

## Natural Resources Wales permitting decisions

### Variation and Consolidation of a bespoke Permit – Dunbia (UK)

We have decided to issue a Natural Resources Wales initiated variation and consolidated permit for Cross Hands Meat Processing Plant in Cross Hands operated by Dunbia (UK).

The permit number is EPR/BU8002IT.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

The permit has been varied following the publication of the revised Best Available Techniques (BAT) Reference Documents (BREF) for Food, Drink and Milk Industries. The associated BAT conclusions to this document were published on 4 December 2019 in the Official Journal of the European Union.

This variation incorporates the changes required by the Industrial Emissions Directive following a statutory review of permits in the Food, Drink and Milk sector. These include the amendment of the wording of several permit conditions relating to notifications, changes to emissions limits and monitoring requirements.

We are satisfied that the operator will be compliant with the published BAT conclusions which will apply from 4 December 2023.

### Purpose of this document

This decision document:

- explains how we have carried out our statutory review of the Operator's Permit;
- why we have decided to vary the Permit as a result of that review; and
- why we have included the specific conditions in the revised Permit through the variation notice we are issuing.

It is our record of our decision-making process, to show how we have taken into account all relevant factors in reaching our position.

## **Structure of this document**

- Assessment of the installation against the published BAT conclusions for Food, Drink and Milk Industries.
- Annex 1 – Decision Checklist regarding relevant BAT Conclusions for Food, Drink and Milk Industries

# **Assessment of the installation against the published BAT conclusions for Food, Drink and Milk Industries**

## **1. Our decision**

We have issued a variation, which will allow the Operator to operate the installation, subject to the conditions in the varied permit.

The variation does three things:

- it consolidates the original permit to reflect changes made through earlier variations;
- it brings the permit into line with our modern regulatory template; and
- it varies the permit where appropriate to reflect the outcome of our statutory review and incorporate Best Available Techniques (BAT) and Associated Emission Limit Values (BAT-AELs).

We consider that, in reaching this decision, we have taken into account all relevant considerations and legal requirements and that the permit will continue to ensure that a high level of protection is provided for the environment and human health.

The original permit, issued on 02/07/2004 ensured that the installation, employed BAT and ensured a high level of protection for human health and the environment. We have altered the permit as a result of the statutory review, and we are confident that the new requirements will deliver a superior level of protection to that which was previously achieved. Where a site is not currently compliant with BAT, Improvement Conditions have been included to bring the site up standard by 4 December 2023.

## 2. The legal framework

The variation and consolidation Notice (which includes the consolidated permit as Schedule 2) will be issued under Regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 (EPR). The environmental permitting regime is a legal vehicle which delivers most of the relevant legal requirements for activities falling within its scope. In particular, the regulated facility is:

- an *installation* as described by the Industrial Emissions Directive (IED);
- subject to aspects of other relevant legislation which also have to be addressed.

We consider that, in issuing the Variation and Consolidated Permit, it will ensure that the operation of the installation complies with all relevant legal requirements and that a high level of protection will be delivered for the environment and human health.

We explain how we have addressed specific statutory requirements more fully in the rest of this document.

## 3. How we reached our decision

### Requesting information to demonstrate compliance with BAT Conclusion techniques

We issued a Notice under Regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 on 28/04/2020 requiring the operator to provide information to demonstrate how the operation of their installation currently meets, or will subsequently meet, the revised standards described in the relevant BAT Conclusions document.

The Regulation 61(1) Notice required the operator to:

- Describe the techniques that will be implemented before 4 December 2023, which will then ensure that operations meet the revised standard, or
- Justify why standards will not be met by 4 December 2023, and confirmation of the date when the operation of those processes will cease within the installation or an explanation of why the revised BAT standard is not applicable to those processes, or
- Justify why an alternative technique will achieve the same level of environmental protection equivalent to the revised standard described in the BAT Conclusions.

- Where their permitted activity involves the use, production or release of a hazardous substance, as defined in Article 3(18) of the Industrial Emissions Directive, the Operator was required to carry out a risk assessment considering the possibility of soil and groundwater contamination at the permitted installation with such substances. Where risk of such contamination is established prepare a baseline report containing information necessary to determine the state of soil and groundwater contamination so as to make a quantified comparison with the state upon definite cessation of the activity.
- Where their permitted activity involves the use, production, storage or release of priority hazardous substances and any other relevant substances., as defined by the Water Framework Directive, the Operator was required to carry out a risk screening assessment considering the presence of priority hazardous substances at the permitted installation. Where a risk of these substances is established the operator is to sample the effluent and screen for the priority hazardous substances. If these substances are found to be present in the effluent stream, then assessment using the H1 tool and potential detailed modelling will be required to demonstrate that the effluent discharge will not have a significant impact to the receiving water.

Where the operator proposed that they were not intending to meet a BAT standard, that also included a BAT Associated Emission Level (BAT-AEL) described in the Food, Drink and Milk BAT Conclusions Document, the Regulation 61(1) Notice requested that the operator make a formal request for derogation from compliance with that AEL (as provisioned by Article 15(4) of IED). In this circumstance, the Notice identified that any such request for derogation must be supported and justified by sufficient technical and commercial information that would enable us to determine acceptability of the derogation request.

The Regulation 61(1) Notice response from the operator was received on 23/10/2020 and additional information received on 21/01/2022.

We considered that the response contained sufficient information for us to commence determination of the permit review. The operator made no claim for commercial confidentiality. We have not received any information in relation to the Regulation 61(1) Notice response that appears to be confidential in relation to any part.

#### **4. Key issues/Regulation 61 response**

BAT Conclusions for the Food, Drink and Milk Industries were published as Commission Implementing Decision EU 2019/2031 in the Official Journal of the EU on 4 December 2019. There are 37 BAT Conclusions. Annex 1 provides a record of decisions made in relation to each relevant BAT Conclusion applicable to the installation. This should be read in conjunction with the permit/variation notice issued.

A detailed response was received from the Operator. Following assessment of the Regulation 61(1) response, queries were sent to the Operator via e-mail. Where the operator has concluded that they have achieved BAT, and we are in agreement, no further information or justification has been sought by Natural Resources Wales.

### **Baseline site condition report**

The Operator has submitted an updated site condition report with their response, this has been reviewed by us. The site condition report has followed the standard template as described in H5 – Site Condition Report guidance, the Operator has also followed European Commission Guidance concerning baseline reports under Article 22(2) of IED. The Operator has identified all hazardous substances used, produced or released from the site and then determined if they are deemed 'relevant' in terms of soil and groundwater pollution. The Operator has completed a risk assessment assessing the possibility for soil and groundwater contamination for each relevant hazardous substance, this included the following information:

- Quantity of substance handled, produced or emitted
- Location of substance, including storage conditions
- The presence and integrity of containment methods

The Operator further completed a site history, environmental setting, information relating to location, nature and extent of existing pollution on site and a site survey.

From the relevant substances identified, the primary pollution scenario was spillage. The Operator has confirmed the use of appropriate storage techniques such as bunding, crash protection, protection/retention walls, use of spill kits and spill kit training for staff. There is an interceptor in use within the surface water drainage system and a penstock valve at the discharge point which can be closed to contain any spillage. The Operator has concluded the risk of pollution is low, with no previous significant pollution incidents impacting groundwater or soil therefore has proposed no

further monitoring is required necessary. The Operator will review the risk assessment every five years in line with the permit requirements.

## 5. Changes we have made

### Improvement Conditions

Based on the information provided in the Regulation 61(1) response, we consider that we need to set improvement conditions. These conditions are set out below.

IC9	<p>(a) The Operator shall submit to NRW the maximum capacity of the installation that was used in the most recent risk assessment submitted to NRW.</p> <p>(b) The Operator shall submit to NRW for approval the maximum capacity of the installation at the current time.</p> <p>(c) If the maximum capacity of the installation has increased from the time of the last submitted risk assessment and the current time, the Operator shall review and update the risk assessment to account for the current maximum capacity. The risk assessment shall be submitted to NRW for review.</p>	<p>(a) and (b) Within 6 months of permit variation issue</p> <p>(c) Within 9 months of permit variation issue (if applicable)</p>
<p>Notes:</p> <p>The capacity is to be taken and presented using the same units from the relevant sub-section of Section 6.8, Part 2, Schedule 1 of the Environmental Permitting Regulations 2016 (as from time to time amended).</p> <p>Capacity is to be taken as the maximum possible capacity of the installation, not the maximum actual production.</p> <p>The risk assessment should follow the methodology set out in The Environmental Risk Assessment (EPR-H1). You may use a methodology other than EPR-H1 however the methodology must address the same issues as in EPR-H1 to an equivalent level of detail.</p>		

### Other changes

All existing improvement conditions and pre-operational measures have been marked as complete in the permit. The permit has been consolidated and issued in the most up to date permit template which has led to addition and amendment of several permit conditions. The operating techniques have been updated to include the Operator's response to the Regulation 61(1) Notice.

### ***Effluent Treatment Plant***

The effluent treatment plant has been removed as a directly associated activity and changed to be permitted as a listed activity under S5.4 of EPR. This is because, as confirmed by the Operator, the ETP is over EPR threshold therefore should be a listed activity.

### ***Site plan***

The site plan has been updated on the permit as the current plan is not suitable as does not shown the boundary in entirety, all emission points have also been added to the site plan.

### ***Emission Point W5***

The Operator requested if we could review the emission limits and monitoring required for this emission point. We have advised the Operator this is not in scope of this permit review and should be subject to an operator-initiated variation. The reporting frequency of monitoring of emissions from W5 has been updated in the permit from monthly to quarterly to reflect an agreement made with NRW via the site compliance officer many years ago.

### ***Emission Point S1***

The reporting frequency of monitoring of emissions from S1 has been reviewed and reduced from monthly to quarterly. This was requested from the Operator and agreed with NRW, we consider this appropriate due to the following reasons:

- The change is in line with current permitting practice
- There has been no ELV breaches

### ***OPRA***

The OPRA score has been reviewed during this variation and has reduced from 60 to 48, this is primarily due to introduction of ISO14001 accredited management system and change from Band B to Band A for operator competence attribution. The new OPRA score includes the ETP as a listed activity.

### **Operational Changes**

No operational changes have occurred as part of this permit review.

### **Capacity creep**

We have included an improvement condition (IC9) in order to establish the current maximum capacity at the installation and to determine if there has been a change since the last risk assessment submitted to NRW. If there has been an increase in the maximum capacity, what we call capacity creep, we have asked the Operator to review and update their risk assessment and submit to us for review. We have also implemented a maximum capacity limit into Table S1.1 of the permit in line with the IC response to prevent any further capacity creep at the installation.

### **Medium Combustion Plant (MCP) / Specified Generator (SG)**

The installation has four existing MCPs already listed in Table S1.1 as a Directly Associated Activity and with associated emission points in Table S3.1. The existing MCPs are: 2x natural gas fuelled steam boilers (2.162 MWth input each) and 2x natural gas fuelled hot water plant (1.122 MWth input each). We have edited the activity description in Table S1.1 to include more detailed information regarding the combustion plant. Emission Limit Values (ELVs) and monitoring for existing MCPs is not required until 1<sup>st</sup> January 2025 at the earliest. As this is some way off, we decided to maintain any existing ELVs and monitoring requirements in the permit and not to impose new stricter ELVs ahead of time.

### **Emissions to Water**

As part of our delivery of the Water Framework Directive requirements, we need to identify and assess the impact for all discharges to surface waters and/or sewer from the site for priority hazardous substances and any other relevant substances. The emissions monitoring for these substances should be carried out using the methods and standards described in the M18 guidance on “Monitoring of discharges to water and sewer”.

With reference to the risk assessment guidance on the gov.uk website entitled “Surface water pollution risk assessment for your environmental permit” (accessible via: <https://www.gov.uk/guidance/surface-water-pollution-risk-assessment-for-your-environmental-permit>) the company carried out the following assessments:

- Screening tests for priority hazardous pollutants and any other relevant priority hazardous substances.
- For any substance which is not screened out by the screening tests further modelling, as described in the risk assessment guidance “Surface water pollution risk assessment for your environmental permit”.

The site has three discharges:

- Emission Point W5 & W6 – are direct discharges to surface water (Afon Gwili) of uncontaminated surface water and roof water.
- Emission Point S1 – is an indirect discharge to foul sewer of treated effluent from the on-site Effluent Treatment Plant (ETP).

As uncontaminated surface water we would not expect the screening tests to be completed for emission points W5 and W6.

The Operator has stated that the existing risk assessment and screening tests completed for the sewer discharge remain relevant. There are also no priority hazardous substances listed in their current permit therefore we do not require the Operator to complete the screening tests again.

There are no direct emissions to a receiving water body of process effluent therefore as per BAT Conclusion 12 the BAT-AELs do not apply. The treated process effluent is discharged to sewer which we consider an indirect emission as undergoes further treatment.

### **Emissions to Water – Article 15(4) Derogations**

No derogations.

### **Emissions to Air**

There were changes to the ELVs for emissions to air taking into account BAT conclusions from the Food, Drink and Milk BREF. The site is within the meat processing sector and as there is one meat smoker in use BAT Conclusion 29 applies. The BAT-AEL for total volatile organic compounds (TVOC) in BAT Conclusion 29 has been applied in the permit effective from 4 December 2023. The Operator has stated they are currently compliant with the TVOC BAT-AEL following confirmatory emissions testing.

The tables below outline the parameters and limits set to implement the BAT-AELs:

Effective until 3 December 2023

Release point	Parameter	Limit / BAT-AEL	Effective until
A7	No parameters set	No limit set	3 December 2023

Effective from 4 December 2023

Release point	Parameter	Limit / BAT-AEL	Effective from
A7	TVOC	50 mg/Nm <sup>3</sup>	4 December 2023

Where BAT-AELs are identified, limits may be prescribed at the top end of the range unless the proximity of sensitive receptors requires a tighter limit or if tighter limits are previously on the permit, this ensures no backsliding of emission limits.

#### **Emissions to Air – Article 15(4) Derogations**

No derogations.

#### **Other IED BREFs relevant to the permit review**

There is also a 5.4 activity listed within Table S1.1 of the permit relating to an on-site effluent treatment plant which treats process effluent from the main activity. We consider this activity to be covered by the BAT conclusions with the Food, Drink and Milk BREF and therefore no additional assessment has been completed against the Waste Treatment BREF.

## **6. Conclusion**

We consider that the installation already employed what used to be BAT, and that the operator has achieved significant improvements in performance since the permit was originally granted. The revised BREF and its BAT-AELs provide the opportunity to consider further environmental improvements.

Coupled with the consolidation and modernisation of the permit, we believe this variation provides a sound basis for ongoing regulation of the installation and we are satisfied that the operator is currently achieving or will be achieving all relevant BAT by 4 December 2023.

We believe that we have ensured compliance with all relevant legal requirements in carrying out this review and making our determination on the variation.

## Annex 1: Decision checklist regarding relevant BAT Conclusions for Food, Drink and Milk Industries

BAT Conclusions for the Food, Drink and Milk Industries were published as Commission Implementing Decision EU 2019/2031 in the Official Journal of the EU on 4 December 2019. There are 37 BAT Conclusions. This checklist provides a record of decisions made in relation to each relevant BAT Conclusion applicable to the installation. This annex should be read in conjunction with the permit.

All BAT Conclusions arising are listed by number in order below;

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
<b>OVERALL ENVIRONMENTAL PERFORMANCE</b>		
<b>1</b>	<b>Environment Management System (EMS) – <u>ALL</u> of the following:</b>	
	I.	Commitment, leadership and accountability of the management, including senior management for the implementation of an effective EMS
	II.	An analysis that includes the determination of the organisation’s context, the identification of the needs and expectations of interested parties, the identification of characteristics of the installation that are associated with possible risks for the environment (or human health) as well as of the applicable legal requirements relating to the environment.
	III.	Development of an environmental policy that includes the continuous improvement of the environmental performance of the installation
	IV.	establishing objectives and performance indicators in relation to significant environmental aspects, including safeguarding compliance with applicable legal requirements;
		<p><b>Currently Compliant</b> The Operator has an externally accredited ISO14001:2015 environment management system, we consider this standard contains all the required information as required by this BAT conclusion.</p>

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	V.	Planning and implementing the necessary procedures and actions (including corrective and preventive actions where needed), to achieve the environmental objectives and avoid environmental risks;	
	VI.	Determination of structures, roles and responsibilities in relation to environmental aspects and objectives and provision of the financial and human resources needed;	
	VII.	Ensuring the necessary competence and awareness of staff whose work may affect the environmental performance of the installation (e.g. by providing information and training);	
	VIII.	Internal and external communication	
	IX.	Fostering employee involvement in good environmental management practices;	
	X.	Establishing and maintaining a management manual and written procedures to control activities with significant environmental impact as well as relevant records;	
	XI.	Effective operational planning and process control;	
	XII.	Implementation of appropriate maintenance programmes;	
	XIII.	Emergency preparedness and response protocols, including the prevention and/or mitigation of the adverse (environmental) impacts of emergency situations;	
	XIV.	When (re)designing a (new) installation or a part thereof, consideration of its environmental impacts throughout its life, which includes construction, maintenance, operation and decommissioning;	
	XV.	Implementation of a monitoring and measurement programme, if necessary, information can be found in the Reference Report on Monitoring of Emissions to Air and Water from IED Installations;	
	XVI.	Application of sectoral benchmarking on a regular basis;	
	XVII.	Periodic independent (as far as practicable) internal auditing and periodic independent external auditing in order to assess the environmental performance and to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;	

BATc number		Summary of BAT Conclusion requirement	Status/comment <b>One of the following:</b> Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	XVIII.	Evaluation of causes of nonconformities, implementation of corrective actions in response to nonconformities, review of the effectiveness of corrective actions, and determination of whether similar nonconformities exist or could potentially occur;	
	XIX.	Periodic review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness;	
	XX.	Following and taking into account the development of cleaner techniques.	
	(i)	Noise Management Plan (BAT 13)	See BAT 13
	(ii)	Odour Management Plan (BAT 15)	See BAT 15
	(iii)	Inventory of water, energy and raw materials consumption as well as of waste water and waste gas streams (BAT 2)	See BAT 2
	(iv)	Energy Efficiency Plan (BAT 6a)	See BAT 6a
2	<b>Establish and maintain a waste water and waste gas inventory as part of the EMS - <u>ALL</u> of the following:</b>		<p><b>Currently Compliant</b> The Operator has an externally accredited ISO14001:2015 environment management system. As per the UK Regulators interpretation document we consider this standard contains all the required information as required by this BAT conclusion.</p>
	<b>Information about the food, drink and milk production processes, including;</b>		
	I.(a)	simplified process flow sheets that show the origin of the emissions	
	I.(b)	descriptions of process-integrated techniques and waste water/waste gas treatment techniques to prevent or reduce emissions, including their performance	
	II.	Information about water consumption and usage and identification of actions to reduce water consumption and waste water volume (BAT 7)	
<b>Information on quantity and characteristics of the waste water streams, such as:</b>		See above	
III.(a)	Average values and variability of flow, pH and temperature		

BATc number	Summary of BAT Conclusion requirement	Status/comment <b>One of the following:</b> Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	III.(b) Average concentration and load values of relevant pollutants/parameters (e.g. TOC/COD, nitrogen species, phosphorus, chloride, conductivity) and their variability	
<b>Information on characteristics of waste gas streams, such as:</b>		
IV.(a)	<i>Mean and variability of:</i>	See above
	Flow temperature	
IV.(b)	<i>Mean concentration, load and variability of relevant substances:</i>	
	Dust	
	TVOC	
	CO	
	NOx SOx	
IV.(c)	<i>Presence of other substances that may affect the waste gas treatment system or plant safety:</i>	
	O2	
	Water vapour Dust	
V.	Information about energy consumption and usage, the quantity of raw materials used, as well as the quantity and characteristics of residues generated, and identification of actions for continuous improvement of resource efficiency (BAT 6 and BAT 10)	
VI.	Identification and implementation of an appropriate monitoring strategy with the aim of increasing resource efficiency, taking into account energy, water and raw materials consumption. Monitoring	

BATc number	Summary of BAT Conclusion requirement	Status/comment <b>One of the following:</b> Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	can include direct measurements, calculations or recording with an appropriate frequency. The monitoring is broken down at the most appropriate level (e.g. at process or plant/installation level).	
<b>MONITORING</b>		
<b>3</b>	<b>For relevant emissions to water as identified by the inventory of waste water streams (BAT 2): monitor key process parameters at key locations</b>	
	<b>Key process parameters</b>	
	Waste water flow	<p><b>Currently Compliant</b></p> <p>As per the UK Regulators Interpretation Document, BAT3 only applies to discharges of process effluent, not discharges of uncontaminated surface water.</p> <p>The Operator is currently monitoring continuously waste water flow, pH and temperature and a range of other determinands as determined by their trade effluent consent which we consider appropriate.</p>
	pH	
	Temperature	
	<b>Key monitoring locations</b>	
	Pre-treatment inlet and/or outlet	<p><b>Currently Compliant</b></p> <p>As per the UK Regulators Interpretation Document, BAT3 only applies to discharges of process effluent, not discharges of uncontaminated surface water.</p> <p>The Operator is currently monitoring continuously waste water flow, pH and temperature at the discharge point and a range of other determinands as determined by their trade effluent consent which we consider appropriate.</p>
	Final treatment inlet	
Discharge point (to the environment)		
Other location		
<b>4</b>	<i>Monitoring of water emissions: monitor emissions to water with at least the frequency given below and in accordance with EN standards:</i>	
	Refer to monitoring emissions to water table in BRef document	<b>Currently Compliant</b>

BATc number	Summary of BAT Conclusion requirement		<b>Status/comment</b> <b>One of the following:</b> Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant	
			The Operator has an indirect discharge of process effluent to foul sewer. The only monitoring that is deemed required for an indirect discharge is chloride monitoring. However, as per the UK Regulators Interpretation Document, chloride monitoring is only required for cheese making facilities or fish/shellfish processing facilities. We do not consider it required for this process.	
5	Refer to monitoring emissions to air table in BRef document	Monitoring parameters depend on sector	<b>Compliant in the future</b> There is one meat smoker in place at the site, therefore TVOC monitoring will apply from the compliance date and will be implemented in the permit.	
6	<b>Energy Efficiency: BAT is to use 6a and appropriate combination of common techniques</b>		<b>Currently Compliant</b> The Operator has stated the site is externally accredited to ISO15001 Energy Management. As per the UK Regulators Interpretation document this accreditation demonstrates compliance with this BAT conclusion.	
	a.	Energy Efficiency Plan		
b.	Use of common techniques			
7	<b>Water consumption and waste water discharge</b> <b>BAT is to use 7a and one or a combination of techniques in b to k</b>		<b>Currently Compliant</b> The Operator has stated due to the nature of the process water cannot be recycled due to hygiene and food safety reasons. The following techniques are in place: <ul style="list-style-type: none"> <li>• Hose nozzles</li> <li>• Pre-rinse washdowns</li> <li>• Dry cleaning</li> </ul>	
	a.	Water recycling and/or reuse		
	b.	Optimisation of water flow		
	c.	Optimisation of water nozzles and hoses		
	d.	Segregation of water streams		
	e.	Dry cleaning		
f.	Pigging system for pipes			

BATc number		Summary of BAT Conclusion requirement	Status/comment <b>One of the following:</b> Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	g.	High-pressure cleaning	<ul style="list-style-type: none"> <li>High pressure low volume wash down system is installed</li> <li>Cleaning is immediately after production</li> </ul>
	h.	Optimisation of chemical dosing and water use in cleaning-in-place (CIP)	
	i.	Low-pressure foam and/or gel cleaning	
	j.	Optimised design and construction of equipment and process areas	
	k.	Cleaning of equipment as soon as possible	
8	<b>Harmful substances. BAT is to use one or a combination of the techniques given below:</b>		<p><b>Currently Compliant</b></p> <p>The following techniques are carried out:</p> <ul style="list-style-type: none"> <li>Dry cleaning where possible</li> <li>Chemicals selected take account of food safety requirements and impact on aquatic environment</li> <li>SDS sheets are kept and COSHH assessments carried out and recorded</li> </ul>
	a.	Proper selection of cleaning chemicals and/or disinfectants	
	b.	Reuse of cleaning chemicals in cleaning-in-place CIP	
	c.	Dry cleaning	
	d.	Optimised design and construction of equipment and process areas	
9	<b>BAT is to use refrigerants without ozone depletion potential and with a low global warming potential</b>		<p><b>Currently Compliant</b></p> <p>Ammonia/glycol and CO<sub>2</sub> used in refrigeration for permitted activity.</p>
10	<b>Increase resource efficiency, use one or a combination of the techniques given below</b>		<p><b>Currently Compliant</b></p> <p>Animal by-product and food waste is sent for Anaerobic Digestion. Drip trays are present under butchery and debagging tables to catch blood residues.</p>
	a.	Anaerobic digestion	
	b.	Use of residues	
	c.	Separation of residues	
	d.	Recovery and reuse of residues from pasteuriser	
	e.	Phosphorus recovery as struvite	
	f.	Use of waste water for land spreading	

BATc number	Summary of BAT Conclusion requirement	Status/comment <b>One of the following:</b> Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant	
<b>EMISSIONS TO WATER</b>			
11	<b>Prevent uncontrolled emissions to water, provide an appropriate buffer storage capacity for waste water</b>	<b>Currently Compliant</b> A 150 m <sup>3</sup> balance tank is in place at the site which forms part of the on-site ETP. Further buffer storage is available at off-site treatment works. The process effluent is treated then discharged to foul sewer.	
12	<b>Reduce emissions to water, use an appropriate combination of the techniques given below</b>		
	a.	Equalisation	<b>Currently Compliant</b> The Operator has an on-site ETP which carries out the following: <ul style="list-style-type: none"> <li>• Screw</li> <li>• Sump tanks (physical separation)</li> <li>• Balance tank (equalisation)</li> <li>• Dissolved Air Flotation</li> <li>• pH dosing</li> </ul> Effluent undergoes further treatment at sewage treatment works.
	b.	Neutralisation	
	c.	Physical separation	
	d.	Aerobic and/or anaerobic treatment	
	e.	Nitrification and/or denitrification	
	f.	Partial nitrification	
	g.	Phosphorus recovery as struvite	
	h.	Precipitation	
	i.	Enhanced biological phosphorus removal	
	j.	Coagulation and flocculation	
	k.	Sedimentation	
	l.	Filtration	
m.	Flotation		
<b>BAT-AELs for direct emissions to a receiving water body.</b>			
Table 1 and associated notes. Associated monitoring given in BAT 4.			
Chemical oxygen demand COD	25–100 mg/L	Not Applicable	

BATc number		Summary of BAT Conclusion requirement		Status/comment <b>One of the following:</b> Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	Total suspended solids TSS	4–50 mg/L		Only apply to direct emissions to receiving water body of process effluent/Do not apply to direct emissions of uncontaminated surface water nor indirect emissions of process effluent to sewer.
	Total nitrogen	2–20 mg/L		
	Total phosphorus	0.2–2.0 mg/L		
<b>NOISE</b>				
13	<b>Set up, implement, and regularly review a Noise Management Plan (as part of the EMS) where nuisance is expected and/or has been substantiated. Include ALL of the following:</b>			
	I.	A protocol containing actions and timelines		Not Applicable Noise nuisance not expected nor been substantiated, no complaints have been received in the last five years. The site officer is in agreement with this statement.
	II.	A protocol for conducting noise emissions monitoring		
	III.	A protocol for response to identified noise events, e.g. complaints		
	IV.	A noise reduction programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures.		
14	<b>Techniques to prevent, or where not practicable reduce noise and vibration emissions. Use one or a combination of the following:</b>			
	a.	Appropriate location of equipment and buildings		Currently Compliant The Operator has confirmed the following are in place: <ul style="list-style-type: none"> <li>• appropriate location of noise emitting plant either enclosed in plant room/production building with door kept closed</li> <li>• air compressors and refrigeration compressors certain software installed with minimises operational times and therefore noise</li> <li>• planned preventative maintenance in place</li> <li>• opening of doors and windows is strictly controlled</li> <li>• Noise emitting plant operated by trained staff</li> </ul>
	b.	Operational measures – see examples		
	c.	Low-noise equipment – see examples		
	d.	Noise control equipment – see examples		
	e.	Noise abatement – see examples		

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
		<ul style="list-style-type: none"> <li>Activities at night outside are restricted and completely avoided if possible</li> </ul>
<b>ODOUR</b>		
15	<b>Set up, implement, and regularly review an Odour Management Plan (as part of the EMS) where nuisance is expected and/or has been substantiated. Include ALL of the following:</b>	
	I.	Protocol with actions and timelines
	II.	Odour monitoring protocol
	III.	Odour complaint response plan/protocol
	IV.	Odour prevention and reduction programme
<b>BAT CONCLUSIONS FOR MEAT PROCESSING</b>		
Indicative	<b>Indicative environmental performance levels for specific energy consumption</b> <i>Table 16 and footnotes</i>	
	0.25 – 2.6 MWh/tonne of raw materials	<b>Currently Compliant</b> 2019 figures indicate the specific energy consumption is 0.57 MWh/tonne therefore within the BAT range.
	<b>Indicative environmental performance levels for specific waste water discharge</b> <i>Table 17 and footnotes</i>	
	1.5 – 8.0 m <sup>3</sup> /tonne of raw materials	<b>Currently Compliant</b> 2019 figures indicate the specific energy consumption is 2.44 m <sup>3</sup> /tonne therefore within the BAT range.
29	<b>Reduce channelled emissions of organic compounds to air from meat smoking, use one or a combination of the techniques given below</b>	
	a.	Adsorption
	b.	Thermal oxidation
	c.	Wet scrubber
	d.	Use of purified smoke
<b>BAT-AEL for channelled TVOC emissions to air from a smoke chamber</b>		

BATc number	Summary of BAT Conclusion requirement		<b>Status/comment</b> <b>One of the following:</b> Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	<i>Table 18 and footnotes, associated monitoring is given in BAT 5</i>		
TVOC		3 – 50 mg/Nm <sup>3</sup>	<b>Compliant in the future</b> The Operator is currently compliant with the TVOC BAT-AEL as indicated by previous recent monitoring exercises where TVOC. The Operator has stated they are exploring the use of abatement and are in discussions with the smoker manufacturer to lower emissions and have stated their intent to comply with the BAT-AEL by 4 December 2023. The BAT-AEL has been set in the permit effective from 4 December 2023.

## **Annex 2: Consultation on the draft decision where an Article 15(4) derogation has been applied**

Not Applicable