CONTROLLED Doc No: IMS-PLAN-1000-OAK Issue No: 9 Issue Date: 06/12/2022



# OAKBURN-Operational Environmental Management Plan STAGE 1 - RENDERING

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 1 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

1.	STAGED APPROACH TO THE OEMP 4	
2.	PURPOSE 4	
3.	KEY ROLES AND RESPONSIBILITIES 4	
4.	SITE OPERATION 4	
4.1.	SSD Permitted Hours of operation	4
4.2.	Rendering Hours of Work	4
4.3.		5
5.	REFERENCES5	
6.	COMMUNICATION 6	
6.1.	Baiada Website	
6.2.		
6.2	2.1. Neighbours and Nearby Residents	6
-	2.2. Customers	
	2.3. Legislative Stakeholder	
	Complaints and Incidents	
	3.1. Dispute Resolution	7
7.	SITE EMERGENCIES	
8.	NOISE MANAGEMENT	
8.1.	Managing Noise	7
8.2.	Construction Environmental Management Plan	
8.3.	Noise Limits	
8.4.	Monitoring and Corrective Action	8
9.	MANAGEMENT OF AIR QUALITY 8	
9.1.	Discharges to Air	
9.2.	Potential Leak from Refrigeration Equipment	
9.3.	Potential for Gas Leak	
9.4.	Oakburn Odour Management Plan	
9.5.	Odour Audit	
9.6.	Dust Mitigation	9
10.	SOILS, WATER QUALITY AND HYDROLOGY	
	. Imported Soil	
	. Erosion and Sediment Control	
	. Stormwater Management	
	Evaporation Ponds	
	. Water Management Plan	
	.5.1. Use of Water	
	.5.2. Metering	
10	.5.3. Disposal	11
10 10	.5.3. Disposal .5.4. On Site Management	11 12
10 10 10	<ul> <li>.5.3. Disposal</li> <li>.5.4. On Site Management</li> <li>.5.5. Waste Water Management</li> </ul>	11 12 12
10 10 10 10	<ul> <li>.5.3. Disposal</li> <li>.5.4. On Site Management</li> <li>.5.5. Waste Water Management</li> <li>.5.6. Management of Risk of Spills to water</li> </ul>	11 12 12
10 10 10 10 11.	.5.3. Disposal         .5.4. On Site Management         .5.5. Waste Water Management         .5.6. Management of Risk of Spills to water         WASTE MANAGEMENT         .17	11 12 12 16
10 10 10 10 11. 11.1	<ul> <li>5.3. Disposal</li></ul>	11 12 12 16 17
10 10 10 11. 11.1 11.2	<ul> <li>5.3. Disposal</li></ul>	11 12 12 16 17 17
10 10 10 11. 11.1 11.2 11.3	.5.3. Disposal         .5.4. On Site Management         .5.5. Waste Water Management         .5.6. Management of Risk of Spills to water         WASTE MANAGEMENT         .17         . Classification of Waste         . Receival and Disposal of waste         . Emergency Disposal and Biosecurity Protocol	11 12 12 16 17 17 17
10 10 10 11. 11.1 11.2 11.3 11.4	.5.3. Disposal         .5.4. On Site Management         .5.5. Waste Water Management         .5.6. Management of Risk of Spills to water         WASTE MANAGEMENT         .17         . Classification of Waste         . Receival and Disposal of waste         . Emergency Disposal and Biosecurity Protocol         . Solid Waste	11 12 12 16 17 17 17 18
$10\\10\\10\\11.\\11.1\\11.2\\11.3\\11.4\\11$	.5.3. Disposal         .5.4. On Site Management         .5.5. Waste Water Management         .5.6. Management of Risk of Spills to water         WASTE MANAGEMENT         .17         . Classification of Waste         . Receival and Disposal of waste         . Emergency Disposal and Biosecurity Protocol         . Solid Waste         .4.1. General Waste	11 12 12 16 17 17 17 18 18
$10\\10\\10\\11.\\11.1\\11.2\\11.3\\11.4\\11\\11$	.5.3. Disposal         .5.4. On Site Management         .5.5. Waste Water Management         .5.6. Management of Risk of Spills to water         WASTE MANAGEMENT         . Classification of Waste         . Receival and Disposal of waste         . Emergency Disposal and Biosecurity Protocol         . Solid Waste         .4.1. General Waste         .4.2. Putrescible Waste	11 12 12 16 17 17 17 18 18 18
$10\\10\\10\\11.\\11.1\\11.2\\11.3\\11.4\\11\\11\\11\\11$	.5.3. Disposal         .5.4. On Site Management         .5.5. Waste Water Management         .5.6. Management of Risk of Spills to water.         WASTE MANAGEMENT         . Classification of Waste         . Receival and Disposal of waste.         . Emergency Disposal and Biosecurity Protocol         . Solid Waste         .4.1. General Waste         .4.2. Putrescible Waste         .4.3. Waste Packaging Materials	11 12 12 16 17 17 17 17 18 18 18 18
10 10 10 11. 11.1 11.2 11.3 11.4 11 11 11 11	.5.3. Disposal         .5.4. On Site Management         .5.5. Waste Water Management         .5.6. Management of Risk of Spills to water.         WASTE MANAGEMENT         .17         . Classification of Waste         . Receival and Disposal of waste         . Emergency Disposal and Biosecurity Protocol         . Solid Waste         .4.1. General Waste         .4.2. Putrescible Waste         .4.3. Waste Packaging Materials         .4.4. Disposal of Maintenance / Electricians waste	11 12 12 12 12 12 12 12 17 17 17 17 17 17 18 18 18 18 18 18
$10\\10\\10\\11.\\11.1\\11.2\\11.3\\11.4\\11\\11\\11\\11\\11\\11\\11$	.5.3. Disposal	11 12 12 12 12 12 12 12 17 17 17 17 17 17 18 18 18 18 18 18 18 19
10 10 10 11. 11.1 11.2 11.3 11.4 11 11 11 11 11	.5.3. Disposal         .5.4. On Site Management         .5.5. Waste Water Management         .5.6. Management of Risk of Spills to water.         WASTE MANAGEMENT         .17         . Classification of Waste         . Receival and Disposal of waste         . Emergency Disposal and Biosecurity Protocol         . Solid Waste         .4.1. General Waste         .4.2. Putrescible Waste         .4.3. Waste Packaging Materials         .4.4. Disposal of Maintenance / Electricians waste	11 12 12 16 17 17 17 18 18 18 18 18 18 19 19 19

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 2 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

11.4.8. Sludge Disposal	
11.4.9. Monitoring	
11.4.10. Corrective Actions	
11.5. Liquid Waste	
11.5.1. Water Management Plan (see 10.5)	
11.5.2. Rendering Management of Liquid waste and Contingencies	
11.6. Pests, Vermin and Priority Weed Management	
11.6.1. Pests and Vermin	
11.6.2. Priority Weed Management	22
12. TRAFFIC AND ACCESS	
12.1. Construction Traffic Management Plan	22
12.2. Existing Rendering Plant – Traffic Management Plan	22
13. HAZARDS AND RISK	
14. DANGEROUS GOODS	
15. AIRPORT CONSIDERATION	
15.1. Bird Monitoring	
15.2. Lighting	
15.3. Finishes	24
16. ANIMAL WELFARE AND BIOSECURITY	
17. ABORIGINAL HERITAGE25	
17.1. Unexpected Finds Protocol	
17.2. Rendering Site Heritage Assessment	25
18. VISUAL AMENITY25	
18.1. Landscaping	
18.1.1. Landscape Management Plan	
18.1.2. Rendering Landscaping	
18.2. Lighting	
18.3. Signage and Fencing	
18.4. Housekeeping	26
19. CONTINGENCY PLANNING	
20. ENVIRONMENTAL PERFORMANCE AND KEY PERFORMANCE AREAS	
20.1. Use of Gas	
20.2. Use of Electricity	
20.3. Waste to Landfill	
20.4. Performance of Waste Water Treatment	
20.5. Site Incidents and Complaints	27
20.6. Improving Environmental Performance	27
21. REVIEW AND REPORTING	
22. BASELINE DATA	
23. HISTORY OF AMENDMENTS	

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 3 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

## **1. Staged Approach to the OEMP**

The Oakburn Operational Environmental Management Plan is to be updated in a staged manner after approvals in accordance with *SSD9394, Part A Administrative Conditions, Condition A15*. Updates may be necessary within each stage to comply with various conditions or to include changes to site procedures.

- STAGE 1: Existing Rendering Plan
- STAGE 2: Commencement of Construction of Processing Plant (with Ongoing Rendering Operation)
- STAGE 3: Processing and Rendering Operation

#### 2.Purpose

The Oakburn Environmental Operations Plan has been developed to meet the requirements of the sites Environmental Certification ISO14001:2015, to meet the requirements of relevant Development consents for the site, to exceed customer expectation and to meet and the company's environmental expectations and continually improve environmental performance for the site.

#### 3.Key Roles and Responsibilities

**Senior Management:** Have the responsibility to provide the resources necessary for the site to meets its obligations.

**Site Management:** Site Management have the responsibility of managing the sites environmental responsibilities. Providing resources to track, monitor, modify and report on the site's environmental performance.

**Site Compliance:** responsible for regular review of reporting requirements, tracking and notification to site Management of the site's environmental responsibilities.

#### 4. Site Operation

## 4.1. SSD Permitted Hours of operation

Table 1: Hours of Work

Table 1 below taken from *SSD9394*, *Part B Specific Environmental conditions B1* stipulates hours of work for the site and any earthworks and construction. Works outside these hours may be organised in accordance with *SSD9394*, *Part B Specific Environmental conditions B2*.

Activity	Day	Time			
Earthworks and construction	Monday – Friday Saturday	7 am to 6 pm 8 am to 1 pm			
Operation (general)	Monday – Sunday	24 hours			

#### 4.2. Rendering Hours of Work

The existing Rendering plant typically operates from Sunday evening till Saturday afternoon 24 hrs a day. The site is manned on occasion outside these hours.

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 4 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

33

## 4.3. General Operation

The site must be operated in accordance with the approved Oakburn Operational Environmental Management Plan (OEMP) in accordance with *SSD9394, PART C Environmental Management Reporting and Auditing Conditions; C7.* 

In accordance with *SSD9394, PART A Administrative Conditions; Condition A24 all* plant and equipment used on site or to monitor performance of the site shall by;

- (i) Maintained in proper and efficient condition and
- (ii) Operated in a proper and efficient manner.

#### 5. References

The site has developed these plans in accordance with the requirements of the following external references:

Ref No	Document Title
١.	Protection of the Environment Operations Act 1997 (POEO)
١١.	Statement of Environmental Effects – Bath, Stewart & Associates 2008
III.	Pesticides Act 1999
IV.	Dangerous Goods Notification (NSW)
V.	Protection of the Environment Operations (Clean Air) Regulation 2021
VI.	Development Approval SSD9394 and any other relevant approvals
VII.	Site Environmental Protection Licence 7566
VIII.	Site Trade Waste Agreement with Tamworth Regional Council (15.11.21-14.11.26)
IX.	Environmental Impact Statement – PSA 2019
Х.	NSW Work Health and Safety Regulation 2017
XI.	Managing Urban Stormwater: Soils and Construction – Volume 1:Blue Book (Landcom, 2004)
XII.	The storage and handling of non-flammable cryogenic and refrigerated liquids AS:1894-1997.
XIII.	Storing and handling of Liquids: Environmental Protection – Participants Handbook (DECC, 2007)
XIV.	EPA's Waste Classification Guidelines: Part 1 Classifying Waste (EPA 2014).

The following internal documents have been referenced throughout this document that are also available on site.

OAKBURN - Odour Management Plan	ELO / Oakburn administration
OAKBURN - Bird Life Monitoring Plan – 19 MAY 2021	Oakburn Administration
OAKBURN – EMS Hub	Oakburn Server
OAKBURN – Traffic Management Plan (IMS-MAN-1000- OAK)	ELO / Emergency Plans / Administration and Main Gate
OAKBURN – Emergency Procedure Manual (REN- Emergency Procedure-1000-OAK)	ELO / Emergency Plans / Administration and Main Gate
Aboriginal Cultural Heritage Assessment Report (Everick Heritage Consultants, 2019)	Oakburn Administration
EMS-TI-1343-NAT Notification to Regulator – Waste Water	ELO / Oakburn administration

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 5 of 3
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

## 6.Communication

## 6.1. Baiada Website

The Baiada Poultry Pty Ltd website will be updated in line with *SSD9394 Part C Environmental Management, Reporting and Auditing, Condition C19,21 and 23* with appropriate notification to the department prior to upload.

## 6.2. Communication with Stakeholders

## 6.2.1. Neighbours and Nearby Residents

Communication with nearby residents is via call around of range of nearby residents / or business. This is to check that there have been no negative effects as part of the Site's operation. This check is documented on sites Oakburn – Neighbour Call Register. This call around is to be completed at least quarterly.

#### 6.2.2. Customers

Customers are contacted in accordance with the sites Change Notification Procedures.

## 6.2.3. Legislative Stakeholder

Communication with Legislative stakeholders will be in accordance with the directions in the relevant legislation / Development Approval / Code of practice / Regulation.

Stakeholders will also be consulted as per the site PIRMP when activated

In relation to the site development key stakeholders will be notified via email and directed to the publicly available website for updated documents at each stage of the process. Aboriginal parties will be included in this communication.

- STAGE 1: Existing Rendering Plan
- STAGE 2: Commencement of Construction of Processing Plant (with Ongoing Rendering Operation)
- STAGE 3: Processing and Rendering Operation

#### 6.3. Complaints and Incidents

Complaints received by the site will be managed in lines with the companies National Complaints handling procedures (EMS-TI-126-NAT Receiving and Recording of Environmental complaints and Incidents).

Complaints are able to be received through the Complaints line on the front gate of the site. A Complaints hotline is also advertised on the company website which will feed complaints back to the site.

Complaints and Incidents are received, recorded, actioned, improved, tracked and reported.

Site Incidents must also be reported in line with SSD9394, Part C, Environmental Management Reporting and Auditing, Conditions C14-19.

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 6 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

## 6.3.1. Dispute Resolution

The company has a system of Corrective Action Requests where issues can be investigated to determine a root cause, identify and employ corrective and preventative actions. This system would be employed where a dispute was raised with the site. Mediation and or Arbitration would be employed where discussion between affected parties was not able to correct the matter.

## 7.Site Emergencies

Site Emergencies will be managed through the site Emergency Procedures Manual (REN-M-1001-OAK) which also includes the site Pollution Incident Response Management Plan (PIRMP).

Oakburn Rendering staff (where applicable) are to be instructed in procedures concerning emergency situations. Training, when completed to the required level of competence, is to be documented on the employee's training file and site Training Matrix.

## 8. Noise Management

Noise is to be managed on the site to meet legislative requirements and to ensure minimal noise impacts at receivers.

## 8.1. Managing Noise

Certain activities are identified as possible noise pollutants, and need to be managed with this in mind.

- All truck movements to and from the site have potential to cause nuisance to neighbours
- All speed limits must be adhered to
- Forklift movements outside the plant areas and WWTP
- Plant alarms maybe audible outside the plant but not at the boundary

## 8.2. Construction Environmental Management Plan

A CEMP must be developed in accordance SSD9394, Part C, Environmental Management Reporting and Auditing, Conditions C2-4 and include the below:

- Erosion and Sediment Control Plan
- Construction Noise Management plan (As per SSD9394, PART B Specific Environmental Conditions; B4)
- Construction Traffic Management Plan (as per SSD9394, PART B Specific Environmental Conditions; B47)
- Community Consultation and Complaints Handling

Construction may not commence on the developed until the CEMP is approved by the Planning Secretary

## 8.3. Noise Limits

Noise from the premises must not exceed those stated in the EPL for the Site Licence No7566:

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 7 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

- An LA10 (15 minute) noise emission criterion of 5dB(A) above background LA (90) dB(A) (7am to 6pm) Monday to Friday and 7am to 1pm Saturday; and
- An LA10 (15 minute) noise emission criterion of 5dB(A) above background LA (90) dB(A) during the evening (6pm to 10pm) Monday to Friday; and
- At all other times, an LA10 (15 minutes) noise emission criterion of 5dB(A) above background level LA (90) dB(A)

Noise from the premises is to be measured or computed at within one meter of the boundary of any residential premises or any other noise sensitive area to determine compliance with condition L2.1. 5dB(A) must be added to the measured level if the noise is substantially tonal or impulsive in character.

There are also additional noise limits that must be complied with in the SSD9394 Condition B6 as per figure below.

Locality	Location	Day L <sub>Aeq(15 minute)</sub>	Evening L <sub>Aeq(15 minute)</sub>	Night L <sub>Aeq(15 minute)</sub>	Night L <sub>AFmax</sub>
R1	Girraween	40	35	35	52
R2	Abbeylands	40	35	35	52
R3	The Billabong	40	35	35	52
R4	Airport South	40	35	35	52

9

Table 2: Noise Limits (dB(A))

NSW Government

Department of Planning, Industry and Environment

Baiada Integrated Poultry Processing Facility (SSD-9394)

## 8.4. Monitoring and Corrective Action

No noise complaints have been received by the site since commencing operations in 2015. The site performs noise testing internally and has on occasion monitored noise from the plant at receptors. Compliance testing will be performed if any noise complaints are received.

## 9. Management of Air Quality

Air quality is managed to manage emissions to air to prevent deterioration of air quality resulting from site operations, including minimization of odours.

## 9.1. Discharges to Air

The following points referred are identified in the site's EPL for the purposes of monitoring relating to discharge to air. Specific testing is not required unless a change in current operation occurs.

- Bio filter No.1 No.2 and No 3
- Boiler Stack Boiler No.1, Boiler No.2 & Boiler No.3
- CAL Biogas Vent

## 9.2. Potential Leak from Refrigeration Equipment

Annual checks by a service contractor are carried out on all refrigeration equipment at Oakburn Rendering Plant and copies retained on site.

There are 7 reverse cycle air conditioners on site all of which containing R410A substance and are serviced by contractor. The site also has a refrigerated Shipping

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 8 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

of 33

container for storage of raw material and also several dryers on compressors. The site maintains a Use of Refrigerant Gas register in the EMS Hub

## 9.3. Potential for Gas Leak

## LNG Storage

Three 80,000 litre storage tanks of LNG are on this site and blended with natural gas for the use in the boilers. LNG is dosed onsite with an odour additive prior to use for identification of any leaks. This area is restricted access and video monitoring. BOC (supplier) has computer access to assist with fault finding and correction.

#### Gas Fired Boilers x 3

Three boilers on site are serviced by an external contractor every 5 weeks including an annual service. The boilers are also monitored during production.

#### Blood Cooker

This unit has a gas burner to allow process of blood. The unit is serviced annually by an external contractor.

#### Natural Gas Line

Gas readings are taken daily and graphed. Gas company service's the gas line. Refer Isolation of Natural and LNG gas on Site Task Instruction.

#### 9.4. Oakburn Odour Management Plan

In accordance with SSD9394, PART B Specific Environmental Conditions; B12 the sites Odour management Plan has been updated to the satisfaction of the Secretary. (REN-SOP-205-OAK OAKBURN – Odour Management Plan – Issue 5 19/05/2021)

This needs to be updated prior to commencement of the operation of the project in accordance with *SSD9394*, *PART B Specific Environmental Conditions; B13& B14*. The Odour Management Plan needs to be reviewed in conjunction with this section of the Sites Operations Manual. Updates will be done internally by compliance staff with the sourcing of additional expertise where required. These updates will be completed and communicated in accordance with *SSD9394 PART C Environmental Management, Reporting and Auditing Condition C11-13*.

#### 9.5. Odour Audit

In accordance with *SSD9394, PART B Specific Environmental Conditions; B15* an Odour audit must be completed within 6 months of the commencement of the extended development.

#### 9.6. Dust Mitigation

In accordance with *SSD9394 PART B Specific Environmental Conditions B17* the site has taken reasonable steps including sealed or paved Heavy vehicle movement paths to prevent nuisance dust creation around the site and the maintenance of a large grassed area and Landscaping to further mitigate dust creation.

Speed limits are enforced for the site on unsealed roads on site to prevent the generation of nuisance dust off main thoroughfares.

During any construction works additional mitigation methods are employed as per SSD9394 PART B Specific Environmental Conditions B18 including

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 9 d
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

- (i) Exposed surfaces and stockpiles supressed by regular watering or alternate suppression method.
- (ii) Covered loads on all trucks entering or leaving the site
- (iii) Methods employed to prevent dirt being tracked onto public roads
- (iv) Public roads to be kept clean where used by trucks performing works on the site.
- (v) Progressive land stabilisation to minimise exposed surfaces.

## **10.** Soils, Water Quality and Hydrology

## 10.1. Imported Soil

In order to prevent contamination of the site, controls are necessary for the use and import of external soils to the site. *SSD9394 PART B Specific Environmental Conditions B20* states that only VENM and ENM or EPA approved materials are permitted to be used on the site. Records of volume and fill type must be available and provided to the department on request.

The site shall ensure a Clean Fill Declaration (EMS-F-053-NAT) is held on site for all materials that are imported to the site with any associated delivery paperwork.

## 10.2. Erosion and Sediment Control

The existing rendering site is currently sealed for heavy vehicle movements and also contains a series of compacted gravel roads. The remainder of the site is comprised of grassed areas which is kept mown. There have been no incidents related to poor sediment control or erosion on the existing site. Any modifications will be subject to the conditions below.

Suitable erosion and sediment control measure must be employed prior to any construction works on the site in accordance with SSD9394 PART B Specific Environmental Conditions B21. Suitable measures are detailed in the "Managing Urban Stormwater: Soils and Construction – Volume 1: Blue Book (Landcom, 2004) guideline.

Further information will also be provided in the CEMP (Construction Environmental Management Plan) when developed for the site in accordance with SSD9394 PART C Environmental Management, Reporting and Auditing C2.

## **10.3.** Stormwater Management

SSD9394 PART B Specific Environmental Conditions B23 requires that a stormwater management plan be developed prior to the operation of the Integrated Processing Facility. This requirement has yet to be triggered as the development has yet to be commenced.

## 10.4. Evaporation Ponds

An Evaporation Pond Management Plan must be developed in accordance with *SSD9394, PART B Specific Environmental Conditions; B26* prior to the commencement of the operation of the project and needs to be included as part of this OEMP.

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 10 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

## 10.5. Water Management Plan

#### 10.5.1.Use of Water

Water is from town supply and is used during the following operations in:

- Cleaning and disinfection of the plant during each processing day
- Hosing the press during production
- Operation or flushing of some processing equipment
- Hosing out raw material delivery trucks
- Footbaths
- Toilet flushing
- Cooling towers
- Biofilters
- Hot water service for showers, laundry, etc.

It is policy that all water leaks are immediately repaired once detected as a matter of urgency.

## 10.5.2. Metering

Metering of Water taken into the site is via main located at the factory entrance on Gunnedah Rd. Backflow devices are employed on this line which are annually by the site and records supplied to TRC.

A number of sub-meters are employed on the site to monitor water use across the site. These are read weekly and tracked to identify trends in usage.

Water discharged to council sewer is also metered and monitored weekly by TRC, sample collection staff. This meter is calibrated annually by the site and records supplied to TRC.

#### 10.5.3.Disposal

#### 10.5.3.1. Sewage

All sewage generated from the rendering site Administration building is disposed of via the council sewer separate to trade waste, In accordance with with SSD9394 PART B Specific Environmental Conditions B37.

#### 10.5.3.2. Trade Waste

All water discharged from the site is via the site *Trade Waste Agreement* with Tamworth Regional Council and *SSD9394 PART B Specific Environmental Conditions B36*. Water under this agreement is discharged to council sewer via sewer line at the Gunnedah Rd truck stop. A summary of key discharge parameters under this agreement are listed in table below. Council will be notified as per national procedure *EMS-TI-1343-NAT Notification to Regulator – Waste Water* 

Parameter	Discharge Limit
рН	7-9
Biological Oxygen Demand (BOD)	300
Chemical Oxygen Demand (COD)	600
Total Suspended Solids (TSS)	300
Total Dissolved Solids (TDS)	1000

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 11 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

Sulphate	500
Total Phosphorus (P)	35
Ammonia (NH <sup>3</sup> )	50
Total Kjeldahl Nitrogen	100
Oil and Grease	100

#### 10.5.4.On Site Management

The site Manager and compliance team are responsible for monitoring use of water across the site. Water use is one of the key parameters monitored and tracked weekly. Continual improvements in water efficiencies are sought across the site.

#### 10.5.5. Waste Water Management

For additional information and process flow diagrams please refer to Section H of the Hydroflux Manuals. The below is a description of the water movement through the system



Figure 1: Waste Water Key Infrastructure

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 12 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

## 10.5.5.1. Wet Wells

Water is collected from all processing areas and moves to WET WELLS 1,2 and 3 or a combination of the above.

Water then moves from WET Well 3 to Balance tank. Balance tank water is then transferred to CAL (Covered Anaerobic Lagoon)

Water is also collected from the Low Temp offal processing to the Condensate tank. Condensate water is used to feed the SBR as part of its normal cycle. Condensate water can also be fed to the CAL if required.

## 10.5.5.2. CAL

The CAL is an anaerobic microbial process that is used as a preliminary treatment of the waste water from the rendering plant

#### 10.5.5.3. SBR

SBR or Sequencing Batch Reactor is a microbial process that is employed after the CAL and is used for secondary processing of the waste water.

#### 10.5.5.4. Clear Wells

Clear Wells – outflow from the SBR proceeds to the clear well for final settling prior to discharge.

#### 10.5.5.5. Discharge to Sewer

Discharge of waste water from site is via the Tamworth Regional Council sewer main. Water is discharged to sewer under the sites Trade Waste Agreement.

#### 10.5.5.6. Reuse

Reuse of water is being considered for landscaping and other outdoor use. Additional detail on this initiative can be found on the sites EMS Hub in the significant impacts list.

#### 10.5.5.7. Monitoring

The waste water system is monitored daily by operators through use of a WWTP checklist

#### 10.5.5.8. Corrective Action

Waste Water operators are to report any issues with the WWTP to the Site Manager for corrective actions to be taken to correct the system. External consultants are also available to assist with the correction of issues relating to Waste water treatment for the site.

#### **10.5.5.9.** WWTP Equipment including Contingency Planning

#### 10.5.5.9.1. Wet Wells (including Rotary Screen)

The waste water from high temp processing is collected in Wet Well 1 at the rear of the building on the High temperature side of the plant. This Wet Well has a capacity of approximately 27,000 litres and is equipped with a 2pump system with a high-level alarm. If the water level reaches a high level an alarm will be triggered

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 13 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

From Wet Well 1 the waste water is transferred to the waste water rotary screening system which is located in the raw material intake area. This screen removes the gross solids, usually small amounts of feathers and pieces of meat small enough to pass through the floor screens. The electric motor for this screen only serves to make the barrel screen rotate. The unit will function without the barrel rotating for a period of about 4 hours and this can be prolonged with regular manual washing by staff.

After screening, the water is transferred to Wet Well 2, located next to Wet Well 1, which has a capacity of approximately 9,400 litres and is equipped with a 2pump system with a high-level alarm. If the water level reaches the high level an alarm will be triggered

A High-level alarm on any Wet Well will cease pumping water to the wet well and alarm through visual and audible means in the Control Room. The alarm is activated to prevent inadvertent spills

If a wet well pump were to fail, it would be replaced with an emergency standby held on site, a stock of the most common parts are also held on site. The pump could also be replaced as the majority of the pumps used within the site are interchangeable and transferred to give service until a replacement pump arrives. The alarms on the wet wells are tested by maintenance on a monthly basis and this is tracked through MEX. All waste water is then transferred to wet-well 3 with a capacity of 9,400 litres before transfer to the 350kl litre balance tank.

All pumps are interchangeable, and there is always a backup unit on site

#### 10.5.5.9.2. Balance Tank

The balance tank holds 350kl and is alarmed with both audible alarms and direct to security alarms for high priority alarms if not corrected within 30 minutes. Unactioned alarms will cease operation of the plant and therefore additional water production until situation is corrected.

The balance tank is used onto to transport material to the CAL. There are two pumps used in alternating sequence. Component spares are also held on site. Construction and integrity of tanks is monitored 3 monthly via the MEX Preventative Maintenance system

#### 10.5.5.9.3. Condensate Tank

The condensate tank holds water generated by the low temp soft offal side of the process where water is condensed off that has low Suspended solids but high BOD and is used to Feed the SBR to ensure it obtains sufficient nutrients for secondary treatment of the waste water.

If any issues are experienced with the Condensate transfer, water can be diverted to the Balance tank. Water will also divert automatically to Balance tank if Condensate tank reaches high level. A high level alarm also exists on this tank that will be activated to security for notification to site.

#### 10.5.5.9.4. SBR

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 14 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

of 33

The site commenced operation of a 5 ML SBR during December 2019. In the SBR, water goes through an aeration – settling – discharge cycle. On the discharge cycle the water is sent to one of two 5ML Clear wells.

New SBR is aerated through the use of submerged aerator systems that have been designed with excess a capacity. The Aerators are comprised of 20 beds of 8 aerators which can be isolated if required. The aerators are powered through the use of 3 blowers which have common spares. The system is capable of running with 2 Blowers until repairs are completed.

A generator can be hired for the running of blowers in case of major power failure to the system.

Key Spares for aerators, blowers and pumps will be held on site.

#### 10.5.5.9.5. Screw Press

The screw press is used to waste solids from the SBR to maintain desired MLSS. Critical spares are held on site for the screw press and buffering is sufficient that several days can be missed without impact while repairs are being made.

#### 10.5.5.9.6. Clear Wells

After processing through the SBR water moves to either of the clear Wells. Water exits the clear wells and is transferred to the discharge tank.

Two Clear wells are available where only one is required for normal use. The clear wells will normally be cycled between. Bird netting has been installed on the clear wells to prevent bird attraction to the area due to concerns from nearby airport.

The second allows for contingency of the overall system and allows water to be pumped from the SBR in case of Emergency repairs.

#### 10.5.5.9.7. Extreme Events

Contingency has been built into the system to allow for handling of minor breakdown and maintenance.

Notification to Tamworth Regional Council would be made if any adverse waste water is discharged inadvertently; however, this is unlikely to occur with controls that are in place.

In an event causing environmental harm or threatening in excess of a \$10,000 clean up, the PIRMP (Pollution Incident Response Management Plan) should be enacted. The decision to enact the PIRMP would be made by Senior Management.

If a general power failure occurs then all processing will cease at the processing plant. Generators can be used to power parts of the system to ensure operation of critical systems. As discussed above generators can also be used on the WWTP through the Control boards linked to this area.

Localized power failures would be initiated by circuit problems within the system. Remediation of these would be undertaken by contacting an electrician.

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 15
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

## 10.5.5.10. Other Liquid Wastes

At times various wet wells and pits require cleaning due to build-up of nondesirable materials. This type of pump out will be conducted by a licenced liquid waste contractor and disposed of appropriately. A liquid waste docket is retained from each pump out and includes the transporters name, volume, type of waste and destination. All waste tracking dockets are retained on site in accordance with the EMS National Records Standard

#### 10.5.5.11. Monitoring and Corrective Action

- Weekly site environmental audit.
- Review and/or trending of waste water analysis results. These results are tracked and stored in the OAKBURN EMS Hub.

• Records kept of volumes of sludge removed from the Oakburn site. – These volumes are tracked and stored in the OAKBURN – EMS Hub

• Records kept of volumes of daily discharge to Tamworth Council's sewage system – These volumes are tracked and reported in the OAKBURN – EMS Hub.

All details are entered into the Oakburn EMS Hub weekly. The OAKBURN EMS Hub is located on the Oakburn Server.

Where it is identified as not complying with this standard, staff are to be notified of the requirements and immediate corrective action is to take place to ensure compliance.

Any individual who continues to be non-compliant or has repeated noncompliance to this standard shall report to the Site Manager where disciplinary action may be taken.

Where equipment or facilities are identified as not complying with this standard, consultation with management may be required to ensure compliance.

Where Waste water analysis is identified outside of trigger values and/or are not complying with this standard, consultation with management may be required to ensure compliance. Repeat testing or further actions may be required to ensure levels remain acceptable and limit the risk to the environment.

Where a potential threat to stormwater, trade waste or the environment is identified, the Site Manager is to be informed immediately, so that appropriate measures can be taken ie Emergency Procedure Manual / PIRMP. The National environmental incidents handling and reporting procedure is to be followed.

Where a service provider or contractor is identified as not complying with this standard, they are to be notified of the requirements and corrective action is to take place to ensure compliance.

#### 10.5.6. Management of Risk of Spills to water

#### **10.5.6.1.** Management of Spills

There are procedures in place to ensure prompt and effective clean-up of all spills, particularly hydrocarbons, (including fuel and oils) and chemicals. Adequate supplies of absorbent material (in this instance, appropriate spill kits)

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 16 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

are stored on site at all times and used in the event of such a spill occurring. Safety Data Sheets (SDS) are available for all chemicals used on site and clean up procedures followed in event of spills.

Spill kits are located in key areas around the site and are marked on the Evacuation diagram.

Relevant staff are to be trained in the use of this spill containment material and signed off on Spill Response Task Instruction at least annually. In addition to this a demonstration of competency normally addressed in the form of a mock spill which is documented on the Mock Spill Assessment Form. The mock spills are conducted at least annually.

Spills kits on this site are checked quarterly by allocated contractor or as used to ensure the kits are kept in good working order and restocked as required

#### 11. Waste Management

#### 11.1. Classification of Waste

The classification of Oakburn waste has been performed referencing the *EPA's Waste Classification Guidelines: Part 1 Classifying Waste (EPA 2014)*. The different waste types are listed, tracked and managed through the Waste Classification Tab – OAKBURN EMS Hub. Waste classifications have been completed in accordance with *SSD9394, PART B Specific Environmental Conditions, Condition; B44.* 

Wastes are classified as Special, Liquid, Hazardous, Restricted Solid Waste, General Solid Waste (putrescible) and general Solid Waste (non-putrescible)

Waste Classification Oakburn Rendering Plant outlines the types of waste and byproducts generated on this site, the class of waste, whether it is recyclable, Waste transporter and destination, tracking requirements, destination and other additional information as required. Some additional information is listed below.

The site should continue to review waste produced by the site with the aim of continually reducing the number of and quantity of wastes that go to landfill.

All waste classification and sampling data to be retained electronically for the life of the development in accordance with SSD9394, PART B Specific Environmental Conditions, Condition; B46.

#### 11.2. Receival and Disposal of waste

In accordance with *SSD9394, PART B Specific Environmental Conditions, Condition; B45* no wastes generated from outside the site will be accepted onto the site for storage, treatment, processing, reprocessing or disposal.

All waste generated by the site must also be disposed of to a facility that is legally able to accept the waste material in accordance with *SSD9394, PART B Specific Environmental Conditions, Condition; B43.* Records will be held on site to show the disposal location of all waste materials. More detail is provided on disposal of specific waste types in further sections.

#### 11.3. Emergency Disposal and Biosecurity Protocol

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 17 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

An Emergency Disposal and Biosecurity Protocol must be developed in accordance with *SSD9394, PART B Specific Environmental Conditions, Condition; B65* prior to the commencement of the operation of the project and needs to be included as part of this Operations Manual.

## 11.4. Solid Waste

## 11.4.1.General Waste

The main types of general waste on site are, but not limited to:

- Discarded/used production PPE equipment
- Amenities waste (paper towels, food waste, cigarette butts, etc.)
- Maintenance waste that cannot be recycled

General waste is collected on site within the skip bins provided by Ron Jones Haulage. It is transported to the Forest Hill landfill by Ron Jones. The waste storage area at the site will be kept in a clean and tidy manner and no unauthorised wastes will be disposed of into these containers. Quantities of General waste disposed to landfill are recorded in the EMS Hub located on the Oakburn server.

## 11.4.2.Putrescible Waste

The main types of putrescible waste on site are, but not limited to, Offal, feather, blood, birds and other non-edible materials. These are typically processed through the rendering plant into pet food meals and tallow. Waste by-products of the waste water treatment process and any bi product from the rendering process are putrescible waste materials for the site.

Disposal of putrescible waste (Offal and Non-edible Product) which cannot be rendered or has been rejected from the process due to contamination will be transported to the Forrest Hill Landfill by Ron Jones Haulage. RJH liaises with the TRC Forest Hill landfill site in the disposal of putrescible waste. Quantities of putrescible waste disposed to landfill are recorded in the EMS Hub located on the Oakburn server.

## 11.4.3. Waste Packaging Materials

Empty chemical containers are stored appropriately on site and then returned to the supplier or recycled. The containers are triple rinsed where required and lids attached.

## **11.4.4.** Disposal of Maintenance / Electricians waste

Scrap metal is stored on site and sent to a metal recycling site as required.

Oily rags are placed in the general waste skip when used.

Used or waste oils are stored on site and generally used for lubrication purposes on other pieces of equipment. A waste oil drum appropriately labelled and bunded is stored in the maintenance workshop. This will be recycled when full through suitable channels.

A small number of light globes and fluorescent tubes are removed from use each year. All lights are retained on site until sufficient volume has been collected for disposal. A review of facilities will be performed and material will be sent to best facility for the type of lighting that has been removed from use.

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 18 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

## 11.4.5. Recycling

A small amount of cardboard is generated at the rendering site. Cardboard is stored in the recycling bin and collected fortnightly by Challenge Recycling Services

Amenities and office recycling which includes milk cartons and aluminium drink cans are stored in the comingled receptacle and collected fortnightly by Challenge Recycling Services. On some occasion's drink containers may be taken to TOMRA licenced waste collections facilities

Non-returnable pine pallets are recycled on site (used for storage of items) or broken down and used as firewood.

#### **11.4.6.** Management of Waste Bins located outside the factory

Waste bins are kept closed at all times to prevent rain entry and to prevent the contents from escaping due to wind. Monitoring of the waste bins for odour and the bin integrity is conducted weekly during the EMS audit, with any issues noted raised to the bin supplier. The bins are cleaned after tipping by washing with minimal water inside the plant. The water from this process is contained within the trade waste system. Any leaking bins are to be reported to the waste transport supplier immediately for repair.

## **11.4.7.Management of Obsolete material on site**

Obsolete machinery is stored in the metal storage area on site. However larger obsolete machinery is either sent for metal recycling or sent to the Processing Plant for secure storage.

#### 11.4.8.Sludge Disposal

Pressed sludge from the WWTP SBR is collected in a 10m hook bin and transported to the Forrest Hill Landfill by Ron Jones Haulage. This material is currently being tested for suitability for land application.

#### 11.4.9. Monitoring

- Daily informal visual checks of waste bins ensuring they are not overfull and not leaking.
- Weekly site environmental audit
- Weekly Landfill volumes
- All information is entered into the Oakburn EMS Hub.

Weekly Landfill volumes and graphs tracking volumes against set targets are located in the Oakburn - EMS Hub located on the OAKBURN server. Additional detail is also located in the Annual Site KPI Report which is hyperlinked on the Landfill and Recycling Tab.

#### **11.4.10.** Corrective Actions

Where it is identified as not complying with this standard, staff are to be notified of the requirements and immediate corrective action is to take place to ensure compliance. Any individual who continues to be non-compliant or has repeated non-compliance to this standard shall report to the Site Manager where disciplinary action may be taken.

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 19 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

of 33

Where equipment or facilities are identified as not complying with this standard, consultation with management may be required to ensure compliance. Where a potential threat to stormwater, trade waste or the environment is identified, the Site Manager is to be informed immediately, so that appropriate measures can be taken i.e. notify Senior Management, consult site Emergency Procedure Manual activate PIRMP as appropriate.

Where a service provider or contractor is identified as not complying with this standard, they are to be notified of the requirements through a Supplier Non-Conformance and corrective action is to take place to ensure compliance.

## 11.5. Liquid Waste

## 11.5.1. Water Management Plan (see 10.5)

## **11.5.2.** Rendering Management of Liquid waste and Contingencies

The objective of the sites liquid waste management is to manage liquid waste in such a manner that the environment is protected from harm, and promote recycling and reuse where possible. To ensure site has contingency to ensure continuing conformance to legislation and key stakeholder requirements.

## 11.5.2.1. Disposal of Waste Oils

As part of scheduled maintenance work, oils are periodically replaced in machinery which requires lubrication. The waste oil is captured and placed in a bunded container for collection. This oil will be removed from site by a licenced transported. This is the responsibility of the Maintenance Manager. A fully completed Waste Tracking Docket will be provided by the waste disposal company on volumes of waste oil collected and destination. Filed as required.

The site also uses several systems of oil filtration which remove contaminants from the oils and puts back into the system, maximising use of the oil and maximising the longevity of the equipment.

#### 11.5.2.2. Chemical Use

All dangerous goods on site are risk assessed under the WHS system. All liquid chemicals are bunded and stored in appropriately marked depots on site. Chemical storage depots are marked and included on the dangerous goods manifest included in the emergency procedures.

#### 11.5.2.3. Application of Pesticides

Where pesticides need to be applied to areas inside or out of the Rendering Plant, it is imperative that all instructions on the labels are read, understood and followed. Applications such as weed and pest control are completed by the landscaping contractors and the pest controller however may at times be undertaken by Baiada staff.

Errors in such applications, where the spray is above the recommended concentration can not only cause health and safety problems for the staff, but may also endanger waterways nearby or local fauna and flora. A Pesticide Log Form is to be completed for all pesticides used (refer Use of Pesticides Log Task Instruction for the correct method of filling out this form). Ideally, key

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 20 d
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

staff, and as a minimum, management, should hold a Chem-Cert certificate, or equivalent

## **11.5.2.4.** Storage of Hydrocarbons on site

Oils are stored on site. The quantity on site would be approximately 2,000 litres (bunded) at any one time, and this is used for servicing of onsite machinery and storage of waste oil.

Any minor leaks or spills are cleaned up immediately by use of the appropriate absorbent spill material which is stored on site in wheelie bins used to contain spill kits, and then swept up and disposed of in the waste bins on site, if appropriate. The oils are bunded, with capacity for more than 120% of the total volume to be contained within the bund.

## **11.5.2.5.** Vehicle Movements / Parking around Stormwater Drains

Traffic movements on this site are one way (clockwise) around the site. For additional detail please refer to the site Traffic Management plan.

Trucks move onto the weighbridge while visitor and staff movements are directed towards the car park or maintenance workshop. The roadways at this site are all concrete. If a major spill was to occur the roadways are quite extensive and would allow a large area to contain. The stormwater drains all lead into a bunded collection area that would allow the containment of a large spill.

A system for checking for oil leaks and clean-up of any minor spills (drips) has been developed through documented weekly site audits and a staff environmental training program. If a staff vehicle was involved, the owner would be informed and expected to have the oil leak repaired

## **11.5.2.6.** Installation of Backflow Devices

There are backflow protection devices throughout the site with a main device connected to the mains water supply at site entry to ensure containment of supply.

A "Zone Protection Device" has to be installed to prevent cross-contamination of the potable water supply (in accordance with AS3500). These are inspected annually and documentation kept on site with copies supplied to Council of the mains device located at the site entry.

## **11.5.2.7.** External Pipe Work Posing Threat to Stormwater

External pipe work needs to be maintained so that it does not direct any water flows towards the storm water system. The external pipework on this site is generally protected against impact. The external pipework is inspected weekly during the weekly external inspection.

Stormwater sampling is conducted yearly with the results recorded and compared to a company standard. (refer Stormwater Sampling Task Instruction).

## 11.5.2.8. Storage of water on site

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 21 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

of 33

Water storage on this site is rain water for landscape purposes only (irrigation) and is contained in 4 x 250,000 litre tanks. This system has been inspected and approved by TRC (2019). There is currently no system of water storage as back up for production needs although this is being investigated see SIL – EMP on EMS Hub for more detail.

## **11.5.2.9.** Pallet Jack and Forklift Maintenance

Manual pallet jacks are used on site requiring little maintenance which, if required, is carried out by onsite maintenance staff.

Forklift maintenance and servicing is carried out by a contractor/s who would conduct this work inside the plant areas. When conducting the pre-work risk assessment, environmental risks would be considered.

## 11.5.2.10. Waste Bin sanitation

Sanitation of all bins is to be carried out inside the plant area or the raw material intake area. At no time is bin sanitation to be carried out outside these areas.

## **11.5.2.11.** Leaks from Raw Material Delivery Trucks

The raw material delivery trucks are to be checked prior to leaving the location of loading to ensure that there are no leaks. For transport companies delivering from outside the Tamworth area, checks should be conducted during transit to ensure no leaking is occurring.

## **11.6.** Pests, Vermin and Priority Weed Management

## **11.6.1.** Pests and Vermin

The Rendering site maintains a contract with an external Pest Control Contractor which includes monthly servicing for Rodents and spiders. This contract can be extended to control any other Pests of concern as required by the site. Records of these services are maintained by the site.

#### **11.6.2. Priority Weed Management**

The Rendering site follows the Baiada National procedures for Noxious Weeds with regular inspections and treatment of priority weeds under the System. Records of these inspections are maintained by the site.

#### **12.** Traffic and Access

#### **12.1.** Construction Traffic Management Plan

A Construction Traffic management plan is to be developed and approved in conjunction with the Construction Environmental Management Plan (CEMP) prior to the commencement of the Integrated processing plant development in accordance with *SSD9394, PART B Specific Environmental Conditions, Condition; B47 and B48*.

#### **12.2.** Existing Rendering Plant – Traffic Management Plan

The existing rendering plan maintains and operates under the *Oakburn – Traffic Management Plan (IMS-MAN-1000-OAK)*. This document considers items such as roadwork, access, parking, traffic flow and general operating conditions.

General requirements include:

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 22
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

- Construction and maintenance of internal roads, driveways and parking is in accordance with AS 2890.1:2004 Parking facilities Off-street carparking (Standard Australia, 2004) and AS 2890.2:2002 Parking facilities Off-street commercial vehicle facilities (Standard Australia, 2002)
- Traffic flow is in accordance with the AUSTROAD guideline allowing for longest vehicle entering the site and manoeuvrability within the site.
- No vehicle shall queue on the public roads whilst entering the site
- Heavy vehicles and its trailers (bins) shall not be parked on local roads or footpaths in the neighbourhood
- All vehicle shall be fully contained on site before being required to stop
- All loading and unloading of materials shall be performed on-site
- All loads of truck shall be covered when enter or leave the site ensuring no track of dirt or other materials occurs on the public road
- All heavy vehicle turning and manoeuvring areas will remain free of obstacles including parked cars.

This document has been developed in accordance with the requirements of SSD9394, PART B Specific Environmental Conditions, Condition; B51 and B52.

## 13. Hazards and Risk

The Rendering plant currently operates under accredited EMS (AS14001:2015) and WHS (AS4801:2001) systems which incorporate the relevant Environmental and Workplace health and safety risks of the site.

Additional methods will need to be employed to meet the requirements of *SSD9394*, *PART B Specific Environmental Conditions, Condition; B53-B58* prior to construction and commencement of operation of the Integrated processing facility.

## 14. Dangerous Goods

All dangerous goods on site should be stored and handled in accordance with all relevant Australian Standards including *AS1894* "*The storage and handling of non-flammable cryogenic and refrigerated liquids"* and the NSW EPA's "*Storing and handling of Liquids: Environmental Protection – Participants Handbook"* to comply with the conditions of *SSD9394, PART B Specific Environmental Conditions, Condition; B60 and B61.* 

Volumes of dangerous goods on site should be stored in accordance with the table 3 below taken from SSD9394, PART B Specific Environmental Conditions, Condition; B60. (Issue 18.12.20).

Where any inconsistencies are found the site should correct them by altering their storage quantities or request alteration to Table 3 below via the department. The site should maintain a Chemical Register for all chemicals used on the site. In addition the site shall maintain a Dangerous goods manifest showing all chemicals triggered for the site manifest in accordance with *Notifications for Schedule 11, Safe work NSW* and lodge the appropriate notifications for this schedule to Safework NSW.

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 23 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

## All dangerous goods liquids shall be stored on appropriate bunds to prevent leakage to the environment.

Description	Dangerous Goods Class	Packing Group	Maximum Storage Quantity
Liquified natural gas (LNG)	2.1	n/a	240,000 L
Liquified petroleum gas (LPG)	2.1	n/a	480 kg
Nitrogen	2.2	n/a	10,000 L
Liquified oxygen gas (LOX)	2.2 (5.1)	n/a	10,000 L
Carbon dioxide	2.2	n/a	10,000 L
Anhydrous ammonia refrigerant	2.3	n/a	7 tonnes
Ferric sulphate	8	III	15,000 L
Hypochlorite solution	8	III	13,800 L
Sodium hydroxide solution	8	III	5,400 L
Sulfuric acid (35%)	8	II	4,000 L

Table 3: Maximum storage quantities of dangerous goods and combustible materials

## 15. Airport Consideration

## 15.1. Bird Monitoring

In accordance with SSD9394, PART B Specific Environmental Conditions, Condition; B63 the Bird Life Monitoring Program (Cumberland Ecology 19.05.21) was developed. This needs to be considered with this section of the Operations Manual.

This program was commissioned to provide for a monitoring program that will identify any potential for the site to attract birds that may negatively impact the safety of the airport operations. It will also cover mitigation measures and triggers for the implementation.

This is a 5 year plan and will also include the collection of baseline data, selection of appropriate monitoring areas over this period and annual reporting.

## 15.2. Lighting

All lighting should be designed and installed to prevent distraction to the nearby airport to comply with SSD9394, PART B Specific Environmental Conditions, Condition; B62.

## 15.3. Finishes

In accordance with SSD9394, PART B Specific Environmental Conditions, Condition; B62 all surfaces on the development need to be non-reflective to avoid distraction of air crews.

## 16. Animal Welfare and Biosecurity

In accordance with *SSD9394, PART B Specific Environmental Conditions, Condition; B65* an Emergency Disposal and Biosecurity Protocol should be developed before the commencement of operation of the integrated facility handling live birds on the site. This requirement has not yet been triggered but should be considered with this section of the Operations Manual.

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 24 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

## 17. Aboriginal Heritage

## **17.1. Unexpected Finds Protocol**

If during the course of any work on the site an item of Aboriginal Heritage significance is found, the actions below should occur in accordance with *SSD9394*, *PART B Specific Environmental Conditions, Condition; B67 & 68.* 

- All work in the immediate vicinity of the suspected Aboriginal item or object must cease immediately;
- A 10m wide buffer area around the item or object must be cordoned off; and
- Heritage NSW must be contacted immediately.

Work in the immediate area of an Aboriginal item or object should only recommence in accordance with the provisions of Part 6 of the National Parks and Wildlife Act 1974.

## 17.2. Rendering Site Heritage Assessment

In January 2019 an *Aboriginal Cultural Heritage Assessment Report (Everick Heritage Consultants)* this report was completed the purpose of which was to identify if any Aboriginal objects or places of cultural significance were located within the development area.

No cultural heritage sites or objects were found during this review. Several conclusions were reached which are detailed on pg3 of this report.

## **18.** Visual Amenity

## 18.1. Landscaping

#### 18.1.1. Landscape Management Plan

A landscape management plan is required to be completed prior to commencement of operation of the project in accordance with *SSD9394, PART B Specific Environmental Conditions, Condition; B72.* This requirement has not yet been triggered but should be considered with this section of the Operations Manual.

## 18.1.2. Rendering Landscaping

Landscaping at the Rendering plant is maintained through use of the rainwater collected from the site and held in 4 x 250000lt tanks. This system has been checked and approved by the TRC for rain water use. Bore water is used to back up this system if required.

Other systems of water reuse are currently being investigated and more information can be found on the *Oakburn EMS Hub - Significant Impacts list*.

Weeds are managed by the sites Groundkeeper, any weed spraying that is performed is done and any application of Pesticides is recorded on the *Use of Pesticide Log (EMS-F-041-NAT)*. Noxious weeds inspections are also completed by the grounds keeper and necessary records kept. Site inspections are completed of the grounds on a weekly basis by Site Manager or operators and issues relating to weed management are reported as required.

#### 18.2. Lighting

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 25 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

of 33

Any lighting that is installed at the site shall be mounted screened and directed in such a manner that is does not have an nuisance effect to surrounding properties or the public road network in accordance with *SSD9394*, *PART B Specific Environmental Conditions, Condition; B74*.

## 18.3. Signage and Fencing

No signage, advertising or fencing (except that is exempt) shall be installed at the development without the approval of the Secretary in accordance with SSD9394, PART B Specific Environmental Conditions, Condition; B75. Approval must also be sought in accordance with this condition.

## 18.4. Housekeeping

Good housekeeping management practices will compliment good environmental management and will not only enhance the site appearance, but will benefit the environment. The importance of good housekeeping cannot be stressed enough, and will flow onto benefits in other areas, including performance issues and compliance with Workplace Health and Safety obligations.

To this end, the weekly site inspections check against operational performance and is recorded and reported to Head Office. Checks as to the standard of these audits and the level of performance are to be performed by the National Environment & Sustainability Manager ideally at least once every six months.

## **19.** Contingency Planning

The site maintains a contingency plan for key items in site operation. This is located in the *Oakburn EMS Hub - Contingency Plan* and considers a wide range of situations and their ramifications to the business and the site operation. It lists the likelihood of occurrence, the severity of the outcome, control measures that exist and contingencies that can be employed in each situation. This is a live document and is updated and reviewed at regular intervals.

## 20. Environmental Performance and Key Performance Areas

The sites environmental performance is based on the monitoring, tracking and reporting of a number of items and areas for the site. The key of which are listed below.

#### 20.1. Use of Gas

The site is a large user of gas, usage is monitored and tracked weekly against Tonnes of Finished product produced. This is monitored against site targets and the site is always conscious of improving gas efficiency.

The site has also commissioned external contractors to identify areas of improvement to the electrical usage. For more details see also SIL on the EMS Hub.

Processing equipment such as the Blood line burner, driers, hydrolyser, batch cooker, pre-heater are some of the key gas usage areas for the site

#### **20.2.** Use of Electricity

The site is a large user of electricity and usage is monitored and tracked weekly against Tonnes of Finished product produced. This is monitored against site targets and the site is always conscious of improving energy efficiency.

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 26
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

The site has also commissioned external contractors to identify areas of improvement to the electrical usage. For more details see also SIL on the EMS Hub.

Four power factor correction units installed on site to assist with more efficient power use. See below list for some of the key energy usage areas for the site.

- Processing Line equipment Large Motors and drives on Dryers / hydrolyser / biofilters
- Electrical items in amenities including Microwaves, computers, washing machine, dryer and air conditioners
- Pumps used across the site
- Lighting (LED lighting used across the site and sensor lights utilised in admin)
- Maintenance activities

## 20.3. Waste to Landfill

The site is designed as a protein recovery plant and its main objective is to make usable materials from by-products of the chicken meat industry. The site is also conscious of the materials that are sent to landfill and monitors the Tonnes of material that are sent to landfill on a weekly basis. The site maintains a target of waste to landfill and is continually trying to improve in this area.

#### 20.4. Performance of Waste Water Treatment

The site maintains a register of the weekly results of the waste water discharged from the site. Corrective actions and continual improvements are made to the operation of this system to obtain optimum results.

## 20.5. Site Incidents and Complaints

The site maintains a register of the incidents and complaints that have occurred on or been received by the site. The number and type of incidents is used to target improvement and corrective actions for the future.

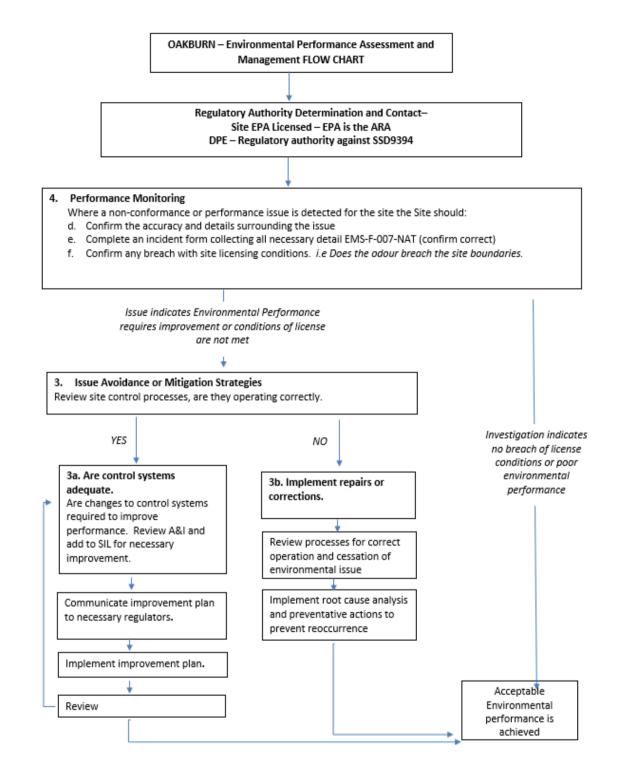
#### 20.6. Improving Environmental Performance

The Site will use the below flow chart to manage identified environmental issues. The flow chart will enable the site to continually improve environmental performance through the identification off issues, rectification and prevention of future issues.

The identified performance improvement areas will be added to the

sites aspects and impacts register. The top 5-10 items are reviewed on a regular basis and improvements made where possible. Impacts are then reviewed and new items are able to be added to the Significant impacts list for improvement. See the sites OAKBURN EMS Hub – SIL and EMP's

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 27 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	



## 21. Review and Reporting

Data and environmental performance are reviewed regularly throughout the year. Systems of tracking and graphing are employed for key environmental parameters to be managed for the site. An annual report is generated for Key EMS KPI's.

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 28 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

33

The OAKBURN Operational Environmental Management Plan shall be reviewed biannually or in the event of significant change in accordance with SSD9394, PART C Environmental Management Reporting and Auditing Conditions; C11, C12 & C13.

Internal audits shall also be performed of the EMS system for the site on a 6monthly basis in accordance with the ISO14001:2015 standard and shall include a review of SIL and EMP's.

Below table shows reports that are required for the site with the authority responsible and the Baiada employee responsible for completion.

Type of Report	Frequency	Government Authority	Responsible Person
National Pollutant Inventory	Annual – Due 30 September	Local State NPI office. To date this site has been under the threshold, but annual checks need to be done in August to verify that this is still exempt from reporting	Site Manager
Australian Packaging Covenant Action Plan	Three year action plans – Due when expired	APC Covenant Committee	Environment & Sustainability Manager
Australian Packaging Covenant Annual Report	Annual – Due September	APC Covenant Committee	Environment & Sustainability Manager
Backflow Calibration	Annual – Due April	Tamworth Regional Council	Site Manager
Trade Waste Figures	Monthly	Tamworth Regional Council	Site Manager
AFSS	Annual – Due April	Tamworth Regional Council & Fire Brigade	Site Manager
NGER	Annual - July	Collect site information and send to National EMS Co-Ord & E&SM	Site Manager
NGER	Annual – Due October	Clean Energy Regulator	Environment & Sustainability Manager
Pressure Vessels	Annual – Due March	WorkCover NSW	Maintenance Manager
Flow Meter	Annual – Due July	Tamworth Regional Council	Site Manager
PIRMP	Annual before 30 <sup>th</sup> Aug	Drill only	Site Manager
EPL – Annual Return	Annual 18 <sup>th</sup> March	EPA	Site Manager
Compliance Report	Annual – 19 Mar to 18 Mar	DPIE	Site Manager
Independent Environmental Audit	3 yearly - Nov	DPIE	Site Manger / Environment &

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 29 of
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

(IEA)			Sustainability Manager
Site Annual KPI Report	Annual July	Baiada Internal Report	Site Compliance Staff

#### 22. Baseline Data

Baseline data for the site has been collected weekly since the plant began operation in 2015 and has been tracked and monitored on a weekly basis over the last 7 years, see Figure 1-7 below. The rendering plant operation will be used as baseline data for the Integrated Facility on its commencement of operation.

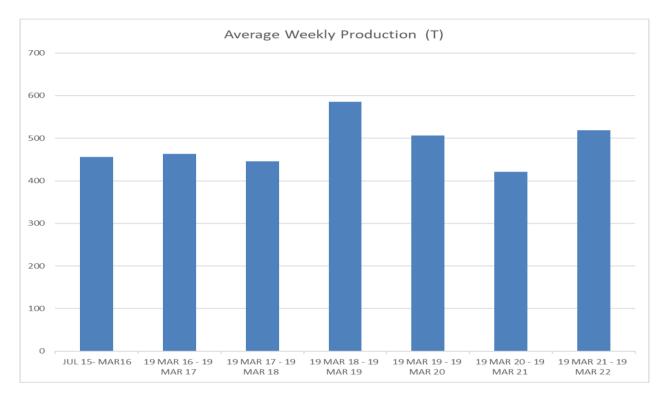
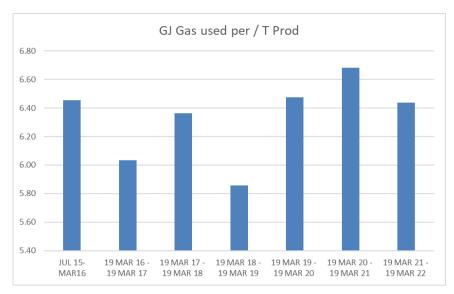
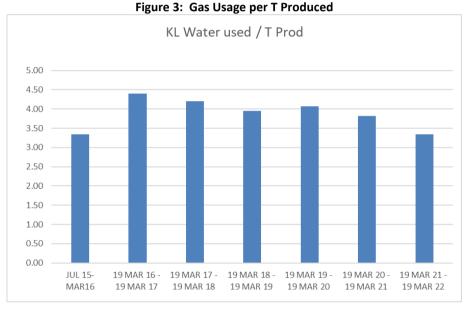


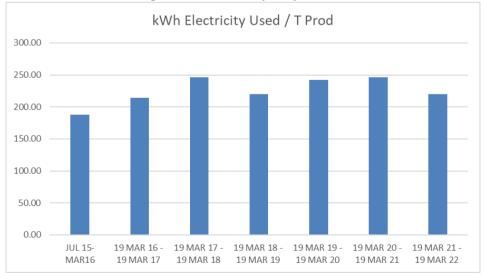
Figure 2: Average Weekly Production (T)

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 30 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	





#### Figure 4: Water used per T produced





Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 31 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

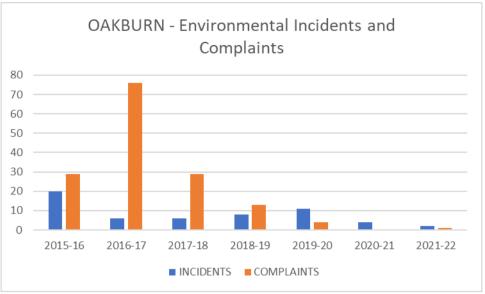


Figure 6: Environmental Incidents and Complaints

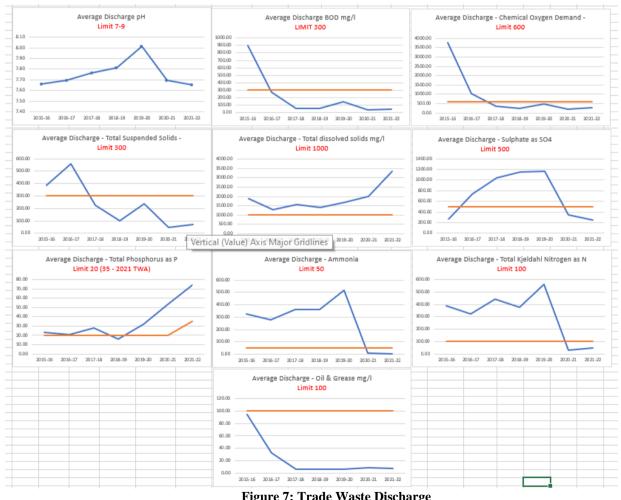


Figure 7: Trade Waste Discharge

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 32 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	

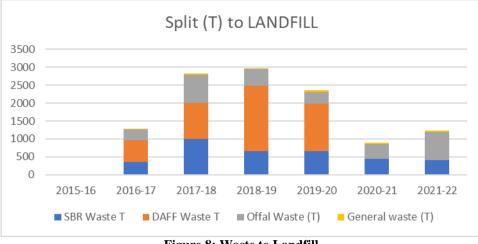


Figure 8: Waste to Landfill

## 23. History of Amendments

Ref	Amend	Type of Amendment	By Whom	Storage
No.	Date			
V01	24.03.16	Document written	Livestock & Compliance Officer	Lotus Notes
V02	07.04.17	Minor issues with content to correct for amended procedures during the last 12 months	Oakburn Admin and Compliance	Lotus Notes
V03	11.10.17	Reference to the Odour, Solid and Liquid Waste and Energy efficiency plans made to avoid duplication of information.	Oakburn Admin and Compliance	Lotus Notes
V04	15.11.19	Added to ELO and document reviewed, minor changes	Oakburn Admin and Compliance	ELO
V05	24.11.20	Reviewed minor corrections and amendments	Oakburn Admin and Compliance	ELO
V06	October 2021	Amendment in line with new SSD9394 and its requirements. Some management plans absorbed back into the operations Manual	Oakburn Admin and Compliance	ELO
V07	March 2022	Amended in line with opportunities for improvement in the 2021 IEA and more fully covered the requirements of the plan for future issues	Oakburn Admin and Compliance	ELO
V08	Sept 2022	Amended in line with comments from DPE April – Aug 2022	Oakburn Admin and Compliance	ELO

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019	
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 2022126	
Authorised By:	Paul Grima	Manager	Date: 2022126	Page 33 of 33
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018	