

# **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/BQ1972IR  
The Operator is:                         Young's Seafood Limited  
The Installation is:                     Humberstone Road  
This Variation Notice number is:   EPR/BQ1972IR/V007

### **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 30/09/2022 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 27/01/2023.

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 No 6 and 9. 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 17 and 18 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 13/08/2024. 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 in place which is aligned to the requirements of ISO14001.</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 a EMS in place which is aligned to the requirements of ISO14001.</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 Operator has stated that all emissions from the site go to sewer via two separate discharge points and as such the effluent discharged is monitored by their water authority regulatory department in line with the Consent to Discharge that they have provided. Internal monitoring is completed of process flow, pH, Chemical Oxygen Demand, Fats, Oils and Greases, Suspended Solids , Ammoniacal Nitrogen, phosphates and also monthly tests for BOD and chloride. Their consent to discharge specifies maximum discharge temperatures for their two separate</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
			discharge points of 43 degrees and 45 degrees respectively. However, they do not monitor temperature routinely as they have no hot water use within the process or product and perform cold water cleans as per industry standard. The Operator also stated that they discharge temperature was never above ambient, with samples showing typical values of 12 degrees.
4	<p><b>Monitoring emissions to water to the required frequencies and standards.</b>            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.</p>	NA	<p>BATc 4 applies in the case of direct discharge of effluent to a water body. The site does not discharge directly to controlled water.</p> <p>We are therefore satisfied that BATc 4 is not applicable for this site.</p>
5	<p><b>Monitoring channelled emissions to air to the required frequencies and standards.</b>            BAT is to monitor channelled emissions to air with at least the frequency given and in accordance with EN standards.</p>	NA	<p>The site does not require as part of the current permit, to monitor emissions that are released to the air from the process, as such the relevant BAT monitoring requirements do not apply.</p> <p>We are therefore satisfied that BATc 5 is not applicable for this site.</p>
6	<p><b>Energy Efficiency</b>            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 provided some details of any energy saving techniques used on site, but they didn't provide any energy efficiency plan (BAT 6a). We have therefore included IC17 in order to ensure compliance.</p>
7	<p><b>Water and wastewater minimisation</b></p>	CC	<p>The operator has provided information to support compliance with BATc 7. We have assessed the information provided and we are</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>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> <ul style="list-style-type: none"> <li>(a) water recycling and/or reuse</li> <li>(b) Optimisation of water flow</li> <li>(c) Optimisation of water nozzles and hoses</li> <li>(d) Segregation of water streams</li> </ul> <p>Techniques related to cleaning operations:</p> <ul style="list-style-type: none"> <li>(e) Dry cleaning</li> <li>(f) Pigging system for pipes</li> <li>(g) High-pressure cleaning</li> <li>(h) Optimisation of chemical dosing and water use in cleaning-in-place (CIP)</li> <li>(i) Low-pressure foam and/or gel cleaning</li> <li>(j) Optimised design and construction of equipment and process areas</li> <li>(k) Cleaning of equipment as soon as possible</li> </ul>		<p>satisfied that the operator has demonstrated compliance with BATc 7.</p> <p>The Operator has provided a justification to why they cannot apply BAT 7a; recover and reuse water within the process are limited for food safety reasons however are reviewed regularly as part of the business improvement programme.</p> <p>The Operator has stated that they are using the following techniques on site:</p> <ul style="list-style-type: none"> <li>b) The manufacturing processes are controlled using a combination of set points including temperatures, flow rates, levels etc. Where appropriate the design of the installation incorporates flow meters, and VSD that reduce consumption and minimise discharge.</li> <li>c) Hose guns and trigger controls employed, and the pressure of the delivery systems regulate for the needs of the operator in the area. The applicability of this is reviewed in line with food and safety concerns.</li> <li>d) The routing and condition of raw, process and surface water drains is known and documented for the site. All process contaminated wastewater is directed to the effluent drains for treatment. Uncontaminated rainwater is directed to surface water drains which outfall to the Sewer.</li> <li>e) The site operates a “Clean As You Go” policy and where possible SOPs prescribe dry cleaning techniques which is subject to process confirmation within each area.</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>g) Cold water power washers and hand scrubbing are employed across the site where applicable and in accordance with food safety.</p> <p>i) Dosing systems are employed to allow more controlled dosing of chemicals which enables a reduction in rinse water. Their use is incorporated and expanded as part of the planned cleaning regimes. Foaming chemicals are used wherever possible for cleaning</p> <p>j) The site is an existing facility. New project proposals and process layout reconfigurations take into account the hygiene requirements of the process and ensure efficient cleaning can be facilitated. New equipment installations go through change management and HACCP process to identify any potential issues.</p> <p>k) Cleaning equipment is carried out to prevent product hardening through hygiene operations for specific equipment and as part of the “Clean As You Go” policy. The main cleaning is undertaken during a specific hygiene window due to the proximity of lines and for food safety concerns.</p>
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 we are satisfied the operator has demonstrated compliance with BATc 8.</p> <p>The Operator has stated that they are using the following techniques on site:</p> <p>(a) In partnership with specialist third party specialist advisors, the Operator has identified the range and application of cleaning chemicals and</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>other chemicals that are used for hygiene, water and effluent treatment.</p> <p>(b) The cleaning methods employed are integral within the documented procedures in each area and they are trained in clear, unambiguous cleaning procedures and applying a “Clean As You Go” policy. Adherence to these requirements is further enforced through process confirmation. This encourages operators to challenge each other via inspections and behavioural based observations. Where possible dry-cleaning techniques are used. Cleaning procedures specify removal of solid debris prior to washing.</p> <p>(c) The equipment and process design as well as the implementation of this design, have taken into account the hygiene requirements of the process and ensures efficient cleaning. New equipment installations go through HAZOP and HACCP processes to identify any potential issues and opportunities. Existing optimisation opportunities are identified periodically in partnership with the operators and hygiene chemical supplier.</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. We are not satisfied that the Operator has demonstrated compliance with BATc 9</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>Operator has refrigerants that are high in GWP.</p> <p><b>R404A (GWP =3922).</b></p> <p>Improvement condition IC18 has been included in the permit to achieve compliance (see Annex 3).</p>
10	<p><b>Resource efficiency</b></p> <p>In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below:</p> <p>(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</p>	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 the use of following techniques:</p> <ul style="list-style-type: none"> <li>• Effluent sludge and other residues are sent from site for recovery via AD.</li> <li>• The site continuously reviews options with respect to re-using residues or by products..</li> <li>• Residues are separated at the point of generation so a decision can actively be made on how the material is to be handled and further treated/recovered.</li> </ul>
11	<p><b>Waste water buffer storage</b></p> <p>In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.</p>	CC	<p>The operator has provided information to support compliance with BATc 11. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 11.</p> <p>The Operator stated that the site prevents uncontrolled emissions by using a combination of control measures including management controls combined with instrumentation and</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
			specifically designed equipment for the nature of the risks posed on site. The combination of the capacity of the buffer tanks within the treatment plants and both interceptor pits at the main factory provides sufficient capacity to retain water on site without discharge until alternative means of removal can be arranged. In the event that capacity was due to be reached, production would be ceased in order to maintain compliance or until such time it could be arranged for effluent to be directed offsite via tanker for third party treatment as per the Accident Management Plan.
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> <ul style="list-style-type: none"> <li>(a) Equalisation</li> <li>(b) Neutralisation</li> <li>(c) Physical separate (eg screens, sieves, primary settlement tanks etc)</li> </ul> <p>Aerobic and/or anaerobic treatment (secondary treatment)</p> <ul style="list-style-type: none"> <li>(d) Aerobic and/or anaerobic treatment (eg activated sludge, aerobic lagoon etc)</li> <li>(e) Nitrification and/or denitrification</li> <li>(f) Partial nitrification - anaerobic ammonium oxidation</li> </ul> <p>Phosphorus recovery and/or removal</p> <ul style="list-style-type: none"> <li>(g) Phosphorus recovery as struvite</li> <li>(h) Precipitation</li> <li>(i) Enhanced biological phosphorus removal</li> </ul> <p>Final solids removal</p> <ul style="list-style-type: none"> <li>(j) Coagulation and flocculation</li> <li>(k) Sedimentation</li> <li>(l) Filtration (eg sand filtration, microfiltration, ultrafiltration)</li> <li>(m) Flotation</li> </ul>	CC	<p>The operator has provided information to support compliance with BATc 12. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 12.</p> <p>The Operator has confirmed the use of following techniques:</p> <ul style="list-style-type: none"> <li>a) The effluent treatment assets comprise tank volumes that ensure the equalisation of effluent prior to treatment in the DAF unit and aeration tanks.</li> <li>b) The site has the ability to adjust pH correction as part of the effluent treatment train through both acid and alkaline dosing facilities for balancing; optimisation of coagulation dosing prior to discharge.</li> <li>c) Physical separation of debris is achieved using mesh rotary screen and fat flotation/skimmer as part of the effluent treatment train. The rotary screen is regularly inspected and cleaned.</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>h) Phosphorous removal within the effluent treatment train on site will occur as a result of the removal of sludge component.</p> <p>j) Coagulation and flocculation are used in combination (successive steps) as part of the existing and planned DAF plant design and operation.</p> <p>k) Sludge is removed from the DAF and directed to a dedicated sludge storage tank. Excess water carried over with the sludge will settle out within the tanks due to gravity/time. De-watering can be carried out to remove the excess waste liquid from the sludge tank - this then is released into the decant drain lines from the sludge storage tanks allow the return and recirculation of excess water back to the head of the treatment process.</p> <p>m) The DAF plant utilises floatation technology as an integral part of the treatment process.</p>										
12	<p><b>Emissions to water – treatment</b>  <b>BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body</b></p> <table border="1" data-bbox="282 1070 1211 1273"> <thead> <tr> <th data-bbox="282 1070 770 1114">Parameter</th> <th data-bbox="770 1070 1211 1114">BAT-AEL (1) (2) (daily average)</th> </tr> </thead> <tbody> <tr> <td data-bbox="282 1114 770 1157">Chemical oxygen demand (COD) (3) (4)</td> <td data-bbox="770 1114 1211 1157">25-100 mg/l (5)</td> </tr> <tr> <td data-bbox="282 1157 770 1200">Total suspended solids (TSS)</td> <td data-bbox="770 1157 1211 1200">4-50 mg/l (6)</td> </tr> <tr> <td data-bbox="282 1200 770 1243">Total nitrogen (TN)</td> <td data-bbox="770 1200 1211 1243">2-20 mg/l (7) (8)</td> </tr> <tr> <td data-bbox="282 1243 770 1286">Total phosphorus (TP)</td> <td data-bbox="770 1243 1211 1286">0,2-2 mg/l (9)</td> </tr> </tbody> </table>	Parameter	BAT-AEL (1) (2) (daily average)	Chemical oxygen demand (COD) (3) (4)	25-100 mg/l (5)	Total suspended solids (TSS)	4-50 mg/l (6)	Total nitrogen (TN)	2-20 mg/l (7) (8)	Total phosphorus (TP)	0,2-2 mg/l (9)	NA	<p>The site discharges process effluent to the foul sewer, there are no direct discharges to the water course, as such BAT-AELs do not apply.</p> <p>We are therefore satisfied that BAT AELs associated with BATc 12 is not applicable for this site.</p>
Parameter	BAT-AEL (1) (2) (daily average)												
Chemical oxygen demand (COD) (3) (4)	25-100 mg/l (5)												
Total suspended solids (TSS)	4-50 mg/l (6)												
Total nitrogen (TN)	2-20 mg/l (7) (8)												
Total phosphorus (TP)	0,2-2 mg/l (9)												
13	<b>Noise management plan</b>	NA	A noise management plan is only required where noise nuisance at sensitive receptors is expected or has been substantiated. There										

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>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>		<p>have been no substantiated noise nuisance from the site therefore an NMP is not a requirement for this site.</p> <p>We are therefore satisfied that BATc 13 is not applicable for 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>	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 has stated the following measures are undertaken on site to limit noise emissions:</p> <ul style="list-style-type: none"> <li>a) The majority of plant and equipment is located internally or within out-buildings. For food safety reasons, the site operates a closed-door policy with respect to all areas of production (loading operations excepted). 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>b) Certain activities are scheduled during normal operational hours, which will have the effect of controlling noise nuisance potential. Equipment performance is part of the procurement specification which will consider the use and applicability of low noise</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>equipment options or equipment will be otherwise enclosed.</p> <p>c) 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, where this is applicable for both temporary or new equipment.</p> <p>e) Consideration of noise is part of the change management process and in the design brief for new installation. Environmental noise would be driven by the need to meet both planning and permitting which, if the need for a technical assessment is demonstrated, would identify noise control and mitigation methods to address noise nuisance potential.</p>
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 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 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>	<b>NA</b>	<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>
25	<p><b>Water consumption and waste water discharge</b></p> <p>In order to reduce water consumption and the volume of waste water discharged, BAT is to use an appropriate combination of the techniques specified in BAT 7 and of the techniques given below.</p> <ul style="list-style-type: none"> <li>(a) Removal of fat and viscera by vacuum</li> <li>(b) Dry transport of fat, viscera, skin and fillets</li> </ul>	<b>NA</b>	<p>The Operator has stated that they do not remove or transport fat/viscera/skin or fillets with water use. Skin is mechanically separated and waste dropped into containers for processing as a by-product and fish fillets are dry transported by conveyor belt.</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						
			We are therefore satisfied that BATc 25 is not applicable for this site.						
26	<p><b>Emissions to air</b></p> <p>In order to reduce channelled emissions of organic compounds to air from fish smoking, BAT is to use one or a combination of the techniques given below.</p> <p>(a) biofilter  (b) Thermal oxidation  (c) Non-thermal plasma treatment  (d) Wet scrubber  (e) Use of purified smoke</p> <p style="text-align: center;"><i>Table 11</i></p> <p><b>BAT-associated emission level (BAT-AEL) for channelled TVOC emissions to air from a smoke chamber</b></p> <table border="1" data-bbox="277 847 1223 930"> <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/Nm<sup>3</sup></td> <td>15–50 <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 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>	15–50 <sup>(1)</sup> <sup>(2)</sup>	<b>NA</b>	<p>The Operator has stated that they do not carry out any smoking operations or smoking flavouring on their site.</p> <p>We are therefore satisfied that BATc 26 is not applicable for this site.</p>
Parameter	Unit	BAT-AEL (average over the sampling period)							
TVOC	mg/Nm <sup>3</sup>	15–50 <sup>(1)</sup> <sup>(2)</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 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 below:

**Boilers**

	Multipac Boiler	Lincoln Boiler	F2 Wanson Thermal boiler
1. Rated thermal input (MW) of the medium combustion plant.	4.0 MWth	4.0 MWth	1.6 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler	Boiler	Thermal Boiler
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Natural gas	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.	Dec 1978	Dec 1986	Jan 2022

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.

The current permit lists the F2 Wanson Boiler as having a thermal capacity of 0.6MWth. However, during the determination the Operator notified that the capacity was 1.6MWth. We have corrected the details of the boiler within this variation. To ensure the emissions are not having a significant impact on the surrounding environment, we have requested that the Operator undertakes a revised H1 assessment of the thermal boiler in combination with the other combustion plants on site, as detailed in improvement condition (IC19).

**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 (Ref: Appendix E 2018074 Site Condition Report 10433889) during the original application received on 30/07/2018. 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.

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 / groundwater to be possible and monitoring is required for these 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.

We do not consider the operator to have submitted a suitable climate change adaptation plan for the installation. We have included an improvement condition into the permit IC 20 to request a climate change adaptation plan is submitted by the operator for approval from the Environment Agency.

### **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 have set improvement conditions in the permit to address the deficiencies in the existing tanks and containment measures on site IC 21. 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>
IC16	<p>The Operator shall undertake a holistic review of the current Odour Management Plan to take into consideration the changes at the site introduced by V006, and revise the plan accordingly.</p> <p>The operator shall provide a copy of the revised plan for review by the Environment Agency, for approval in writing.</p>

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>
IC17	<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
IC18	<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>	3 months from date of issue or as agreed in writing by the Environment Agency

	<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>	
IC19	<p>The Operator shall complete an H1 risk assessment for all of the combustion plant on site as stated within Table S1.1. The H1 assessment should use operational data where available. Where the assessment doesn't screen out the emissions from the combustion plant, the Operator shall undertake further detailed modelling as set out in our guidance Air emissions risk assessment for your environmental permit - GOV.UK</p> <p>The H1 assessment along with any additional assessments as required shall be submitted to the Environment Agency for review.</p>	3 months from date of issue or as agreed in writing by the Environment Agency
IC 20	<p>The operator shall produce a climate change adaptation plan, which will form part of the EMS.</p> <p>The plan shall include, but not be limited to:</p> <ul style="list-style-type: none"> <li>• Details of how the installation has or could be affected by severe weather;</li> <li>• The scale of the impact of severe weather on the operations within the installation;</li> <li>• An action plan and timetable for any improvements to be made to minimise the impact of severe weather at the installation.</li> </ul> <p>The Operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency.</p>	DD/MM/YYYY or other date as agreed in writing with the Environment Agency

Improvement programme requirements		
Reference	Reason for inclusion	Justification of deadline
IC 21	<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 permit issue