 25m x 6m)	<p>The concrete floor, receivals pit floor, pit walls and base of the wastewater collection sump shall be constructed of reinforced concrete of at least 150mm thick and with a permeability co-efficient of at least 1×10^{-9}m/sec</p> <p>The concrete shall be poured in situ with an added waterproofing agent;</p> <p>The receivals pit, sump and pit- walls shall be polyurethane lined prior to cement pouring;</p> <p>The raw materials receival area shall be fitted with three fast closing air lock doors;</p> <p>The entire building shall be fitted with sufficient air extraction units to enable negative pressure to be maintained within the building when operational (with an extraction capacity of approximately 70,000m³/hour)</p> <p>All extracted air shall be conveyed to the biofilters</p> <p>The poultry vehicle washdown bay is to be located within the receivals area of the new poultry rendering shed</p> <p>Wash water from the vehicle washdown bay shall be diverted directly into the raw materials receivals bins or shall drain to a dedicated wastewater sump with a solids screen;</p> <p>All waste water generated in the shed shall be diverted to the wastewater treatment plant</p> <p>The raw materials receivals area and the poultry processing areas shall be fitted with three continuous negative pressure monitoring gauges on the eastern side of the building as shown in Figure 3 in Schedule 1</p> <p>The raw materials receivals area shall be fitted with 3 x raw materials receivals bins for offal, feathers and meat/bone respectively</p>
2.	New low temperature poultry press dewatering rendering plant	<p>Shall be located within the poultry processing area within the new poultry rendering shed (as shown in Schedule 1, Figure 2)</p> <p>The following rendering plant infrastructure shall be fitted with point source air extraction points with a combined extractive flow rate of 10,000m³/hour:</p> <ul style="list-style-type: none"> • Precooker Surge Bin • Precooker • Pre-cooker discharge conveyor

	Infrastructure	Design, construction and installation requirements
		<ul style="list-style-type: none"> • Twin Screw Press • Press discharge conveyor • Decanter Feed Tank • Decanter Liquid Outlets (2) • Separator Feed Tank • Separator Sludge Collection Tank • Stickwater Tank • Concentrate Tank • CIP Tank • Evaporator Heating Body (1) • Evaporator Vacuum Pump • Meal Disc Dryer <p>The meal mill shall be fitted with a separated point source air extraction hood with a flow rate of 7,300m³/hour).</p> <p>All air from the extraction/points shall be conveyed to the biofilters for treatment.</p> <p>A low temperature rendering vessel shall be installed and have a maximum throughput capacity of 14 tonnes/hour at 95°C;</p> <p>Condensate from the rendering process is to be diverted to the WWTP from treatment</p> <p>Protein fines recovered from the tallow polishing process and stick water from meal press are to be added back into the meal production cycle through the evaporator.</p> <p>Stick water and liquid waste generated from the rendering process shall be diverted to WWTP for treatment.</p> <p>Air extraction units shall be fitted with misting sprays prior to conveyance of the air to the biofilter head (humidified)</p>
3.	Relocation of feather hydrolysis plant to new shed	<p>The new feather hydrolysis plant shall be fitted with point source air extraction devices at the following locations.</p> <ul style="list-style-type: none"> • Steam feather hydrolysis plant(vessel) with a capacity of 5 tonnes per hour • Dryer • Discharge screw • Dust collectors at milling and bagging area <p>Air from the above listed point sources will be conveyed to the biofilters for treatment</p>
4.	New poultry Biofilter	<p>The new biofilter shall consist of 3 x concrete biofilter beds with a graded floor</p> <p>Each biofilter bed shall consist of air plenum, medium support, biofilter and irrigation system</p> <p>Each biofilter bed shall contain media support rails and plates allowing for 1800mm of pine bark or similar media</p> <p>The new biofilter head shall be constructed to allow for mixing of air from various air extraction sources and to allow even air flow distribution and balancing of pressure across biofiltration beds.</p> <p>The air inlet to each biofilter beds shall be constructed to allow for independent operation and isolation of each biofilter bed</p>

	Infrastructure	Design, construction and installation requirements
		<p>The air plenum of each biofilter bed shall be constructed to allow for excess water drainage at either side of biofilter bed and recirculated or directed to WWTP</p> <p>Each biofilter bed shall be fitted with Continuous Emissions Monitoring System (CEMS) that measures biofilter bed moisture, inlet pressure, inlet air relative humidity, temperature</p> <p>Each biofilter bed shall be constructed to allow a surface area of 600m² and to contain approximately 1080m³ of media</p> <p>Each biofilter bed shall be constructed and operated to allow a minimum air residence time of 45 seconds if biofilter operating in isolation, or 30 seconds if 2 or more biofilters operating at any one time</p>

Compliance reporting

2. The works approval holder must within 90 calendar days of an item of infrastructure or equipment required by condition 1 being constructed and/or installed:
 - (a) undertake an audit of their compliance with the requirements of condition 1; and
 - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.

3. The Environmental Compliance Report required by condition 2, must include as a minimum the following:
 - (a) certification by a suitably qualified independent civil engineer that the components thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
 - (b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and
 - (c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

Commissioning and Time Limited Operations

Environmental commissioning requirements

4. The works approval holder may only commence environmental commissioning of an item of infrastructure listed in condition 1 once the Environmental Compliance Report has been submitted for that item of infrastructure in accordance with condition 2 of this works approval.

5. Prior to commencement of environmental commissioning of the poultry rendering plant the works approval holder shall submit an updated Biofilter Management Plan for the premises which includes the poultry biofilter listed in condition 1 of this works approval.

Time limited operations phase

Commencement and duration

6. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 1 (as applicable):
- (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 2 for that item of infrastructure: or
 - (b) until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 5(a).

Monitoring during time limited operations

7. The works approval holder must undertake processing monitoring during time limited operations in accordance with Table 2.

Table 2: Process monitoring during time limited operations

Monitoring point reference on Map of monitoring locations (1) in Schedule 1	Process description	Parameter	Units ¹	Frequency ²	Method
Fan P1	Ducts/ collectors extracting process air for odour control:	Air velocity	m/s	Quarterly ^{3,4}	USEPA Method 2
		Volumetric flow rate	m ³ /sec		
Fan P1	Red Meat/Poultry area (Fan 1); Blood/Feathers/DAF area (Fan 2) and Building air collector (Fan 3)	Odour concentration	ou		AS/NZS 4323.3
BSO-P1, BSO-P2, BSO-P3, where BSO-P is the biofilter surface outlet (poultry)	Collectors feeding to biofilters	Temperature	°C	Continuously	CEMS
		Relative Humidity	%		
		Pressure	kPa		
		Air velocity	m/s	Quarterly ^{3,4}	USEPA Method 2
		Volumetric flow rate	m ³ /sec		
Any one of BI-P1, BI-P2, BI-P3 where BI-P is the	Collectors feeding to biofilters	Odour concentration	ou	Quarterly ^{3,4,5}	AS/NZS 4323.3

biofilter inlet (poultry)					
BSO-P1, BSO-P2, BSO-P3, where BSO-P is the biofilter surface outlet (poultry)	Biofilter outlets (poultry)	Odour concentration	ou	Quarterly ⁷	AS/NZS 4323.3 With Witch Hat equipment
BSO-P1, BSO-P2, BSO-P3, where BSO-P is the biofilter outlet (poultry)	Biofilter outlets (poultry)	Temperature ⁶	°C	Quarterly ^{3,4}	None specified
		Air velocity ⁶	m/s		USEPA Method 2
		Pressure loss through biofilter media	kPa		None specified

Notes to Table 2

- Note 1: Volumetric flow rate and odour units are referenced to STP wet.
2: Monitoring shall be undertaken to reflect normal operating conditions and any limits or conditions inputs or production.
3: Whilst undertaking the monitoring ensure that the Biofilter inlet fan is operating at a capacity of 95% of design capacity.
4: Monitoring shall be undertaken immediately prior to or immediately after monitoring odour concentration at corresponding location as specified in Table 2.
5: One sample at any one inlet location for three quarters and one sample at two inlet locations for the fourth quarter in each reporting period; such that each inlet location is sampled at least once per annual period.
6: One composite of twelve evenly spaced locations over the surface area of each Biofilter cell. One measurement of temperature and velocity at each location of every cell.
7: One composite sample collected over 12 locations of each cell.
8: One composite sample comprising of one sample collected over the 4 locations of each cell.
9: Recommended for aerated area sources.

Compliance reporting

8. The works approval holder must submit to the CEO a report on commissioning and time limited operations within 60 calendar days of the completion date of commissioning and time limited operations or 60 calendar days before the expiration date of the works approval, whichever is the sooner.
9. The works approval holder must record the results of all monitoring activity required by condition 7 in the reporting format as specified in Table 3

Table 3: Reporting requirements				
Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form ¹
-	Copies of original monitoring reports submitted to the Licensee by third parties	Not Applicable	Within 14 days of the CEOs request	As received by the Works Approval Holder from third parties

Table 3: Reporting requirements				
Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form ¹
6	Results of quarterly monitoring for the main poultry biofilter surface	Quarterly	-	Not specified
	Results of quarterly monitoring for the main poultry odour control equipment	Quarterly	-	One graphical chart per one month for each per parameter
	Results of continuous monitoring for the main poultry odour control equipment	Quarterly		

10. The works approval holder must ensure the report/s required by condition 8 includes the following:
- (a) a summary of commissioning and time limited operations, including timeframes and amount of poultry material processed;
 - (b) a summary of monitoring parameter results obtained during commissioning and time limited operations under condition 5 and condition 6.
 - (c) a summary of the environmental performance of all infrastructure as constructed or installed (as applicable), which includes records detailing the composite parts of the:
 - (i) poultry rendering shed building;
 - (ii) new low temperature poultry press dewatering rendering plant;
 - (iii) the relocated feather hydrolysis plant; and
 - (iv) the new poultry biofilter
 - (d) a review of performance and compliance against the conditions of the works approval and the commissioning and time limited operations report required by condition 8; and
 - (e) where the manufacturer's design specifications and the conditions of this works approval have not been met, what measures will the works approval holder take to meet them, and what timeframes will be required to implement those measures.

Records and reporting (general)

11. The works approval holder must record the following information in relation to complaints received by the works approval holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
- (a) the name and contact details of the complainant, (if provided);
 - (b) the time and date of the complaint;

- (c) the complete details of the complaint and any other concerns or other issues raised; and
 - (d) the complete details and dates of any action taken by the works approval holder to investigate or respond to any complaint.
- 12.** The works approval holder must maintain accurate and auditable books including the following records, information, reports, and data required by this works approval:
- (a) the works conducted in accordance with condition 1;
 - (b) any maintenance of infrastructure that is performed in the course of complying with condition 1; and
 - (c) monitoring programmes undertaken in accordance with condition 6; and
- 13.** The books specified under condition 11 must:
- (a) be legible;
 - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
 - (c) be retained by the works approval holder for the duration of the works approval; and
 - (d) be available to be produced to an inspector or the CEO as required.

Definitions

In this works approval, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition
annual period	a 12 month period commencing from [day month] until [day month] of the immediately following year.
AS/NZS 4323.3	means Australian Standard 4323.3 <i>Stationary source emissions - Determination of odour concentration by dynamic olfactometry</i>
books	has the same meaning given to that term under the EP Act.
CEMS	Means continuous emissions monitoring system
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V Division 3 of the EP Act.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
environmental commissioning	means the sequence of activities to be undertaken to test equipment integrity and operation, or to determine the environmental performance, of equipment and infrastructure to establish or test a steady state operation and confirm design specifications.
Environmental Commissioning Report	means a report on any commissioning activities that have taken place and a demonstration that they have concluded, with focus on emissions and discharges, waste containment, and other environmental factors.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the works approval.
EP Act	<i>Environmental Protection Act 1986</i> (WA).
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA).

Term	Definition
quarterly	means the 4 inclusive periods from 1 April to 30 June, 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March
STP	Standard temperature and pressure
time limited operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.
USEPA Method 1	means United States (of America) Environmental Protection Agency Method 1 – Sample/Velocity Traverses
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
works approval holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below in the orange (Figure 1).



Source: Attachment 2A -0 Premises Map: Layout of key infrastructure and buildings from Works Approval Application (DWER reference document# DWERDT386359)

Figure 1: Map of the boundary of the prescribed premises

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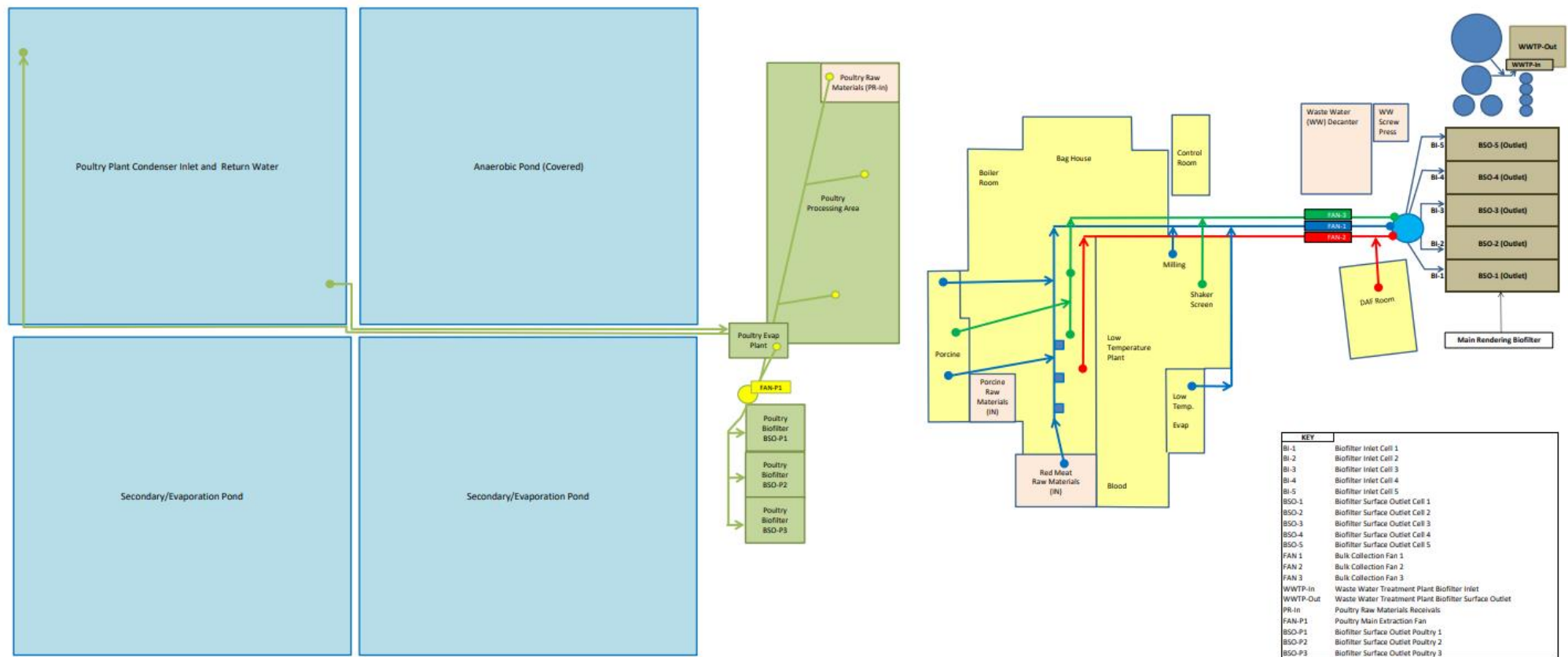
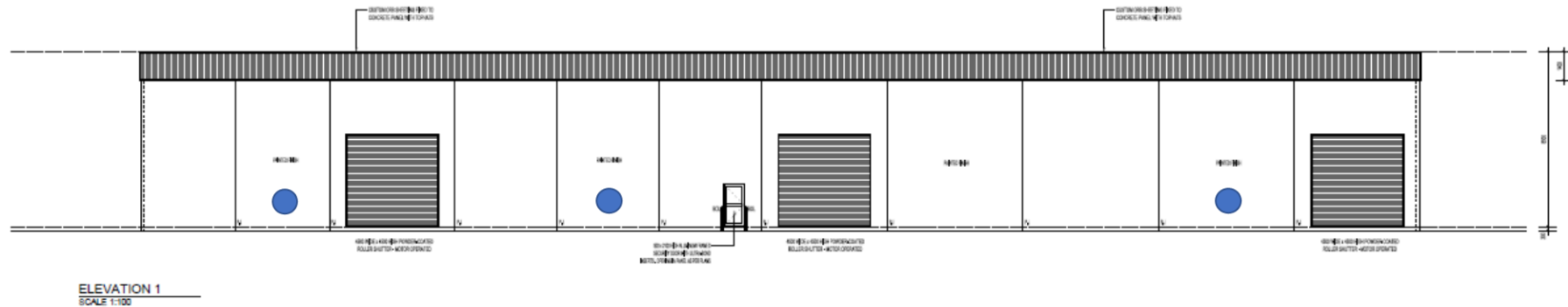


Figure 2: Premises schematic layout

East facing elevation



● Pressure Transmitter Location

Figure 3: Negative pressure gauges within the new poultry rendering building