



# Works Approval

## *Environmental Protection Act 1986, Part V*

**Works Approval Holder:** Trevor John Hinck

**Works Approval Number:** W5932/2015/1

**Place of residence:** 277 Chalk Hill West Road  
 HYDEN WA 6359

**Premises address:** Kerrigan Feedlot  
 Lot 1281 Chalk Hill West Road  
 HYDEN WA 6359  
 Being Lot 1281 on Plan 155567 as depicted in Schedule 1.

**Issue date:** Monday, 11 January 2016

**Commencement date:** Monday, 11 January 2016

**Expiry date:** Sunday, 10 December 2019

The following category/s from the *Environmental Protection Regulations 1987* cause this Premises to be a prescribed premises for the purposes of the *Environmental Protection Act 1986*:

Category number	Category description	Category production or design capacity	Approved premises production or design capacity
68	Cattle Feedlot: premises on which the watering and feeding of cattle occurs, being premises-  (a) situated 100 metres or more from a watercourse ; and  (b) on which the number of cattle per hectare exceeds 50	500 animals or more	Not more than 2,800 animals

**Conditions**

This Works Approval is subject to the conditions set out in the attached pages.

Date signed: 7 January 2016

.....  
 Jonathan Bailes  
 Manager Licensing (Process Industries)  
 Officer delegated under section 20  
 of the *Environmental Protection Act 1986*



# Works Approval Conditions

## 1 General

### 1.1 Interpretation

1.1.1 In the Works Approval, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 In the Works Approval, unless the contrary intention appears:

**'Act'** means the *Environmental Protection Act 1986*;

**'CEO'** means Chief Executive Officer of the Department of Environment Regulation;

**'CEO'** for the purpose of correspondence means:

Chief Executive Officer  
 Department Administering the Environmental Protection Act 1986  
 Locked Bag 33  
 CLOISTERS SQUARE WA 6850  
 Email: info@der.wa.gov.au;

**'Premises'** means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Works Approval;

**'Schedule 1'** means Schedule 1 of this Works Approval unless otherwise stated;

**'Works Approval'** means this Works Approval numbered W5932/2015/1 and issued under the *Act*;

**'Works Approval Holder'** means the person or organisation named as the Works Approval Holder on page 1 of the Works Approval;

1.1.3 Any reference to an Australian or other standard in the Works Approval means the relevant parts of the standard in force from time to time during the term of this Works Approval.

1.1.4 Any reference to a guideline or code of practice in the Works Approval means the current version of the guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guidelines or code of practice made during the term of this Works Approval.

### 1.2 General conditions

1.2.1 The Works Approval Holder shall construct the works in accordance with the documentation detailed in Table 1.2.1:

**Table 1.2.1: Construction Requirements<sup>1</sup>**

Document	Parts	Date of Document
Works Approval Application Form	All	23 October 2015

Note 1: Where the details and commitments of the documents listed in condition 1.2.1 are inconsistent with any other condition of this works approval, the conditions of this works approval shall prevail.



## **2 Information**

### **2.1 Reporting**

- 2.1.1 The Works Approval Holder shall submit a compliance document to the CEO following the construction of the works and prior to commissioning of the same.
- 2.1.2 The compliance document shall:
- (a) certify that the works were constructed in accordance with the conditions of the works approval; and
  - (b) be signed by a person authorised to represent the Works Approval Holder and contain the printed name and position of that person within the company.

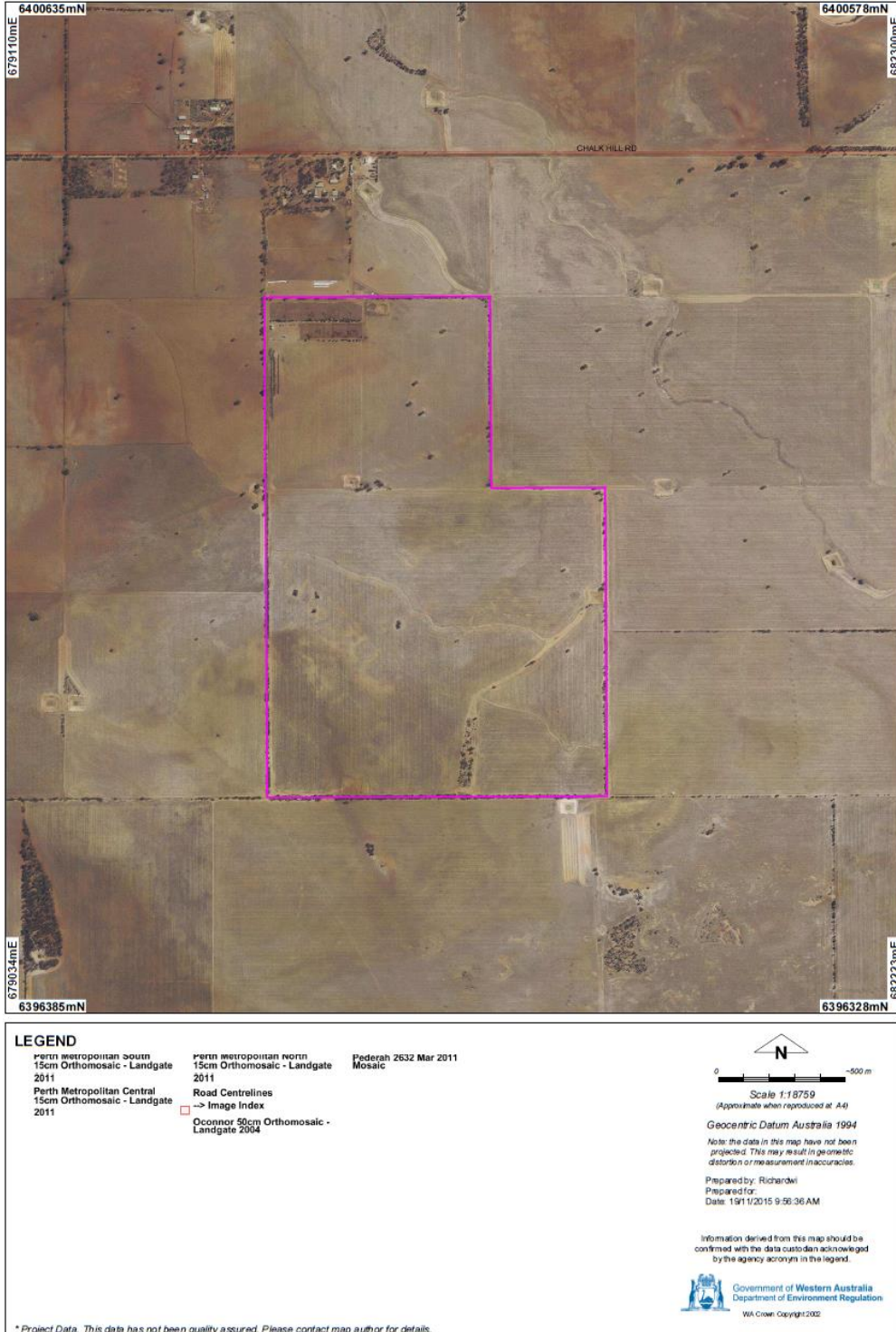


# Schedule 1: Maps

## Premises map

The Premises is shown in the map below. The pink line depicts the Premises boundary.

### Kerrigan Feedlot





# Decision Document

## *Environmental Protection Act 1986, Part V*

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**Proponent:** Trevor John Hinck

**Works Approval:** W5932/2015/1

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HYDEN WA 6359

**Premises address:** Kerrigan Feedlot  
Lot 1281 Chalk Hill West Road  
HYDEN WA 6359  
Being Lot 1281 on Plan 155567

**Issue date:** Monday, 11 January 2016

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### **Decision**

Based on the assessment detailed in this document the Department of Environment Regulation (DER) has decided to issue a works approval. DER considers that in reaching this decision, it has taken into account all relevant considerations and legal requirements and that the Works Approval and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision Document prepared by: Richard Wilson  
Licensing Officer

Decision Document authorised by: Ed Schuller  
Delegated Officer



## Contents

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## 1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.



## 2 Administrative summary

Administrative details		
Application type	Works Approval <input checked="" type="checkbox"/>	
	New Licence <input type="checkbox"/>	
	Licence amendment <input type="checkbox"/>	
	Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	<b>Category number(s)</b>	<b>Assessed design capacity</b>
	68	2,800 animals
Application verified	Date: 18/11/2015	
Application fee paid	Date: 4/12/2015	
Works Approval has been complied with	Yes <input type="checkbox"/>	No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
Compliance Certificate received	Yes <input type="checkbox"/>	No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
Commercial-in-confidence claim	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Commercial-in-confidence claim outcome	N/A	
Is the proposal a Major Resource Project?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i> )?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the Premises within an Environmental Protection Policy (EPP) Area	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If Yes include details of which EPP(s) here.		
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>



### **3 Executive summary of proposal and assessment**

#### Site information

Kerrigan feedlot is located 10km south of Hyden, within the Shire of Kondinin. The annual average rainfall in the area is 340mm and the closest ephemeral watercourse is approximately 400m from the Premises boundary. The soil type at the site is described as undulating firm-setting sand over clay (duplex) with occasional rock outcrops. Bores in the region of the feedlot demonstrate that groundwater depth ranges from 5m to 18m below ground level. Previous testing of the depth to groundwater at the feedlot site has shown that depth to groundwater exceeds 18m. The property is located in an agricultural zone, with the nearest neighbour being situated approximately 660m NNW of the feedlot.

#### Existing feedlot

The feedlot is an existing feedlot that has operated under Registration R2055/2009/1 since 2009. It currently has a capacity to hold 2,000 head of cattle in two rows of pens. The feedlot has a stocking density of 12m<sup>2</sup>/head. Drains transport wastewater to an existing sedimentation pond and holding pond. Wastewater is pumped from the holding pond and is used in the composting process as required. There is no irrigation undertaken at the feedlot. Manure from the pens is scraped regularly and transported to the composting area. Carcasses are also composted at the composting area. The feedlot generates approximately 2,500 tonnes of compost per year. This compost is applied to paddocks at a rate of 5 tonnes/hectare. The pens are sealed every 3-4 years with gravel as frequent pen cleaning and general wear and tear can reduce the thickness of the compacted layer underneath. Pens are cleaned about every 3 months and the sedimentation pond is cleaned every 2 years.

#### Proposed feedlot expansion

The proposed feedlot expansion involves the construction of 5 additional pens, increasing the feedlot capacity to a maximum of 2,800 head. The new pens will each measure 40m by 45m. Each pen will contain a concrete feed trough and a concrete water trough, both with a concrete apron. In addition to the new pens, drains will be constructed to direct wastewater from the new pens to the sedimentation and holding ponds and an additional evaporation pond will be constructed. The proponent has chosen to use The National Guidelines for Beef Cattle Feedlots in Australia, 3rd Edition (2012) as reference for all elements of the construction.

#### Construction of pens

The area of the new pens will be ripped to a depth of 500mm, levelled and water bonded. The area will be then rolled with a 15 tonne pad foot compactor, water bonded again and then finished with a 15 tonne smooth drum roller. This method is expected to result in a highly compacted gravel pen surface. Shade will also be constructed in the pens, with each pen having 4 shade sails that each measure 20mx6m.

Diversion drains will be constructed to divert uncontaminated stormwater away from the feedlot. This will contain the waste within the controlled drainage area so that the wastewater collection system can be as small as possible.

The feedlot has an existing wastewater collection system; however it was not constructed to contain the runoff from the 1 in 20 year ARI rainfall event. As part of the feedlot expansion, a new evaporation pond will be constructed to ensure that the runoff from a 1 in 20 year ARI rainfall event is contained for the 7 hectares of controlled drainage area (this includes pens, laneways, drains etc).





## 4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986* (EP Act), the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L1.2.1	<p><b>Construction</b> Condition 1.2.1 has been included on the works approval to require the works approval holder to construct the works as proposed in the application submitted to DER.</p> <p><b>Operation</b> <u>Emission Description</u> <i>Emission:</i> Contaminated stormwater from the feedlot area containing high levels of nutrients and/or suspended solids running off site or leaching into groundwater. <i>Impact:</i> Contamination of ground and/or surface waters. There is no surface water within 400m of the premises. Waste water containing high levels of nutrients can cause eutrophication of waterways.</p> <p>The Licensee has advised that groundwater bores on site show that groundwater is approximately 18m below ground level. The exact depth to groundwater is unknown. There are no Public Drinking Water Source Areas within 10km of the feedlot.</p> <p><i>Controls:</i> Diversion drains will be constructed to divert uncontaminated stormwater away from the feedlot operations area and to reduce the catchment area for the wastewater treatment system. Contaminated stormwater drains to an evaporation pond that is lined with insitu clay. Drains and the sedimentation system will be inspected and maintained where required.</p> <p>The application states that an additional pond will be constructed to ensure that the run-off from the entire controlled drainage area will be contained. The additional pond</p>	Works Approval Application form Dated 23 October 2015 and supporting documentation



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>will have a surface area of 0.29 ha and a depth of 0.6m and a total volume of 1.8ML. This has been calculated as the volume required to capture additional runoff for a 1 in 20 year rain fall event.</p> <p><u>Risk Assessment</u>  <i>Consequence:</i> Insignificant  <i>Likelihood:</i> Unlikely  <i>Risk Rating:</i> Low</p> <p><u>Regulatory Controls</u>            The premises is subject to the general provisions of the EP Act.</p> <p><u>Residual Risk</u>  <i>Consequence:</i> Insignificant  <i>Likelihood:</i> Unlikely  <i>Risk Rating:</i> Low</p>	
<b>Point source emissions to surface water including monitoring</b>	NA	<p><b>Construction</b>            There is not expected to be any emissions to surface water during the construction of the additional pens.</p> <p><b>Operation</b>            There are no point source emissions to surface water from the premises with up to 20 year rainfall events being contained on site. The nearest surface water body to the premises is an ephemeral waterway 400m to the north of the premises.</p> <p>Details on the additional pond have been included in the general conditions section above.</p>	Works Approval Application form Dated 23 October 2015 and supporting documentation
<b>Emissions to land including</b>	NA	<p><b>Construction</b>            There is not expected to be any emissions to land during the construction of the</p>	Works Approval Application form



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
monitoring		<p>additional pens.</p> <p><b>Operation</b> All wastewater from the feedlot operations will be diverted to containment ponds the evaporation pond that will be constructed will ensure that the ponds are able to contain a 1 in 20 year ARI rainfall event. Details on the additional pond have been included in the general conditions section above.</p> <p>Compost will continue to be composted within the controlled drainage area. The compost will continue to be applied to paddocks a rate of 5 tonnes per hectare per year with the total area where compost can be spread being 8000ha. The groundwater is approximately 18m below ground level.</p>	Dated 23 October 2015 and supporting documentation
Odour	NA	<p><b>Construction</b> There is not expected to be any increase in odour sources from the construction of the additional pens.</p> <p><b>Operation</b> <u>Emission Description</u> <i>Emission:</i> Fugitive nuisance odour emissions from solid and liquid wastes on the premises. <i>Impact:</i> Nuisance odour impacts on neighbouring properties affecting amenity. <i>Controls:</i> The premises is located 10km south of Hyden within the Shire of Kondinin. There is a residence approximately 660m from the premises. This is less than the recommended 1000m separation distance for feedlots as outlined in DER's Guidance Statement for Separation Distances and Siting. There is only one residence within the 1000m recommended separation distance. The current occupiers have supplied a letter to advise they do not object to the extension of the feedlot.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant</p>	<p>Works Approval Application form Dated 23 October 2015 and supporting documentation</p> <p>Guidance Statement: Separation distances and siting October 2015</p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p> <p><u>Regulatory Controls</u> The premises is subject to the general provisions of the EP Act.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p> <p>Odour emissions from the premises are not likely to significantly increase with the increase in cattle on the premises. Although the works approval will allow an increase of 800 extra head of cattle from 2,000 to 2,800, the operator only expects the site to hold 2500 head. DER has not received any odour complaints from the premises.</p>	
<b>Fugitive Emissions</b>	NA	<p><b>Construction</b> There is unlikely to be any fugitive dust emissions from the premises during construction of the additional pens.</p> <p><b>Operation</b> <u>Emission Description</u> <i>Emission:</i> Fugitive nuisance dust crossing the boundary of the premises. <i>Impact:</i> Dust having a nuisance impact on neighbouring properties. <i>Controls:</i> The site is located approximately 660m from the nearest adjacent residence.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p>	Works Approval Application form Dated 23 October 2015 and supporting documentation



<b>DECISION TABLE</b>			
<b>Works Approval / Licence section</b>	<b>Condition number W = Works Approval L= Licence</b>	<b>Justification (including risk description &amp; decision methodology where relevant)</b>	<b>Reference documents</b>
		<u>Regulatory Controls</u> The premises is subject to the general provisions of the EP Act.  <u>Residual Risk</u> <i>Consequence</i> : Insignificant <i>Likelihood</i> : Unlikely <i>Risk Rating</i> : Low	
<b>Information</b>	W2.1.1 W2.1.2	Works approval conditions 2.1.1 and 2.1.2 have been included to ensure that the works approval holder submits a compliance document stating that the pens have been constructed as proposed.	
<b>Works approval Duration</b>	-	The works approval has been granted for a period of three years.	-



## 5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
14/12/2015	Application advertised in West Australian (or other relevant newspaper)	No comments received	N/A
11/12/2015	Letter sent to Shire of Kondinin	No comments received	N/A

## 6 Risk Assessment

*Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management*

**Table 1: Emissions Risk Matrix**

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High