



Licence number	L7316/1996/9
Licence holder	Fletcher International Exports Pty Ltd
ACN	003 213 652
Registered business address	43 Auburn Street MOREE NSW 2400
DWER file number	DEC9037/2
Duration	4/10/2020 to 3/10/2023
Date of amendment	29/09/2022
Premises details	Narrakup 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, <i>Environmental Protection Regulations 1987</i>)	Assessed production throughput
Category 15: Abattoir: premises on which animals are slaughtered.	77,740 tonnes (hot standard carcass weight) per annual period
Category 16: Rendering operations: premises on which substances from animal material are processed or extracted.	15,548 tonnes per annual period
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.	2,960 kilograms of woodchip per hour
Category 62: Solid waste depot: premises on which waste is stored, or sorted, pending final disposal or re-use.	1,000 tonnes of organic waste and ash per annual period
Category 83: Fellmongering: premises on which animal skins or hides are dried, cured or stored.	780,000 skins per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 29 September 2022, by:

Manager Process Industries

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

Licence history

Ref number	Date	Summary of changes
L7316/1996/8	12/05/2011	Amendment to allow compostable waste to go to an approved compost manufacturer and other administrative changes
L7316/1996/8	12/05/2011	Amendment to new licence format
L7316/1996/8	29/04/2016	Amendment Notice to extend licence expiry date to 3 October 2019
L7316/1996/8	24/10/2018	Amendment Notice 1 – to replace Category 67A with Category 62. Include Category 67 and the biomass boilers and associated infrastructure installed under W5807/2015/1 to the licence
L7316/1996/9	24/09/2020	Licence renewed incorporating Amendment Notice 1
L7316/1996/9	29/09/2022	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.

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

- 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 requirements specified in that table.

Table 1: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirement	Infrastructure location	
Wastewater Treatment ponds			
1	Wastewater Treatment System (WTS) Ponds consisting of: <ul style="list-style-type: none"> - aerobic pond (10ML); and - 2 x maturation dams (35ML each) 	<ul style="list-style-type: none"> • All uncontaminated stormwater must be diverted away from the ponds with exception of stormwater from the northwest portion of the main building, to minimise the threat of erosion of pond embankments or flooding; • There must be no discernible seepage loss from the outer pond embankments; • Overtopping of the ponds must be not occur; • Aerobic and maturation pond surfaces must be kept clear of floating matter, debris and algal mats; • Vegetation on inner embankments of the ponds must not interfere with the integrity of pond walls or prevent adequate water surface aeration. 	(Schedule 1, Figure 2) Aerobic aeration pond(10ML) Maturation dam 1 (35ML), Maturation dam 2 (35ML)
Biomass Boiler System			
2	Boiler system consisting of: 2 X Uniconfort Global G400 4,640kW _{thermal} Biomass boilers each fitted with a multiclones to collect flyash	<ul style="list-style-type: none"> • Boilers and associated multiclones to be located within an enclosed purpose built building to contain dust emissions and reduce noise emissions; • Multiclones must be visually inspected on a daily basis, excluding days when it is not operated; • Multiclones to be cleaned regularly of accumulated particulate; • Boilers to be inspected daily; • Regular maintenance to ensure that the automatic fire tube cleaning function is operational. 	(Schedule 1, Figure 3) Bio Boilers
3	Biomass boiler feeding system consisting of: <ul style="list-style-type: none"> - feedstock storage shed; - walking floor; - bucket elevators; - rotary valve and auger; - conveyors systems; and - a drag-chain conveyor 	<ul style="list-style-type: none"> • The boiler feed system must: <ul style="list-style-type: none"> - be sealed to prevent fugitive dust emissions; - housed within a roofed area to contain fugitive dust and reduce noise emissions; - only use whole tree woodchips and - only operate during the day. 	N/A

Site infrastructure and equipment		Operational requirement	Infrastructure location
4	Ash and fly ash system consisting of : - augers - bins for storing ash and fly ash	<ul style="list-style-type: none"> Ash and fly ash system must be sealed to prevent fugitive dust emissions; Bins containing the spent ash and fly ash must be emptied on a monthly basis under appropriate conditions (i.e. not in high windy conditions) into the waste storage area and mixed with moistened sheep manure. 	(Schedule 1, Figure 3) Ash Bin
5	Hammer mill fitted with cyclone	<ul style="list-style-type: none"> The hammer mill must: <ul style="list-style-type: none"> be operated to deliver a uniform biomass (woodchip) size of 25mm; be housed within an enclosed shed to mitigate noise and dust emissions; only operate between 5:30 am and 10:00 pm daily Monday to Friday. Captured cyclone dust from the hammermill must be routed to feedstock storage shed. 	N/A
6	Existing blowdown tank	<ul style="list-style-type: none"> Blowdown water from the biomass boilers must be directed to the existing blowdown tank without overtopping; Blowdown tank must drain to the on-site water treatment plant. 	N/A
7	Biomass boiler stacks (Emission points E1 and E2)	<ul style="list-style-type: none"> Boiler emissions to the atmosphere must be via two minimum 12m above ground level (agl) stacks; Emissions must have passed through a multiclone before being emitted from the boiler stacks; Sampling points on stacks maintained to comply with AS 4323.1 to enable the monitoring specified in Condition 38. 	(Schedule 1, Figure 5) E1 and E2
8	2x 5MW _{thermal} LPG Gas fired boilers emitting to single stack with height (12m) (emission point E3)	<ul style="list-style-type: none"> The 2x 5MW thermal shall only burn LPG gas; Shared stack with a height (12)m agl (E3); Shall only operate in the event of a failure or maintenance of the biomass boilers. 	(Schedule 1, Figure 5) E3
Temporary solid waste storage area			
9	Waste storage area consisting of: - clay bunded, concrete hardstand - draining to 2x leachate sumps with a total storage capacity of 6,000L and fitted with a pump.	<ul style="list-style-type: none"> Must be maintained to ensure base and bunded sides are impervious and that all leachate is drained to a concrete sump; Only organic waste and boiler ash to be stored within the bunded area; Must be checked daily during rainy days to prevent overtopping; Must be taken away on a regular basis by a controlled waste operator; Leachate collected in the sump to be pumped to the DAF and not permitted to overtop. 	(Schedule 1, Figure 2) Hard stand area

Operational controls

Waste material processing requirement

2. The licence holder must ensure that all animal waste material received for rendering is processed within 24 hours from slaughter of the animal. If this cannot be achieved, the licence holder shall comply with the conditions 3, 4 and 5.

Plant breakdown - contingency plan

3. In the event of a plant breakdown that prevents rendering from continuing, the licence holder must:
 - (a) direct waste material to a landfill site licensed to accept this type of waste; OR
 - (b) direct the waste material to a licensed rendering facility.
4. In the event of failures of longer than 24 hours, the licence holder must cease slaughtering onsite until the rendering plant is fully operational.
5. The licence holder must immediately notify the CEO in the event of a plant breakdown or failure, prior to the implementation of the contingency plans specified in conditions 3 and 4.

Pre-treatment of wastewater

6. The licence holder must direct all contaminated or potentially contaminated water resulting from the operation of the abattoir, rendering (including the gas treatment system), waste storage area and lairage run-off through the following pre-treatment devices, prior to discharge to the treatment system:
 - (a) a contra shear screen, with a maximum aperture size 0.5 millimetres; and
 - (b) a 'SYSDAF' unit.

Leachate and stormwater management

7. The licence holder must store organic material (including ash and fly ash) within the waste storage area.
8. The licence holder must divert uncontaminated stormwater away from the waste storage area.

Fellmongering management

Sheepskin salting and fellmongering

9. The licence holder must store solid chemical substances (such as salt for sheepskin salting) in weatherproof storage on hardstand flooring, pending process use.
10. The licence holder must undertake all sheepskin salting and fellmongering within a concrete floored building, which features banded opening on the doors, or a sloped floor to prevent loss of salt or pickling liquor outside the building.
11. The licence holder must direct wastewater from the sheepskin salting and fellmongering processing area to the WTS.
12. The licence holder must direct runoff and washings from the sheepskin salting area to impervious concrete tanks, pending liquid waste disposal off-site by a licensed liquid waste contractor.

Management of rendering plant

Gas treatment system

13. The licence holder must operate the rendering facility such that the gas treatment system is operational whenever the cooker system is in use.

14. The licence holder must direct all condensable gases from the cooker system to the condensers, then through the afterburner for incineration, prior to being released to the atmosphere.
15. The licence holder must operate the after-burner such that a minimum residence time of 0.5 seconds at a minimum temperature of 760 degrees Celsius (or 0.25 seconds at a minimum temperature of 860 degrees Celsius) are maintained.
16. The licence holder must:
 - (a) maintain an alarm system (e.g. flashing light over the operator's control panel) to signal when the temperature in the after-burner drops below 760 degrees Celsius; and
 - (b) in the event that the alarm is signalled, cease loading of the after-burner until an after-burner temperature of 760 degrees Celsius and a residence time of 0.5 seconds or greater is reached.
17. The licence holder must:
 - (a) maintain a thermocouple within the afterburner (not in direct contact with the flame) to measure the temperature in either the after-burner chamber or in the exhaust duct leading from the after-burner;
 - (b) ensure the thermocouple is connected to a direct-reading chart recorder or other approved device, which shall be operated when the cooker is in operation; and
 - (c) maintain up-to-date records of charts from the chart recorder.

Conveyors and hoppers

18. The licence holder must ensure all presses, blood coagulation equipment and equipment associated with cooking or drying are enclosed, to enable the enclosed space to be exhausted to the after-burner or wet scrubber.

Rendering plant building

19. The licence holder must ensure the rendering plant building is enclosed and all external doors remain closed during the operation of the rendering equipment.

Waste minimisation / removal / storage

Solid waste management

20. The licence holder must discharge process wastes generated by the abattoir, boilers, rendering facility and lairage yards in the following ways:
 - (a) blood, offal, trimmings, bones, waste sheepskins, and condemned carcasses generated at the abattoir must:
 - (i) be processed at the on-site rendering facility; or
 - (ii) disposed off-site to a licensed waste facility; and
 - (b) organic solid waste (including manure, screening solids, SYSDAF cake, paunch contents, waste meat meal, ash and fly ash) must be directed to the waste storage area, prior to being transported off-site to a licensed disposal or reuse facility.

Salt waste management

21. The licence holder must store all salt waste in a concrete bunded area or impervious container, prior to offsite removal.

Emissions and discharges

Dust emissions

22. The licence holder must ensure that no visible dust generated from the primary activities crosses the boundary of the premises.

Odour

23. The licence holder must ensure that odour emitted from the premises does not unreasonably interfere with the health, welfare, convenience, comfort or amenity of any person who is not on the premises.

Emissions to land

24. The licence holder must dispose of treated wastewater from the maturation dam to the irrigation areas 1, 2A, 2B, 3A, 3B and 4, as depicted in the premises map in Schedule 1, Figure 1.
25. The licence holder must dispose of all treated wastewaters by irrigation such that:
- (a) wastewater is evenly distributed over the individual irrigation paddocks, to prevent localised concentration of nutrients;
 - (b) no soil erosion or ponding of wastewaters occurs;
 - (c) wastewater is only applied to areas with a healthy vegetation cover;
 - (d) there is no direct runoff, spray drift or discharge beyond the boundaries of the premises or onto remnant vegetation;
 - (e) irrigation must not occur within 50 metres of any defined wetland, watercourse or drain (including Mill Brook); and
 - (f) irrigation must not occur during periods of rainfall or onto flooded areas.
26. The licence holder must manage the application of wastewater and solid matter (fertiliser and compost) to the irrigation areas to ensure that the following nutrient loading rates are not exceeded;
- (a) Total Nitrogen - 280 kilograms per hectare per annual period;
 - (b) Total Phosphorus - 30 kilograms per hectare per annual period; and
 - (c) Biochemical Oxygen Demand - 30 kilograms per hectare per day.
27. The licence holder must provide calculations to show the nutrient loading rates for each irrigation area used during the annual period.

Monitoring

General

28. 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.

Soil quality monitoring

29. The licence holder must collect and analyse representative soil samples from the locations listed in Table 2, for the parameters and at the frequency specified in that table.

Table 2: Soil Monitoring

Locations to be sampled	Parameters to be analysed	Units	Frequency
Four representative locations within irrigation areas 1, 2A, 2B, 3A, 3B and 4 (as depicted in Schedule 2 (Figure 1)) at the following depths: surface, 30cm and 45cm below the surface	pH	No unit	Six monthly; in April and October
	salinity	decisiemens per metre (dS/m)	
	ammoniacal nitrogen	mg/kg	
	nitrate		
	nitrogen		
	orthophosphate phosphorus	No unit	
phosphorus retention index (PRI)			

Water monitoring

30. The licence holder must:

- maintain a suitable metering device to measure the cumulative volume (in m³ per day) of wastewater discharged to the pond system;
- maintain suitable metering devices to measure the volume (in m³ per day) of wastewater discharged from the pond system to each irrigation area;
- maintain suitable metering devices to measure the cumulative volume (in m³ per day) of groundwater and surface water used at the site; and
- record flow measurements (m³) of Mill Brook on a monthly basis.

31. The licensee must collect and analyse representative water samples from the sampling locations listed in Table 3, at the frequency and for the parameters specified in that table.

Table 3: Water Monitoring Program

Sampling Location	Parameters	Units	Sampling frequency
Raw wastewater, DAF Outflow, subsurface flow wetland and maturation pond	pH	No unit	Monthly
	Electrical conductivity	µS/cm	
	Biochemical oxygen demand	mg/L	
	Total suspended solids		
	Total nitrogen		
	Total phosphorus		
	Oil and grease		
Mill Brook where the waterway enters and exits the site.	pH	No unit	Monthly (when flowing)
	Biochemical oxygen demand	mg/L	
	Total dissolved solids		
	Total nitrogen		
	Total phosphorus		
Monitoring bores: MW2, MW4A MW4B, MW5A, MW5B, MW9, MW10A, MW10B, MWI IA, MWI1B, MVV12A, MW12B, W14, MW15A, W15B, MW16A, MW16B and MW20 as shown in Schedule 1 (Figure 4)	Standing water level (SWL)	metres below ground level (mbgl)	Quarterly In April, July, October and January
	pH	No unit	
	Electrical conductivity	µS/cm	
	Total dissolved solids	mg/L	
	Total nitrogen		
	Total phosphorus		

Monitoring of point source emissions to air

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

Table 4: Emission and discharge monitoring

Emission point reference	Parameter	Units ^{1,2}	Operating conditions	Method	Frequency
E1 and E2 Schedule1 (Figure 5)	Nitrogen dioxide (NO ₂)	g/min	High and low fire	USEPA Method 7E	Annually
	Carbon monoxide (CO)			USEPA Method 10 and 3A	
	Particulate matter			USEPA Method 17	

Note 1: All units are referenced to STP dry.

Note 2: All units are referenced to 8% O₂.

33. The licence holder must ensure that sampling required under condition 32 is undertaken at sampling locations in accordance with AS 4323.1.
34. The licence holder must ensure that sampling and analysis undertaken pursuant to condition 32 for the parameters specified in Table 4 is undertaken by a holder of NATA accreditation for the relevant methods of sampling and analysis.

Monitoring of inputs and outputs

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

Table 5: Monitoring of inputs and outputs

Input / Output	Parameter	Units	Averaging period	Frequency
Livestock received at premises	Animals	number	Annual	Each batch arriving at premises
Slaughtered animals	Hot standard carcase weight (HSCW)	kilograms (weighed)		Total of all animals slaughtered on the premises

Records and reporting

36. All information and records required by the licence must:
- be legible;
 - if amended, be amended in such a way that the original and subsequent amendments remain legible and are capable of retrieval;
 - except for records listed in condition 36(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;
 - for those following records, be retained until the expiry of the licence and any subsequent licence:
 - off-site environmental effects; or
 - matters which affect the condition of the land or waters.
37. The licence holder must:
- undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
 - prepare and submit to the CEO, by no later than 30 April in each year, an Annual Audit Compliance Report in the approved form.

- 38.** 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.
- 39.** 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) the maintenance of infrastructure required to ensure that it is kept in good working order in accordance with condition 1;
 - (c) monitoring undertaken in accordance with conditions 29, 31, 32 and 35;
 - (d) the calculation of annual total liveweight of animals slaughtered; and
 - (e) complaints received under condition 38.
- 40.** The licence holder must provide the CEO with an annual environmental report for the period 1 February to 31 January of each year of the licence. The report must contain, but not necessarily be limited to:
- (a) all monitoring data or other collected data required by any condition of this licence;
 - (b) an explanation of the monitoring results with respect to the environmental impacts of the project;
 - (c) a trend comparison of monitoring results for the previous 3 years;
 - (d) the number and type of environmental complaints received, including address, nature of complaint (where appropriate cross referenced within prevailing wind directions) and action taken;
 - (e) any changes to site boundaries, location of groundwater monitoring bores, surface drainage channels and on-site or off-site impacts or pollution;
 - (f) detailed information on the nutrient inputs and outputs (plant uptake requirements and production volumes) from cropping, including the nutrient loading rates for each area and each crop type. This information to be provided in a tabular format;
 - (g) plans showing the location and extent of the irrigated areas (condition 24) the soil sampling locations (condition 29) and the monitoring bores sampled (condition 31), for the reporting period;
 - (h) periods that the biomass boilers were off-line due to breakdown or maintenance; and
 - (i) monthly information on boiler inputs (gas and woodchip burnt) and outputs (ash removed for disposal).

Definitions

In this licence, the terms in Table 6 have the meanings defined.

Table 6: Definitions

Term	Definition
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, annually	a 12 month period commencing from 1 February until 31 January of the immediately following year.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 <i>Water Quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples</i>
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 <i>Water Quality – Sampling – Guidance on sampling of waste waters</i>
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 <i>Water Quality – Sampling – Guidance on sampling of groundwaters</i>
AS 4323.1	means the Australian Standard AS 4323.1 <i>Stationary Source Emissions Method 1: selection of sampling positions</i>
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department. "submit to / notify the CEO" (or similar), means either: <p style="margin-left: 40px;">Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 JOONDALUP DC WA 6919</p> or: <p style="margin-left: 40px;">info@dwer.wa.gov.au</p>
DAF	Dissolved Air Flootation
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) 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	<i>Environmental Protection Act 1986</i> (WA)
EP Regulations	Environmental Protection Regulations 1987 (WA)
hardstand	means a compacted clay or concrete surface with a hydraulic conductivity of 1×10^{-9} m/s or less
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 specified on the front of the licence as the person to whom this licence has been granted

Term	Definition
m ³	means cubic metres;
mg/kg	means milligrams per kilogram
NATA	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	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.
PRI	Phosphorus Retention Index
renderable material	means blood, bone, fat, offal, condemned carcasses and alike
solid waste	means waste that: <ul style="list-style-type: none"> 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 degrees Celsius or when it is transported; and e) is generally capable of being moved by a spade at normal temperatures (i.e. is spadeable).
STP	Standard Temperature and Pressure
SYSDAF	has the same meaning as DAF.
USEPA	means United States Environmental Protection Agency
USEPA Method 7E	means test method 7E - the Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure)
USEPA Method 17	means test method 17 – the Determination of Particulate Matter Emissions from Stationary Sources
USEPA Method 10 and 3A	means test method 10 and 3A - the Determination of Carbon Monoxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)
waste	has the same meaning given to that term under the EP Act.
WTS	Wastewater Treatment System

END OF CONDITIONS

Schedule 1: Maps

Premises map

The red line depicts the prescribed premise boundary

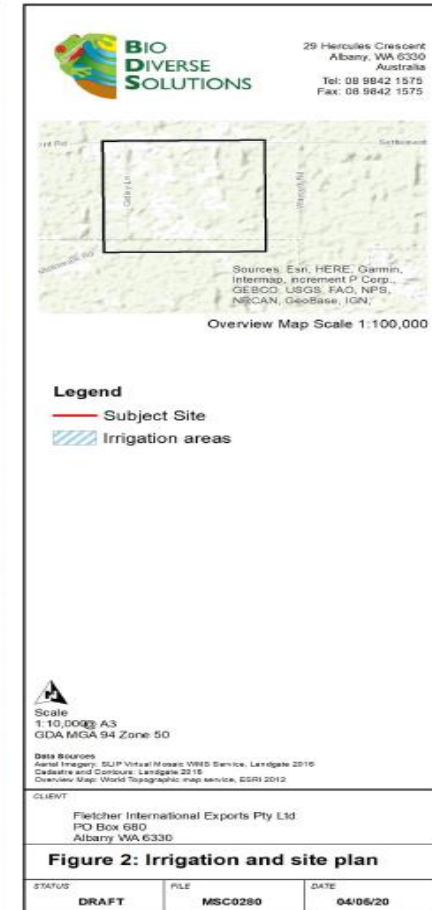


Figure 1: Map of the boundary and irrigation areas of the prescribed premises

Map of infrastructure and equipment

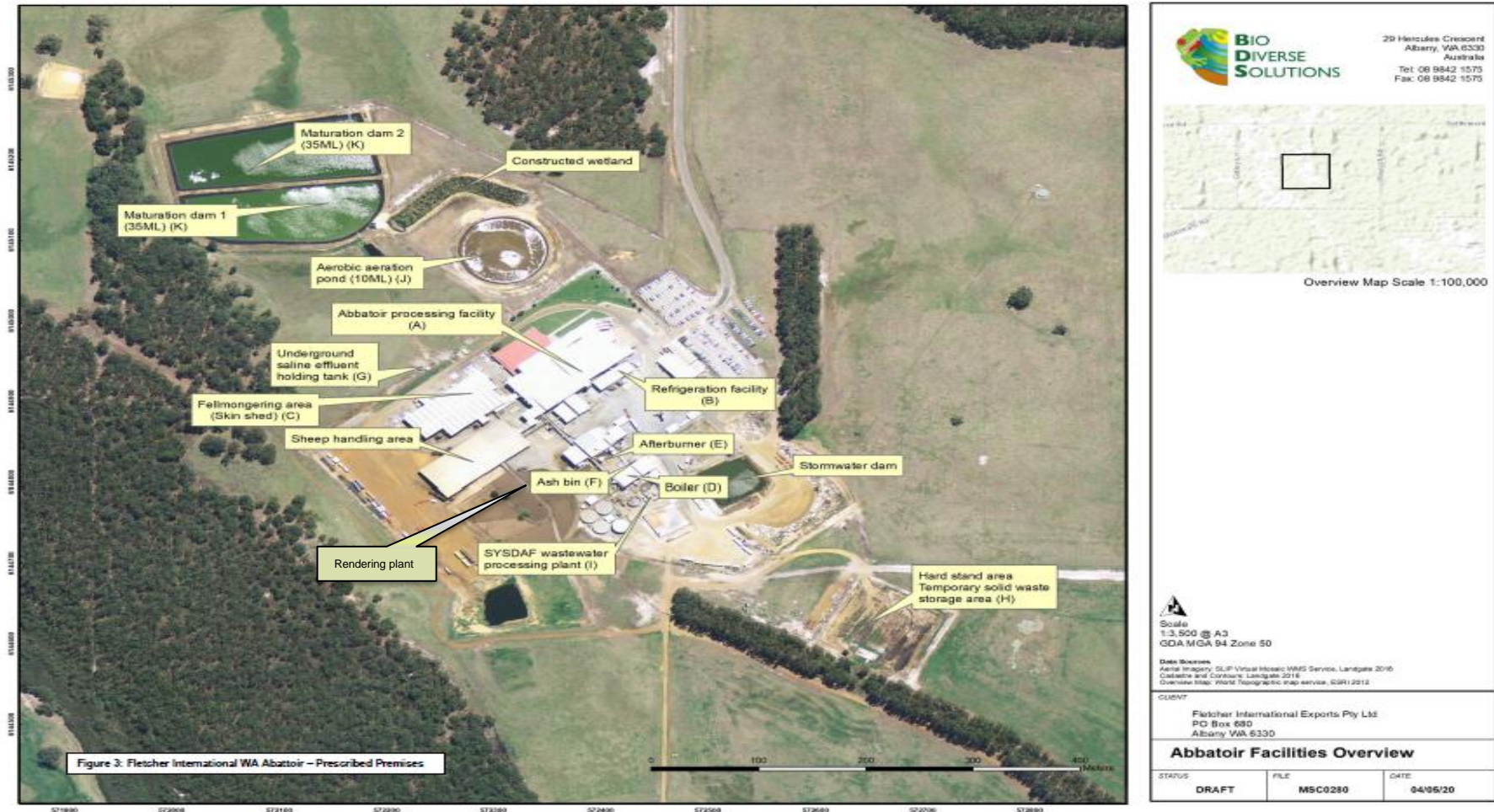


Figure 2: The Premises infrastructure locations are illustrated in the map above

Map of infrastructure and equipment

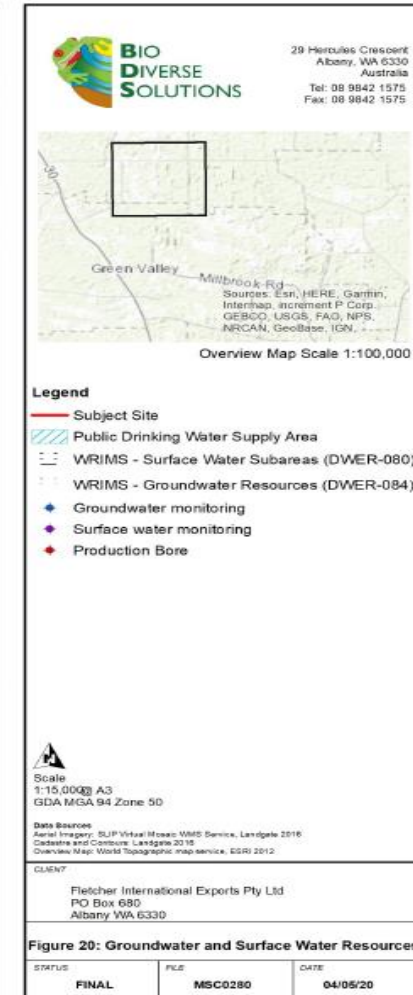


Figure 3: The Premises infrastructure locations are illustrated in the map above

Monitoring locations



Figure 4: Ground bores and surface water monitoring locations



Emission points



Figure 5: Biomass boilers emission points