

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/BP3940QD
The Operator is: Cranswick Country Foods PLC
The Installation is: Wombwell Food Processing Facility
This Variation Notice number is: EPR/BP3940QD/V002

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 4th 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 01/08/2022 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 04/11/2022.

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 Conclusions 7 water reuse/recycling, 11 buffer capacity, 12 effluent treatment and 29 smoker abatement. 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 5, 6 and 7 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 08/05/2024 requesting information on the meat smoking operation, BATc 5 air emissions monitoring, BATc 6 energy efficiency, BATc 7 water reuse, BATc 9 refrigerants, BATc 11 buffer capacity, BATc 29 smoker abatement and climate change adaptation. 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
GENERAL BAT CONCLUSIONS (BAT 1-15)			
1	<p>Environmental Management System - Improve overall environmental performance.</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 externally accredited to the ISO14001 standard and the certificate has been provided.</p>
2	<p>EMS Inventory of inputs & outputs. Increase resource efficiency and reduce emissions.</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 there are programmes in place for monitoring and measuring the use of raw materials including foodstuffs and packaging materials, mains gas, electricity, water, finished products and animal by-products, solid waste streams and trade effluent.</p>
3	<p>Monitoring key process parameters at key locations for emissions to water.</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 operator has confirmed they continuously monitoring and recording trade effluent flow, pH and temperature in accordance with their trade effluent consents.</p>
4	<p>Monitoring emissions to water to the required frequencies and standards.</p>	N/A	<p>The only parameter relevant for discharges to sewer is chloride but this is not a parameter of</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
	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 not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.		concern for the meat processing activities undertaken onsite and so is not applicable. We are therefore satisfied that BATc 4 is not applicable for this site
5	<p>Monitoring channelled emissions to air to the required frequencies and standards.</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 operator stated a package smoke chamber with electric heater is used for cold smoking meat. Emissions are via a high level stack (A9). They state this has been in place since the permit was issued in 2009.</p> <p>The emission point was not previously included within the permit and there was no requirement to monitor emissions. However in preparation for the permit review and compliance with BATc 5 permanent sampling ports have been installed and MCERTS contractor appointed.</p> <p>Yearly monitoring for TVOC has now been included in the permit.</p>
6	<p>Energy Efficiency</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>	CC	<p>The operator has provided information to support compliance with BATc 6. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 6.</p> <p>The operator has an energy management system certified to ISO 50001 and the certification has been provided.</p> <p>In addition they confirm they use of the following energy saving techniques onsite:</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
			<ul style="list-style-type: none"> • Burner regulation and control • Minimise boiler blowdown • Optimise steam distribution systems • Process control systems • Reduce compressed air leaks • Reduce heat loss by insulation
7	<p>Water and wastewater minimisation</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>	FC	<p>The operator has provided information to support compliance with BATc 7. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 7.</p> <p>The operator stated they do not reuse/recycle water onsite due to food hygiene requirements and there are no CIP systems. Water reuse however does not need to be directly indicted with wash waters. We would expect sites to consider some reuse techniques and have therefore included IC5 for this to be considered further.</p> <p>They did however confirm the following water saving techniques are used:</p> <ul style="list-style-type: none"> • optimization of water flow • optimization of water nozzles and hoses • dry cleaning • high-pressure cleaning • optimisation of chemical dosing and water use in cleaning-in-place • low-pressure foam and/or gel cleaning • optimised design and construction of equipment and process areas • cleaning of equipment as soon as possible

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"> • Cleaning every day - during production and between batches, and most cleaning after production at night time
8	<p>Prevent or reduce the use of harmful substances</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 the information provided and we are satisfied that the operator has demonstrated compliance with BATc 8.</p> <p>The operator works with a specialist cleaning contractor to select standard products approved for use within the food industry. Records are kept of all substances on site including COSHH substances and safety data sheets.</p> <p>In addition, the operator confirms dry cleaning and optimised design and construction of equipment and process areas.</p>
9	<p>Refrigerants</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>	CC	<p>The operator has provided information to support compliance with BATc 9. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 9.</p> <p>The operator has confirmed there are 10 separate systems with hydrofluorocarbon (HFC) refrigerants ' F-gas' with high GWP. They keep a log of these systems, refrigerant charge, and GWP and have evidence that following a historic leak have used drop in replacement with a far lower GWP. They state drop in replacement will continue for the site until the complete ban of these refrigerants in 2030</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 further state they have appointed professional designers and contractors to prepare for alternative end-of-life systems moving to ammonia refrigeration and provided a planning application for their new ammonia plant room and reception building.</p> <p>The operator has discussed and evidenced there transition to lower GWP and ammonia systems is already underway and that they are aware of their obligations.</p>
10	<p>Resource efficiency 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"> (a) Anaerobic digestion (b) Use of residues (c) Separation of residues (d) Recovery and reuse of residues from the pasteuriser (e) Phosphorus recovery as struvite (f) Use of waste water for land spreading 	CC	<p>The operator has provided information to support compliance with BATc 10. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 10.</p> <p>The operator has confirmed they separate residues including cardboard and plastic from unwrapping raw materials, scrap metal and hazardous waste including lubricating oils. These are exported offsite for recycling, and residual waste (mostly process scrap plastic packaging from packing) is exported offsite for energy recovery.</p> <p>Food waste, fats, oil and grease (FOG) and settled solids from the pretreated waste water are sent offsite for anaerobic digestion.</p>
11	<p>Waste water buffer storage In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.</p>	FC	<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>

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 has confirmed there are 2 below ground settlement tanks. (20,000 & 15,400 litres) within the waste effluent system which continuously separate FOG, settled solids and feed into the sewer at a regular rate.</p> <p>They state an impervious, reinforced concrete apron with containment kerbs and sealed construction joints prevents cross contamination of the separate surface drainage system. Spill kits are also on hand.</p> <p>There however doesn't appear to be any way to hold back emergency spillages into either the sewer or surface water systems. We have therefore added IC5 to achieve compliance.</p>
12	<p>Emissions to water – treatment</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> <ul style="list-style-type: none"> (a) Equalisation (b) Neutralisation (c) Physical separate (eg screens, sieves, primary settlement tanks etc) <p>Aerobic and/or anaerobic treatment (secondary treatment)</p> <ul style="list-style-type: none"> (d) Aerobic and/or anaerobic treatment (eg activated sludge, aerobic lagoon etc) (e) Nitrification and/or denitrification (f) Partial nitrification - anaerobic ammonium oxidation <p>Phosphorus recovery and/or removal</p> <ul style="list-style-type: none"> (g) Phosphorus recovery as struvite (h) Precipitation (i) Enhanced biological phosphorus removal <p>Final solids removal</p> <ul style="list-style-type: none"> (j) Coagulation and flocculation (k) Sedimentation 	<p>FC</p>	<p>The operator has provided information to support compliance with BATc 12. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 12.</p> <p>The operator confirms catch pots are used to capture fats and oils within the effluent streams. There however is no other form of treatment on site.</p> <p>The original permit decision detailed that onward treatment at Yorkshire Water Waste water treatments works was sufficient. New BAT however requires operators to take responsibility for their own effluent and we have therefore included IC6 requiring the operator to investigate potential effluent treatment options onsite.</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
	(l) Filtration (eg sand filtration, microfiltration, ultrafiltration) (m) Flotation		
13	<p>Noise management plan</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"> - a protocol containing actions and timelines; - a protocol for conducting noise emissions monitoring; - a protocol for response to identified noise events, eg complaints; - 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. 	N/A	<p>A 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>Noise management</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"> (a) Appropriate location of equipment and buildings (b) Operational measures (c) Low-noise equipment (d) Noise control equipment (e) Noise abatement 	CC	<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"> • Closing doors and windows in enclosed areas • Avoidance of noisy activities such as deliveries at night • Air compressors, pumps and fans for refrigeration systems are low noise, mostly located inside the building, or installed outside and enclosed for weather protection and noise control on the north side of the factory • The work areas inside the factory are thermally insulated for energy efficiency which also provides sound

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															
			proofing. Equipment such as the bowl chopper are also fitted with additional enclosure for the well-being of workers.															
15	<p>Odour Management</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 part of the environmental management system (see BAT 1), that includes all of the following elements:</p> <ul style="list-style-type: none"> - a protocol containing actions and timelines; - a protocol for conducting odour monitoring. - a protocol for response to identified odour incidents eg complaints; - 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. 	N/A	<p>An odour management plan is only required where odour nuisance at sensitive receptors is expected or has been substantiated. There have been no substantiated odour nuisance from the site therefore an OMP is not a requirement for this site.</p> <p>We are therefore satisfied that BATc 15 is not applicable for this site.</p>															
MEAT PROCESSING SECTOR BAT CONCLUSIONS (BAT 29)																		
29	<p>Emissions to air – Meat Processing Sector</p> <p>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.</p> <table border="1" data-bbox="295 1011 1207 1291" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;"></th> <th style="width: 15%;">Technique</th> <th style="width: 80%;">Description</th> </tr> </thead> <tbody> <tr> <td>(a)</td> <td>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)</td> <td>Thermal oxidation</td> <td>See Section 14.2.</td> </tr> <tr> <td>(c)</td> <td>Wet scrubber</td> <td>See Section 14.2. An electrostatic precipitator is commonly used as a pretreatment step.</td> </tr> <tr> <td>(d)</td> <td>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.	FC	<p>The operator has provided information to support compliance with BATc 29. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 29 with regards to abatement infrastructure.</p> <p>The operator has stated they are “not obliged” to install any combination of the techniques suggested as their emissions already comply with the BAT-AEL.</p> <p>The operator has provided one round of monitoring undertaken in April 2022. The onsite circumstances/site working capacity at the time of the monitoring are not explained and we cannot accept one round of monitoring as evidence that emissions will always be within limits. BAT does not make exception</p>
	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.																

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						
			that low emissions alone negate the need for abatement infrastructure. We have included IC7 in order to achieve compliance						
29	<p>BAT-associated emission level (BAT-AEL) for channelled TVOC emissions to air from a smoke chamber.</p> <table border="1" data-bbox="300 480 1216 587"> <thead> <tr> <th>Parameter</th> <th>Unit</th> <th>BAT-AEL (average over the sampling period)</th> </tr> </thead> <tbody> <tr> <td>TVOC</td> <td>mg/Nm³</td> <td>3-50 ⁽¹⁾ ⁽²⁾</td> </tr> </tbody> </table> <p>⁽¹⁾ The lower end of the range is typically achieved when using adsorption or thermal oxidation. ⁽²⁾ The BAT-AEL does not apply when the TVOC emission load is below 500 g/h.</p> <p>The associated monitoring is given in BAT 5</p>	Parameter	Unit	BAT-AEL (average over the sampling period)	TVOC	mg/Nm ³	3-50 ⁽¹⁾ ⁽²⁾	CC	<p>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 BAT-AELs.</p> <p>As detailed above the meat smoker has not been regularly monitored however in preparation for the permit review a round of monitoring was undertaken in April 2022. This showed the TVOC emission rate to be 9.3g/hr over a 1 hr sampling period. The reported concentration was 11mg/m³. Annual monitoring has now been included within the permit.</p>
Parameter	Unit	BAT-AEL (average over the sampling period)							
TVOC	mg/Nm ³	3-50 ⁽¹⁾ ⁽²⁾							
Meat Sector Environmental Performance Levels									
EPL	<p>Environmental Performance Level – Energy consumption for the meat processing sector</p> <table border="1" data-bbox="300 1066 1216 1173"> <thead> <tr> <th>Unit</th> <th>Specific energy consumption (yearly average)</th> </tr> </thead> <tbody> <tr> <td>MWh/tonne of raw materials</td> <td>0,25-2,6 ⁽¹⁾ ⁽²⁾</td> </tr> </tbody> </table> <p>⁽¹⁾ The specific energy consumption level does not apply to the production of ready meals and soups. ⁽²⁾ 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 ⁽¹⁾ ⁽²⁾	CC	<p>The operator provided information confirming their total energy use for 2021 was 36936.9MWh. The total finished product was 32117 tonnes. Total Energy Use / Tonne Total Raw Material = 1.15 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 ⁽¹⁾ ⁽²⁾								

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				
EPL	<p>Environmental Performance Level – Specific waste water discharge for the meat processing sector</p> <table border="1" data-bbox="282 331 1218 419"> <thead> <tr> <th data-bbox="282 331 752 371">Unit</th> <th data-bbox="752 331 1218 371">Specific waste water discharge(yearly average)</th> </tr> </thead> <tbody> <tr> <td data-bbox="282 371 752 419">m³/tonne of raw materials</td> <td data-bbox="752 371 1218 419">1,5-8,0 (*)</td> </tr> </tbody> </table> <p data-bbox="282 419 1218 483">(*) 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 ³ /tonne of raw materials	1,5-8,0 (*)	CC	<p>The operator provided information confirming their total waste water produced for 2021 was 84733m³. The total finished product was 32117 tonnes. Total Waste Water Discharge / Tonne Total Raw Materials = 0.6 m³/tonne.</p> <p>This is below the target range of 1.5 – 8.0 m³/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 ³ /tonne of raw materials	1,5-8,0 (*)						

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.

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

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(s) below:

Combined heat and power (CHP) engines

1. Rated thermal input (MW) of the medium combustion plant.	3.05MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	CHP engine
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Natural gas 100%
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.	2020

Boilers

	Boiler 1	Boiler 2
1. Rated thermal input (MW) of the medium combustion plant.	2.02MWth	2.14MWth
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 100%	Natural gas 95% Diesel 5%
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.	2020	2020

All medium combustion plant were permitted as new under permit variation V003 and the emission limits and monitoring requirements have been retained.

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.

The Operator submitted a site condition report [Application Site Report Studleigh Royd Limited June 2008] during the original application received on 07/07/2008. The site condition report included a report on the baseline conditions as required by Article 22. We reviewed that report and considered that it adequately described the condition of the soil and groundwater at that time.

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 confirmed there has been no change in the hazardous substances used, their capability of causing pollution and/or the pollution prevention measures at the installation since the risk assessment was submitted on 07/07/2008. Consequently, we are satisfied there has been no change to the assessment of risk for hazardous substances.

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.

The operator has submitted a climate change adaptation plan, which considers, as a minimum the impact of severe weather on the operations within the installation. We consider the climate change adaptation plan to be appropriate for the installation.

Containment

We asked the Operator vis 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 of all tanks;

- Tank reference/name
- Contents details
- Capacity (litres)
- Location
- Construction material(s) of each tank
- The bunding specification including
 - Whether the tank is banded
 - 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 banded 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. We are satisfied that the existing tanks and containment measures on site meet the standards set out in CIRIA C736.

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.

Superseded Improvement Conditions – Removed from permit as marked as “complete”	
Reference	Improvement Condition
IC1	The operator shall develop a written Site Closure Plan. In drafting the plan, the Operator shall have regard for Section 2.11 of the Agency Sector Guidance Note for the Food and Drink Sector EPR6.10 dated October 2003 or subsequent revision . A summary of the plan shall be submitted to the Environment Agency in writing. The notification requirements of condition 2.4.2 shall be deemed to have been complied with on submission of the plan.
IC2	The Operator shall carry out a water efficiency audit of the installation. The audit shall have regard to Section 2.4.3 of the Agency Sector Guidance Note for the Food and Drink Sector EPR6.10 dated October 2003 or subsequent revision, and shall provide a breakdown of significant water use by department or activity and shall establish the current installation performance and water efficiency objective(s) for the installation. A summary of the audit and timetable for the implementation of any identified improvements shall be submitted to the Agency in writing.
IC3	The Operator shall carry out a waste minimisation audit of the installation. The audit shall have regard to Section 2.4.2 of the Agency sector Guidance Note for the Food and Drink Sector EPR6.10 dated October 2003 or subsequent revision. The audit shall provide information on any lines and operations identified as causing a loss of materials during production, specifying for each, the amount lost (tonnes/year) and the percentage recovered in process or recycled. A summary of the audit and timetable for the implementation of any identified improvements shall be submitted to the Agency in writing.
IC4	The Operator shall undertake an assessment of their current energy use at the Permitted Installation and shall identify energy efficiency objectives for the Installation. The assessment shall have regard to Section 2.7 of the Agency Sector Guidance Note for the Food and Drink Sector EPR6.10 dated October 2003 or subsequent revision and Horizontal Guidance Note H2. A summary of the assessment and a timetable for the implementation of any identified improvements shall be submitted to the Environment Agency in writing.

The following improvement conditions have added to the permit as a result of the variation.

Improvement programme requirements		
Reference	Reason for inclusion	Justification of deadline
IC5	The operator shall confirm, 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 with respect to BATc 7, 11 and 29. Refer to BAT Conclusions for a full description of the BAT requirement.	3 months from date of permit issue or other date agreed by the Environment Agency
IC6	The Operator shall submit a written report to the Environment Agency for technical assessment and approval on the feasibility of installing effluent treatment and include a review of treatment options available along with their associated benefits. Justification is required where no on-site treatment is provided, taking into account the nature of the wastewater and any subsequent off-site treatment. In addition the report needs to consider the appropriate on-site monitoring of the effluent stream prior to disposal. (BAT 12 and Best Available Techniques Reference Document and BAT Conclusions document for the food, drink and milk industry dated December 2019).	12 months from date of permit issue or other date agreed by the Environment Agency
IC7	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: <ul style="list-style-type: none"> • Methodology applied for achieving BAT • Demonstrating that BAT has been achieved. <p>The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BATc 29</p> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	3 months from date of permit issue or other date agreed by the Environment Agency