

# Licence

Licence number	L5177/1989/13		
Licence holder Trading name ACN	Cutting Cart Pty Ltd Dardanup Butchering Co 661 123 404		
Registered business address	100 Wimbridge Road PICTON WA 6229		
DWER file number	DER2014/001843		
Duration	01/10/2015 to 30/09/2029		
Date of amendment	21/05/2025		
Premises details	Dardanup Butchering Company Abattoir 100 Wimbridge Road PICTON WA 6229		
	Legal description – Lot 100 on Plan 61127		

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed production throughput
Category 15: Abattoir: premises on which animals are slaughtered.	30,000 tonnes per annual period (liveweight)

This licence is granted to the licence holder, subject to the attached conditions, on 21 May 2025 by:

### MANAGER, PROCESS INDUSTRIES ENVIRONMENTAL REGULATION

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

## **Licence history**

Date	Instrument	Summary of changes		
24/09/2015	L5177/1989/13	Licence renewed for 5 years.		
29/04/2016	L5177/1989/13	Amendment by notice – licence duration extended to 2027.		
03/11/2016	L5177/1989/13	Amendment notice 1 – update to irrigation areas, monitoring and reporting requirements. Improvement requirement to submit an updated NIMP deleted.		
09/09/2020	L5177/1989/13	Licence amendment for construction of new lairage yards and removal of category 55.		
20/02/2023	L5177/1989/13	Licence transferred from Dardanup Butchering Company Nominees Pty Ltd to Cutting Cart Pty Ltd.		
27/05/2024	L5177/1989/13	Licence amendment for the installation of an AMIAD membrane filtration system, MD screw press, discharge tank, filter permeate tank and filter feed tank and changes to wastewater pathways. Includes department-initiated changes to require the submission of a nutrient management plan to support a future amendment application to hold sheep in the wastewater disposal areas and the monitoring of the off-site discharge of abattoir wastewater to Water Corporation sewer.		
01/05/2025	L5177/1989/13	Department initiated licence amendment to remove all references to proposed pig and sheep lairage yards, extend the submission date of the Nutrient Management Plan (NMP), changes to monitoring and reporting and other administrative updates. Licence duration extended to 2029.		
21/05/2025	L5177/1989/13	Department initiated licence amendment to correct formatting issue for images relating to Figures 1, 2, 3 and 4 in Schedule 1.		

## Interpretation

In this licence:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (a) 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;
- (b) where tables are used in a condition, each row in a table constitutes a separate condition;
- (c) any reference to an Australian or other standard, guideline, or code of practice in this licence:
  - (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;
- (d) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (e) unless specified otherwise, all definitions are in accordance with the EP Act.

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

## **Licence conditions**

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

### Infrastructure and equipment

1. The licence holder must ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

	Table '	1: Ir	nfrastruct	ure and	equi	pment	require	ements
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ltem	Infrastructure and equipment	Operational requirement	Infrastructure location - schedule 1
Abatt	oir		
1	Slaughterhouse	<ul> <li>All wastewater generated from the slaughterhouse must be directed to the wastewater treatment system (WTS) for treatment prior to on-site and off-site disposal.</li> </ul>	Shown as: 'Abattoir building' in Figure 3, Site layout map
Wast	ewater collection, treatment and d	isposal	
2	<ul> <li>Wastewater Treatment System (WTS) located on a concrete hardstand, consisting of the following: <ul> <li>Screw extractor located within a concrete lined sump</li> <li>Rotary screen located on a concrete hardstand area that drains back to the WTS</li> <li>Dissolved air flotation impermeable tank (DAF)</li> <li>AMIAD membrane filtration system</li> <li>Anaerobic tank (impermeable) (EEI highrate anaerobic reactor technology (HART) tank)</li> <li>Area: 4, 421 m<sup>3</sup> Volume: 120 kL</li> </ul> </li> <li>MD Screw Press</li> <li>Pond 1 (advanced nutrient removal unit process (ANRUP) pond) that is <ul> <li>HDPE-lined</li> <li>Pond 2 (phosphorus removal and holding</li> </ul> </li> </ul>	<ul> <li>a) All treatment and storage vessels or compounds must be maintained free of leaks.</li> <li>b) All solids generated on site from the WTS must be directed to dedicated solid waste collection bins for disposal offsite to a facility which is licensed to accept the waste.</li> <li>c) All solids generated from the desludging of ponds will be dewatered in geobags for off-site disposal to a licensed waste facility.</li> <li>d) A minimum 300 mm freeboard must be maintained for Pond 1 and Pond 2.</li> <li>e) Stormwater runoff from site drainage must be prevented from entering the ponds or causing erosion of outer pond embankments.</li> <li>f) Vegetation and floating debris (emergent or otherwise) must not encroach onto the surface or inner pond embankments.</li> <li>g) Trapped overflows are maintained at the ponds</li> </ul>	Shown as: 'Pond 1, Pond 2 and Anaerobic tank', in Figure 1, Premises map 'DAF Area and AMIAD filter with permeate tank' in Figure 3, Site layout map

ltem	Infrastructure and equipment	Operational requirement	Infrastructure location - schedule 1
	o HDPE-lined	carryover of surface floating matter to the subsequent pond or irrigation area.	
3	<ul> <li>Waste containment vessels consisting of:</li> <li>Recycled Water Tank (120 kL)</li> <li>Discharge tank (250 kL)</li> <li>Filter feed tank (14 kL)</li> <li>Filter sludge tank (7 kL)</li> <li>Metal bin (waste from screw extractor and rotating screen)</li> <li>Truck / Metal bin (waste from DAF)</li> <li>New Truck / bin (waste from MD Screw Press) "once installed"</li> </ul> Two by-products areas used to store animal material, located on a concrete hardstand area comprising of: <ul> <li>Blood tank (fiberglass)</li> <li>Hopper / bins (paunch from animals)</li> <li>Truck / trailers</li> <li>Animal bi-products suitable for rendering</li> </ul>	<ul> <li>a) Waste material must only be stored within vessels or compounds that are free from leaks.</li> <li>b) Waste disposed off-site must only be disposed of at a waste facility licensed to accept the type of waste.</li> <li>c) All bins must be covered when not in use and removed from the site at least once daily when the abattoir is operating.</li> <li>d) Byproduct (offal, bones, blood, skins) must be directed to trucks for offsite disposal or render at a facility licensed to accept the waste or material.</li> <li>e) Blood must be directed to the fibreglass tank (blood) prior to offsite disposal.</li> <li>f) The fiberglass tank (blood) must be emptied daily for offsite disposal or render.</li> </ul>	Shown as: 'Recycled water tank, Discharge tank, Filter feed tank, Filter sludge tank, Blood tank and By-products area' in Figure 3, Site layout map
Sludg	je dewatering pad		
4	<ul> <li>Pond sludge dewatering pad consisting of:</li> <li>An impervious and bunded limestone pad</li> <li>Leachate collection sump, pipes and pump</li> </ul>	<ul> <li>a) All sludge or dewatering bags must only be dewatered on the limestone dewatering pad</li> <li>b) All leachate generated from dewatering activities must be directed back into Pond 1.</li> </ul>	Shown as: 'Pond sludge dewatering pad' in Figure 1, Premises map
Wast	ewater disposal and irrigation		1
5	10.23 Ha wastewater disposal area consisting of Irrigation areas # 1,2,3,4,5,6,7,8,9,10 & 11	<ul> <li>a) Irrigation may only occur from the discharge tank and Pond 2 through irrigation flow meters F1: 142541D350 and F2: 143541D350.</li> <li>b) Prior to irrigation from Pond 2 occurring, sampling in</li> </ul>	Shown as: 'Irrigation areas' #1 to #11 in Figure 2, 'Discharge

ltem	Infrastructure and equipment	Operational requirement	Infrastructure location - schedule 1
		<ul> <li>accordance with condition 5 Table 3 must occur.</li> <li>c) Only treated wastewater must be irrigated to the wastewater disposal area outlined in the premises map.</li> <li>d) Treated wastewater is even distributed over all the irrigation areas.</li> <li>e) No soil erosion or ponding of wastewater will occur.</li> <li>f) There is no direct runoff, spray drift or discharge beyond the disposal area.</li> <li>g) Healthy vegetation cover is maintained over the irrigatio area.</li> <li>h) Irrigation must not occur within fifty (50) metres of an defined watercourses or drain.</li> <li>i) Discharge must not occur during periods of rainfall or onto flooded area(s).</li> </ul>	<ul> <li>tank' in Figure 3, Site layout map</li> <li>'Pond 2' in Figure 1 Premises map</li> <li>'F1 &amp; F2 flow meters' in Figure 1, Premises map</li> </ul>
6	Water corporation sewerage connection and Tradewaste flow meter- N1 ND285003 (N1)	<ul> <li>a) Abattoir wastewater (trade waste) may be discharged off-site to Water corporation sewer.</li> <li>b) All trade waste being discharged off-site to sewer must pass through flow meter N1 and the volumes discharged recorded.</li> </ul>	Shown as: 'Water corp. sample area' in Figure 3, Site layout map
Laira	ge/holding yards		

ltem	Infrastructure and equipment	Opera	tional requirement	Infrastructure location - schedule 1
7	Cattle lairage yards: Undercover with concrete floor with collection sumps and pump stations to transfer screened wastewater to the WTS. Existing sheep and pig lairage yards: Concrete lined, bunded and sloped to prevent runoff of contaminated water or discharge of animal waste into the environment.	a) b)	All drains and bunds within the yards must direct all wastewater to the WTS Bunds or drains maintained around lairage yards to exclude stormwater flows.	'Cattle lairage yards' in Figure 3, Site layout map
Hide	and skin shed			
8	Undercover hide and skin shed with concrete floor	a)	All wastewater generated from the shed must be directed to a blind sump for collection and disposal off- site to a licensed liquid waste facility.	Shown as: 'Hide and skin shed' in Figure 3, Site layout map

## **Emissions**

#### Emissions of wastewater to land

2. The licence holder must not cause or allow wastewater emissions to land greater than the limits listed in Table 2.

### Table 2: Emissions to land

Emission point reference	Parameter	Limit (including units)
Wastewater irrigation	Total nitrogen	250 kg/ha/annual period
areas:	Total phosphorus	20 kg/ha/annual period
#1- 1.35 ha #2- 1.14 ha #3- 9.64 ha #4- 8.17 ha #5- 9.32 ha	BOD	30 kg/ha/day

Emission point reference	Parameter	Limit (including units)
#7- 13.25 ha		
#8- 5.44 ha		
#9- 6.14 ha		
#10- 4.90 ha		
#11- 13.05 ha		

## Monitoring

#### **General monitoring**

- **3.** The licence holder must ensure that:
  - (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
  - (b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
  - (c) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
  - (d) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.
- **4.** The licence holder must ensure that quarterly monitoring is undertaken at least 45 days apart.

#### Monitoring of emissions to land

**5.** The licence holder must undertake the monitoring in Table 3 according to the specifications in that table.

Table 3: Monitoring of emissions to land

Emission point references	Monitoring point reference	Parameter	Units	Averaging period	Frequency
Irrigation areas #1, #2, #3, #4, #5, #6, #7, #8, #9, #10 and #11	Flowmeters: • F1 (North): 142541D350. • F2 (South): 143541D350.	Volumetric flow rate	Cubic metres (m <sup>3</sup> ) or kL discharged to <u>each</u> irrigation area	Monthly	Continuous
	Discharge tank (250 kL)	рН	No unit	Spot sample	Quarterly
		TDS	mg/L		from Discharge Tank On each
	and Pond 2	TSS			
		BOD			
		Total nitrogen			
	Total phosphorus			occasion a discharge from Pond 2 occurs	
	Ammonium- nitrogen				
		Nitrate + nitrite- nitrogen			

#### Monitoring of inputs and outputs

**6.** The licence holder must undertake the monitoring in Table 4 according to the specifications in that table.

Table 4:	Monitoring	of inputs	and out	puts
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Input / Output	Parameter	Units	Averaging period	Frequency
Livestock received at premises	Animals	Number	Annual	Monthly total
Animals to be slaughtered	Liveweight of animals	tonnes (estimated)		Estimated from number of livestock received at premises
Slaughtered animals	Hot standard carcase weight (HSCW)	kilograms (weighed)		Total of all animals slaughtered on the premises, by species
Tradewaste (Flow meter: N1 D285003) discharged to Water Corporation sewer	Abattoir wastewater (trade waste)	kL	month	cumulative volumes of trade waste discharged to sewer each month

#### Monitoring of ambient groundwater

**7.** The licence holder must undertake the monitoring in Table 5 according to the specifications in that table.

#### Table 5: Monitoring of ambient groundwater quality

Monitoring locations as shown in Schedule 1, Figure 1	Parameter	Units	Averaging period	Frequency	
Groundwater monitoring	Standing water level	m AHD	Spot sample	Quarterly	
bores: MB1, MB2, MB3	рН	No unit			
	TDS	mg/L			
	TSS				
	Total nitrogen				
	Total phosphorus				

### **Records and reporting**

- 8. All information and records required by the licence must:
  - (a) be legible;
  - (b) if amended, be amended in such a way that the original and subsequent amendments remain legible and are capable of retrieval;
  - (c) except for records listed in condition 8 (d), be retained for at least 6 years from the date the records were made or until the expiry of the licence or any subsequent licence; and;
  - (d) for those following records, be retained until the expiry of the licence and any subsequent licence:
    - (i) off-site environmental effects; or
    - (ii) matters which affect the condition of the land or waters.

- **9.** The licence holder must:
  - (a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
  - (b) prepare and submit to the CEO, by no later than 1 March in each year, an Annual Audit Compliance Report in the approved form.
- **10.** The licence holder must implement a complaints management system that as a minimum, records the number and details of complaints received concerning the environmental impact of the activities undertaken at the premises and any action taken in response to the complaint.
- **11.** The licence holder must maintain accurate and auditable books including the following records, information, reports and data required by this licence:
  - (a) the calculation of fees payable in respect of this licence;
  - (b) monitoring undertaken in accordance with conditions 3, 4, 5, 6 and 7 of this licence;
  - (c) the calculation of annual total liveweight of animals slaughtered (data provided for each species); and
  - (d) complaints received under condition 10 of this licence.

### **Submission of a Nutrient Management Plan**

- **12.** The licence holder must submit to the CEO by 31 December 2026, a Nutrient Management Plan.
- **13.** The Nutrient Management Plan required by condition 12, shall include, but not be limited to:
  - (a) describe the irrigation area, irrigation discharge rates, nutrient inputs from manure, irrigation schedule and irrigated crop or vegetation.
  - (b) describe the locations, sheep numbers and rotations where sheep are proposed to be held within the irrigation areas (visual maps and explanations);
  - (c) provide site-specific nutrient loading rates, based on the irrigated crops' ability to assimilate nutrients, and export nutrients through biomass harvesting; and
  - (d) demonstrate how vegetation within all the irrigation area will be maintained with healthy coverage over the irrigation areas, including damage done by sheep overgrazing and trampling.
- **14.** The licence holder must submit to the CEO an annual environmental report by no later than 1 March each year. The report must contain the information listed in Table 6.

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Condition or table	Parameter

Table 6: Annual environmental report

Condition or table	Parameter				
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken				
Table 2	(a) Present wastewater monitoring data in a tabulated and graphical form that includes the sample date				
	(b) Present monthly and annual tabulated loadings of nitrogen, phosphorus and BOD applied to each of the irrigation areas using the Nutrient loading calculator in Appendix 1				
Table 3	(a) Wastewater monitoring data in tabulated and graphical form that includes the sample date.				
	(b) Present monthly and annual tabulated loadings of nitrogen, phosphorus and BOD applied to the irrigation areas using the				

Condition or table	Parameter
	Nutrient Loading Spreadsheet in Appendix 1.
	(c) Present monthly photographic evidence illustrating the date, the flow meter serial number and flow meter readings for flow meter F1 and flow meter F2.
	(d) Photographic evidence as per item 'c' must report a minimum of 10 months within the annual reporting period"
Table 4	Monitoring of inputs and outputs
Table 5	<ul> <li>(a) Groundwater monitoring data in tabulated and graphical form including the sampling date.</li> </ul>
	(b) An assessment and interpretation of the data including comparison to historical trends and loading limits (minimum of 5 years).
	(c) Copies of all laboratory sample analysis reports.
Condition 9	A summary of compliance against each licence condition (AACR)
Condition 10	A summary of complaints recorded for the annual period

**15.** The licence holder must ensure the report required by condition 14 also contains an assessment of the information contained within against previous monitoring results and licence limits.

## **Definitions**

In this licence, the terms in Table 7 have the meanings defined.

#### **Table 7: Definitions**

Term	Definition
AHD	Australian Height Datum
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	means the inclusive period from 1 January until 31 December in the same year
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 Water Quality – Sampling – Guidance on sampling of waste waters
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 Water Quality – Sampling – Guidance on sampling of groundwaters
averaging period	means the time over which a limit is measured or a monitoring result is obtained
BOD	Biochemical oxygen demand

Term	Definition
CEO	<ul> <li>means Chief Executive Officer of the Department of Water and Environmental Regulation.</li> <li>"submit to / notify the CEO" (or similar) means either:</li> <li>Director General</li> <li>Department Administering the Environmental Protection Act 1986</li> <li>Locked Bag 10</li> </ul>
	JOONDALUP DC WA 6919
	info@dwer.wa.gov.au
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 the EP Act, which includes Part V, Division 3
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
EP Act	means the Environmental Protection Act 1986 (WA)
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point
hardstand	means a surface with a permeability of 10 <sup>-9</sup> metres/second or less
HSCW	means the carcase weight of an animal once dressed and trimmed according to the standard carcase definition for that animal species, and measured hot at the end of the slaughter chain, before being transferred to the chillers
HDPE	High density polyethylene
licence	means this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within
licence holder	refers to the occupier of the premises being the person to whom this licence has been granted, as specified at the front of this licence
ΝΑΤΑ	National Association of Testing Authorities, Australia
NATA accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis
premises	means the premises to which this licence applies, as specified at the front of this licence and as shown on the map in Schedule 1 to this licence
prescribed premises	has the same meaning given to that term under the EP Act
quarterly	means the 4 inclusive periods from 1 January to 31 March, 1 April to 30 June, 1 July to 30 September and 1 October to 31 December in the same year
spot sample	means a discrete sample representative of the time and place at which the sample is taken
TDS	Total dissolved solids
TSS	Total suspended solids

### END OF CONDITIONS

## Schedule 1: Maps

## Premises map with irrigation areas and monitoring bores



Figure 1: The boundary of the prescribed premises is shown in red in the map above. Treated wastewater for irrigation from the Discharge Tank bypasses Pond 2 and discharges directly through the existing flow meters (F1: 142541D350 and F2: 143541D350.) to the irrigation paddocks (connected to irrigation pumps north and south). The pipe connecting the discharge tank to the irrigation pumps, bypassing the F1 and F2 flow meters is shown in pink above.

L5177/1989/13 (21/05/2025)

## Wastewater irrigation areas



Figure 2: The above map shows a visual representation of the paddocks on the premises used for treated wastewater irrigation.

L5177/1989/13 (21/05/2025)

## Site layout map



Figure 3: The premises site layout map with labelled infrastructure is provided above.

L5177/1989/13 (21/05/2025)

# **Appendix 1: Nutrient loading calculator**

Irrigation areas <sup>1</sup> : size, volume irrigated, irrigation days			gation days	Annual period (as defined by your licence) <sup>2</sup>											
	Size (ha)			January	February	March	April	May	June	July	August	September	October	November	D
EXAMPLE	0.20 ()	volume irrigated	kl	20.000	20.000	18 000	15,000	0	0	0	0	15.000	18.000	20.000	-
irrigation area:	25	days of irrigation	davs/month	29	28	30	25	0	0	0	0	20	25	30	
inguton aroa.		volume irrigated	kl	544 W	20							2.0			
Irrigation Area 1:		days of irrigation	days/month	8 0											
		volume irrigated	kl												-
Irrigation Area 2:		days of irrigation	days/month												-
		volume irrigated		-											-
Irrigation Area 3:		days of irrigation	dave/month												-
		uays of ingation	Juays/monut												
	EXAMPLE	sampling date:		20/01/2022	15/02/2022	17/03/2022	19/04/2022	12/05/2022	12/06/2022	9/07/2022	15/08/2022	12/09/2022	15/10/2022	13/11/2022	7.
	EXAMPLE	lotal hitrogen	mg/L	13.2	27.3	17.6	19.2	42.4	25.1	30.4	40.3	34.8	38.7	44.0	-
	EXAMPLE	50D	mg/L	4.8	12.1	0.7	4.9	4.8	4.1	3.3	5.2	4.4	5.2	5.7	┣─
wastewater			Sampling date:								-				┣—
quality	For	wineries to indicate sa	ampling period:*								ļ				-
		gen	mg/L												
	Total phos	pnorus	mg/L												
	Biochemic	al oxygen demand	mg/L												
Nutrient and BOI	D loadings	5		January	February	March	April	May	June	July	August	September	October	November	D
EXAMPLE total nitro	ogen loading	S		10.6	17.0	12.7	11.5					20.9	27.9	35.7	
EXAMPLE BOD IN	adinas		kg/ha/month	3.8	9.7	4.4	2.9					2.6	3.7	4.1	
	ango		kg/ha/day	0.13	0.35	0.15	0.12					0.13	0.15	0.14	
Irrigation Area 1	Total nitro	gen	kg/ha/month												
	Total phos	phorus	kg/ha/month												
	Biochemic	al oxygen demand	kg/ha/month												
			kg/ha/day												
Irrigation Area 2	Total nitrogen		kg/ha/month												
	Total phos	phorus	kg/ha/month												
	Biochemic	al oxygen demand	kg/ha/month												
			kg/ha/day												
Irrigation Area 3	Total nitro	gen	kg/ha/month						1						
	Total phos	phorus	kg/ha/month												
	Biochemic	al oxygen demand	kg/ha/month												
			kg/ha/day												
Explanatory note	s and calc	ulations:	•	•				•			•			•	
White cells should	be filled in	where applicable Pa	le vellow cells w	/ill calculate a	Itomatically										_
NOTE 1 - Where I	there is irrig	ation to more than 3	areas additiona	l copies of this	s sheet should	t be completer	4								_
NOTE 2 - This she	eet should b	e completed for your	annual period a	as defined by y	our licence	i be completed									
F g If your annua	l period is fi	om 1 October to the	30 September in	the following	vear for the 2	2022-2023 an	nual period v	ou should incl	ude data from	January - Se	ptember 2023	and October	- December 2	2022	
NOTE 3 - Volume	irrigated du	ring the annual perio	d (kl.) for each	irrigation area	is the sum of	the monthly y	olumes irrigat	ted to that are	a	oundary oo		, and obtobor	2000112011		_
F a For the exam	nle shown	Volume irrigated duri	ing annual perio	d = 20000(Jz	(n) + 20000(l)	Feb) + 18 000	(Mar) + 15.00	00 (Apr) + 15(	000 (Sep) + 18	8 000 (Oct) +	20 000 (Nov)	+ 25 000 (Dec)	= 151000k	Noting that	for t
during the months	of May Ju	ne Julv or August	ng annaa pono	20,000 (00	<i>inj · 20,000 (i</i>	00) - 10,000	(11101) • 10,00	<i>i</i> ( <i>i</i> ,p <i>i</i> ) · <i>i</i> 0,0	(00p) · /0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	20,000 (1000)	20,000 (200)	, 101,000 M	L. Noting that	0/ 1
NOTE 4 - The sar	noling and	analysis of your wast	water quality et	ould be under	taken in acco	rdance with v	our licence co	nditions							
For sampling less	often than	monthly i.e. quarterly	6-monthly or	annually. for m	onths where i	no samplina is	required wa	stewater quali	ty should be t	aken to be ea	uivalent to the	most recent s	ample taken		
F a Quarterly san	nolina durin	g Feb May Aug and	Nov - total nitro	aen concentra	ations were an	alvsed to be	7 11 8 and 1.	3 ma/l_respec	tively in the w	astewater Fo	r March and A	April as Februa	arv was the m	nost recent sar	mple
estimated to be 7	ma/I Simil	arly for June and Jul	v as Mav was ti	he most recen	t sample_tota	l nitroaen con	centration is e	stimated to be	= 11 ma/l The	ere will be no	sampling date	e associated w	ith non-sampl	ing months	npic
If your licence rea	uires vou to	monitor loading rate	s for additional r	parameters (e.	a, inorganic n	itrogen, reacti	ve phosphoru	s etc.) additio	nal copies of t	his sheet sho	uld be comple	ted for the add	ditional param	eters.	
			this rout is only		g. morganic n	fuegeri, redet				nie eneet ene		lete vinte au		en vintere la	diad
with which poriod	enes to indi	cate sampling period	- this row is only	y required to b	e completed i	i your licence	condition spe	cilles a sampl	ing period e.g.	pre-vinatge,	peak vintage,	late vintage, p	ost vintage, n	ion-vintage. In	uica
NOTE 6 Deres	tor localine		h month	atora far an-	inigation area	(ka/be/mert	), monthly	noontrollen -f	Doromatas /T		) in mc// * -	nonthly veloce	ofworten	or irrigated to !	innin
Parame	ter loading	(TN, TP of BOD) eac	a monun per he	clare for each	ingation area	(kg/na/month	i): monthly co	ncentration of	parameter (1	N, TP OF BOL	) in mg/L ~ n		e of wastewat	er imgated to i	ing
	manla -t	n for total niture new f	- lanuary 40.0	ma// * 00 000	14 / 1 000	064 km/m	064/05 -	- 10 6 1	anth /f la	SIZ	e or irrigation	area			
E.g. Using the exa	ample show	n, for total hitrogen fo	January: 13.2	111g/L 20,000	KL / 1,000 = .	204 kg/month	204725 na =	- 10.6 kg/na/h	ionun (ior Jahl	ialy).					
I oading of parame	eter (BOD)	each day per hectare	for each irrigati	on area (kg/h	(day) BOD Ic	ading (kg/ha/	month) + num	her of days of	irrigation duri	ng that month	1				

Loading of parameter (BOD) each day per hectare for each irrigation area (kg/ha/day): BOD loading (kg/ha/month) + number of days of irriga E.g. Using the example shown, for BOD for October: 3.7 kg/ha/month / 25 days of irrigation during October = 0.15 kg/ha/day (for October)

	Volume irrigated during		
ecember	annual period (kL) <sup>3</sup>		
25,000	151,000		
27			
7/12/2022			
47.3			
7.5			
ecember	kg/ha/annual period <sup>7</sup>		
47.3	183.5		
7.5	38.8		
0.20			
the examp	le there was no irrigation		
e taken, total nitrogen concentration is			
ato which -	ompling data corresponde		
ate which s	ampling date corresponds		
ation area	(kl.) ÷ 1000		