

# **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/YP3135YD  
The Operator is:                         Gilbertson & Page Limited  
The Installation is:                     Brownfields Pet Food factory  
This Variation Notice number is:   EPR/YP3135YD/V002

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

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

We have reviewed the permit for this installation against the BAT Conclusions for the Food, Drink and Milk Industries published on 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 25/05/2022.

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 1, 2 and 6. The operator does not currently comply with the requirements of BATc 1, 2 and 6. In relation to this/these BAT Conclusions, the operator has committed compliance by 4 December 2023. We have therefore included Improvement Condition IC10 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 02/05/2023 regarding BATc 5, 6, and 17. 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 on 17/07/2023 regarding the updated site plan containing the sewer emission points. We made a copy of this information available to the public in the same way as the response 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>	FC	<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 declared that future compliance will be achieved by 04/12/2023 in relation to BATc 1 (xvi) and (xvii).</b></p> <p>We consider that the operator will be future compliant with BATc 1. Improvement condition IC10 has been included in the permit to achieve compliance (see Annex 3).</p> <p>The EMS is not accredited to ISO14001 standard.</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>	FC	<p>The operator has provided information to support compliance with BATc 2. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 2.</p> <p><b>The Operator declared that it will be future compliance with BATc 2 (III) – wastewater streams and quality, and (VI) – monitoring strategy to increase efficiency.</b></p> <p>We consider that the operator will be future compliant with BATc 2. Improvement condition IC10 has been included in the permit to achieve compliance (see Annex 3).</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 declared that it is monitoring flow rate, pH, SS, P, and sulphides in process effluent discharged through emission point S1 to foul sewer leading to Thames Water for treatment. The average daily volume is 10 m<sup>3</sup>.</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
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>We are satisfied that BATc 4 is not applicable to this Installation.            This installation produces dry pet food resulting in little wastewater being produced. Process effluent, mixed with domestic wastewater is discharged to sewer and not to surface water.</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>	CC	<p>The operator has provided information to support compliance with BATc 5. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 6.            The Operator declared monitoring air emission points A2, A3, A4, and A5 at BS EN 13284-1 at one hour intervals.</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.  <b>The Operator declared that an energy efficiency plan is yet to be developed and compliance will be achieved by 04/12/2023.</b>  <b>Furthermore, The Operator was unable to identify any energy efficiency techniques currently used in this installation, as per this BATc 6(b) requirement.</b>            We consider that the operator will be future compliant with BATc 6 (a) and (b). Improvement condition IC10 has been included in the permit to achieve compliance (see Annex 3).</p>
7	<p><b>Water and wastewater minimisation</b>            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.            (a) water recycling and/or reuse            (b) Optimisation of water flow            (c) Optimisation of water nozzles and hoses            (d) Segregation of water streams</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 declared using the following techniques:</p> <ul style="list-style-type: none"> <li>• Optimisation of water flow</li> <li>• Optimised design and construction of equipment and process areas</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
	Techniques related to cleaning operations: (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		<ul style="list-style-type: none"> <li>• Cleaning of equipment as soon as possible</li> </ul>
8	<b>Prevent or reduce the use of harmful substances</b> 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. (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	CC	The operator has provided information to support compliance with BATc 8. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 8. The Operator declared using: <ul style="list-style-type: none"> <li>• Dry cleaning</li> <li>• Optimised design and construction of equipment and process areas</li> </ul>
9	<b>Refrigerants</b> 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.	NA	We are satisfied that BATc 9 is not applicable to this Installation. The site does not use refrigeration gases for cooling, chilling, and/or refrigeration purposes other than those used for domestic purposes, including air conditioning units.
10	<b>Resource efficiency</b> In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below: (a) Anaerobic digestion (b) Use of residues (c) Separation of residues (d) Recovery and reuse of residues from the pasteuriser (e) Phosphorus recovery as struvite (f) Use of waste water for land spreading	CC	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. The Operator declared that use of residue by reworking out of spec products is the resource efficiency method employed as the only applicable option based on the process operation.
11	<b>Waste water buffer storage</b> In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.	NA	We are satisfied that BATc 11 is not applicable to this Installation.



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
			The Installation does not hold any process effluent on-site, this being discharged to sewer at average volume of 10 m <sup>3</sup> per day therefore, the site does not need a wastewater buffer.
12	<p><b>Emissions to water – treatment</b></p> <p>In order to reduce emissions to water, BAT is to use an appropriate combination of the techniques given below.</p> <p>Preliminary, primary and general treatment</p> <p>(a) Equalisation</p> <p>(b) Neutralisation</p> <p>(c) Physical separate (eg screens, sieves, primary settlement tanks etc)</p> <p>Aerobic and/or anaerobic treatment (secondary treatment)</p> <p>(d) Aerobic and/or anaerobic treatment (eg activated sludge, aerobic lagoon etc)</p> <p>(e) Nitrification and/or denitrification</p> <p>(f) Partial nitrification - anaerobic ammonium oxidation</p> <p>Phosphorus recovery and/or removal</p> <p>(g) Phosphorus recovery as struvite</p> <p>(h) Precipitation</p> <p>(i) Enhanced biological phosphorus removal</p> <p>Final solids removal</p> <p>(j) Coagulation and flocculation</p> <p>(k) Sedimentation</p> <p>(l) Filtration (eg sand filtration, microfiltration, ultrafiltration)</p> <p>(m) Flotation</p>	<b>NA</b>	<p>We are satisfied that BATc 12 is not applicable to this Installation.</p> <p>The installation produces dry pet food only and the manufacturing process does not result in any significant quantities of wastewater being generated, thus no need for on-site effluent treatment. Any process effluent generated is discharged to foul sewer and not directly to water.</p>
12	<p><b>Emissions to water – treatment</b></p> <p><b>BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body</b></p>	<b>NA</b>	<p>We are satisfied that BATc 12 is not applicable to this Installation.</p> <p>The installation produces dry pet food only and the manufacturing process does not result in any significant quantities of wastewater being generated, thus there is no need for on-site effluent treatment. Any process effluent generated is discharged to foul sewer and not directly to water.</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										
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Parameter</th> <th style="width: 50%;">BAT-AEL (°) (°) (daily average)</th> </tr> </thead> <tbody> <tr> <td>Chemical oxygen demand (COD) (°) (°)</td> <td>25-100 mg/l (°)</td> </tr> <tr> <td>Total suspended solids (TSS)</td> <td>4-50 mg/l (°)</td> </tr> <tr> <td>Total nitrogen (TN)</td> <td>2-20 mg/l (°) (°)</td> </tr> <tr> <td>Total phosphorus (TP)</td> <td>0,2-2 mg/l (°)</td> </tr> </tbody> </table>	Parameter	BAT-AEL (°) (°) (daily average)	Chemical oxygen demand (COD) (°) (°)	25-100 mg/l (°)	Total suspended solids (TSS)	4-50 mg/l (°)	Total nitrogen (TN)	2-20 mg/l (°) (°)	Total phosphorus (TP)	0,2-2 mg/l (°)		
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13	<p><b>Noise management plan</b></p> <p>In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to set up, implement and regularly review a noise management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:</p> <ul style="list-style-type: none"> <li>- a protocol containing actions and timelines;</li> <li>- a protocol for conducting noise emissions monitoring;</li> <li>- a protocol for response to identified noise events, eg complaints;</li> <li>- a noise reduction programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures.</li> </ul>	<b>NA</b>	<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>										
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> <ol 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> </ol>	<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 following techniques are used:</p> <ul style="list-style-type: none"> <li>• Appropriate location of equipment</li> <li>• Operational measures</li> <li>• Low-noise equipment</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> </ul>	<b>FC</b>	<p>The operator has provided information to support compliance with BATc 15. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 15.</p> <p><b>However, the site did received odour related complaints in the past and was required on 16/09/2022 to produce an action plan for the</b></p>										

BATC No	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	<ul style="list-style-type: none"> <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>		<p><b>operation and maintenance of the carbon filters, and produce a revised OMP by 28/01/2023 but there is no data to show that the Operator has submitted the OMP nor that it has been approved by the Agency.</b></p> <p>Given that an updated OMP has already been requested through POC4 that has been retained and renumbered IC12, we will not duplicate this request here through an identical IC.</p>
<b>PET FOOD BAT CONCLUSIONS (BAT 16-17)</b>			
16	<p><b>Energy efficiency – Green fodder only</b></p> <p>In order to increase energy efficiency in green fodder processing, BAT is to use an appropriate combination of the techniques specified in BAT 6 and of the techniques given below.</p> <ul style="list-style-type: none"> <li>(a) Use of predried fodder</li> <li>(b) Recycling of waste gas from the dryer</li> <li>(c) Use of waste heat for pre-drying</li> </ul> <p>Applicable in addition to BAT6</p>	<b>N/A</b>	<p>The site does not process green fodder.</p> <p>We are therefore satisfied that BATc 16 is not applicable for this site.</p>
17	<p><b>Emissions to air – particulates</b></p> <p>In order to reduce channelled dust emissions to air, BAT is to use one of the techniques given; a. bag filter, b. cyclone.</p> <p>Note: There is no BAT-AEL for dry pet food production. However, we want to set an ELV to ensure this parameter is adequately controlled. These should be based on what the operator can achieve (if monitoring data is available) and should be in line with the <u>compound</u> animal feed BAT-AELs (10mg/m<sup>3</sup> for grinding and/or 20mg/m<sup>3</sup> for cooling). However, as this is not a BAT-AEL, no derogation is required if the operator cannot achieve this. We will ensure they have the correct abatement and set an appropriate ELV with an IC.</p>	<b>CC</b>	<p>The operator has provided information to support compliance with BATc 17 AELs. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 15.</p> <p>The Operator declared compliance against permitted ELVs for grinders, coolers and general processes:</p> <ul style="list-style-type: none"> <li>A2 – cooler via cyclone and bag filter– 2.3 mg/m<sup>3</sup></li> <li>A3 – dust suppression via bag filter – 0.89 mg/m<sup>3</sup></li> <li>A4 – grinder via bag filter – 0.21 mg/m<sup>3</sup></li> <li>A5 – dryer vacuum via cyclone – 0.44 mg/m<sup>3</sup></li> </ul> <p><b>We take this opportunity to include in the consolidated permit the new, upper limits for:</b></p> <ul style="list-style-type: none"> <li><b>A2 – 20 mg/m<sup>3</sup></b></li> <li><b>A3 – 20 mg/m<sup>3</sup></b></li> <li><b>A4 – 10 mg/m<sup>3</sup></b></li> <li><b>A5 – 20 mg/m<sup>3</sup></b></li> </ul>

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				These ELVs are applicable from the time of permit issue, thus an IC is not required in this instance.	
<b>Animal Feed Environmental Performance Levels</b>					
EPL	<b>Environmental Performance Level – Energy Consumption for Pet food</b>			CC	<p>The operator has provided information to support compliance with BAT EPL. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BAT EPL. The operator reports that between during 2021 the site achieved a specific energy consumption of 0.53 MWh/Tonne, which is not within the EPL 0.39 – 0.50 MWh/t range representative for the dry pet-food sector.</p> <p><b>However, the Operator declared that the indicative EPL upper limit has been exceeded because of works undertaken to install odour control units. Therefore, we do not consider that an IC is required on this occasion.</b></p>
	Product	Unit	Specific energy consumption (yearly average)		
	Compound food	MWh/tonne of products	0.01-0.10 <sup>(1)(2)(3)</sup>		
	Dry pet food		0.39-0.50		
	Wet pet food		0.33-0.85		
<p>(1) The lower end of the range can be achieved when pelleting is not applied.</p> <p>(2) The specific energy consumption level may not apply when fish and other aquatic animals are used as raw material.</p> <p>(3) The upper end of the range is 0.12 MWh/tonne of products for installations located in cold climates and/or when heat treatment is used for Salmonella decontamination.</p>					
EPL	<b>Environmental performance level – Waste water discharge for Animal Feed</b>			NA	<p>We are therefore satisfied that BAT EPL is not applicable for this site.</p> <p>This ELP is applicable for installations producing wet pet food. Because this site produces only dry pet food, this BAT-EPL is not applicable.</p>
	Product	Unit	Specific waste water discharge (yearly average)		
	Wet pet food	m3/tonne of products	1.3-2.4		

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

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

- 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 below:

#### Boilers

1. Rated thermal input (MW) of the medium combustion plant.	2.5 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler 1
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.	June 2005

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.

#### **Particulate Emissions**

BAT-AELs are derived for those substances identified as key environmental issues during the BREF review process.

If the operator has identified current compliance against BAT-AELs we will implement the relevant emission limit value (ELV) from the date of permit issue. This is relevant for emission points A2, A4, A4, and A5 against BAT 17 for dust emissions from the bag filters and cyclones.

We have added an improvement condition (IC11) for size fractionation of particulate emissions because a BAT-AEL applies for dust emissions to air. The justification for

this IC is that there are a number of activities within the FDM sector which may result in release of particulates to air e.g. drying, milling and grinding. Overall there is little available information on how much fine particulates are released. This IC is a one-off exercise requiring operators to monitor and report on the fractions of fine particulate (PM<sub>10</sub> and PM<sub>2.5</sub>) emissions and increase our understanding of potential health effects. Where BAT-AELS may apply to multiple emission points e.g. grain milling, we may accept limited representative monitoring rather than expecting them to monitor every single emission point.

### **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 [Document reference 1776485.502/B0, July 2017] during the original application received on 05/07/2017. 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 not identified any hazardous substances used / stored at the installation.

### **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 stated that the installation is not likely to be or has previously not been affected by climate change.

### **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. We are satisfied that the existing tanks and containment measures on site meet the standards set out in CIRIA C736.

### Annex 3: Improvement Conditions

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

Previous improvement conditions marked as complete in the previous permit.

<b>Superseded Improvement Conditions – Removed from permit as marked as “complete”</b>	
<b>Reference</b>	<b>Improvement Condition</b>
POC 1	Prior to the commencement of activities specified in Table S1.1, the operator shall undertake emissions monitoring to MCerts Standard to identify the emissions (including speciation) and the concentration ranges under both normal operations, including but not limited to start-up and shut-down of process batches, and worst case scenario operational loads from emission points A1 to A5. The monitoring shall take into account pollutants released from the start of the process (batching) to the packaging of the finished product (including combustion emissions from the drying process). A report shall be submitted to the Environment Agency detailing the emissions monitoring undertaken and the findings of the emissions monitoring.
POC 2	Prior to the commencement of activities specified in Table S1.1, the operator shall submit a commissioning plan for the installation of the proposed odour abatement system (including air extraction). The plan shall be designed to demonstrate that permit conditions will be met under all anticipated operating conditions and the site odour emissions will not extend beyond the site. The operator shall also confirm the commissioning programme, details of odour abatement plant monitoring protocols and a proposal for the assessment of the performance of the abatement system against design parameters.
POC 3	Prior to the commencement of activities specified in Table S1.1, the operator shall identify and install abatement to treat odour emissions from the start of the process (batching) to the packaging of the finished product. The installation and the commissioning of the approved odour abatement system shall be implemented by the operator, subject to any such amendments or additions as notified by the Environment Agency.
POC 4	Retained and renumbered as IC12
POC 5	Retained and renumbered as IC13
POC 6	Retained and renumbered as IC14
POC 7	Retained and renumbered as IC15
POC 8	Retained and renumbered as IC16
POC 9	Retained and renumbered as IC17

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>
IC10	<p>The operator shall submit, for approval by Environment Agency, a report setting out progress to achieving the 'Narrative' BAT where BATc 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, 2 and 6.</p> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	04/12/2023
IC11	<p>The Operator shall submit a written report to the Environment Agency of monitoring carried out to determine the size distribution of particulate matter in the exhaust gas emissions to air from emission points [A2, A3, A4, and A5], identifying the fractions within the PM<sub>10</sub> and PM<sub>2.5</sub> ranges. The monitoring shall be carried out under representative operating conditions and shall be in accordance with EN ISO 23210 unless otherwise agreed with the Environment Agency.</p>	12 months from permit issue.

IC12	<p>Prior to the commencement of activities specified in Table S1.1, the operator shall develop a revised odour management plan for the activities undertaken at the Installation. The plan shall take into account the appropriate measures for odour control specified in the Part B Process Guidance Note 6/26/13 dated December 2013. The plan shall also include all the required information as specified in the Environment Agency Horizontal Guidance H4 - Odour Management. The plan shall:</p> <ul style="list-style-type: none"> <li>• Include the management of odorous emissions from the start of the process (batching) to the packaging of the finished product, following the completion of emissions monitoring undertaken in POC1, and the identification of required process changes including emissions abatement system (POC3).</li> <li>• address all points raised in the Environment Agency's review of the odour management plan</li> <li>• identify all odorous emissions and activities, under normal and abnormal operations</li> <li>• detail control measures in place for each emission /activity (under normal and abnormal operations)</li> <li>• identify process monitoring required for each emission and trigger levels for action to be taken.</li> </ul> <p>The updated odour management plan shall be submitted to the Environment Agency for review and comment. The operator shall amend the odour management plan in accordance with the Environment Agency's comments prior to final approval.</p>	12 months from permit issue or other date agreed in writing with the Environment Agency
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IC13	<p>Prior to the commencement of activities specified in Table S1.1, the operator shall develop a written /documented preventative-based overarching maintenance management system for plant, including conditional maintenance (if applicable) of equipment and site infrastructure whose failure could impact on the environment.</p> <p>The overarching maintenance management system report shall identify:</p> <ul style="list-style-type: none"> <li>• roles and responsibilities</li> <li>• a system to generate documented maintenance instructions for each job/task</li> <li>• a review system to <ul style="list-style-type: none"> <li>o track the progress of maintenance jobs</li> <li>o review maintenance tasks frequencies following on-site accidents, incidents, near misses, and notifications from plant /equipment suppliers</li> </ul> </li> <li>• a documented system which identifies critical plant/equipment/items, whose failure could impact on the environment, including details of where critical spares can be found on site, and, or sourced within a short timeframe.</li> </ul> <p>A report detailing the overarching maintenance management system shall be submitted to the Environment Agency for review and comment. The operator shall amend the maintenance management system in accordance with the Environment Agency's comments prior to final approval.</p>	12 months from permit issue or other date agreed in writing with the Environment Agency
IC14	<p>Prior to the commencement of activities specified in Table S1.1, the operator shall develop a training management system, which identifies the training needs, for all staff and personnel, including third party contractors, working at the Installation, relevant to their job role. The training management system report shall identify training requirements for each person/job function, including:</p> <ul style="list-style-type: none"> <li>• Refresher training</li> <li>• access to written/documentated operational instructions relevant to their roles within the permitted installation activities</li> <li>• a documented system to maintain a record of the skills and training requirements for all staff whose activities/jobs in relation to the permitted Installation may have an impact on the environment and shall keep records of all relevant training</li> </ul> <p>Details of the overarching training management system report shall be submitted to the Environment Agency for review and comment. The operator shall amend the training management system in accordance with the Environment Agency's comments prior to final approval.</p>	12 months from permit issue or other date agreed in writing with the Environment Agency

IC15	<p>Prior to the commencement of activities specified in Table S1.1, the operator shall develop an accident management plan which identifies accidents /incidents which could have an impact on the environment. The accident management plan shall describe how scenarios including but not limited to events such as fire, explosions, spills/leak are identified and managed to minimise the environmental impact. The plan shall also detail the measures in place to minimise the scenario from occurring. A report on the accident management plan, covering the points above shall be submitted to the Environment Agency for review and comment. The operator shall amend the accident management plan in accordance with the Environment Agency's comments prior to final approval.</p>	12 months from permit issue or other date agreed in writing with the Environment Agency
IC16	<p>Prior to the commencement of activities specified in Table S1.1, the operator shall develop a document management system and documented written procedures for all the permitted installation activities which covers:</p> <ul style="list-style-type: none"> <li>• normal operational conditions</li> <li>• abnormal operating conditions</li> <li>• investigating and reporting actual or potential non-compliance with operating procedures whose failure could lead to an impact on the environment</li> <li>• investigating abnormal operating conditions, including any malfunction, breakdown of plant, equipment or technique, down time, and short term or long term remedial measures and near misses, and prompt implementation of required actions, and the maintenance of detailed records of all actions and investigations, and</li> <li>• a documented system to record and investigate environmental complaints relating to the permitted installation activities, or alleged environmental effects on the environment, detailing the date, nature and source of the complaint, a summary of the review and investigation and actions taken, including any review and changes of the site management systems.</li> </ul> <p>The operator shall submit a report on the management system developed to manage the above document procedures, including when procedures will be reviewed and updated. The report shall be submitted to the Environment Agency for review and comment. The operator shall amend the document management system in accordance with the Environment Agency's comments prior to final approval.</p>	12 months from permit issue or other date agreed in writing with the Environment Agency

IC17	<p>Prior to the commencement of activities specified in Table S1.1, the operator shall undertake a survey to determine the integrity, adequacy and suitability of existing site hardstanding, kerbing and secondary containment for above-ground tanks and the measures to comply with the requirements of the Food and Drink Technical Guidance Note (EPR 6.10), CIRIA 736 and any other relevant industry standard. The survey shall assess the adequacy of the design, construction and condition of existing site hardstanding, kerbing and secondary containment for above-ground tanks with the purpose of preventing fugitive emissions to surface water, ground water and land. A written report summarising the survey, proposals for improvements and a timescale for implementation of any improvements shall be submitted to the Environment Agency for review and comment. The operator shall implement any improvements in accordance with the Environment Agency's comments.</p>	<p>12 months from permit issue or other date agreed in writing with the Environment Agency</p>
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