

# **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/BN3316IU  
The Operator is:                         Butcher's Pet Care Ltd  
The Installation is:                     Crick Pet Food  
This Variation Notice number is:   EPR/BN3316IU/V009

### **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 31/01/2022 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 08/07/2022

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

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

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

Based on our records and previous experience in the regulation of the installation we consider that the Operator will be able to comply with the techniques and standards described in the BAT Conclusions other than for those techniques and requirements described in BAT Conclusion, 4-monitoring of total nitrogen, 6(a)-energy efficiency plan, 11-buffer storage, and 12-AELs to water. The operator does not currently comply with the requirements of BATc 1, 4, 6, 11, and 12-AELs. In relation to this/these BAT Conclusion(s), the operator has committed compliance by 4 December 2023. We have therefore included Improvement Conditions 18 and 20 in the Consolidated Variation Notice to ensure that the requirements of the BAT Conclusions are delivered before 4 December 2023.

## 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 23/03/2023. A copy of the further information request was placed on our public register. In addition to the response to our further information request, we received additional information during the determination from the Operator via email regarding MCPs capacity on 1.5 MWth. We made a copy of this information available to the public in the same way as the response(s) to our information request.

# **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>	<b>FC</b>	<p>The operator has provided information to support compliance with BATc 1. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 1.</p> <p><b>The Operator has declared future compliance with BATc 1</b>  <b>(i)(ii)(iii)(iv)(v)(x)(xi)(xii)(xvi)(xvii)(xix)(xx)(iv)</b></p> <p>The Operator is actively working to produce a consolidated EMS and declared that will be completed by the end of 2023.</p> <p>We consider that the operator will be future compliant with BATc 1. Improvement condition 18 has been included in the permit to achieve compliance (see Annex 3).</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>	<b>CC</b>	<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 declared that it is:</p> <ul style="list-style-type: none"> <li>• Recording and reviewing emissions and resources used</li> <li>• Using a simplified flow chart for CHP and ETP</li> <li>• Monitoring of water usage and actions identified to reduce consumption</li> <li>• Monitoring of BOD, SS, ammonia, TP, and pH at UKAS accredited laboratory</li> <li>• Monitoring of NO<sub>2</sub> and CO at MCERTS standards by UKAS accredited laboratory</li> <li>• Monitoring energy usage</li> <li>• Measuring of water, gas, steam and electricity consumption/generation by automated means.</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
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 declared:</p> <ul style="list-style-type: none"> <li>• Monitoring of influent and effluent</li> <li>• Discharge flow rate is monitored continuously</li> <li>• Testing of effluent quality is tested daily in house and weekly at UKAS accredited testing laboratory.</li> </ul>
4	<p><b>Monitoring emissions to water to the required frequencies and standards.</b></p> <p>BAT is to monitor emissions to water with at least the frequency given [refer to BAT 4 table in BATc] and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.</p>	CC	<p>The operator has provided information to support compliance with BATc 4. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 4.</p> <p>The Operator is monitoring pH, BOD, COD, TSS, and ammoniacal nitrogen daily in-house and by third party, MCERTS certified independent contractor weekly.</p> <p><b>However, there has been no evidence provided to support the compliance statement in relation to monitoring of TN .</b></p> <p>We consider that the operator will be future compliant with BATc 4. Improvement condition 18 has been included in the permit to achieve compliance (see Annex 3).</p>
5	<p><b>Monitoring channelled emissions to air to the required frequencies and standards.</b></p> <p>BAT is to monitor channelled emissions to air with at least the frequency given and in accordance with EN standards.</p>	NA	<p>We are satisfied that BATc 5 is not applicable to this Installation. There are no drying, griding or cooling of product activities carried out in this installation.</p> <p>The Operator declared that it is monitoring emissions to air from water cooling related activities (autoclave cookers) emitted through cooling towers.</p>
6	<p><b>Energy Efficiency</b></p>	FC	<p>The operator has provided information to support compliance with BATc 6. We have assessed the</p>

BATC No	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	<p>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>		<p>information provided and we are not satisfied that the operator has demonstrated compliance with BATc 6. The Operator declared using the following techniques:</p> <ul style="list-style-type: none"> <li>• LED lighting</li> <li>• Heat recovery with heat exchangers</li> <li>• Reduced compressed air system leaks</li> <li>• Use of variable speed drives</li> <li>• Reducing heat losses by insulation</li> </ul> <p><b>However, the Operator does not currently have an energy efficiency plan to satisfy BATc 6(a) requirement.</b></p> <p>We consider that the operator will be future compliant with BATc 6(a). Improvement condition 18 has been included in the permit to achieve compliance (see Annex 3).</p>
7	<p><b>Water and wastewater minimisation</b></p> <p>In order to reduce water consumption and the volume of waste water discharged, BAT is to use BAT 7a and one or a combination of the techniques b to k given below.</p> <p>(a) water recycling and/or reuse  (b) Optimisation of water flow  (c) Optimisation of water nozzles and hoses  (d) Segregation of water streams</p> <p>Techniques related to cleaning operations:</p> <p>(e) Dry cleaning  (f) Pigging system for pipes  (g) High-pressure cleaning  (h) Optimisation of chemical dosing and water use in cleaning-in-place (CIP)  (i) Low-pressure foam and/or gel cleaning  (j) Optimised design and construction of equipment and process areas  (k) Cleaning of equipment as soon as possible</p>	CC	<p>The operator has provided information to support compliance with BATc 7. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 7. The Operator is using the following wastewater minimisation techniques:</p> <ul style="list-style-type: none"> <li>• Optimisation of water nozzles and hoses</li> <li>• Optimisation of water flow</li> <li>• Water recycling and/or reuse</li> <li>• Low pressure foam for cleaning</li> </ul>
8	<p><b>Prevent or reduce the use of harmful substances</b></p>	CC	<p>The operator has provided information to support compliance with BATc 8. We have assessed the</p>



BATC No	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	<p>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  (b) Reuse of cleaning chemicals in cleaning-in-place (CIP)  (c) Dry cleaning  (d) Optimised design and construction of equipment and process areas</p>		<p>information provided and we are satisfied that the operator has demonstrated compliance with BATc 8.</p> <p>The Operator declared using the following technique:</p> <ul style="list-style-type: none"> <li>Proper selection of cleaning chemicals and/or disinfectants</li> </ul>
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>	CC	<p>The operator has provided information to support compliance with BATc 9. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 9.</p> <p>The Operator declared that is using R404A gas in the freezer and chiller. This gas has a GWP of 3922, above the 1400 GWP threshold to be classed as low GWP. There is no plan in place for the gradual phase out of this gas. Whilst the Operator is actively using recycled gas, R404A-R, for refill they will need to phase this out and consider alternatives. On that basis, IC18 has been included.</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 declared sending the ETP resulting sludge to a contractor for off-site anaerobic digestion installation operating under a separate permit.</p>
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>	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> <p>The Operator declared that:</p> <ul style="list-style-type: none"> <li>There is on site storage capacity of 700 m<sup>3</sup> allowing the installation to operate for 36</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>hours before a third party contractor will collect, via tankers, excess wastewater.</p> <ul style="list-style-type: none"> <li>The site uses slam-shut valves to prevent accidental discharges to Clifton Brook.</li> </ul> <p><b>However, there are concerns raised in relation to:</b></p> <ul style="list-style-type: none"> <li><b>Bunding of the balance tank is missing</b></li> <li><b>The Operator acknowledged the problem and is seeking a contractor to address the situation.</b></li> </ul> <p>We consider that the operator will be future compliant with BATc 11. Improvement condition 19 has been included in the permit to achieve compliance (see Annex 3).</p>
12	<p><b>Emissions to water – treatment</b></p> <p>In order to reduce emissions to water, BAT is to use an appropriate combination of the techniques given below.</p> <p>Preliminary, primary and general treatment</p> <p>(a) Equalisation</p> <p>(b) Neutralisation</p> <p>(c) Physical separate (eg screens, sieves, primary settlement tanks etc)</p> <p>Aerobic and/or anaerobic treatment (secondary treatment)</p> <p>(d) Aerobic and/or anaerobic treatment (eg activated sludge, aerobic lagoon etc)</p> <p>(e) Nitification and/or denitrification</p> <p>(f) Partial nitration - anaerobic ammonium oxidation</p> <p>Phosphorus recovery and/or removal</p> <p>(g) Phosphorus recovery as struvite</p> <p>(h) Precipitation</p> <p>(i) Enhanced biological phosphorus removal</p> <p>Final solids removal</p> <p>(j) Coagulation and flocculation</p> <p>(k) Sedimentation</p> <p>(l) Filtration (eg sand filtration, microfiltration, ultrafiltration)</p>	<b>CC</b>	<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 declared using:</p> <ul style="list-style-type: none"> <li>Physical separation</li> <li>Equalisation</li> <li>Neutralisation</li> <li>Aerobic treatment</li> <li>Nitrification</li> <li>Filtration</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										
	(m) Flotation												
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"> <thead> <tr> <th>Parameter</th> <th>BAT-AEL (1) (2) (daily average)</th> </tr> </thead> <tbody> <tr> <td>Chemical oxygen demand (COD) (3) (4)</td> <td>25-100 mg/l (5)</td> </tr> <tr> <td>Total suspended solids (TSS)</td> <td>4-50 mg/l (6)</td> </tr> <tr> <td>Total nitrogen (TN)</td> <td>2-20 mg/l (7) (8)</td> </tr> <tr> <td>Total phosphorus (TP)</td> <td>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)	FC	<p>The operator has provided information to support compliance with BAT-AELs. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BAT-AELs.</p> <p>The Operator provided monitoring data for:</p> <ul style="list-style-type: none"> <li>• BOD – 2.5 mg/l</li> <li>• TSS – 6.25 mg/l</li> <li>• Ammoniacal nitrogen – 5 mg/l</li> </ul> <p><b>The current permit does not contain emission limits as per this BAT and we take this opportunity to include these with associated AELs at upper levels, as shown below:</b></p> <ul style="list-style-type: none"> <li>• <b>COD – 100 mg/l</b></li> <li>• <b>TSS – 15 mg/l (retained)</b></li> <li>• <b>TN – 20 mg/l</b></li> <li>• <b>TP – 2 mg/l</b></li> </ul> <p>All existing parameters will keep existent limits:</p> <ul style="list-style-type: none"> <li>• BOD – 10 mg/l</li> <li>• Ammoniacal nitrogen – 5mg/l</li> <li>• pH – 6-9</li> </ul> <p>We consider that the operator will be future compliant with BAT-AELs. Improvement condition 20 has been included in the permit to achieve compliance (see Annex 3).</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	<p><b>Noise management plan</b></p> <p>In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to set up, implement and regularly review a noise management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:</p> <ul style="list-style-type: none"> <li>- a protocol containing actions and timelines;</li> <li>- a protocol for conducting noise emissions monitoring;</li> <li>- a protocol for response to identified noise events, eg complaints;</li> </ul>	NA	<p>We are satisfied that BATc 13 is not applicable to this Installation.</p> <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>										

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
	- a noise reduction programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures.		
14	<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> <p>(a) Appropriate location of equipment and buildings  (b) Operational measures  (c) Low-noise equipment  (d) Noise control equipment  (e) Noise abatement</p>	<b>CC</b>	<p>The operator has provided information to support compliance with BATc 14. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 14.</p> <p>The Operator is using:</p> <ul style="list-style-type: none"> <li>• Appropriate location of equipment in buildings such as forklifts only used indoors</li> <li>• Operational measures such as closing of doors and windows, PPM, not accepting delivers outside normal operating hours</li> <li>• Noise control equipment such as insulation of noisy areas, soundproofing of CHP enclosure</li> </ul>
15	<p><b>Odour Management</b></p> <p>In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to set up, implement and regularly review an odour management plan, as 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>We are satisfied that BATc 15 is not applicable to this Installation.</p> <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>

## **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 updated
- 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.

### **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.

The existing H1 assessment of particulate emissions to air remains valid for the revised capacity threshold now placed within table S1.1 of the permit.

### **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

### Existing Medium Combustion Plant (1MW-50MW)

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.	1.5 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	CHP
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.	May 2021

#### Boilers

1. Rated thermal input (MW) of the medium combustion plant.	21.2 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler 1 – 10.6 MWth Boiler 2 – 10.6 MWth
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Boiler 1: Natural gas 100% Boiler 2: 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.	Boiler 1: February 2011 Boiler 2: February 2011

We have reviewed the information provided and we consider that the declared combustion plants, Boiler 1 and Boiler 2 qualify as “existing” medium combustion plant.

CHP is a new plant, which was previously permitted in accordance with the MCPD.

For existing medium combustion plant with a rated thermal input greater than 5 MW, Boilers 1 and 2, the emission limit values set out in tables 2 and 3 of Part 1 of Annex II MCPD shall apply from 1 January 2025.

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 monitoring frequency is based on the aggregated thermal input of the plant.

### **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.

We have set the daily flow of the permit as 960m<sup>3</sup> in the absence of information relating to IC10.

### **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 [Reference number: 12388620040802 VB/JAC dated 02/08/2004 and updated 14/06/2011] during the original application received on 10/09/2004. 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 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 July 2011. 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 flooding, 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 (IC21) 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 details of all tanks;

- Tank reference/name
- Contents
- Capacity (litres)
- Location
- Construction material(s) of each tank
- The bunding specification including
  - Whether the tank is bunded
  - If the bund is shared with other tanks
  - The capacity of the bund
  - The bund capacity as % of tank capacity
  - Construction material of the bund
  - Whether the bund has a drain point



- Whether any pipes penetrate the bund wall
- Details of overfill prevention
- Drainage arrangements outside of bunded areas
- Tank filling/emptying mitigation measures (drips/splashes)
- Leak detection measures
- Details of when last bund integrity test was carried out
- Maintenance measures in place for tank and bund (inspections)
- How the bund is emptied
- Details of tertiary containment

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

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

**The effluent treatment plant’s balance tank is not bunded and there is no secondary containment that could prevent an accidental discharge from this asset reaching Clifton Brook. The Operator did commissioned a contractor to carry out works in relation to the containment of the balancing tank but the work has not been completed and the Operator is currently looking for a new contractor.**

We have set improvement conditions in the permit to address the deficiencies in the existing tanks and containment measures on site (IC22). See Improvement condition(s) in Annex 3 of this decision document.

## Annex 3: Improvement Conditions

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

Previous improvement conditions marked as complete in the previous permit.

<b>Superseded Improvement Conditions – Removed from permit as marked as “complete”</b>	
<b>Reference</b>	<b>Improvement Condition</b>
IC1	The operator shall provide a plan for implementing a full environmental management system, including a system of auditing, to a recognised standard, for discussion with the Agency.
IC2	Following the first instance of annual monitoring of oxides of nitrogen, oxides of sulphur, and particulate matter required in Table 2.10.1 of this Permit, the Operator shall provide the Agency with an evaluation of the significance of these emissions to air, using the methodology provided in the Agency's Horizontal Guidance Note H1, or another equivalent assessment.
IC3	The Operator shall provide the Agency with an evaluation of the significance of the emissions to water of phosphorous, using the methodology provided in the Agency's Horizontal Guidance Note H1, or another equivalent assessment.
IC4	The Operator shall provide the Agency with an update list of raw materials used or likely to be used in the installation, to include but not limited to: <ul style="list-style-type: none"> <li>• Cleaning chemicals</li> <li>• Cooling tower treatment chemicals</li> <li>• Oils and greases</li> </ul> in the format given in Table 2.4.1.1 of the Application.
IC5	The Operator shall provide the Agency with an odour management plan, making reference to relevant guidance including the Agency's Odour Horizontal Guidance Note H4 as from time to time amended. It is recommended that the management plan should include: <ul style="list-style-type: none"> <li>• A full inventory of potential odour emission sources, including those that may occur under abnormal conditions. This should include estimates of gas flow rates and odour concentrations.</li> <li>• An impact assessment of the odour emissions from the installation, carried out in accordance with the guidance given in IPPC H4 part 2 (section 1.5.2). For the purpose of this exercise it is recommended that the acceptability of the site be judged against an exposure criterion of at least 1.5 ou/m<sup>3</sup> as a 98 percentile of 1 hour averages. This value is considered appropriate because of the meat cooking activities carried out on site.</li> </ul>

	<ul style="list-style-type: none"> <li>• A review of all odour mitigation techniques with a full justification with the choice of technique used within the installation.</li> </ul>
IC6	The Operator shall undertake an assessment of subsurface structures and their potential to cause fugitive emissions to surface water and ground water. The assessment will take into account the requirements of section 2.2.5 of the Agency's Guidance Note IPPC S6.11, July 2003. A written report summarising the findings shall be submitted to the Agency. A timescale for implementation of any improvements shall be approved by the Agency.
IC7	The Operator shall provide the Agency with an update Application Table 2.6.1 on waste recovery and disposal, to include effluent treatment plant sludge.
IC8	The Operator shall provide the Agency with their written BAT appraisal of options for recovery or disposal of effluent treatment plant sludge generated at the Installation, for discussion with the Agency. The assessment will include the provisions that would be in place to meet Duty of Care requirements.
IC9	The Operator shall provide the Agency with an updated written accident management plan, to further include, but not necessarily be limited to: <ul style="list-style-type: none"> <li>• Failure of the effluent treatment plant pollution prevention measures.</li> <li>• Failure of the ofal trailer pollution prevention measures, and;</li> <li>• Failure of the LFO storage pollution prevention measures.</li> </ul> Taking note of the Guidance given in Section 2.8 of Sector Guidance Note IPPC S6.11 Guidance for the Red Meat Processing (Cattle, Sheep and Pigs) Sector.
IC10	The Operator shall provide a report in writing to the Agency detailing the current monitoring method, having regard to EN, ISO and BS standards, used to determine effluent flow at W1. The monitoring method shall be agreed in writing with the Agency.
IC11	The Operator shall assess the current method for effluent flow as identified in IC10 with the requirements given in the MCERTS standard 'Minimum requirement for the self-monitoring of effluent flow' version 2, August 2004. A written report shall be provided to the Agency detailing how this standard is to be achieved and shall include timescales for implementation.
IC12	The Operator shall provide a procedure/ work instruction that shall be agreed with the Agency for the operation of the continuous pH meter having regards to the calibration requirement given in BS6068-2.50:1995, ISO10523:1984.
IC13	The Operator shall assess the current method for determining released effluent pH in IC12 with the requirements given in MCERTS standard 'Continuous Water Monitoring Equipment, Part 2: Performance standards for on-line analysers' version 1, February 2003. A written report shall be provided to the Agency detailing how this standard is to be achieved and shall include timescales for implementation.
IC14	<b>Not found</b>
IC15a	The Operator shall set up and maintain a daily log of odour observations from raw materials storage areas and from outside of the waste reception building. Records shall include the date, time, wind direction and location of the observation.

IC15b	After 12 months of continuous observations as required by IC15a, the Operator shall produce a written report including a copy of the logged observations and any conclusions that can be drawn, which shall be submitted to the Agency.
IC16	The Operator shall develop a Site Condition Plan in accordance with Agency document H5 – Guidance for Applicants – Site Condition Report Guidance and Templates, in order to ensure that there is sufficient information available to support any future application to surrender any part of the permit. The report shall cover both the existing production plant and the plant to be built in accordance with this variation notice, with a separate section for each area. The report shall be submitted in writing to the Agency and shall be implemented upon approval by the Agency.
IC17	A comprehensive report, with associated drawings and engineering specifications shall be submitted to the Agency, detailing the construction and maintenance of hard standing areas, kerbing, containment for raw materials, product storage details and any other waste storage areas.

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>
IC18	<p>The operator shall submit, for approval by Environment Agency, a report setting out progress to achieving the 'Narrative' BAT where BAT is currently not achieved, but will be achieved before 4 December 2023. The report shall include, but not be limited to, the following:</p> <ol style="list-style-type: none"> <li>1) Methodology for achieving BAT</li> <li>2) Associated targets /timelines for reaching compliance by 4 December 2023</li> <li>3) Any alterations to the initial plan (in progress reports).</li> </ol> <p>The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BAT 1, 4, 6, 11, and 12.</p> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	04/12/2023
IC19	<p>The Operator shall undertake a survey of the site effluent treatment plant (ETP) primary, secondary and tertiary containment 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

IC20	<p>The operator shall submit, for approval by the Environment Agency, a report setting out progress to achieving the Best Available Techniques Conclusion Associated Emission Levels (BAT-AELs) where BAT is currently not achieved, but will be achieved before 4 December 2023. The report shall include, but not be limited to, the following:</p> <ol style="list-style-type: none"> <li>1) Current performance against the BAT-AELs.</li> <li>2) Methodology for reaching the BAT-AELs.</li> <li>3) Associated targets /timelines for reaching compliance by 4 December 2023.</li> <li>4) Any alterations to the initial plan (in progress reports).</li> </ol> <p>The report shall address the BAT Conclusions for Food, Drink and Milk industries with respect to the following:</p> <ul style="list-style-type: none"> <li>• BAT 12 Table 1 (compliance with BAT-AELs for direct discharges to a receiving water body)</li> </ul> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	04/12/2023
IC21	<p>The operator shall produce a climate change adaptation plan. The approved plan 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>	12 months from permit issue