Decision Report

Application for Licence

Division 3, Part V Environmental Protection Act 1986

Licence Number	L9237/2020/1
Applicant	GrainCorp Oilseeds Pty Ltd
ACN	006 772 578
File Number	DER2019/000655
Premises	GrainCorp Pinjarra Street address 172 Greenlands Road Pinjarra WA 6208 Legal description - Part L of 812 on Deposited Plan 63292
	Part Lot 812 on Deposited Plan 63292 Certificate of Title Volume 2720 Folio 174 As defined by the coordinates in Schedule 1 of the Licence
Date of Report	17/08/2020
Status of Report	Final

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1. Definitions of terms and acronyms

In this Decision Report, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition	
AACR	Annual Audit Compliance Report	
ACN	Australian Company Number	
AER	Annual Environment Report	
Category/ Categories/ Cat.	Categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations	
Decision Report	refers to this document.	
Delegated Officer	an officer under section 20 of the EP Act.	
Department	means the department established under section 35 of the <i>Public Sector</i> <i>Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.	
DWER	Department of Water and Environmental Regulation	
EPA	Environmental Protection Authority	
EP Act	Environmental Protection Act 1986 (WA)	
EP Regulations	Environmental Protection Regulations 1987 (WA)	
Licence Holder	GrainCorp Oilseeds Pty Ltd	
Minister	the Minister responsible for the EP Act and associated regulations	
Noise Regulations	Environmental Protection (Noise) Regulations 1997 (WA)	
Prescribed Premises	has the same meaning given to that term under the EP Act.	
Premises	refers to the premises to which this Decision Report applies, as specified at the front of this Decision Report	
Review	this Licence review	
Risk Event	As described in Guidance Statement: Risk Assessment	
UDR	Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA)	

2. Purpose and scope of assessment

2.1 Application details

GrainCorp Oilseeds Pty Ltd (the applicant) has applied for a licence in respect of an existing facility that processes canola seed into canola oil. Table 2 lists the documents submitted during the assessment process.

Table 2: Documents and information submitted during the assessment process

Document/information description	Date received
Application form and supporting documentation	5 December 2019
Response to request for further information	17 January 2020

3. Background

The applicant has stated that The Pinjarra Site, which is only partially leased by GrainCorp Oilseeds, has had a variety of businesses that operate within its grounds.

Prior to 1997/98 the site was owned by Davison Oils who operated a chemical manufacturing business in conjunction with a small oilseed processing plant. This was on sold to Joyce Rural Industries who operated the site until 2001. Davison Industries purchased the land back & sold the Chemical Licenses to Nu-Farms. The Oilseed crushing business was purchased by Riverland Oilseeds in August 2001. In October 2012 Graincorp purchased Riverland Oilseeds. GrainCorp leases the use of the land and the site is shared with three other businesses.

Table 3 lists the prescribed premises categories that have been applied for.

Classification of Premises	Description	Approved Premises production or design capacity or throughput
Category 19	Edible oil or fat processing: premises on which vegetable oil or oil seed or animal fat is processed and from which liquid waste is or is to be discharged onto lands or into waters.	65,000 tonnes per year

4. **Overview of Premises**

4.1 **Operational aspects**

The premises produces approximately 65,000t of oil seed to produce 25,000 tonnes of canola oil per year using thermal and mechanical extraction. Canola seed is cleaned from any gross contaminants (plant material) and preheated then flaked and cooked prior to mechanical pressing to extract the oil. The oil is then stored in tanks on site prior to being trucked off site and exported to be used in edible products such as margarine.

The left over material (meal) from the canola seed is milled and removed from the premises and used in animal feed. Approximately 80,000L of wastewater containing nutrients is irrigated to an area that is approximately 2.38ha.

4.2 Contaminated Sites

The premises was previously used for chemical formulation of agricultural pesticides and herbicides between 1988 and 1996.

The premises was reported as '*Contaminated* – *Remediation Required*' in January 2011. After site investigations the premises was classified on 1 January 2017 as '*Contaminated* – *remediation required*'. The site was remediated and on 6 February 2019 the premises was reclassified as '*remediated for restricted use*'.

5. Part V of the EP Act

5.1 Applicable regulations, standards and guidelines

The overarching legislative framework of this assessment is the EP Act and EP Regulations.

The guidance statements which inform this assessment are:

- Guideline: Industry Regulation Guide to Licensing (June 2019)
- Guidance Statement: Regulatory Principles (July 2015)
- Guidance Statement: Setting Conditions (October 2015)
- Guidance Statement: Licence Duration (August 2016)
- Guideline: Decision Making (June 2019)
- Guidance Statement: Risk Assessments (February 2017)

5.2 Works approval and licence history

Table 4 summarises the works approval and licence history for the premises.

Table 4: Works approval and licence history

Instrument	Issued	Nature and extent of works approval, licence or amendment	
L5138	30/06/2000	Licence issued to Joyce Rural	
L9237	17/08/2020	New Licence for GrainCorp facility	

6. Modelling and monitoring data

6.1 Monitoring of discharges to land

The applicant currently discharges approximately 80,000L of wastewater to an area that is approximately 2.38ha. Wastewater quality is tested bi-annually for nitrogen and phosphorus. Table 5 shows the average concentrations of total nitrogen and phosphorus between 2015 and 2019 and the irrigation rate of nutrients based on a discharge volume of 80,000L a year and compares the discharge to the limits in Water Quality Protection Note 22. The limits used are those for areas that are the highest risk.

Table 5: Wastewater quality and irrigation concentrations

	Ν	Р
Average concentration based on biannual testing from 2015 - 2019	146.7mg/L	145 mg/L
Average Kg irrigated based on 80,000kL/year	11.74 Kg	11.63 Kg
Kg/ha irrigated per year based on 2.38 ha irrigation area	4.93 Kg/ha	4.88 Kg/ha
Water Quality Protection Note 22: Highest risk category irrigation rates kg/ha/yr	140 Kg/ha/yr (inorganic nitrogen)	10 Kg/ha/yr (reactive phosphorus)

7. Consultation

The application for a licence was advertised in the West Australian Newspaper on 6 April 2020. No third party comments were received.

8. Distance to receptors

8.1 Residential and sensitive receptors

The distances to residential and sensitive receptors are detailed in Table 6.

Table 6: Receptors and distance from activity boundary

Sensitive Land Uses	Distance from Prescribed Activity
Residential premises	250m south of the processing shed
Residential premises	450m south west of the processing shed
Residential premises	750m south east of the processing shed
Residential premises	750m east of the processing shed
Pinjarra Town site	2,000m north east of the processing shed



8.2 Groundwater and water sources

The PSI states that the depth to groundwater across the premises ranges from 5 to 8m below ground level and flows in a west north-westerly direction (360 Environmental 2013).

The distances to groundwater and water sources are shown in Table 7.

 Table 7: Groundwater and water sources

Groundwater and water sources	Distance from Premises	Environmental value
Groundwater	Depth to groundwater across the premises is approximately 5 to 8m below ground level (360 Environmental October 2013)	Groundwater possibly used by private bore owners for stock watering and irrigation
Stormwater sump	50m south of the premises	No classified as a wetland
Conservation category wetlands	475m north east of the premises	Conservation category



Figure 2: Distance to Conservation category wetlands

8.3 Soil type

Preliminary site investigation (PSI) (360 Environmental 2013) conducted as part of the contaminated sites investigation, identified the soils as predominantly Pinjarra Plain Soils comprising of layering of eroded scarp soils with onsite investigations such as bore installations and test pitting indicated the general soil profile consisting of gravel sands and fill sands over clayey sands and sandy clays over clays.

9. Risk assessment

9.1 Determination of emission, pathway and receptor

In undertaking its risk assessment, DWER will identify all potential emissions pathways and potential receptors to establish whether there is a Risk Event which requires detailed risk assessment.

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. Where there is no actual or likely pathway and/or no receptor, the emission will be screened out and will not be considered as a Risk Event. In addition, where an emission has an actual or likely pathway and a receptor which may be adversely impacted, but that emission is regulated through other mechanisms such as Part IV of the EP Act, that emission will not be risk assessed further and will be screened out through Table 8.

The identification of the sources, pathways and receptors to determine Risk Events are set out in Table 8 below.

Table 8: Identification of emissions, pathway and receptors during operation

Risk Events								
Sources/Activities		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts	Proponent controls	Continue to detailed risk assessment	
Canola oil production	Truck and vehicle movements	Noise	Nearest resident is 250m south of the premises	Air	Reduced amenity	No truck movements outside of business hours	No	Truck deliveries and load outs take The process is not inherently noisy There have not been any noise con years The Environmental Protection (Noi
	Processing of canola seeds including heating, rolling and pressing	Noise				Operation take place within an enclosed shed No night time operations		
		Odour				Limited odour emission can be controlled with a wet scrubber	No	There have not been any odour co
	Storage of canola oil	Canola oil	Soil	Direct release	Contamination of soil	Canola oil is stored in stainless steel tanks and the tanks are within a concrete bunded area	No	The Delegated officer considers the the storage of canola oil.
	Storage of Meal	Dust	Nearest resident is 250m south of the premises	Air	Reduced amenity	Meal is stored within an enclosed shed	No	The Delegated Officer considers th the shed and the separation distan
	Irrigation of wastewater/ wash water	Wastewater containing nutrients	Soil/Groundwater	Seepage through soil	Reduction in groundwater quality impacting beneficial use	Even irrigation over irrigation area via a travelling irrigator Limit irrigation volume of 80,000L	No	The irrigation rate and concentratic specified in Water Quality Protection The Delegated Officer has determin (80kL) to be irrigated and is consider The Delegated Officer considers the irrigation occurs consistently during the low volumes and low nutrient low

Reasoning

- ke place within between 7am and 5pm
- isy and all infrastructure is within the processing shed
- complaints relating to the premise received by DWER within the last 5

loise) Regulation 1997 apply

complaints regarding the operation of premises in the previous 5 years.

the current containment measures are appropriate for the risk posed by

that there is no potential path way due to the storage of the meal within ance to the nearest receptor

ation of nutrients are below the nutrient application loading rates ction Note 22 for Nitrogen and Phosphorus.

mined that the area available for irrigation for the volume of wastewater sidered appropriate.

that if the irrigation is evenly spread over the irrigation area and ring dry periods the irrigation of wastewater will not pose a risk due to t loadings.

10. Determination of Licence conditions

The conditions in the issued Licence have been determined in accordance with the *Guidance Statement: Setting Conditions*.

Table 9 provides a summary of the conditions to be applied to this licence.

Table 9: Summary of conditions to be applied

Condition Ref	Grounds		
Infrastructure	Sets out how infrastructure is to be operated		
Condition 1			
Emissions and discharges	Permits irrigation and restricts irrigation during winter		
Condition 2			
Monitoring	Requires monitoring of wastewater and groundwater limiting the nutrient and		
Conditions 3, 4 and 5	BOD loads that can be irrigated		
Records and reporting	Requires the Licence Holder to report compliance with the licence and		
Conditions 6, 7, 8 and 9	maintain records of complaints and emissions that relate to the limits in the		
	licence and calculation of annual fees for the premises.		

DWER notes that it may review the appropriateness and adequacy of controls at any time and that, following a review, DWER may initiate amendments to the licence under the EP Act.

11. Applicant's comments

The Applicant was provided with the draft Decision Report and draft Licence on 22 July 2020 The Applicant provided comments which are summarised, along with DWER's response, in Appendix 2.

12. Conclusion

This assessment of the risks of activities on the Premises has been undertaken with due consideration of a number of factors, including the documents and policies specified in this Decision Report (summarised in Appendix 1).

This assessment was also informed by a site inspection by DWER officers on 19 February 2020

Based on this assessment, it has been determined that the Issued Licence will be granted subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

Chris Malley A/Manager, Process Industries

Officer delegated under section 20 of the Environmental Protection Act 1986

Appendix 1: Key documents

	Document title	In text ref	Availability	
1.	Licence Application	Application	DWERDT232248	
2.	Response to request for further information		DWERDT245540	
3.	360 Environmental 2013, Preliminary Groundwater and Surface Water Investigation – Lot 812 Paceway Court Pinjarra		A742900	
4.	DWER, June 2019. <i>Guideline: Industry</i> <i>Regulation Guide to Licensing</i> . Department of Water and Environmental	NA	accessed at <u>www.dwer.wa.gov.au</u>	
5.	DER, July 2015. <i>Guidance Statement:</i> <i>Regulatory principles.</i> Department of Environment Regulation, Perth.			
6.	DER, October 2015. <i>Guidance Statement:</i> <i>Setting conditions.</i> Department of Environment Regulation, Perth.			
7.	DER, August 2016. <i>Guidance Statement:</i> <i>Licence duration.</i> Department of Environment Regulation, Perth.			
8.	DER, November 2016. <i>Guidance Statement:</i> <i>Risk Assessments.</i> Department of Environment Regulation, Perth.			
9.	DER, June 2019. <i>Guidance Statement:</i> <i>Decision Making</i> . Department of Environment Regulation, Perth.			
10.	DoW July 2008, Water Quality Protection Note 22: Irrigation with nutrient-rich wastewater		https://www.water.wa.gov.au/data/assets /pdf_file/0013/4045/82324.pdf	

Appendix 2: Summary of applicant's comments on risk assessment and draft conditions

Condition Summary of Licence Holder comment		DWER response		
Decision report 4.1 Paragraph 1	Change 65,000t of crude oil to Crushing 65,000mt of oil seed to produce 25,000mt of oil	Decision report updated		
Condition 1: Table 1 row 1	Change wording from 'within the canola oil processing shed' to 'adjacent to'	Licence updated to state within enclosed shed		
Condition 1: Table 1 row 2	Change wording from '80,000' to '90,000'	Licence updated		
Condition 2	Allow irrigation from September to April	Licence updated – The Delegated Officer considers the risk of irrigation in September and April to be acceptable.		