

# **Review of an Environmental Permit for an Installation subject to Chapter II of the Industrial Emissions Directive under the Environmental Permitting (England & Wales) Regulations 2016 (as amended)**

## **Decision document recording our decision-making process following review of a permit**

The Permit number is:                   EPR/ZP3631SW  
The Operator is:                         Pilgrim's Pride Ltd  
The Installation is:                     Pilgrim's Pride (Bodmin)  
This Variation Notice number is:   EPR/ZP3631SW/V006

### **What this document is about**

Article 21(3) of the Industrial Emissions Directive (IED) requires the Environment Agency to review conditions in permits that it has issued and to ensure that the permit delivers compliance with relevant standards, within four years of the publication by the European Commission of updated decisions on best available techniques (BAT) Conclusions.

We have reviewed the permit for this installation against the BAT Conclusions for the Food, Drink and Milk Industries published on 4<sup>th</sup> December 2019 in the Official Journal of the European Union. In this decision document, we set out the reasoning for the consolidated variation notice that we have issued.

It explains how we have reviewed and considered the techniques used by the Operator in the operation and control of the plant and activities of the installation. It is our record of our decision-making process and shows how we have taken into account all relevant factors in reaching our position.

As well as considering the review of the operating techniques used by the Operator for the operation of the plant and activities of the installation, the consolidated variation notice takes into account and brings together in a single document all previous variations that relate to the original permit issue. Where this has not already been done, it also modernises the entire permit to reflect the conditions contained in our current generic permit template.

The introduction of new template conditions makes the Permit consistent with our current general approach and with other permits issued to Installations in this sector. Although the wording of some conditions has changed, while others have been deleted because of the new regulatory approach, it does not reduce the level of environmental protection achieved by the Permit in any way. In this document, we therefore address only our determination of substantive issues relating to the new BAT Conclusions.

We try to explain our decision as accurately, comprehensively and plainly as possible. Achieving all three objectives is not always easy, and we would welcome any feedback as to how we might improve our decision documents in future.

### **How this document is structured**

1. Our decision
2. How we reached our decision
3. The legal framework
4. Annex 1 – Review of operating techniques within the Installation against BAT Conclusions.

5. Annex 2 – Review and assessment of changes that are not part of the BAT Conclusions derived permit review
6. Annex 3 – Improvement Conditions

## 1 Our decision

We have decided to issue the Variation Notice to the Operator. This will allow the Operator to continue to operate the Installation, subject to the conditions in the Consolidated Variation Notice that updates the whole permit.

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

The Consolidated Variation Notice contains many conditions taken from our standard Environmental Permit template including the relevant annexes. We developed these conditions in consultation with industry, having regard to the legal requirements of the Environmental Permitting Regulations and other relevant legislation. This document does not therefore include an explanation for these standard conditions. Where they are included in the Notice, we have considered the techniques identified by the operator for the operation of their installation, and have accepted that the details are sufficient and satisfactory to make those standard conditions appropriate. This document does, however, provide an explanation of our use of “tailor-made” or installation-specific conditions, or where our Permit template provides two or more options.

## 2 How we reached our decision

### 2.1 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 (a Regulation 61 Notice) on 02/08/2022 requiring the Operator to provide information to demonstrate where the operation of their installation currently meets, or how it will subsequently meet, the revised standards described in the relevant BAT Conclusions document.

The Notice required that where the revised standards are not currently met, the operator should provide information that:

- describes the techniques that will be implemented before 4 December 2023, which will then ensure that operations meet the revised standards, or
- justifies 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 standards are not applicable to those processes, or
- justifies why an alternative technique will achieve the same level of environmental protection equivalent to the revised BAT standards described in the BAT Conclusions.

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 BAT Conclusions Document, the Regulation 61 Notice required that the Operator make a formal request for derogation from compliance with that BAT-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 Notice response from the Operator was received on 02/12/2022.

We considered it was in the correct form and contained sufficient information for us to begin our determination of the permit review [but not that it necessarily contained all the information we would need to complete that determination].

The Operator made no claim for commercial confidentiality. We have not received any information in relation to the Regulation 61 Notice response that appears to be confidential in relation to any party.

### 2.2 Review of our own information in respect to the capability of the Installation to meet revised standards included in the BAT Conclusions document

Based on our records and previous experience in the regulation of the installation we consider that the Operator will be able to comply with the techniques and standards described in the BAT Conclusions other than for those techniques and requirements described in BAT Conclusion BATc 6 Energy Efficiency Plan and BATc 9 refrigerants. In relation to these BAT Conclusions, we do not fully agree with the Operator in respect of their current stated capability as recorded in their response to the Regulation 61 Notice. We have therefore included Improvement Conditions IC7 and IC8 in the Consolidated Variation Notice to ensure that the requirements of the BAT Conclusions are delivered within 3 months of the variation being issued.

### 2.3 Requests for further information during determination

Although we were able to consider the Regulation 61 Notice response generally satisfactory at receipt, we did in fact need more information in order to complete our permit review assessment, and issued a further information request on 08/08/2024. A copy of the further information request was placed on our public register.

## 3 The legal framework

The Consolidated Variation Notice will be issued under Regulations 18 and 20 of the 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 IED;
- subject to aspects of other relevant legislation which also have to be addressed.

We consider that, in issuing the Consolidated Variation Notice, 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.

## Annex 1: decision checklist regarding relevant BAT Conclusions

BAT Conclusions for the Food, Drink and Milk Industries, were published by the European Commission on 4 December 2019.

There are 37 BAT Conclusions.

BAT 1 – 15 are General BAT Conclusions (Narrative BAT) applicable to all relevant Food, Drink and Milk Installations in scope.

BAT 16 – 37 are sector-specific BAT Conclusions, including Best Available Techniques Associated Emissions Levels (BAT-AELs) and Associated Environmental Performance Levels (BAT-AEPLs):

BAT 16 & 17	BAT Conclusions for Animal Feed
BAT 18 – 20	BAT Conclusions for Brewing
BAT 21 – 23	BAT Conclusions for Dairies
BAT 24	BAT Conclusions for Ethanol Production
BAT 25 & 26	BAT Conclusions for Fish and Shellfish Processing
BAT 27	BAT Conclusions for Fruit and Vegetable Processing
BAT 28	BAT Conclusions for Grain Milling
BAT 29	BAT Conclusions for Meat Processing
BAT 30 – 32	BAT Conclusions for Oilseed Processing and Vegetable Oil Refining
BAT 33	BAT Conclusions for Soft Drinks and Nectar/Fruit Juice Processed from Fruit and Vegetables
BAT 34	BAT Conclusions for Starch Production
BAT 35 – 37	BAT Conclusions for Sugar Manufacturing

This annex 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 Consolidated Variation Notice.

The overall status of compliance with the BAT conclusion is indicated in the table as:

**NA – Not Applicable**

**CC – Currently Compliant**

**FC – Compliant in the future (within 4 years of publication of BAT Conclusions)**

**NC – Not Compliant**

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
<b>GENERAL BAT CONCLUSIONS (BAT 1-15)</b>			
1	<p><b>Environmental Management System - Improve overall environmental performance.</b></p> <p>Implement an EMS that incorporates all the features as described within BATc 1.</p>	CC	<p>The operator has provided information to support compliance with BATc 1. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 1.</p> <p>The operator has a EMS aligned with the principles of ISO14001 standard and the certification has been provided.</p>
2	<p><b>EMS Inventory of inputs &amp; outputs. Increase resource efficiency and reduce emissions.</b></p> <p>Establish, maintain and regularly review (including when a significant change occurs) an inventory of water, energy and raw materials consumption as well as of waste water and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all of the features as detailed within the BATCs.</p>	CC	<p>The operator has provided information to support compliance with BATc 2. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 2.</p> <p>The operator has confirmed energy consumption, raw materials, water use and waste streams are monitored and tracked.</p>
3	<p><b>Monitoring key process parameters at key locations for emissions to water.</b></p> <p>For relevant emissions to water as identified by the inventory of waste water streams (see BAT 2), BAT is to monitor key process parameters (e.g. continuous monitoring of waste water flow, pH and temperature) at key locations (e.g. at the inlet and/or outlet of the pre-treatment, at the inlet to the final treatment, at the point where the emission leaves the installation).</p>	CC	<p>The operator has provided information to support compliance with BATc 3. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 3.</p> <p>The inlet and outlet of the effluent treatment plant (ETP) are continuously monitored for flow and pH. Phosphate, Total Suspended Solids (TSS), Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) are monitored monthly.</p>
4	<p><b>Monitoring emissions to water to the required frequencies and standards.</b></p> <p>BAT is to monitor emissions to water with at least the frequency given [refer to BAT 4 table in BATc] and in accordance with EN standards. If EN standards are</p>	N/A	<p>BATc 4 applies in the case of direct discharge of effluent to a water body. All process effluent from the site is discharged to sewer.</p>

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.		We are therefore satisfied that BATc 4 is not applicable for this site.
5	<p><b>Monitoring channelled emissions to air to the required frequencies and standards.</b></p> <p>BAT is to monitor channelled emissions to air with at least the frequency given and in accordance with EN standards.</p>	CC	<p>The operator has provided information to support compliance with BATc 5. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 5.</p> <p>The site has 3 smokers which discharge via one emission to air (A7). The smokers are not currently in use and are unmonitored. The operator however has confirmed that should the smokers be bought back into use they will be monitored in accordance with BAT and can be monitored separately. We have included the monitoring requirements within the permit.</p>
6	<p><b>Energy Efficiency</b></p> <p>In order to increase energy efficiency, BAT is to use an energy efficiency plan (BAT 6a) and an appropriate combination of the common techniques listed in technique 6b within the table in the BATc.</p>	FC	<p>The operator has provided information to support compliance with BATc 6. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 6.</p> <p>The operator does not have a stand-alone Energy Efficiency Plan in place. They confirmed energy efficiency is embedded within all onsite activities with energy consumption tracked and improvements mandated by the wider Group.</p> <p>Good foundations appear to be in place however we have included IC7 in order to ensure compliance.</p>

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
			<p>The operator also confirmed the following energy saving techniques are used on site:</p> <ul style="list-style-type: none"> <li>• Energy efficient motors</li> <li>• LED lighting</li> </ul>
7	<p><b>Water and wastewater minimisation</b></p> <p>In order to reduce water consumption and the volume of waste water discharged, BAT is to use BAT 7a and one or a combination of the techniques b to k given below.</p> <p>(a) water recycling and/or reuse</p> <p>(b) Optimisation of water flow</p> <p>(c) Optimisation of water nozzles and hoses</p> <p>(d) Segregation of water streams</p> <p>Techniques related to cleaning operations:</p> <p>(e) Dry cleaning</p> <p>(f) Pigging system for pipes</p> <p>(g) High-pressure cleaning</p> <p>(h) Optimisation of chemical dosing and water use in cleaning-in-place (CIP)</p> <p>(i) Low-pressure foam and/or gel cleaning</p> <p>(j) Optimised design and construction of equipment and process areas</p> <p>(k) Cleaning of equipment as soon as possible</p>	CC	<p>The operator has provided information to support compliance with BATc 7. We have assessed this information and are satisfied that the operator has demonstrated compliance with BATc 7.</p> <p>The operator has confirmed the following water saving techniques are used onsite:</p> <ul style="list-style-type: none"> <li>• Water reuse/recycling. Some CIP systems are used on site “where appropriate”. These are automated and optimised to minimise water and detergent use. These utilise recovery of the final rinse waters for use in the following pre-rinse.</li> <li>• Wash system efficiency interventions and trending of data means that consumption is continuously being optimised.</li> <li>• Hose guns and trigger controls are used with the pressure regulated for the needs of the operational area.</li> <li>• Segregation of water streams. All process contaminated wastewater is directed to the on-site effluent drains. Uncontaminated rainwater and site run off is directed to surface water drains.</li> <li>• The site operates a “Clean As You Go” policy with procedures in place to prescribe dry cleaning techniques.</li> </ul>



BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
			<ul style="list-style-type: none"> <li>• Foaming systems are used to allow more controlled dosing of chemicals and a reduction in rinse water.</li> </ul>
8	<p><b>Prevent or reduce the use of harmful substances</b></p> <p>In order to prevent or reduce the use of harmful substances, e.g. in cleaning and disinfection, BAT is to use one or a combination of the techniques given below.</p> <p>(a) Proper selection of cleaning chemicals and/or disinfectants</p> <p>(b) Reuse of cleaning chemicals in cleaning-in-place (CIP)</p> <p>(c) Dry cleaning</p> <p>(d) Optimised design and construction of equipment and process areas</p>	CC	<p>The operator has provided information to support compliance with BATc 8. We have assessed this information and are satisfied that the operator has demonstrated compliance with BATc 8.</p> <p>The operator has confirmed they work with a specialist supplier to source hygiene chemicals.</p> <p>As detailed above, CIP process are used on site and dry cleaning is undertaken.</p>
9	<p><b>Refrigerants</b></p> <p>In order to prevent emissions of ozone-depleting substances and of substances with a high global warming potential from cooling and freezing, BAT is to use refrigerants without ozone depletion potential and with a low global warming potential.</p>	FC	<p>The operator has provided information to support compliance with BATc 9. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 9.</p> <p>The operator provided an inventory of the manufacturing refrigeration systems onsite. All are high GWP 404A and 407A. They confirmed that they will select ultra-low GWP refrigerants at end of life or in the case of R404A a CAPEX is in place for 2026 to replace all units.</p> <p>They further state they are in consultation with their refrigeration contractor and have considered replacement/swap out of all equipment however due to compatibility issues it is not currently possible to proactively use a refrigerant with lower GWP.</p>

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			This however is not presented within a formal document and we have included IC8.
10	<p><b>Resource efficiency</b> In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below:</p> <ul style="list-style-type: none"> <li>(a) Anaerobic digestion</li> <li>(b) Use of residues</li> <li>(c) Separation of residues</li> <li>(d) Recovery and reuse of residues from the pasteuriser</li> <li>(e) Phosphorus recovery as struvite</li> <li>(f) Use of waste water for land spreading</li> </ul>	<b>CC</b>	<p>The operator has provided information to support compliance with BATc 10. We have assessed this information and are satisfied that the operator has demonstrated compliance with BATc 10.</p> <p>The operator has confirmed that residues are separated at the point of generation where possible.</p> <p>Non-conforming product is sent for redistribution for human consumption. Effluent sludge and other residues not fit for consumption are sent off site for anaerobic digestion.</p>
11	<p><b>Waste water buffer storage</b> In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.</p>	<b>CC</b>	<p>The operator has provided information to support compliance with BATc 11. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 11.</p> <p>The operator has confirmed there is an emergency capacity volume within the effluent plant of no less than 70m<sup>3</sup>.</p> <p>They state the combination of volume in the front end of the treatment plant including the reception pit, primary, main, balance tank extension and the headroom within the aeration tanks provides sufficient volume to both balance and exercise control over abnormal wastewater and maintain</p>

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
			<p>compliance or direct effluent offsite via tanker for third party treatment.</p> <p>The operator has also confirmed all surface water drains are protected by interceptors and outfalls are controlled via penstock valves.</p>
12	<p><b>Emissions to water – treatment</b></p> <p>In order to reduce emissions to water, BAT is to use an appropriate combination of the techniques given below.</p> <p>Preliminary, primary and general treatment</p> <p>(a) Equalisation</p> <p>(b) Neutralisation</p> <p>(c) Physical separate (eg screens, sieves, primary settlement tanks etc)</p> <p>Aerobic and/or anaerobic treatment (secondary treatment)</p> <p>(d) Aerobic and/or anaerobic treatment (eg activated sludge, aerobic lagoon etc)</p> <p>(e) Nitrification and/or denitrification</p> <p>(f) Partial nitrification - anaerobic ammonium oxidation</p> <p>Phosphorus recovery and/or removal</p> <p>(g) Phosphorus recovery as struvite</p> <p>(h) Precipitation</p> <p>(i) Enhanced biological phosphorus removal</p> <p>Final solids removal</p> <p>(j) Coagulation and flocculation</p> <p>(k) Sedimentation</p> <p>(l) Filtration (eg sand filtration, microfiltration, ultrafiltration)</p> <p>(m) Flotation</p>	CC	<p>The operator has provided information to support compliance with BATc 12. We have assessed this information and are satisfied that the operator has demonstrated compliance with BATc 12.</p> <p>Effluent is treated onsite by equalisation of influent prior to treatment in the DAF unit and aeration tanks.</p> <p>The site has the ability to adjust pH as part of the effluent treatment train through both acid and alkaline dosing.</p> <p>Physical separation of debris is achieved using mesh rotary screen and fat flotation/skimmer.</p> <p>Phosphorous removal will occur as a result of the sludge removal.</p> <p>Coagulation and flocculation are used in combination (successive steps) as part of the DAF operation.</p> <p>Sludge is removed from the DAF and directed via a screw press to dedicated sludge storage facilities. Excess water carried over with the</p>

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
			<p>sludge will settle out within the tanks due to gravity/time. Decant drain lines from the sludge storage tanks allow the return of excess water back to the head of the treatment process.</p> <p>The DAF plant utilises floatation technology as an integral part of the treatment process.</p>
13	<p><b>Noise management plan</b></p> <p>In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to set up, implement and regularly review a noise management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:</p> <ul style="list-style-type: none"> <li>- a protocol containing actions and timelines;</li> <li>- a protocol for conducting noise emissions monitoring;</li> <li>- a protocol for response to identified noise events, eg complaints;</li> <li>- 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.</li> </ul>	<b>N/A</b>	<p>The operator maintains a voluntary NMP however a formal noise management plan is only required where noise nuisance at sensitive receptors is expected or has been substantiated. There have been no substantiated noise nuisance from the site therefore an NMP is not a requirement for this site.</p> <p>We are satisfied that BATc 13 is not applicable to this site.</p>
14	<p><b>Noise management</b></p> <p>In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to use one or a combination of the techniques given below.</p> <ul style="list-style-type: none"> <li>(a) Appropriate location of equipment and buildings</li> <li>(b) Operational measures</li> <li>(c) Low-noise equipment</li> <li>(d) Noise control equipment</li> <li>(e) Noise abatement</li> </ul>	<b>CC</b>	<p>The operator has provided information to support compliance with BATc 14. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 14.</p> <p>The operator confirms they use a combination of operational techniques to prevent and reduce noise emissions. These include:</p> <ul style="list-style-type: none"> <li>• Planned Preventative Maintenance (PPM) and inspection procedures to detect abnormalities in operation that could lead to excessive noise.</li> <li>• The site operates a closed-door policy with respect to all areas of</li> </ul>

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
			<p>production (loading operations excepted).</p> <ul style="list-style-type: none"> <li>• The site is operated by trained personnel that are aware of the potential for the site to generate off-site impacts including statutory nuisance (noise, odour, dust, vermin, light, vibration etc).</li> <li>• Noise is a consideration of the activities of contractors and projects and is routinely assessed during planned and reactive construction and maintenance activities.</li> <li>• All areas of the site are subject to inspection and process confirmation audits that would identify abnormal operations/activities that may give rise to noise nuisance potential.</li> <li>• Consideration of noise is part of equipment specification, which would identify opportunities to include the requirement for low noise equipment such as fans, pumps and compressors.</li> <li>• The design of any new plant will include features to reduce plant noise leakage, sound suppression to external equipment and inherently quiet fan assemblies to ensure no increase on the current background noise.</li> <li>• A noise deflector is located adjacent to residential area between the air handling unit.</li> </ul>
15	<p><b>Odour Management</b></p> <p>In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to set up, implement and regularly review an odour management plan, as</p>	N/A	<p>The operator maintains an OMP however an odour management plan is only required where odour nuisance at sensitive receptors is expected or has been substantiated. There</p>

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	part of the environmental management system (see BAT 1), that includes all of the following elements: <ul style="list-style-type: none"> <li>- a protocol containing actions and timelines;</li> <li>- a protocol for conducting odour monitoring.</li> <li>- a protocol for response to identified odour incidents eg complaints;</li> <li>- an odour prevention and reduction programme designed to identify the source(s); to measure/estimate odour exposure: to characterise the contributions of the sources; and to implement prevention and/or reduction measures.</li> </ul>		have been no substantiated odour nuisance from the site therefore an OMP is not a requirement for this site.  We are therefore satisfied that BATc 15 is not applicable for this site.										
<b>MEAT PROCESSING SECTOR BAT CONCLUSIONS (BAT 29)</b>													
29	<b>Emissions to air – Meat Processing Sector</b>  In order to reduce channelled emissions of organic compounds to air from meat smoking, BAT is to use one or a combination of the techniques given below. <table border="1" data-bbox="293 783 1207 1066" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">Technique</th> <th style="width: 20%;">Description</th> </tr> </thead> <tbody> <tr> <td>(a) Adsorption</td> <td>Organic compounds are removed from a waste gas stream by retention on a solid surface (typically activated carbon).</td> </tr> <tr> <td>(b) Thermal oxidation</td> <td>See Section 14.2.</td> </tr> <tr> <td>(c) Wet scrubber</td> <td>See Section 14.2. An electrostatic precipitator is commonly used as a pretreatment step.</td> </tr> <tr> <td>(d) Use of purified smoke</td> <td>Smoke generated from purified primary smoke condensates is used to smoke the product in a smoke chamber.</td> </tr> </tbody> </table>	Technique	Description	(a) Adsorption	Organic compounds are removed from a waste gas stream by retention on a solid surface (typically activated carbon).	(b) Thermal oxidation	See Section 14.2.	(c) Wet scrubber	See Section 14.2. An electrostatic precipitator is commonly used as a pretreatment step.	(d) Use of purified smoke	Smoke generated from purified primary smoke condensates is used to smoke the product in a smoke chamber.	<b>CC</b>	The operator has provided information to support compliance with BATc 29. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 29 with regards to abatement infrastructure.  The operator has confirmed all three smokers are of the same design and have a built in wet scrubber abatement system.
Technique	Description												
(a) Adsorption	Organic compounds are removed from a waste gas stream by retention on a solid surface (typically activated carbon).												
(b) Thermal oxidation	See Section 14.2.												
(c) Wet scrubber	See Section 14.2. An electrostatic precipitator is commonly used as a pretreatment step.												
(d) Use of purified smoke	Smoke generated from purified primary smoke condensates is used to smoke the product in a smoke chamber.												
29	BAT-associated emission level (BAT-AEL) for channelled TVOC emissions to air from a smoke chamber. <table border="1" data-bbox="293 1241 1207 1347" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Parameter</th> <th style="width: 20%;">Unit</th> <th style="width: 50%;">BAT-AEL (average over the sampling period)</th> </tr> </thead> <tbody> <tr> <td>TVOC</td> <td>mg/Nm<sup>3</sup></td> <td>3-50 <sup>(1)</sup> <sup>(2)</sup></td> </tr> </tbody> </table> <p><sup>(1)</sup> The lower end of the range is typically achieved when using adsorption or thermal oxidation.  <sup>(2)</sup> The BAT-AEL does not apply when the TVOC emission load is below 500 g/h.</p>	Parameter	Unit	BAT-AEL (average over the sampling period)	TVOC	mg/Nm <sup>3</sup>	3-50 <sup>(1)</sup> <sup>(2)</sup>	<b>CC</b>	The operator has provided information to support compliance with BATc 29. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 29.  The smokers are not operational and have not previously been monitored. At this time it is not known if emissions will be within limits.				
Parameter	Unit	BAT-AEL (average over the sampling period)											
TVOC	mg/Nm <sup>3</sup>	3-50 <sup>(1)</sup> <sup>(2)</sup>											

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	The associated monitoring is given in BAT 5		We have included the 50mg/m <sup>3</sup> BAT-AEL within the permit to ensure compliance.				
	<b>Meat Processing Sector Environmental Performance Levels</b>						
EPL	<p><b>Environmental Performance Level – Energy consumption for the meat processing sector</b></p> <table border="1" data-bbox="286 501 1216 660"> <thead> <tr> <th data-bbox="286 501 752 560">Unit</th> <th data-bbox="752 501 1216 560">Specific energy consumption (yearly average)</th> </tr> </thead> <tbody> <tr> <td data-bbox="286 560 752 600">MWh/tonne of raw materials</td> <td data-bbox="752 560 1216 600">0,25-2,6 <sup>(1)</sup> <sup>(2)</sup></td> </tr> </tbody> </table> <p data-bbox="286 608 1216 660"><sup>(1)</sup> The specific energy consumption level does not apply to the production of ready meals and soups. <sup>(2)</sup> The upper end of the range may not apply in the case of a high percentage of cooked products.</p>	Unit	Specific energy consumption (yearly average)	MWh/tonne of raw materials	0,25-2,6 <sup>(1)</sup> <sup>(2)</sup>	CC	<p>The operator provided information confirming their total energy use for 2023 was 25143MWh. The total finished product was 10214 tonnes. Total Energy Use / Tonne Total Raw Material = 2.46 MWh/tonne.</p> <p>This is within the target range of 0.25 – 2.6 MWh/tonne of raw materials. We are therefore satisfied the operator can meet the EPL for energy consumption.</p>
Unit	Specific energy consumption (yearly average)						
MWh/tonne of raw materials	0,25-2,6 <sup>(1)</sup> <sup>(2)</sup>						
EPL	<p><b>Environmental Performance Level – Specific waste water discharge for the meat processing sector</b></p> <table border="1" data-bbox="286 879 1216 967"> <thead> <tr> <th data-bbox="286 879 752 919">Unit</th> <th data-bbox="752 879 1216 919">Specific waste water discharge(yearly average)</th> </tr> </thead> <tbody> <tr> <td data-bbox="286 919 752 967">m<sup>3</sup>/tonne of raw materials</td> <td data-bbox="752 919 1216 967">1,5-8,0 <sup>(1)</sup></td> </tr> </tbody> </table> <p data-bbox="286 975 1216 1023"><sup>(1)</sup> The specific waste water discharge level does not apply to processes using direct water cooling and to the production of ready meals and soups.</p>	Unit	Specific waste water discharge(yearly average)	m <sup>3</sup> /tonne of raw materials	1,5-8,0 <sup>(1)</sup>	CC	<p>The operator provided information confirming their total waste water produced for 2023 was 64590m<sup>3</sup>. The total finished product was 10214 tonnes. Total Waste Water Discharge / Tonne Total Raw Materials = 6.32 m<sup>3</sup>/tonne.</p> <p>This is within the target range of 1.5 – 8.0 m<sup>3</sup>/tonne specific water discharge of raw materials. We are therefore satisfied the operator can meet the EPL for waste water discharge.</p>
Unit	Specific waste water discharge(yearly average)						
m <sup>3</sup> /tonne of raw materials	1,5-8,0 <sup>(1)</sup>						

## **Annex 2: Review and assessment of changes that are not part of the BAT Conclusions derived permit review**

### **Updating permit during permit review consolidation**

- Activity name
- Introductory note
- Site plan
- Table S1.1 overhaul
  - Activity Reference (AR) renumbering
  - Updated listed activities
  - Addition of production capacity
  - Directly associated activities (DAAs) standardisation

We have updated permit conditions to those in the current generic permit template as a part of permit consolidation. The conditions will provide the same level of protection as those in the previous permit.

### **Production/Capacity Threshold**

The Environment Agency is looking to draw a “line in the sand” for permitted production capacity; a common understanding between the Operator and regulator for the emissions associated with a (maximum) level of production, whereby the maximum emissions have been demonstrated as causing no significant environmental impact.

We have included a permitted production level (capacity) within table S1.1 of the permit for the section 6.8 listed activity and we need to be confident that the level of emissions associated with this production level have been demonstrated to be acceptable.

The Operator has completed a H1 assessment of emissions for typical figures of production at the time of permitting and submitted a revised H1 with their Reg 61 response for emissions to water.

### **Emissions to Air**

We asked the operator to list all emission points to air from the installation in the Regulation 61 notice. And to provide a site plan indicating the locations of all air emission points.

The operator has provided an up to date air emission plan.

### **Implementing the requirements of the Medium Combustion Plant Directive**

For the existing combustion plant with a rated thermal input less than 1 MW we will not be including any emission limit values or monitoring requirements within the permit, unless any site specific conditions require us to do this.

We asked the Operator to provide information on all combustion plant on site in the Regulation 61 Notice as follows:



- Number of combustion plant (CHP engines, back-up generators, boilers);
- Size of combustion plant – rated thermal input (MWth)
- Date each combustion plant came into operation

The Operator provided the information in the table below:

**Boilers**

	Boiler 1	Boiler 2
1. Rated thermal input (MW) of the medium combustion plant.	1.4	1.4
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler	Boiler
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Natural gas	Natural gas
4. Date of the start of the operation of the medium combustion plant or, where the exact date of the start of the operation is unknown, proof of the fact that the operation started before 20 December 2018.	1999	1999

We have reviewed the information provided and we consider that the declared combustion plant qualify as “existing” medium combustion plant.

For existing MCP with a rated thermal input of less than or equal to 5 MW, the emission limit values set out in tables 1 and 3 of Part 1 of Annex II MCPD shall apply from 1 January 2030.

We have included the appropriate emission limit values for existing medium combustion plant as part of this permit review. See Table S3.1 in the permit. We have also included a new condition 3.1.4 within the permit which specifies the monitoring requirements for the combustion plant in accordance with the MCPD.

**Emissions to Water and implementing the requirements of the Water Framework Directive**

We asked the Operator to provide information on all emissions to water at the installation in the Regulation 61 Notice as follows;

- Identify any effluents which discharge directly to surface or groundwater;
- Provide an assessment of volume and quality, including results of any monitoring data available;
- and for any discharges to water / soakaway whether a recent assessment of the feasibility of connection to sewer has been carried out.

The operator has previously provided assessments for all emissions to water at the installation. The operator declares there has been no change to activities and subsequent effluents generated at the installation since this risk assessment was taken. Consequently, we agree that the original risk assessments remain valid at this time.

### **Soil & groundwater risk assessment (baseline report)**

The IED requires that the operator of any IED installation using, producing or releasing “relevant hazardous substances” (RHS) shall, having regarded the possibility that they might cause pollution of soil and groundwater, submit a “baseline report” with its permit application. The baseline report is an important reference document in the assessment of contamination that might arise during the operational lifetime of the regulated facility and at cessation of activities. It must enable a quantified comparison to be made between the baseline and the state of the site at surrender.

At the definitive cessation of activities, the Operator has to satisfy us that the necessary measures have been taken so that the site ceases to pose a risk to soil or groundwater, taking into account both the baseline conditions and the site’s current or approved future use. To do this, the Operator has to submit a surrender application to us, which we will not grant unless and until we are satisfied that these requirements have been met.

Neither the Operator or Environment Agency have a copy of the first site condition report.

The Operator submitted a summary report which referenced the site condition report and baseline report. We have reviewed the information and we consider that it adequately describes the current condition of the soil and groundwater. Consequently, we are satisfied that the baseline conditions have not changed.

### **Hazardous Substances**

Hazardous substances are those defined in Article 3 of Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures

The operator has provided a short risk assessment on the hazardous substances stored and used at the installation. The risk assessment was a stage 1-3 assessment as detailed within EC Commission Guidance 2014/C 136/03.

The stage 1 assessment identified the hazardous substances used / stored on site. The stage 2 assessment identified if hazardous substances are capable of causing pollution. If they are capable of causing pollution they are then termed Relevant Hazardous Substances (RHS). The Stage 3 assessment identified if pollution prevention measures are fit for purpose in areas where hazardous substances are used / stored. This includes drains as well.

The outcomes of the three stage assessment identified that pollution of soil and/or ground water to be unlikely.

### **Climate Change Adaptation**

The operator has considered if the site is at risk of impacts from adverse weather (flooding, unavailability of land for land spreading, prolonged dry weather / drought) .

The operator has identified the installation as likely to be or has been affected by prolonged dry weather/ drought, which we consider to be a severe weather event. This is in relation to the sites mains water use which does not require a formal climate change adaptation plan.

## **Containment**

We asked the Operator via the Regulation 61 Notice to provide details of the each above ground tanks which contain potentially polluting liquids at the site, including tanks associated with the effluent treatment process where applicable.

The Operator provided details of all tanks;

- Tank reference/name
- Contents
- Capacity (litres)
- Location
- Construction material(s) of each tank
- The bunding specification including
  - Whether the tank is bunded
  - If the bund is shared with other tanks
  - The capacity of the bund
  - The bund capacity as % of tank capacity
  - Construction material of the bund
  - Whether the bund has a drain point
  - Whether any pipes penetrate the bund wall
- Details of overfill prevention
- Drainage arrangements outside of bunded areas
- Tank filling/emptying mitigation measures (drips/splashes)
- Leak detection measures
- Details of when last bund integrity test was carried out
- Maintenance measures in place for tank and bund (inspections)
- How the bund is emptied
- Details of tertiary containment

and whether the onsite tanks currently meet the relevant standard in the Ciria “Containment systems for the prevention of pollution (C736)” report.

We reviewed the information provided by the operator and their findings. We are not satisfied that the existing tanks and containment measures on site meet the standards set out in CIRIA C736.

We have set improvement conditions in the permit to address the deficiencies in the existing tanks and containment measures on site (IC9). See Improvement condition(s) in Annex 3 of this decision document.

### Annex 3: Improvement Conditions

Based on the information in the Operator's Regulation 61 Notice response and our own records of the capability and performance of the installation at this site, we consider that we need to set improvement conditions so that the outcome of the techniques detailed in the BAT Conclusions are achieved by the installation. These improvement conditions are set out below - justifications for them is provided at the relevant section of the decision document (Annex 1 or Annex 2).

Previous improvement conditions marked as complete in the previous permit.

<b>Superseded Improvement Conditions – Removed from permit as marked as “complete”</b>	
<b>Reference</b>	<b>Improvement Condition</b>
IC1	The Operator shall provide the Agency with a written description of measure in place or proposed to ensure that the soakaways will receive only uncontaminated surface water and will not be contaminated by leakages or spills of process materials or fire water. Any proposed improvements shall include a timetable for implementation which shall be approved in writing by the Agency.
IC2	The Operator shall develop and implement written procedures for handling, investigating, communicating and reporting actual or potential non compliance with operating procedures or emission limits; and shall train relevant staff in procedures to be used by supervisors or managers for the reporting of deviations from permit conditions to the Agency.
IC3	The Operator shall provide the Agency with an expanded accident management plan, to include at least but not limited to the following hazards: fire, failure of containment of any of the activities identified in the Application Site Report, subsurface pipe leak, accidental spillage or leak threatening contamination of the surface water drainage system, failure of the effluent treatment plant, accidental loss of refrigerants. The accident management plan shall address the indicative BAT requirements described in Sector Guidance Note IPPS S6.11, Version 1, July 2003.
IC4	The Operator shall provide the Agency with a written inventory of emission from emission points A7, A15-A18 listed in Table 2.2.1 of the permit. The methodology for undertaking any emission measurements shall be approved in writing by the Agency prior to commencement.
IC5	Using the inventory developed under item IP4 above, the Operator shall assess the potential impact of air emissions from the installation using the H1 assessment tool or an equivalent assessment.
IC6	The Operator shall submit a written report to the Agency detailing how the indicative benchmark or mercury release to sewer as given in General Sector Guidance for Food and Drink S6.10, issue 1, August 2003 shall be achieved. The report shall

	include time-scales for implementation of any necessary improvements that shall be agreed with the Agency.
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The following improvement conditions have added to the permit as a result of the variation.

<b>Improvement programme requirements</b>		
<b>Reference</b>	<b>Reason for inclusion</b>	<b>Justification of deadline</b>
IC7	<p>The operator shall submit, for approval by the Environment Agency, a report demonstrating achievement of the 'Narrative' BAT conclusions as identified in the Food, Drink and Milk Bref published on 4 December 2019 where BAT is currently not demonstrated or achieved. The report shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> <li>• Methodology applied for achieving BAT</li> <li>• Demonstrating that BAT has been achieved.</li> </ul> <p>The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BATc 6</p> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	3 months from date of issue or as agreed in writing by the Environment Agency
IC8	<p>The operator shall use refrigerants without ozone depletion potential and with a low global warming potential (GWP) in accordance with BAT 9 from the Food, Drink and Milk Industries BATCs.</p> <p>To demonstrate compliance against BAT 9, the operator shall produce a plan for the onsite refrigerant system(s) at the installation. The plan is to be assessed by the Environment Agency and shall be incorporated within the existing environmental management system.</p> <p>The plan should include, but not be limited to, the following:</p> <ul style="list-style-type: none"> <li>• Where practicable, retro filling systems containing high GWP refrigerants e.g. R-404A with lower GWP alternatives as soon as possible.</li> <li>• An action log with timescales, for replacement of end-of-life equipment using refrigerants with the lowest practicable GWP.</li> </ul>	3 months from date of issue or as agreed in writing by the Environment Agency

IC9	<p>"The Operator shall undertake a survey of the primary, secondary and tertiary containment at the site and review measures against relevant standard including:</p> <ul style="list-style-type: none"> <li>• CIRIA Containment systems for the prevention of pollution (C736) – Secondary, tertiary and other measures for industrial and commercial premises,</li> <li>• EEMUA 159 - Above ground flat bottomed storage tanks</li> </ul> <p>The operator shall submit a written report to the Environment Agency approval which outlines the results of the survey and the review of standard and provide details of</p> <ul style="list-style-type: none"> <li>• current containment measures</li> <li>• any deficiencies identified in comparison to relevant standards,</li> <li>• improvements proposed</li> <li>• time scale for implementation of improvements.</li> </ul> <p>The operator shall implement the proposed improvements in line with the timescales agreed by the Environment Agency."</p>	12 months from date of issue or as agreed in writing by the Environment Agency
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