Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L7316/1996/10
Licence holder	Fletcher International Exports Pty Ltd
ACN	003 213 652
Registered business address	Level 16, Tower 2 201 Sussex Street SYDNEY NSW 2000
DWER file number	DEC9037/2
Duration	04/10/2023 to 03/10/2043
Date of issue	19/09/2023
Premises details	Narrikup Export Abattoir 520 Settlement Road NARRIKUP WA 6326 Legal description - Lot 5216 on Plan 205738 and Lot 4 on Diagram 69395, as depicted in Schedule 1

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	**Assessed production capacity**
Category 15: Abattoir: premises on which animals are slaughtered.	Not more than 50,000 tonnes (hot standard carcase weight) of sheep slaughtered per annual period
Category 16: Rendering operations: premises on which substances from animal material are processed or extracted.	Not more than 15,000 tonnes of animal material rendered per annual period
Category 62: Solid waste depot: premises on which waste is stored, or sorted, pending final disposal or re-use.	Not more than 10,000 tonnes of organic waste and ash stored at any one time
Category 67: Fuel burning: premises on which gaseous, liquid or solid fuel is burnt in a boiler for the supply of steam or in power generation equipment.	Not more than 2,960 kilograms of woodchips burnt per hour
Category 83: Fellmongering: premises on which animal skins or hides are dried, cured or stored.	Not more than 1,600,000 animal skins processed (fellmongering and salting) per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 19 September 2023, by:

Caron Goodbourn

Digitally signed by Caron Goodbourn
Date: 2023.09.19 13:28:31 +08'00'

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

Licence history

Issue Date	Reference number	Summary of changes
02/10/2008	L7316/1996/7	Licence reissue
12/05/2011	L7316/1996/7	Amendment to allow compostable waste to go to an approved compost manufacturer and other administrative changes, including updating the licence format.
15/09/2011	L7316/1996/8	Licence reissued with administrative changes.
02/04/2015	W5807/2015/1	Works approval to authorise the installation of two biomass boilers.
29/04/2016	L7316/1996/8	Amendment Notice to extend licence expiry date to 3 October 2019.
24/10/2018	L7316/1996/8	Amendment Notice 1 – to replace category 67A with Category 62. Include category 67 and the biomass boilers associated infrastructure installed under W5807/2015/1 to the licence.
24/09/2020	L7316/1996/9	Licence renewed incorporating Amendment Notice 1.
29/09/2022	L7316/1996/9	Department initiated amendment to extend the licence expiry date by 12 months (3/10/2023) to allow the licence renewal application assessment to be completed.
19/09/2023	L7316/1996/10	Licence renewed (partial review) with additional regulatory controls added.

Interpretation

In this licence:

(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 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;
(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 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 infrastructure and equipment specified in Table 1 is maintained in good working order and operated in accordance with the operational requirement(s) specified in that table.

Table 1: Infrastructure and equipment requirements

Site infrastructure and equipment		Operational requirement	Infrastructure location
Lairage yards			
1.	Covered lairage yards – covered pens with impermeable concrete base.	(a) All contaminated or potentially contaminated water generated from the lairage yards must be directed to the wastewater treatment system. (b) All manure must be contained within the concrete base. (c) Bunding and/or sloped hardstand base directs all uncontaminated stormwater flows from entering the covered lairage yards. (d) All sheep awaiting slaughter must only be held in the covered and uncovered lairage yards areas.	Labelled as "lairage yards" in Schedule 1, Figure 2.
2.	Uncovered lairage yards – uncovered pens with insitu earth floor, and bunded on the uphill (northern side).	(a) Manure generated in this area must be collected on a weekly basis during the months of May, June, July, August and September, and stored on the solid waste storage area. (b) Manure and sediment contaminated runoff generated within the uncovered lairage yards to be directed through a solids screen prior to discharging into the first flush pond.	Labelled as "ground sheep yards" in Schedule 1, Figure 2.
3.	First flush pond – clay lined pond	(a) A minimum top of embankment freeboard of 300 mm is maintained.	Labelled as "first flush pond" in Schedule 1, Figure 2.
Slaughter Operations			
4.	Abattoir facility within an enclosed building(s) with concrete flooring and drainage.	(a) All contaminated or potentially contaminated water resulting from the operation of the abattoir must be directed to the wastewater treatment system.	Labelled as "abattoir processing facility" in Schedule 1, Figure 2.
Rendering Operations			
5.	Rendering facility including the following infrastructure positioned within an enclosed building with concrete flooring and drainage: • cooker system; • conveyors and hoppers *(any conveyors not*	(a) All external doors must remain closed during the operation of the rendering facility. (b) All gases exiting the rendering facility must pass through the odour emission control infrastructure. (c) All presses, blood coagulation equipment and equipment associated with cooking or drying must be enclosed, to enable the	Labelled as "rendering facility" in Schedule 1, Figure 2.

	Site infrastructure and equipment	Operational requirement	Infrastructure location

	located inside the building must be enclosed); and
	• odour emission control infrastructure:
	  • gas treatment system;
	  • condensers; and
	  • afterburner (including thermocouple for measurement of temperature and associated alarm system)
	  • wet scrubber
		enclosed space to be exhausted to the afterburner or wet scrubber.
		(d) All contaminated or potentially contaminated water resulting from the operation of the rendering facility (including the gas treatment system) must be directed to the wastewater treatment system.	

Biomass boiler system			
6.	Feedstock delivery and storage area consisting of the following infrastructure positioned within a roofed area with concrete flooring: • walking floor • augers and conveyor system(s)	(a) Augers and conveyor systems must be sealed or located within an enclosed shed to prevent fugitive dust emissions. (b) Must only receive and transport whole tree woodchips.	Labelled as “Feedstock delivery and storage area” in Schedule 1, Figure 3.
7.	Biomass boiler shed consisting of the following infrastructure positioned within an enclosed building: • Hammer mill fitted with a cyclone *(located outside the shed)* • Feed hopper • Biomass boiler system consisting of two biomass boilers, each fitted with a multiclone to collect flyash • Ash and fly ash system consisting of augers and bins *(bins may be located outside the shed)* for transporting and storing ash and flyash. (Bins have an approximate capacity of 4.2m^3) • Control room Two biomass boiler stacks (E1 and E2) Biomass blowdown tank (mild steel, approximate 900 L capacity)	(a) Hammer mill must be operated to deliver a biomass (woodchip) size not less than 20 mm. (b) Captured cyclone dust from the hammermill must be directed to the feedstock delivery and storage area. (c) Biomass boiler system emissions to atmosphere must pass through a multiclone before being emitted via two minimum 12 m above ground level (agl) stacks. (d) Bins containing the spent ash and fly ash must be emptied into the solid waste storage area only under low wind conditions to minimise dust emissions. (e) Spent ash and fly ash must immediately on deposition to the waste storage area be mixed with moistened organic material to minimise dust emissions. (f) Water from the biomass blowdown tank must drain to the wastewater treatment system.	Biomass boiler shed labelled as “bio boilers” in Schedule 1, Figure 3. Ash and fly ash bin labelled as “ash bin” in Schedule 1, Figure 3.

Site infrastructure and equipment		Operational requirement	Infrastructure location
8.	Two, 5 megawatt (MW) liquefied petroleum gas (LPG) fired boilers emitting to a single stack (approximate height of 12 m agl) positioned within an enclosed shed.	(a) Emissions to atmosphere from the two 5 MW boilers shall be via a single stack with an approximate height of 12 m agl.	Labelled as “LPG boilers and RO” in Schedule 1, Figure 3 Stack labelled as “E3” in Schedule 1, Figure 6
Fellmongering and skin salting			
9.	Enclosed shed for the following processes: • Fellmongering; and • Salting of skins Salt wastewater storage tank (impermeable concrete tank with a capacity of at least 30 kL)	(a) Solid chemical substances (such as salt for sheepskin salting) must be stored in weatherproof storage on hardstand flooring, pending process use. (b) Concrete floored building, which features bunded door openings, or a sloped floor to prevent loss of salt or pickling liquor outside the building. (c) Wastewater from the fellmongering process must be directed to the wastewater treatment system. (d) Wastewater from the salting of skins must be directed to the salt wastewater storage tank. (e) Salt waste from the skin salting process must be stored in a concrete bunded area or impervious container prior to offsite removal.	Labelled as “fellmongering facility” in Schedule 1, Figure 2 Labelled as “underground salt water tank” in Schedule 1, Figure 3
Solid waste storage area			
10.	Solid waste storage area (impervious concrete hardstand with impervious clay bunding) Associated concrete leachate sump(s) (two sumps with a total capacity of 6,000 L) that are fitted with pump(s) and pipes connected to the wastewater treatment system.	(a) Only organic waste and boiler ash to be stored within the solid waste storage area. (b) Leachate sumps must be checked daily during rainy periods to ensure overtopping does not occur. (c) Leachate from the solid waste storage area must drain to the concrete leachate sump(s). (d) Leachate collected in the sumps must be pumped to the wastewater treatment system.	Labelled as “solid waste storage area” in Schedule 1, Figure 2.
Wastewater treatment and disposal (irrigation)			
11.	Wastewater treatment system consisting of: • contra shear screen(s) with a maximum aperture size of 0.5 millimetres (mm) • dissolved air floatation unit (SYSDAF unit) • Aerobic pond (2 mm high density polyethylene (HDPE) lined, with an approximate capacity	(a) All wastewater must be directed through the wastewater treatment system. (b) Wastewater from the aerobic pond must be directed to maturation holding pond 1 via the constructed wetland system. (c) All uncontaminated stormwater must be diverted away from the aerobic and maturation holding ponds with exception of stormwater from the northwest portion of the main building, to minimise the threat of erosion of pond embankments or flooding. (d) There must be no discernible seepage loss from the outer aerobic and maturation	Labelled as “contrashear” and “SYSDAF” in Schedule 1, Figure 3. Labelled as “aerobic pond”, “constructed wetland”, “maturation holding pond 1” and “maturation holding pond 2” in

	Site infrastructure and equipment	Operational requirement	Infrastructure location
	of 10 ML) with at least two (2) mechanical aeration units. • constructed wetland system consisting of four (4) below ground HDPE lined cells separated by weirs, each containing medium sized gravel overlain with topsoil and wetland vegetation • Two (2) maturation holding ponds (2 mm HDPE lined, with an approximate capacity of 35 ML each)	holding pond's embankments. (e) Overtopping of the aerobic pond, maturation holding ponds and constructed wetland must not occur. (f) Aerobic and maturation holding pond surfaces must be kept clear of floating matter, debris and algal mats. (g) Vegetation on inner embankments of the aerobic and maturation holding ponds must not interfere with the integrity of pond walls or prevent adequate water surface aeration. (h) Must maintain a suitable metering device to measure the cumulative volume (in m^3 or kL per day) of wastewater discharged to the pond system.	Schedule 1, Figure 2. Metering device for measuring inflow to pond system is located at the outflow of the SYSDAF, labelled as "W1" in Schedule 1, Figure 5.
12.	Wastewater irrigation areas 1 (22.5 ha), 2A (14.8 ha), 2B (10.1 ha), 3A (13.5 ha), 3B (36 ha) and 4 (35.4 ha). Wastewater distribution infrastructure: • approximately 100 mm diameter underground and above ground pressure pipe work • travelling irrigators capable of achieving a sprinkler radius of approximately 40 m or greater	(a) Must maintain a suitable metering device to measure, in accordance with condition 13, the volume of wastewater discharged from maturation holding pond 2 to each irrigation area. (b) Must only discharge wastewater to the wastewater irrigation areas. (c) Irrigation must not occur during the months of May, June, July and August. (d) No irrigation may occur within fifty (50) metres of any defined wetland, watercourse or drain (including Mill Brook). (e) Irrigation must only occur over areas that are about to be sown with or are actively growing crops or pasture. (f) Irrigation areas must be irrigated with an even distribution. (g) Irrigation must only occur at a rate that does not cause erosion or ponding of wastewater. (h) Irrigation must occur in a manner that does not produce visible surface runoff or spray drift outside of the irrigation areas or onto native vegetation. (i) Irrigation must not occur during periods of rainfall or onto visibly flooded areas. (j) No stock to be held or grazed within the irrigation areas. (k) Irrigation areas must be harvested at least once every 12 months with the tonnages of biomass and crop type recorded. (l) The amount, type and date of application of other fertilisers/compost or any other nutrients applied to the irrigation areas must be recorded.	Labelled as "Irrigation Area 1", "Irrigation Area 2A", "Irrigation Area 2B", "Irrigation Area 3A", "Irrigation Area 3B", and "Irrigation Area 4" in Schedule 1, Figure 4. Approximate location of wastewater distribution infrastructure pipework and travelling irrigator connection points shown within inset of map in Schedule 1, Figure 4.

Waste and by-product storage and disposal

2. The licence holder must ensure that wastes and by-products produced on the premises, specified in Table 2 are managed in accordance with the corresponding requirements specified in Table 2.

Table 2: Waste and by-product management specifications

	Waste or by-product type	Disposal strategy	Specified requirements
1.	Renderable material from the abattoir (including blood, offal, trimmings, bones, waste sheepskins) and condemned carcasses generated at the abattoir	Processed in the onsite rendering facility or removed from the premises to a facility licensed to accept the material	(a) All animal waste material must not be stored for more than twenty-four (24) hours, from slaughter of the animal, prior to rendering or removing from the premises.
2.	Organic solid waste (including manure, screening solids, SYSDAF cake, paunch contents, waste meat meal, ash and fly ash)	Removed from the premises	(a) Must only be stored within the solid waste storage area prior to being transported offsite to a licensed disposal or reuse facility.

Emissions and discharges

Emissions to land

3. The licence holder must not cause or allow wastewater to be applied to each irrigation area in exceedance of the loading limits specified in Table 3.

Table 3: Wastewater loading limits

Irrigation area	Parameter	Loading limit
Irrigation area 1, irrigation area 2A, irrigation area 2B, irrigation area 3A, irrigation area 3B, and irrigation area 4	Total nitrogen	280 kg/ha/annual period
	Total phosphorus	30 kg/ha/annual period
	Biochemical oxygen demand (BOD)	1,500 kg/ha/month

Emissions to air

4. The licence holder must ensure that the emissions specified in Table 4 are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 4: Authorised emission to air discharge points during operations

	Emission	Discharge point	Discharge point location
1.	Biomass boiler emissions to atmosphere	Two boiler stacks, minimum 12 m agl	Labelled as “E1” and “E2” in Schedule 1, Figure 6
2.	LPG fired boiler emissions to atmosphere	Single stack, approximate height 12 m agl	Labelled as “E3” in Schedule 1, Figure 6

5. The licence holder must ensure that emission of dark smoke from all discharge points in Table 4 shall not continue for a period greater than 20 minutes in total over any 24 hour period.

Submission of winter irrigation management plan

6. The licence holder must submit to the CEO, by 1 March 2024, a Winter Irrigation Management Plan.

7. The Winter Irrigation Management Plan required by condition 6, shall include, but not be limited to:

(a) an assessment of the adequacy of irrigation area 1, irrigation area 2A, irrigation area 2B, irrigation area 3A, irrigation area 3B and irrigation area 4 based on
  a. hydraulic loading rates (soil moisture rates);
  b. nutrient loading rates; and
  c. biochemical oxygen demand loading rates;
(b) a monthly water balance assessing the adequacy of the storage capacity of the wastewater treatment system;
(c) a contingency plan for storage of wastewater during periods when irrigation is not possible due to waterlogged conditions or when wastewater is in excess to the pasture or vegetation needs;
(d) details of proposed management measures to manage winter irrigation that considers environmental factors such as soil moisture, precipitation, Epan and ET data and crop factors;
(e) options for cropping or managing vegetation to increase water and nutrient uptake over winter;
(f) options for irrigation infrastructure to increase evaporation, provide even distribution and to avoid overwatering; and
(g) measuring, monitoring and reporting in respect to the winter irrigation management plan.

Submission of nutrient offtake strategy

8. The licence holder must submit to the CEO by 1 March 2024, a Nutrient Offtake Strategy for the irrigation areas.

9. The Nutrient Offtake Strategy required by condition 8, shall include, but not be limited to:

(a) crop types (both winter and summer crops) to be grown within the irrigation areas;
(b) predicted nutrient uptake for each crop type (annually or season depending on crop);
(c) predicted water uptake for each crop type (monthly);
(d) expected biomass tonnage (crop yield) and method of removal for each crop type;
(e) fertiliser requirements for each irrigation area;
(f) details on any plans for soils to be amended for the purpose of increasing phosphorous retention;
(g) estimated nutrient balance for each irrigation area, for a period of at least 5 years, based on maximum irrigation volumes and considering sections (a) to (f) of this condition.

Groundwater monitoring bore investigation

10. The licence holder must submit to the CEO, by 15 December 2023, a groundwater monitoring bore report that must include, but not be limited to, the information listed in Table 5.

Table 5: Groundwater monitoring bore report

Groundwater monitoring bore	Report requirements
MW2, MW4A, MW4B, MW5A, MW5B, MW8, MW9, MW10A, MW10B, MW11A, MW11B, MW12A, MW12B, MW13A, MW13B, MW14, MW15A, MW15B, MW16A, MW16B, MW17A, MW17B MW19 and MW20 with approximate location shown in Schedule 1, Figure 5.	(a) GPS coordinates of each bore location; (b) At least one of the following: a. Copies of the bore logs recorded at the time of installation of each groundwater monitoring bore; or b. Details on the screening depths of each groundwater monitoring bore, including an explanation on how this information was obtained. (c) If bore logs, as required by section (b)a, are not available, the report must include a characterisation of the soil profile for each bore location to a depth of at least 1.5 metres below ground level. (d) If bore logs, as required by section (b)a: a. are not available; OR b. if they are available but do not contain the surveyed height (AHD) of the bore at top of casing, the report must include the surveyed height (AHD) of each bore at top of casing, and estimated height (AHD) of ground level.

Monitoring

General monitoring

11. 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 surface water sampling is conducted in accordance with AS/NZS 5667.6;
(d) all groundwater sampling is conducted in accordance with AS/NZS 5667.11;
(e) all soil samples are collected in accordance with DPIRD guidelines for soil sampling;
(f) all soil samples are submitted to and tested by a laboratory with current ASPAC certification (or equivalent); and
(g) all water laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless otherwise indicated in the relevant table.

12. The licence holder must ensure that:

(a) monthly monitoring is undertaken at least 15 days apart;
(b) quarterly monitoring is undertaken at least 45 days apart; and
(c) annual monitoring is undertaken at least 9 months apart.

Water monitoring

13. The licence holder must monitor emissions in accordance with the requirements specified in Table 6 and record the results of all such monitoring.

Table 6: Monitoring of emissions to land

Monitoring location	Parameter	Units	Frequency	Averaging period
Maturation holding pond 2 (W2) as shown in Schedule 1, Figure 5	Volume of wastewater discharged to each irrigation area 1, 2A, 2B, 3A, 3B and 4	m^3 or kL	Continuous when discharging	Monthly
	pH[1]	pH units	Monthly	Spot sample
	Electrical conductivity[1]	µS/cm		
	Biochemical oxygen demand	mg/L		
	Total suspended solids			
	Total nitrogen			
	Total phosphorus			
	Oil and grease			
	Aluminium	mg/L	Annually	
	Boron			
	Cadmium			
	Copper			
	Lead			
	Mercury			
	Total residual chlorine			
	Zinc			
	Escherichia coli	CFU/100 mL		

[1] In field non-NATA accredited analysis permitted for pH and electrical conductivity.

14. The licence holder must undertake groundwater monitoring in accordance with the requirements specified in Table 7 and record the results of all such monitoring.

Table 7: Groundwater monitoring

Monitoring bores	Parameter	Units	Frequency	Averaging period
MW2, MW4A, MW4B, MW5A, MW5B, MW9, MW10A, MW10B, MW11A, MW11B, MW12A, MW12B, MW14, MW15A, MW15B, MW16A, MW16B, MW17A, MW17B and MW20 as shown in Schedule 1, Figure 5	Standing water level	m(AHD) m(BGL)	Monthly until 24 months of consecutive data has been recorded, then quarterly thereafter	Spot, in-field measurement
	pH[1]	pH units		
	Electrical conductivity[1]	µS/cm		
	Total nitrogen	mg/L	Quarterly, in April, July, October and January	Spot sample
	Total phosphorus			
	Reactive phosphorus			
	Total dissolved solids			
	Arsenic			
	Sodium ion (Na^+)			

Monitoring bores	Parameter	Units	Frequency	Averaging period
	Potassium ion(K^+)			
	Calcium ion(Ca^{2+})			
	Magnesium ion (Mg^{2+})			
	Chloride ion (Cl^-)			
	Sulphate ion (SO_4^{2-})			
	Biocarbonate ion (HCO_3^-)			

[1] In field non-NATA accredited analysis permitted for pH and electrical conductivity.

15. The licence holder must undertake surface water monitoring in accordance with the requirements specified in Table 8 and record the results of all such monitoring.

Table 8: Surface water quality monitoring

Surface water quality sampling sites	Parameter	Units	Frequency	Averaging period
Mill Brook where the waterway enters (SW1)[1] and exits (SW2) the premises as shown in Schedule 1, Figure 5.	Flow	m^3	Monthly	Spot, in-field measurement
	pH[2]	pH units	Monthly, when flowing	
	Total nitrogen	mg/L		Spot sample
	Total phosphorus			
	Total dissolved solids			
	Biochemical oxygen demand			

[1] Where Mill Brook is not flowing where the waterway enters the premises, the sample (SW1) must be taken at the northern most flowing location within Mill Brook, within the premises. The GPS coordinates of the sampling location must be recorded at the time of sampling.
[2] In field non-NATA accredited analysis permitted for pH.

Soil monitoring

16. The licence holder must undertake soil sampling in accordance with the requirements specified in Table 9 and record the results of all such monitoring.

Table 9: Soil monitoring

Soil monitoring location	Soil profile	Parameter	Units	Frequency
Composite surface soil sampling				
At least one sample made up of at least 40 individual grab samples taken from an area of approximately 1 to 2 ha within each irrigation area (areas 1, 2A, 2B, 3A, 3B and 4 as shown in Schedule 1,	0-10 cm	pH	pH units	Annually
		Electrical conductivity	dS/m	
		Moisture content	%	
		Total nitrogen	mg/kg	
		Nitrate-nitrogen		
		Total phosphorus		
		Phosphorus (Colwell)		
		Phosphorus buffering index (PBI)	-	
		Exchangeable sodium percentage	%	

Soil monitoring location	Soil profile	Parameter	Units	Frequency
Figure 4)[1]		Aluminium	mg/kg	Once every 5 years, commencing in 2023
		Cadmium		
		Copper		
		Lead		
		Zinc		
Composite soil profile sampling				
At least one sample made up of at least 5 individual cores for each irrigation area (areas 1, 2A, 2B, 3A, 3B and 4 as shown in Schedule 1, Figure 4)[2]	0–20 cm, 20–40 cm and 40–70 cm	pH	pH units	Annually
		Electrical conductivity	dS/m	
		Moisture content	%	
		Total nitrogen	mg/kg	
		Nitrate-nitrogen		
		Total phosphorus		
		Phosphorus (Colwell)		
		Phosphorus buffering index (PBI)	-	
		Exchangeable sodium percentage	%	
		Aluminium	mg/kg	Once every 5 years, commencing in 2023
		Cadmium		
		Copper		
		Lead		
		Zinc		

[1] GPS coordinates must be recorded for the boundary of each sampling area used within each irrigation area, to ensure subsequent sampling events are in the same location.

[2] GPS coordinates must be recorded for each sampling location, to ensure subsequent sampling events are in the same location.

Monitoring of inputs and outputs

17. The licence holder must undertake the monitoring in Table 10 according to the requirements in that table and record the results of all such monitoring.

Table 10: Monitoring of processes

Input / Output	Units	Frequency
Livestock received for slaughter at the premises	Number of animals	Monthly and annual total of the number of livestock received for slaughter at the premises
Sheep/lambs slaughtered at the premises	tonnes (weighed, hot standard carcase weight)	Total (tonnes (weighed, hot standard carcase weight)) of all animals slaughtered on the premises
Rendering of animal material	tonnes	Annual total of all animal material rendered on the premises
Renderable material removed from the premises	tonnes	Annual total of all renderable material removed from the premises
Fellmongering and salting of skins	Number of skins	Annual total number of skins processed at the premises

Input / Output	Units	Frequency
Organic solid waste removed from the premises	m^3 or tonnes	Each batch removed from the premises
LPG boiler inputs – LPG usage	litres	Monthly
Bio boiler inputs – woodchips	tonnes	Monthly

Records and reporting

Record-keeping

18. The licence holder must maintain accurate and auditable books that include the following records, information, reports, and data required by this licence:

(a) the calculation of fees payable in respect of this licence;
(b) any maintenance of infrastructure that is performed in the course of complying with condition 1;
(c) monitoring programmes undertaken in accordance with conditions 1, 13, 14, 15, 16 and 17;
(d) complaints received under condition 20.

19. The books specified under condition 18 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 licence holder for the duration of the licence; and
(d) be available to be produced to an inspector or the CEO as required.

20. The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the department of 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 (where appropriate cross referenced with prevailing wind directions);
(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 licence holder to investigate or respond to any complaint.

Notification requirements

21. The licence holder must notify the CEO, at least 14 days prior to, the commencement of any pond desludging works at the premises:

(a) the proposed commencement date and duration of desludging activities;
(b) the proposed on-site handling and management of all sludge removed, including any leachate generated; and
(c) the proposed details of the receiving premises (if proposed to remove off the premises).

22. The licence holder must notify the CEO, within 7 days after, any of the following events:

(a) the removal of renderable material from the premises due to the failure or breakdown of any part of the rendering plant process:

(i) the total amount of renderable material removed;
(ii) details of the receiving premises for each load;

(b) emission of dark smoke for a period greater than 20 minutes in total over any 24 hour period from discharge points specified in Table 4;

(c) completion of desludging works at the premises:
(i) the total volume of sludge removed;
(ii) on-site management of all sludge removed;
(iii) if removed off the premises:
a. if the material has been dewatered and meets the definition of a solid, the details of the receiving premises for each load; or
b. if the material has not been dewatered and does not meet the definition of a solid, a copy of the controlled waste tracking receipt for each load removed;

(d) breach of any loading rate limits as specified in condition 3; or

(e) the failure of any flow meter or pumps associated with the treatment or irrigation of wastewater.

Annual reporting requirements

23. 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 30 April in each year, an Annual Audit Compliance Report in the approved form.

24. The licence holder must submit to the CEO, by no later than 30 April in each year, an environmental report containing the information listed in Table 11 for the preceding annual period.

Table 11: Annual environmental report

Condition or Table	Requirement
-	Summary of any environmental incidents that have occurred during the annual period and any action taken
-	Summary of periods, including dates, that the biomass boilers were off-line due to breakdown or maintenance.
Table 1, 11(h)	Volume (in m^3 or kL) of wastewater discharged monthly to the pond system (monitoring location W1)
Table 1, 12	Detailed information on any cropping within the irrigation areas, including but not limited to: (a) a summary of annual, or as needed at the end of rotation/harvest, data collected on plant biomass tonnage (crop yields) removed from the premises; and (b) estimated amount (in kg or m^3) of solid matter (fertiliser and/or compost) or any other nutrient inputs applied to each irrigation area monthly, including an explanation of the basis for determining these amounts and dates they were applied.
Condition 3	Calculation of the monthly and annual loads of nitrogen, phosphorus and BOD through the application of wastewater applied to each irrigation area, including showing how the monthly and annual loads were calculated. This calculation should be provided in the form of the *Licence holder loading rates calculator* as provided by email and shown in Appendix 2 of the associated Decision Report. An electronic copy of the spreadsheet can also be requested by emailing info@dwer.w.gov.au.

Condition or Table	Requirement
Condition 13	(a) Volume (in m^3 or kL) of wastewater applied daily to each irrigation area, and monthly cumulative volumes. Flow meter readings and dates they were taken must also be provided. (b) Results of wastewater monitoring data including the sampling date.
Condition 14	Results of groundwater monitoring data including the sampling date.
Condition 15	Results of surface water monitoring data including the sampling date and any GPS coordinates required.
Condition 16	Results of soil monitoring data including the sampling date and GPS coordinates.
Conditions 3, 13, 14, 15 and 16	(a) An assessment and interpretation of monitoring results including comparison to historical trends. (b) Copies of laboratory sample and analysis reports.
Condition 17	Records of inputs and outputs
Condition 20	Complaints summary
Conditions 21 and 22	Summary of any notifications reported
Condition 23	Compliance

Definitions

In this licence, the terms in Table 12 have the meanings defined.

Table 12: 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	a 12-month period commencing from 1 February until 31 January of the immediately following year
AS 3543	means the Australian Standard AS 3543 *Use of standard Ringelmann and Australian Standard miniature smoke charts*
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 5667.6	means the Australian Standard AS/NZS 5667.6 *Water Quality – Sampling – Guidance on sampling rivers and streams*
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*
ASPAC	Australian Soil and Plant Analysis Council
ASPAC certification	means in relation to the analysis of a sample that the laboratory is certified by ASPAC for the specified analysis at the time of the analysis
averaging period	means the time over which a limit or target is measured or a monitoring result is obtained
books	has the same meaning given to that term under the EP Act
BS 2742C	means the British Standard 2742C *Ringelmann Chart*
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
CFU	colony forming units
condition	means a condition to which this licence is subject under s.62 of the EP Act
DAF	dissolved air floatation
dark smoke	means smoke which, when viewed from any point outside the premises boundary, at a distance of not less than 5 metres from its source, and compared with a chart known as the Australian Miniature Smoke Chart (AS 3543) or, the Ringelmann Chart (BS 2742C), would appear darker than shade one on one of those charts.
Department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3
DPIRD guidelines for soil sampling	means the document titled "*A guide for 'fit for purpose' soil sampling"* (Gourley CJP and Weaver DM, July 2019, Fertilizer Australia, Canberra, Australia)

Term	Definition
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 structure at their lowest point
GPS	means global positioning system
hardstand	means a compacted clay or concrete surface with a hydraulic conductivity of 1 x 10^{-9} m/s or less
HDPE	high density polyethylene
hot standard carcase weight (HSCW)	refers to the weight of a carcase once the live animal has been slaughtered, with hide, feet, tail, head, and innards removed. It can be estimated by multiplying the liveweight with the dressing percentage.
irrigation area	refers to irrigation area 1, irrigation area 2A, irrigation area 2B, irrigation area 3A, irrigation area 3B and irrigation are 4 as shown in Schedule 1, Figure 4
leachate	means water that has been allowed to contact compost or other organic material
licence	refers to 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 whom this licence has been granted, as specified at the front of this licence
NATA	National Association of Testing Authorities, Australia
NATA accreditation	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	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this licence
prescribed premises	has the same meaning given to that term under the EP Act
phosphorus retention index (PRI)	means the ratio of phosphorus adsorbed by soil (micrograms per gram) compared to that remaining in the solution (of initial concentration of 10 mg phosphorus per litre) after 16 hours
renderable material	means blood, bone, fat, offal, waste sheepskins, condemned carcasses and alike
solid	means material that: (a) has an angle of repose of greater than 5 degrees; (b) does not contain, or is not comprised of, any free liquids; (c) does not contain, or is not comprised of, any liquids that are capable of being released when the waste is transported; (d) does not become free flowing at or below 60˚C or when it is transported; and (e) is generally capable of being moved by a spade at normal temperatures (i.e. is spadeable).
spot sample	means a discrete sample representative at the time and place at which the sample is taken
STP	standard temperature and pressure
SYSDAF	has the same meaning as DAF

END OF CONDITIONS

Schedule 1: Maps

Premises map

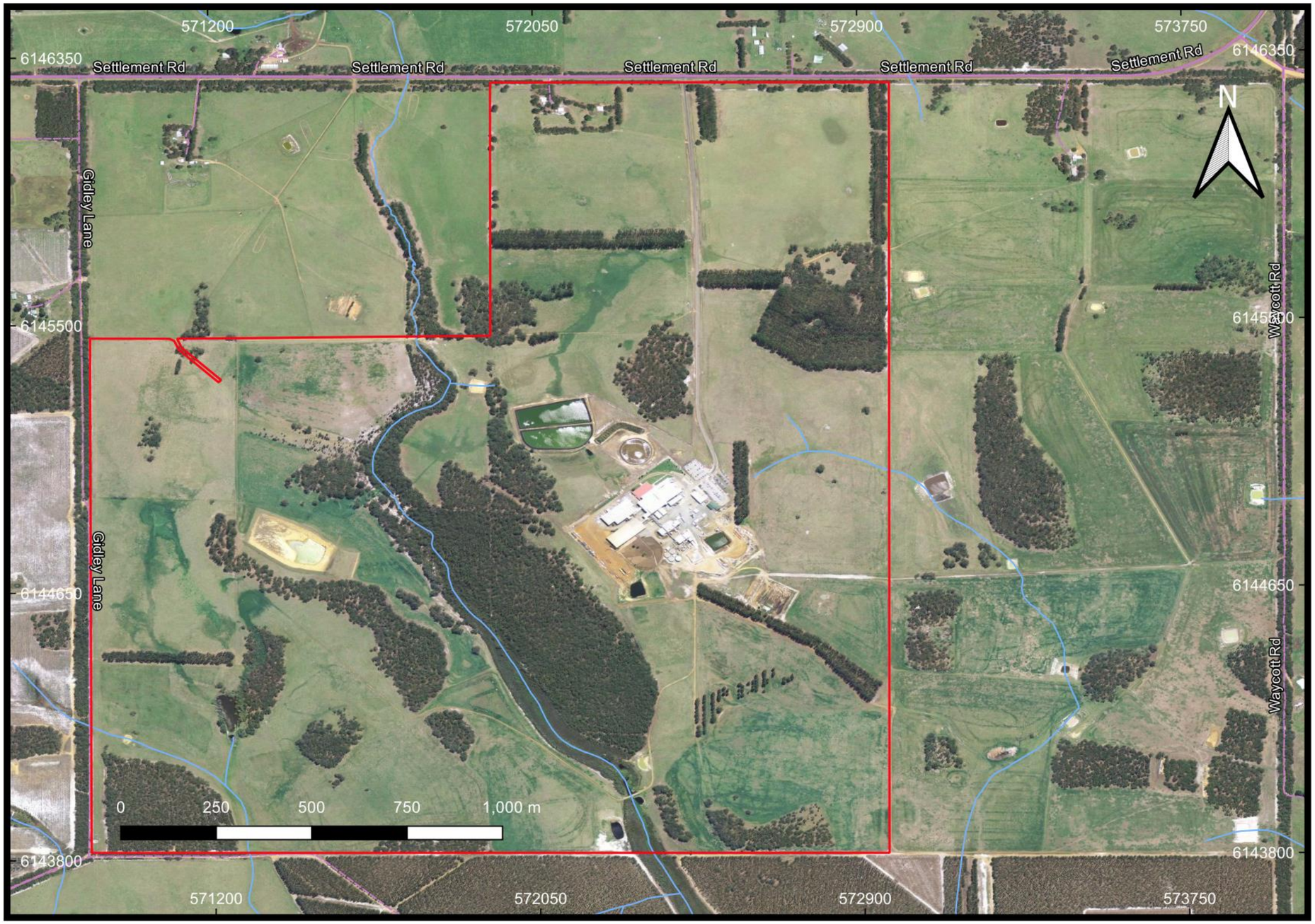

Figure 1: Map of the boundary of the prescribed premises (red line).

Site layout map 1

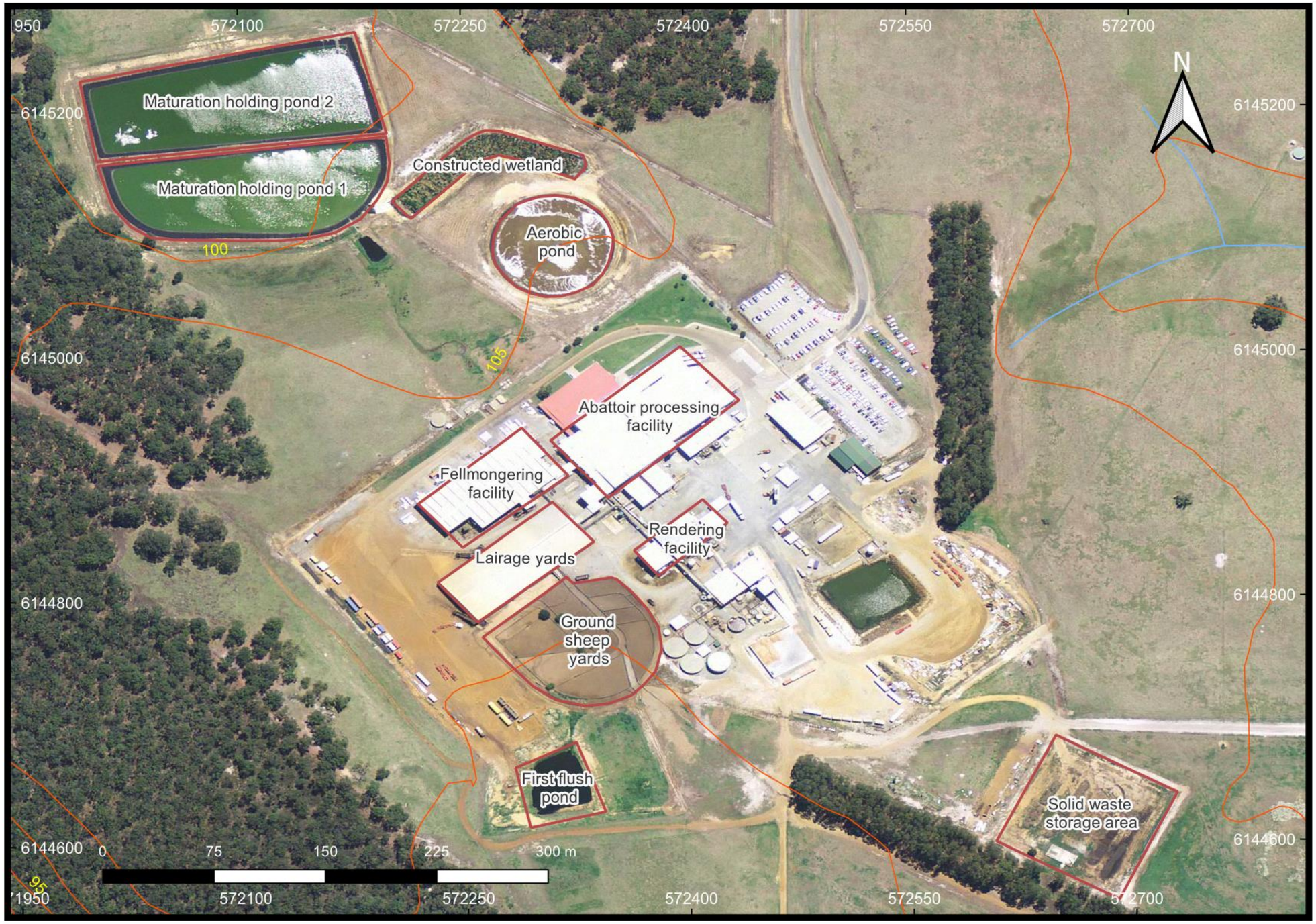

Figure 2: Map of overall site layout

Site layout map 2

Figure 3: Map of premises infrastructure

Irrigation areas and infrastructure

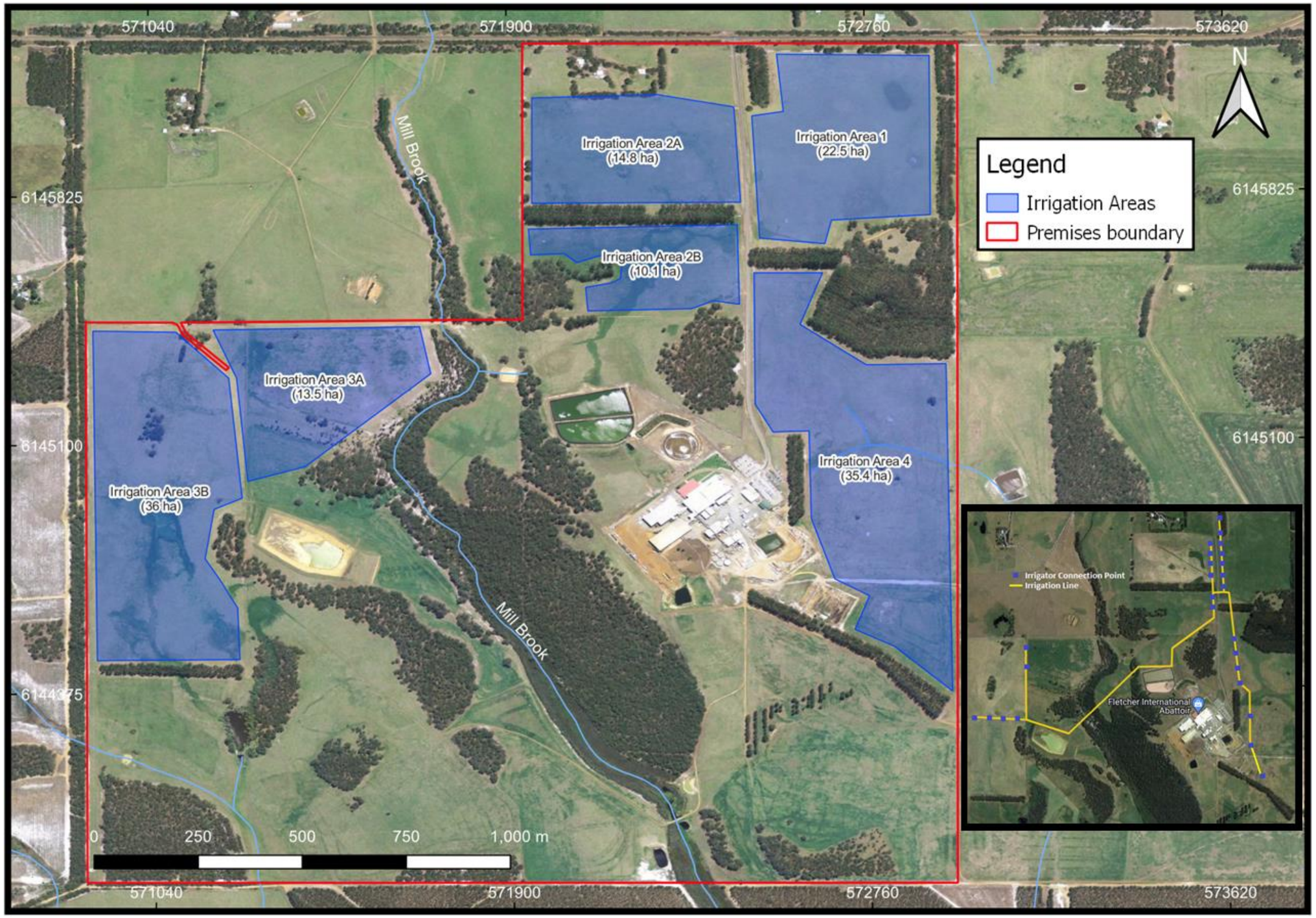

Figure 4: Map of the irrigation areas and approximate location of irrigation infrastructure (inset)

Monitoring locations – wastewater, surface water and groundwater

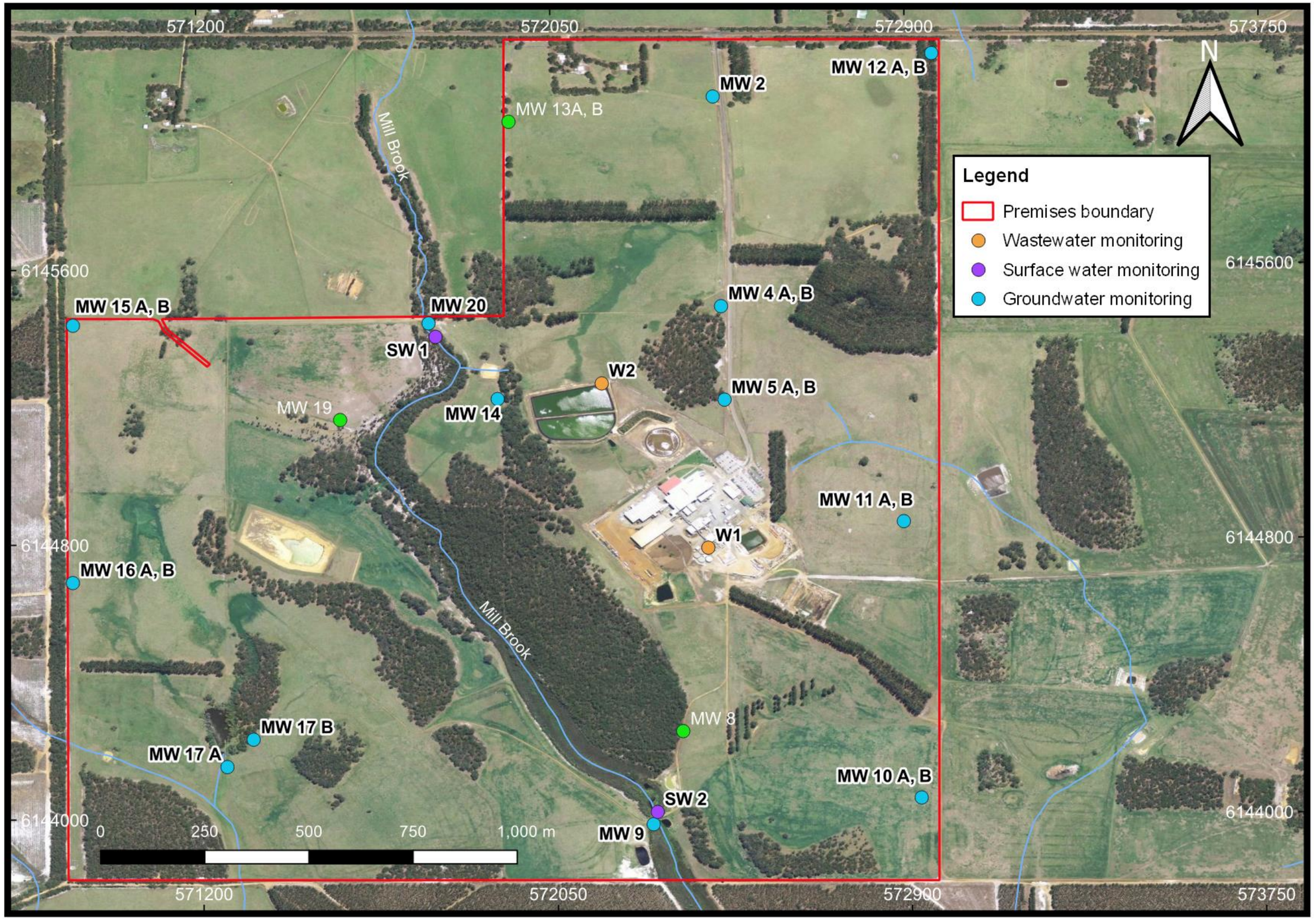

Figure 5: Map of wastewater, surface water and groundwater monitoring locations.

Monitoring locations – emissions to air

Figure 6: Map showing location of authorised emission to air discharge points.