



**Baiada**

# **OAKBURN-Environmental Operations 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: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 1 of 25 Issue Date: 31/08/2018

1.	STAGED APPROACH TO THE OEMP .....	4
2.	PURPOSE .....	4
3.	KEY ROLES AND RESPONSIBILITIES .....	4
4.	REFERENCES .....	4
5.	COMMUNICATION .....	5
5.1.	Baiada Website .....	5
5.2.	Communication with Stakeholders .....	5
5.2.1.	Neighbours and Nearby Residents .....	5
5.2.2.	Customers .....	5
5.2.3.	Legislative Stakeholder .....	5
5.3.	Complaints and Incidents .....	5
5.3.1.	Dispute Resolution .....	5
6.	SITE EMERGENCIES .....	6
7.	BASELINE DATA .....	6
8.	REVIEW AND REPORTING .....	7
9.	WASTE MANAGEMENT .....	9
9.1.	Emergency Disposal and Biosecurity Protocol .....	9
9.2.	Solid Waste .....	9
9.2.1.	Classification of Waste .....	9
9.2.2.	General Waste .....	9
9.2.3.	Putrescible Waste .....	9
9.2.4.	Waste Packaging Materials .....	10
9.2.5.	Disposal of Maintenance / Electricians waste .....	10
9.2.6.	Recycling .....	10
9.2.7.	Management of Waste Bins located outside the factory .....	10
9.2.8.	Management of Obsolete material on site .....	10
9.2.9.	Sludge Disposal .....	10
9.2.10.	Monitoring .....	11
9.2.11.	Corrective Actions .....	11
9.3.	Liquid Waste .....	12
9.3.1.	Water Management Plan .....	12
9.3.2.	Rendering Management of Liquid waste and Contingencies .....	12
9.3.3.	Management of Risk of Spills to water .....	16
9.3.4.	Evaporation Pond Management Plan .....	18
10.	NOISE MANAGEMENT .....	20
10.1.	Managing Noise .....	20
10.2.	Construction Environmental Management Plan .....	20
10.3.	Noise Limits .....	20
10.4.	Monitoring and Corrective Action .....	20
11.	MANAGEMENT OF AIR QUALITY .....	21
11.1.	Discharges to Air .....	21
11.2.	Use of Diesel / Generation of Diesel Fumes .....	21
11.3.	Swales and Retention Buns .....	21
11.4.	Potential Leak from Refrigeration Equipment .....	21
11.5.	Potential for Gas Leak .....	21
11.6.	Oakburn Odour Management Plan .....	22
12.	UTILITY EFFICIENCY – WATER, GAS, ELECTRICITY .....	23
12.1.	Use of Water .....	23
12.2.	Use of Gas .....	23
12.4.1.	Monitoring and Recording .....	24
12.4.2.	Efficiency Programs .....	24
12.4.3.	Reporting .....	24
13.	LANDSCAPING .....	24

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018

13.1. Landscape Management Plan .....	24
13.2. Rendering Landscaping .....	24
14. GENERAL.....	24
14.1. Housekeeping .....	24
14.2. Airport .....	25
14.2.1. Bird Monitoring .....	25
14.2.2. Lighting.....	25
14.2.3. Finishes .....	25
15. HISTORY OF AMENDMENTS .....	25

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 3 of 25 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 Condition A15 SSD9394. 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 meet 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. References

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

- Protection of the Environment Operations Act 1997 (POEO)
- Statement of Environmental Effects – Bath, Stewart & Associates 2008
- Pesticides Act 1999
- Dangerous Goods Notification (NSW)
- Protection of the Environment Operations (Clean Air) Regulation 2021
- Development Approval SSD9394 and any other relevant approvals
- Site Environmental Protection Licence 7566
- Site Trade Waste Agreement with Tamworth Regional Council
- Environmental Impact Statement – PSA 2019
- *OAKBURN - Odour Management Plan – Issue:5 19 MAY 2021- APPROVED*
- *OAKBURN - Bird Life Monitoring Plan – 19 MAY 2021*

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 4 of 25 Issue Date: 31/08/2018

## 5. Communication

### 5.1. Baiada Website

The Baiada Poultry Pty Ltd website will be updated in line with relevant conditions of the SSD9394

### 5.2. Communication with Stakeholders

#### 5.2.1. 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 affects 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.

#### 5.2.2. Customers

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

#### 5.2.3. 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.

STAGE 1: Existing Rendering Plan

STAGE 2: Commencement of Construction of Processing Plant (with Ongoing Rendering Operation)

STAGE 3: Processing and Rendering Operation

### 5.3. 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 conditions C14-19 of the Development Approval SSD9394 where the sites PIRMP procedures are implemented

#### 5.3.1. 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

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 5 of 25 Issue Date: 31/08/2018

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.

## **6. 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

## **7. Baseline Data**

Baseline data for the site has been collected weekly since the plant began operation in 2015 and is tracked and monitored on a weekly basis.

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 6 of 25 Issue Date: 31/08/2018

## 8. Review and Reporting

Data and environmental performance is 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.

The site undertakes an Annual Compliance Report (previously AEMR) as per the requirements of Development Approval SSD9394. This report reviews all areas of the site's environmental performance and will be completed to the satisfaction of the planning secretary and lodged onto the planning portal in accordance with development approval.

The site also will undertake an Independent Environmental Audit (IEA) every 3 years commencing in 2021 which will review the conditions of approval for the site. The site will provide the report and feedback to the report to the Planning secretary via the portal.

The Environmental Operations Manual shall be reviewed biannually or in the event of significant change.

Internal audits shall also be performed of the EMS system for the site on a 6monthly basis in accordance with the ISO standard.

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	Clean Energy Regulator	Environment &

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 7 of 25 Issue Date: 31/08/2018

	October		Sustainability Manager
Pressure Vessels	Annual – Due March	WorkCover NSW	Maintenance Manager
Thermostatic Mixing Valves	Annual – Due April	WorkCover NSW, Australian Standard	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 18 <sup>th</sup> March	EPA	Site Manager

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018

## 9. Waste Management

### 9.1. Emergency Disposal and Biosecurity Protocol

An Emergency Disposal and Biosecurity Protocol must be developed in accordance with Condition B65 of SSD9394 prior to the commencement of the operation of the project and needs to be included as part of this Operations Manual.

### 9.2. Solid Waste

#### 9.2.1. Classification of Waste

The classification of Oakburn waste has been performed referencing the EPA issued Waste Classification Guidelines: Part 1 Classification of Waste. The different waste types are listed, tracked and managed through the Waste Classification Tab – OAKBURN EMS Hub.

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 by-products 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.

#### 9.2.2. 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

#### Disposal of General Waste

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.

#### 9.2.3. 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

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 9 of 25 Issue Date: 31/08/2018

putrescible waste disposed to landfill are recorded in the EMS Hub located on the Oakburn server.

#### **9.2.4. 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.

#### **9.2.5. 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
- Light globes and fluorescent tubes are recycled through an approved waste handler. All lights are retained on site and sent to the processing plant or Tamworth Regional Council Recycling facility to be included in the light recycling.

#### **9.2.6. 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
- Non-returnable timber pallets are recycled on site (used for storage if items)

#### **9.2.7. 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.

#### **9.2.8. 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.

#### **9.2.9. 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.

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 10 of 25 Issue Date: 31/08/2018

### **9.2.10. 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.

### **9.2.11. 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.

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.

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 11 of 25 Issue Date: 31/08/2018

## 9.3. Liquid Waste

### 9.3.1. Water Management Plan

A water Management plan must be developed in accordance with Condition B28 of SSD9394 prior to the commencement of the operation of the project and needs to be included as part of this Operations Manual.

### 9.3.2. 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.

#### 9.3.2.1. 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.

#### 9.3.2.2. Waste Water Management

##### 9.3.2.2.1. 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.

##### 9.3.2.2.2. CAL

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

##### 9.3.2.2.3. 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.

##### 9.3.2.2.4. Clear Wells

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

##### 9.3.2.2.5. Discharge to Sewer

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 12 of 25 Issue Date: 31/08/2018

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.

#### **9.3.2.2.6. 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.

#### **9.3.2.2.7. Monitoring**

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

#### **9.3.2.2.8. 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.

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

#### **9.3.2.3.1. 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

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

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 13 of 25 Issue Date: 31/08/2018

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

#### **9.3.2.3.2. 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

#### **9.3.2.3.3. 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.

#### **9.3.2.3.4. SBR**

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.

#### **9.3.2.3.5. 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.

#### **9.3.2.3.6. 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.

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 14 of 25 Issue Date: 31/08/2018

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.

#### **9.3.2.3.7. Discharge to Sewer**

The water being discharged from the SBR is sent to a 100 KI discharge tank ready to be pumped to the Tamworth Regional Council water treatment facility. Discharge is monitored and spare pumps are kept on site.

The sewer pipeline runs to the sewer connection point at the truck stop on the Oxley Highway. The external pipe work at Oakburn is generally protected against impact, and could only rupture due to failure. The pipeline is driven weekly to detect any leaks and this check is documented

Quality of water discharged to sewer is monitored weekly by TRC's laboratory. Results of this analysis are provided to the site and are tracked and stored on the EMS Hub.

#### **9.3.2.3.8. 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.

#### **9.3.2.4. Other Liquid Wastes**

At times various wet wells and pits require cleaning due to build-up of non-desirable 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

#### **9.3.2.5. Monitoring and Corrective Action**

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 15 of 25 Issue Date: 31/08/2018

- 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 non-compliance 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.

### **9.3.3. Management of Risk of Spills to water**

#### **9.3.3.1. 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) 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

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 16 of 25 Issue Date: 31/08/2018

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

### **9.3.3.2. 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.

### **9.3.3.3. 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 staff, and as a minimum, management, should hold a Chem-Cert certificate, or equivalent

### **9.3.3.4. 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.

### **9.3.3.5. 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

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 17 of 25 Issue Date: 31/08/2018

environmental training program. If a staff vehicle was involved, the owner would be informed and expected to have the oil leak repaired

#### **9.3.3.6. 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.

#### **9.3.3.7. External Pipe Work Posing Threat to stormwater systems**

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).

#### **9.3.3.8. Storage of water on site**

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.

#### **9.3.3.9. 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.

#### **9.3.3.10. 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.

#### **9.3.3.11. 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.

### **9.3.4. Evaporation Pond Management Plan**

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 18 of 25 Issue Date: 31/08/2018

An Evaporation Pond Management Plan must be developed in accordance with Condition B26 of SSD9394 prior to the commencement of the operation of the project and needs to be included as part of this Operations Manual.

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Issue Date: 31/08/2018

## 10. Noise Management

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

### 10.1. 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

### 10.2. Construction Environmental Management Plan

A CEMP must be developed in accordance with relevant conditions of the development approval SSD9394 Conditions C2-C4 and include the below:

- Erosion and Sediment Control Plan
- Construction Noise Management plan (As per Condition B4)
- Construction Traffic Management Plan (as per condition B47)
- Community Consultation and Complaints Handling

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

### 10.3. Noise Limits

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

- 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.

### 10.4. 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.

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 20 of 25 Issue Date: 31/08/2018

## 11. 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

### 11.1. 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

### 11.2. Use of Diesel / Generation of Diesel Fumes

The use of fuels needs to be streamlined to minimise use where possible as these are non-renewable resources and also the use of these generates carbon monoxide and other fumes which are emitted to the atmosphere.

Diesel on this site is only used in the operation of vehicles coming onto site including staff vehicles, delivery trucks and auxiliary machinery used for maintenance tasks

### 11.3. Swales and Retention Buns

Swales and the retention bunds (x2) are checked weekly during the External site inspection audit for pooling or water. These are emptied after rain events and are otherwise kept locked closed. If water is present in these areas for a period of time there is a potential for stagnant water and possible odour.

### 11.4. 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 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

### 11.5. 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

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 21 of 25 Issue Date: 31/08/2018

This unit has a gas burner to allow process of blood. The unit is serviced 12 monthly 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.

#### **11.6. Oakburn Odour Management Plan**

In accordance with the Development approval Condition B12 the sites Odour management Plan has been updated to the satisfaction of the Secretary. This needs to be updated prior to commencement of the operation of the project.

The Odour Management Plan needs to be reviewed in conjunction with this section of the Sites Operations Manual.

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 22 of 25 Issue Date: 31/08/2018

## **12. Utility Efficiency – Water, Gas, Electricity**

The site aims to minimise water use and control gas and electricity usage in order to be as efficient as possible.

### **12.1. 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.

### **12.2. 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.

See below list for some of the key energy usage areas for the site.

- Processing Line equipment – Blood line burner, driers, hydrolyser, batch cooker, pre-heater

### **12.3. 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.

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

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 23 of 25 Issue Date: 31/08/2018

## **12.4. Rendering Water, Energy and Gas Efficiency**

### **12.4.1. Monitoring and Recording**

Water, gas and electricity usage is monitored at the same time weekly and recorded in the Site KPI spreadsheet. The site monitors site total water usage and water usage through key areas of the site. Total Water use calculated per finished tonne produced is used to benchmark water use over time.

To ensure the water meter/s are reading correctly, the meter is tested every 12 months by an external contractor.

Gas and Electricity are also monitored against T of Finished product produced on a weekly basis, tracked and reported against site targets

### **12.4.2. Efficiency Programs**

The site identifies efficiency programs through the sites aspects and impacts register. The top 10-15 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 EMS Hub – SIL and EMP's

### **12.4.3. Reporting**

An annual report is completed each year which shows the sites performance against set targets. A review of SIL and EMP's is included in the 6 monthly internal audits and external certification audits.

## **13. Landscaping**

### **13.1. Landscape Management Plan**

A landscape management plan is required to be completed prior to commencement of operation of the project in accordance with Condition B72 of the development consent. This should also form part of the Sites Operations Manual.

### **13.2. 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 EMS Hub Significant Impacts list.

Weeds are managed by the sites Groundkeeper, any weed spraying that is performed is done in conjunction with 8.3.3.3 Application of Pesticides. 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.

## **14. General**

### **14.1. Housekeeping**

Good housekeeping management practices will compliment good environmental management and will not only enhance the site appearance, but will benefit the

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 24 of 25 Issue Date: 31/08/2018

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.

## 14.2. Airport

### 14.2.1. Bird Monitoring

In accordance with condition B63 of the Development consent a site Bird life Monitoring plan has been developed. This needs to be considered with this section of the Operations Manual.

### 14.2.2. Lighting

All lighting should be designed and installed to prevent distraction to the nearby airport.

### 14.2.3. Finishes

In accordance with condition B62 of the Development consent all surfaces on the development need to be non-reflective to avoid distraction of air crews.

## 15. History of Amendments

Ref No.	Amend Date	Type of Amendment	By Whom	Storage
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

Prepared By:	Sherilee Stewart	Oakburn Admin and Compliance	Date: 30/07/2019
Checked By:	Grant White	National Environment & Sustainability Manager	Date: 10/12/2021
Authorised By:	Paul Grima	Manager	Date: 10/12/2021
Template No:	BAI-TMP-016-NAT	Issue No: 1	Page 25 of 25 Issue Date: 31/08/2018