

# Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Sarval (Hartshill) Limited

Hartshill Rendering Plant Mancetter Road Nuneaton Warwickshire CV10 0TA

Variation application number EPR/BS5959IE/V004

Permit number EPR/BS5959IE

## Hartshill Rendering Plant Permit number EPR/BS5959IE

#### Introductory note

#### This introductory note does not form a part of the permit

The following notice gives notice of the variation and consolidation of an environmental permit.

Permit EPR/BS5959IE was issued by the Environment Agency in July 2006 for the animal byproducts (ABP) rendering facility, an associated effluent treatment plant and a proposed Integrated Energy Recovery Facility (IREF) on-site, located at the premises of DeMulder & Sons Limited (PDM), Hartshill, Nuneaton, Warwickshire.

This variation encompasses a company name change; modification to the currently permitted activities and the introduction of new equipment; to improve the efficiency of the process, improve environmental control in relation to odour and improve the treatment of process effluent. These modifications will not increase the overall capacity of the rendering facility.

The technologies to be installed include:

#### 35tph pre-evaporation plant

Improving the overall energy efficiency of the rendering process by utilising waste heat from the main dryer to pre-treat raw material, with associated benefits for reductions in emissions. It is estimated that overall energy consumption of the rendering plant will be reduced by approximately 25% as a result of incorporating the pre-evaporator.

#### Upgrade to the existing effluent treatment plant

The upgrade involves a greater flow rate which will take into account any variations in plant load. The upgrade to the effluent treatment plant is to accommodate any additional increases in the effluent treatment capacity required at the rendering facility.

#### Installation of a Regenerative Thermal Oxidiser (RTO)

Concentrated odours will be ducted via a new water scrubber and then to a natural gas fired RTO, which will provide a constant capacity for odour treatment. The design of the RTO is a three canister system allowing for no possibility of contaminated air bypassing the RTO. It is expected that this system will have an odour abatement efficiency of ~99.7%. Fluegas from the RTO will be discharged to atmosphere via a free standing 22m high stack.

Additionally, the site name and company / operator name has been changed to Sarval (Hartshill) Limited. There is no change to the control of the facility or the operator but for the aforementioned name change, and the operator has confirmed that there will be no significant change to the site management systems.

As part of this variation, the operator applied through the partial surrender process, to remove a number of scheduled activities that are no longer relevant to the site, as plant and process have been decommissioned and/or removed:

- Removal of the gas-fired CHP plant;
- Removal of the 3MWth fluidised bed combustor; and,
- Cancelation of the Integrated Energy Recovery Facility (IREF).

#### Installation background and summary

The facility is an animal by-products (ABPs) rendering processor, which accepts predominantley Category 3 ABPs. The process involves size reduction, evaporation of water and sterilisation of animal by-products to produce meat and bone meal (MBM) and tallow. Category 3 ABP's arise from material which has previously been passed fit for human consumption.

Up to 250,000 tonnes of raw materials per year (ABPs) are delivered onto site in dedicated vehicles. All vehicles delivering animal by-products are fully enclosed vehicles or sheeted bulk tipper trailers or skip wagons.

Raw materials arriving at the site are directed to the Raw Material Reception Building where their contents are tipped directly into one of three receiving hoppers. Raw material waiting to unload is kept in covered vehicles until directed to the Raw Material Reception Building. All vehicles and containers are hosed out within the Raw Material Reception Building before being cleaned in the trailer wash area.

From the raw material receiving hoppers the material is screw conveyed to the crushers and reduced down to a particle size of 30mm. The crushed material can then be pumped to Drier A, Drier B and the pre-evaporation plant via the feed control bin. The pre-evaporation plant further reduces particle size down to 20mm prior to pre-heating and pre-pressing to separate water, fat and solids. Moisture is removed from the raw material indirectly by the steam provided by the three boilers or waste heat from the site driers. The pre-evaporation plant reduces the moisture content of the feed to the driers by utilising their waste heat thereby reducing energy use per tonne processed. Driers A & B and the pre-evaporation plant can process raw materials at a maximum combined rate of 47 tonnes per hour.

Moisture evaporated off from the raw material drying processes is condensed via air cooled condensers and cooling towers before treatment in the effluent treatment plant and discharged to sewer.

The sterilised product is conveyed from Driers A & B to the press system where the liquid (tallow) and solid (meat and bone meal (MBM) are separated. The tallow is settled and filtered and stored in the tallow farm tanks prior to despatch off-site in road tankers for further uses; such as biodiesel or renewable energy production.

The MBM is cooled, ground and conveyed to storage silos prior to being loaded into dedicated trailers. Loaded trailers can then be dispatched off-site for use in petfood production for example, or unloaded in the Meal Storage Building prior to sale.

High strength odours from process equipment are treated in the Regenerative Thermal Oxidiser (RTO). The steam boilers and an acid-dosed scrubber followed by carbon filter (the PASCF system) are also available to treat odour.

Air from the entire building envelope is extracted to Scrubbing Towers 1, 2 and 3 where it is treated with 'scrubbing' liquids; sulphuric acid, caustic liquor and sodium hypochlorite, before being discharged to atmosphere.

The site operates an Environmental Management System accredited to ISO 14001.

The schedules specify the changes made to the permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit				
Description	Date	Comments		
Application EPR/BS5959IE/A001	Received 27/08/2004			
Additional information received	Received 30/03/2006			
Schedule 4 Notice issued on 09/03/2006	Response received on 30/03/2006			

Status log of the permit					
Description	Date	Comments			
Additional information received	Received 22/06/2006				
Permit issued (EPR/BS5959IE)	12/07/2006				
Variation application (EPR/BS5959IE/V002)	Received 28/08/2007				
Variation issued	27/09/2007				
Variation application EPR/BS5959IE/V003	Duly made 11/06/2013				
Variation issued	27/08/2013				
Notification of change of company name	Received 06/03/2014	The company name has been changed from DeMulder & Sons Ltd to Sarval (Hartshill) Limited.			
Variation application EPR/BS5959IE/V004	Received 06/03/2014	See Introductory Note above.			
Request for Further Information 11/04/14	Duly Made 28/04/2014	Reciept of requested information.			
Schedule 5 Notice served	Issued 28/05/2014	Receipt of final complete response 06/06/2014			
Schedule 5 Notice served	lssued 02/07/2014	Receipt of final complete response 29/07/2014			
Schedule 5 Notice served	Issued 08/08/2014	Receipt of final complete response 04/09/2014			
Variation determined EPR/BS5959IE	12/09/14	Varied and consolidated permit issued in modern condition format.			

End of introductory note

## Notice of variation and consolidation

## The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates.

#### Permit number

EPR/BS5959IE

#### Issued to

Sarval (Hartshill) Limited ("the operator")

#### whose registered office is

Ings Road Ings Road Doncaster South Yorkshire DN5 9TL

#### company registration number 00656996

#### to operate a regulated facility at

Hartshill Rendering Plant Mancetter Road Nuneaton Warwickshire CV10 0TA

to the extent set out in the schedules.

The notice shall take effect from 12/09/14

Name	Date
A.J. Nixon	12 September 2014

Authorised on behalf of the Environment Agency

#### Schedule 1

All conditions have been varied by the consolidated permit as a result of the application made by the operator or as a result of upgrading to the current permit template.

#### Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

### Permit

## The Environmental Permitting (England and Wales) Regulations 2010

#### Permit number

EPR/BS5959IE

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BS5959IE/V004 authorising,

Sarval (Hartshill) Limited ("the operator"),

#### whose registered office is

Ings Road Ings Road Doncaster South Yorkshire DN5 9TL

#### company registration number 00656996

#### to operate an installation at

Hartshill Rendering Plant Mancetter Road Nuneaton Warwickshire CV10 0TO

to the extent authorised by and subject to the conditions of this permit.

Name	Date	
A.J. Nixon	12 September 2014	

Authorised on behalf of

## Conditions

#### 1 Management

#### 1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
  - (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
  - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.
- 1.1.4 The operator shall comply with the requirements of an approved competence scheme or other approval issued by the Environment Agency.

#### 1.2 Energy efficiency

- 1.2.1 The operator shall:
  - (a) take appropriate measures to ensure that energy is used efficiently in the activities;
  - (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
  - (c) take any further appropriate measures identified by a review.

#### 1.3 Efficient use of raw materials

- 1.3.1 The operator shall:
  - (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
  - (b) maintain records of raw materials and water used in the activities;
  - (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
  - (d) take any further appropriate measures identified by a review.

## 1.4 Avoidance, recovery and disposal of wastes produced by the activities

- 1.4.1 The operator shall take appropriate measures to ensure that:
  - (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and

- (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
- (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.
- 1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

### 2 **Operations**

#### 2.1 Permitted activities

2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the "activities").

#### 2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in red on the site plan at schedule 7 to this permit.

#### 2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
  - a) If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.3 Waste shall only be accepted if:
  - (a) it is of a type and quantity listed in schedule 2 table S2.2 ; and
  - (b) it conforms to the description in the documentation supplied by the producer and holder.
- 2.3.4 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
  - (a) the nature of the process producing the waste;
  - (b) the composition of the waste;
  - (c) the handling requirements of the waste;
  - (d) the hazardous property associated with the waste, if applicable; and
  - (e) the waste code of the waste.

2.3.5 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

#### 2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

### 3 Emissions and monitoring

#### 3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.

#### 3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
  - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

#### 3.3 Odour

- 3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.3.2 The odour levels at any point on the installation boundary shall not exceed  $1.5OU_E/m^3$ .
- 3.3.3 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
- (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

#### 3.4 Noise and vibration

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
  - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

#### 3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
  - (a) point source emissions specified in tables S3.1, and S3.2.
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.3.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1 and S3.2 unless otherwise agreed in writing by the Environment Agency.
- 3.5.5 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

#### 3.6 Pests

3.6.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not

limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.

- 3.6.2 The operator shall:
  - (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;
  - (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

### 4 Information

#### 4.1 Records

- 4.1.1 All records required to be made by this permit shall:
  - (a) be legible;
  - (b) be made as soon as reasonably practicable;
  - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
  - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
    - (i) off-site environmental effects; and
    - (ii) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

#### 4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:
  - (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
  - (b) the annual production /treatment data set out in schedule 4 table S4.2; and
  - (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
- (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4 ; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.
- 4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter, if during that quarter the total amount accepted exceeds 100 tonnes of non-hazardous waste or 10 tonnes of hazardous waste.

#### 4.3 Notifications

- 4.3.1 (a) In the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately -
  - (i) inform the Environment Agency,
  - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
  - (iii) take the measures necessary to prevent further possible incidents or accidents;
  - (b) in the event of a breach of any permit condition the operator must immediately -
    - (i) inform the Environment Agency, and
    - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
  - (c) in the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (c) any change in the operator's name or address; and
- (d) any steps taken with a view to the dissolution of the operator.
- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
  - (a) the Environment Agency shall be notified at least 14 days before making the change; and
  - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.
- 4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:
  - (a) a decision by the Secretary of State not to re-certify the agreement;
  - (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
  - (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

#### 4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", in which case it may be provided by telephone.

## Schedule 1 - Operations

Activity	Activity listed in	Description of	Limits of specified		
reference	Schedule 1 of the EP Regulations	specified activity	activity		
A1	Section 5.4 A(1)(a)(i)	Effluent treatment plant.	From entry to site drainage system, through the on-site effluent treatment plant, to discharge to sewer. Excluding domestic sewage treatment and discharge.		
A2	Section 6.8 A(2)(a)	Crushing, heating and drying of imported raw material to produce and separate substances suitable for disposal or recovery off- site.	Receipt of raw materials to treatment for disposal or recovery off site or sale of finished products.		
	Directly Associated Acti	vity			
A3	Directly associated activity	Raw material delivery, storage, handling, preparation and transfer, including depackaging.	From delivery to site, offloading, handling and storage.		
A4	Directly associated activity	Fuel and chemical storage and handling	From receipt or production of materials to use in on-site processes.		
A5	Directly associated activity	Waste storage and handling.	From production of waste to storage, handling and dispatch from the Installation.		
A6	Directly associated activity	Three gas fired boilers with a total aggregated thermal input of 27.9 MW <sub>th</sub>	Production of steam for use on site.		
A7	Directly associated activity	Emissions and odour abatement.	Abatement of emissions to air from rendering activities; associated buildings; product and raw material storage buildings, via scubbers and RTO.		
A8	Directly associated activity	Vehicle washing.	On-site washing and cleaning of vehicles.		

Table S1.2 Operating techniques					
Description	Parts	Date Received 27/08/2004			
Application	The response to Section B2 of the Application Form given in section B2.1 to B2.11 inclusive of the Application including the additional information received on the 23 January 2006 and 22 June 2006.				
Application for variation EP3931UM (EPR/BS5959IE/V002)	The response to Section C2 of the Application Form given in Sections C2.1 to C2.11 inclusive of the Application for variation dated 23 August 2007.	28/08/2007			
Application for variation EPR/BS5959IE/V003	The response to question 3 in application form C3. Variation application supporting information for forms C2 and C3.	11/06/2013			
Variation Application EPR/BS5959IE/V004	The response to questions 2b, 5c,5a in part C2 of the application form. Table 3, Table 4, Table 5, and responses to questions 4 and 6 in part C3 of the application form . "Proposed Changes" section and Section 3 of supporting document "Application for a Variation to PPC Permit EPR/BS5959IE/V004". Section 4 of the "Response to request for further information dated 11 <sup>th</sup> April 2014" document.	28/04/2014			
Response to Schedule 5 Notice (served on 28/05/2014).	Response to Question a)	09/06/2014			
Response to Schedule 5 Notice (served on 08/08/2014).	Response to Schedule 5 Question a)	04/09/2014			

Table S1.3	Improvement programme requirements	
Reference		Date
IC4	The Operator shall submit proposals, including a time scale for implementation, for the reduction of releases of odour with the objective of not exceeding a maximum of 1.5 OUE (1-hour average, 98th percentile) at the Installation boundary. The Operator shall also make comment on the feasibility of further reducing odour releases to achieve a maximum of 0.5 OUE (1-hour average, 98th percentile) at the Installation boundary. The proposals shall have regard to the "Secretary of State's Guidance for the A2 Rendering Sector"	
IC5	The Operator shall carry out a water efficiency audit of the Installation. The audit shall consider the requirements of the Agency Guidance Note IPPC S6.10, August 2003, Section 2.4.3, and shall provide a breakdown of significant water use by department or activity and shall establish the current Installation performance (for example litre water/kg of raw materials) and water efficiency objective(s) for this Installation. As part of the audit, the Operator shall have specific regard to the options available for recycling of wastewater. A summary of the audit shall be sent to the Agency in writing.	
IC7	The operator shall submit a proposal to the Environment Agency for an emission monitoring programme relating to emissions to air from the Regenerative Thermal Oxidiser (RTO) for the following parameters: oxides of nitrogen; oxides of sulpher; carbon monoxide and volatile organic compounds.	date of

## Schedule 2 - Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels			
Raw materials and fuel description	Specification		
Tallow	Meeting the 'End of Waste' standard as agreed with the Environment Agency in the letter dated 11/11/2013, reference DOW130706		

Table S2.2 Permitted waste types and quantities for use in the production process				
Maximum quantity	Maximum annual process limit of 250,000 tonnes/yr			
Waste code	Description			
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING			
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing			
02 01 02	animal-tissue waste			
02 02	Waste from the preparation and processing of meat, fish and other foods of animal origin			
02 02 02	animal-tissue waste			
02 02 03	materials unsuitable for consumption or processing			

## Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 [Point A1 on site plan in Schedule 7]	Scrubber Tower Number 1	No parameters set	No limit set	-	-	-
A2 [Point A2 on site plan in schedule 7]	Scrubber Tower Number 2	No parameters set	No limit set	-	-	-
A3 [Point A3 on site plan in schedule 7]	Scrubber Tower Number 3	No parameters set	No limit set	-	-	-
	Boiler Number 1:- when burning tallow.	Particulates	50 mg/m3	Periodic over minimum 4- hour period.	Bi-annual	BS EN 13284-1
A4 [Point A4 on site plan in schedule 7]	Boiler Number 1	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	450 mg/m <sup>3</sup>	Periodic over minimum 4- hour period	Bi-annual	ISO 10849 or BS ISO 11564
	Boiler Number 1	Carbon monoxide	150 mg/m <sup>3</sup>	Periodic over minimum 4- hour period	Bi-annual	ISO 12039
	Boiler Number 2:- when burning tallow	Particulates	50 mg/m <sup>3</sup>	Periodic over minimum 4- hour period.	Bi-annual	BS EN 13284-1
A5 [Point A5 on site plan in schedule 7]	Boiler Number 2	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	450 mg/m <sup>3</sup>	Periodic over minimum 4- hour period	Bi-annual	ISO 10849 or BS ISO 11564
	Boiler Number 2	Carbon monoxide	150 mg/m <sup>3</sup>	Periodic over minimum 4- hour period	Bi-annual	ISO 12039
A7 [Point A7 on site plan in schedule 7]	Boiler Number 4:- when burning tallow	Particulates	50 mg/m <sup>3</sup>	Periodic over minimum 4- hour period.	Bi-annual	BS EN 13284-1

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A7 [Point A7 on site plan in schedule 7]	Boiler Number 4	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	450 mg/m <sup>3</sup>	Periodic over minimum 4- hour period	Bi-annual	ISO 10849 or BS ISO 11564
	Boiler Number 4	Carbon monoxide	150 mg/m <sup>3</sup>	Periodic over minimum 4- hour period	Bi-annual	ISO 12039
A11 [Point A11 on site plan in schedule 7]	Regenerative Thermal Oxidiser	No parameters set	No limit set	-	-	-

Note 1: certification to the MCERTS performance standards indicates compliance with BS EN 15267-3

Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 Discharge to soakaway via swale as shown on site plan in schedule 7.	Uncontaminated storm water drainage; adjacent to Meal Store - discharge to swale.	-	-	-	-	-
W2 Discharge to soakaway via swale as shown on site plan in schedule 7.	Uncontaminated storm water drainage; Access road discharge to swale.	-	-	-	-	-

Table S3.3 Point Source emissions to sewer – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
S1 Discharge to foul sewer as shown on site plan in schedule 7	Discharge from the Effluent Treatment Plant; MBM Cooling Tower overflow; boiler blowdown; Scrubbing Tower overflow.	-	-	-	-	-

## **Schedule 4 - Reporting**

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Particulates	A4, A5 & A7	Every 6 months	01 January, 01 July
Oxides of Nitrogen	A4, A5 & A7	Every 6 months	01 January, 01 July
Carbon Monoxide	A4, A5 & A7	Every 6 months	01 January, 01 July

Table S4.2: Annual production/treatment		
Parameter	Units	
Total raw materials received and processed	Tonnes	
Electrical energy used on installation	kWh	
Steam used on installation	Tonnes	

Table S4.3 Performance parameters		
Parameter	Frequency of assessment	Units
Water usage	Annually	m <sup>3</sup> /tonne of raw materials
Energy usage	Annually	MWh/tonne of raw materials

Table S4.4 Reporting forms			
Media/parameter	Reporting format	Date of form	
Air	Agency form BS5959IE/ PER or other form as agreed in writing by the Environment Agency	8 September 2014	
Water usage	Agency form BS5959IE / WU1 or other form as agreed in writing by the Environment Agency	1 July 2006	
Energy usage	Agency form BS5959IE / EU1 or other form as agreed in writing by the Environment Agency	1 July 2006	
Other performance indicators	Agency form BS5959IE / PP1 or other form as agreed in writing by the Environment Agency	1 July 2006	

## **Schedule 5 - Notification**

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

#### Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

## (a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution

To be notified immediately		
Date and time of the event		
Reference or description of the		
location of the event		
Description of where any release		
into the environment took place		
Substances(s) potentially		
released		
Best estimate of the quantity or		
rate of release of substances		
Measures taken, or intended to		
be taken, to stop any emission		
Description of the failure or		
accident.		

(b) Notification requirements for the breach of a limit		
To be notified immediately		
Emission point reference/ source		
Parameter(s)		
Limit		
Measured value and uncertainty		
Date and time of monitoring		
Measures taken, or intended to		
be taken, to stop the emission		

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements for the detection of any significant adverse environmental effect		
To be notified immediatley		
Description of where the effect on		
the environment was detected		
Substances(s) detected		
Concentrations of substances		
detected		
Date of monitoring/sampling		

#### Part B - to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to	
prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify,	
limit or prevent any pollution of the environment	
which has been or may be caused by the emission	
The dates of any unauthorised emissions from the	
facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

\* authorised to sign on behalf of the operator

## **Schedule 6 - Interpretation**

"accident" means an accident that may result in pollution.

*"authorised officer"* means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

*"application"* means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

*"background concentration"* means such concentration of that substance as is present in:

- for emissions to surface water, the surface water quality up-gradient of the site; or
- for emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge.

*"disposal"*. Means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

"emissions to land" includes emissions to groundwater.

*"EP Regulations"* means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

*"emissions of substances not controlled by emission limits"* means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission or background concentration limit."

*"groundwater"* means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

*"hazardous property"* has the meaning given in Schedule 3 of the Hazardous Waste (England and Wales) Regulations 2005 No.894 and the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138).

*"Industrial Emissions Directive"* means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"quarter" means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

*"recovery"* means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

"Waste code" means the six digit code referable to a type of waste in accordance with the List of Wastes (England)Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

*"Waste Framework Directive" or "WFD"* means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste

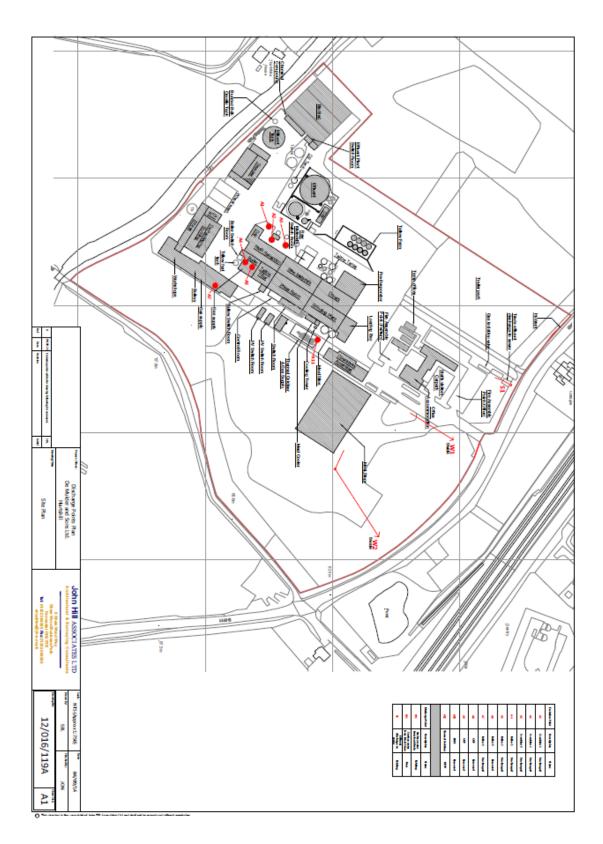
"year" means calendar year ending 31 December.

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- (a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- (b) in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content

## Schedule 7 - Site plan



END OF PERMIT