# 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/BO5187INThe Operator is:Pets Love Fresh LimitedThe Installation is:PLF BlenheimThis Variation Notice number is:EPR/BO5187IN/V004

# 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 <u>Requesting information to demonstrate compliance with BAT Conclusion techniques</u>

We issued a Notice under Regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 01/08/2022 requiring the Operator to provide information to demonstrate where the operation of their installation currently meets, or how it will subsequently meet, the revised standards described in the relevant BAT Conclusions document.

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

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

Where the Operator proposed that they were not intending to meet a BAT standard that also included a BAT Associated Emission Level (BAT-AEL) described in the BAT Conclusions Document, the Regulation 61 Notice required that the Operator make a formal request for derogation from compliance with that BAT-AEL (as provisioned by Article 15(4) of IED). In this circumstance, the Notice identified that any such request for derogation must be supported and justified by sufficient technical and commercial information that would enable us to determine acceptability of the derogation request.

The Regulation 61 Notice response from the Operator was received on 20/02/2023.

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

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

#### 2.2 <u>Review of our own information in respect to the capability of the Installation to meet revised</u> 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 6 and 12. In relation to these BAT Conclusions, we do not fully agree with the Operator in respect of their current stated capability as recorded in their response to the Regulation 61 Notice. We have therefore included Improvement Conditions IC8 & IC9 in the Consolidated Variation Notice to ensure that the requirements of the BAT Conclusions are delivered within 3 months of the variation being issued with regard to BATc 6 and 12 months of the variation being issued with regard to BATc 12.

#### 2.3 <u>Requests for further information during determination</u>

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 21/08/2024. The initial information request, required the Operator to resubmit their Regulation 61 Response Tool with more detail and supporting information on all relevant BAT Conclusions. A response was received on 22/11/2024. Following a review of the revised Regulation 61 Response Tool and supporting information a further information request was issued on 25/11/2024, this request required further clarification be provided on the following BAT Conclusions; 2, 3, 6, 9, 11, 12 and the relevant Environment Performance Levels. In addition further clarification was sought on the activities undertaken at the site, the site condition report and the climate change adaptation plan. A response was received on 02/12/2024. A copy of each further information requests and responses with the supporting information was placed on our public register.

# 3 The legal framework

The Consolidated Variation Notice will be issued under Regulations 18 and 20 of the EPR. The Environmental Permitting regime is a legal vehicle which delivers most of the relevant legal requirements for activities falling within its scope. In particular, the regulated facility is:

- an *installation* as described by the IED;
- subject to aspects of other relevant legislation which also have to be addressed.

We consider that, in issuing the Consolidated Variation Notice, it will ensure that the operation of the Installation complies with all relevant legal requirements and that a high level of protection will be delivered for the environment and human health.

We explain how we have addressed specific statutory requirements more fully in the rest of this document.

#### Annex 1: decision checklist regarding relevant BAT Conclusions

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

There are 37 BAT Conclusions.

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

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

BAT 16 & 17 BAT 18 – 20 BAT 21 – 23	BAT Conclusions for Animal Feed BAT Conclusions for Brewing BAT Conclusions for Dairies
BAT 21 – 23 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
GENE	RAL BAT CONCLUSIONS (BAT 1-15)		
1	Environmental Management System - Improve overall environmental performance. Implement an EMS that incorporates all the features as described within BATc 1.	CC	The Operator has provided information to support compliance with BATc 1. We have assessed the information provided and we are satisfied that the Operator has demonstrated compliance with BATc 1. The operator has an established EMS, which aligns with (but not audited to) the ISO 14001:2015 standards and meets the requirements of BATc 1. A summary of the features EMS has been provided, the EMS encompasses all of the points as set out in BATc 1.
2	EMS Inventory of inputs & outputs. Increase resource efficiency and reduce emissions. Establish, maintain and regularly review (including when a significant change occurs) an inventory of water, energy and raw materials consumption as we 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.		<ul> <li>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.</li> <li>The Operator submitted a simplified diagram showing an overview of the onsite processes.</li> <li>Energy and water usage are monitored on-site alongside production figures. The tracking of key performance indicator (KPIs) encourage maximum use of raw material for the products, to ensure production lines are as efficient as possible.</li> <li>Raw material usage including energy and water discussed with the senior leadership team and actions taken where needed.</li> <li>Effluent produced by the on-site processes is monitored by the sewage undertaker, Anglian Water.</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	Monitoring key process parameters at key locations for emissions to water. 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).	CC	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. All effluent arising from the production processes and cleaning is discharged to foul sewer via a trade effluent consent. Prior to the discharge the effluent passes through catch pots to capture solids, fats and oils. Currently there is no form of effluent treatment in place at the site. The sewage undertaker (Anglian Water) undertakes sampling of the effluent at a minimum frequency of every three months. The following parameters are monitored – Suspend Solids, COD (Chemical Oxygen Demand), pH, Sulphate and oils and grease.
4	Monitoring emissions to water to the required frequencies and standards. 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.	NA	We are satisfied that BATc 4 is not applicable to this Installation. There are no direct discharges of treated process effluent to surface water, all effluent is discharged to the foul sewer.
5	Monitoring channelled emissions to air to the required frequencies and standards. BAT is to monitor channelled emissions to air with at least the frequency given and in accordance with EN standards.	NA	We are satisfied that BATc 5 is not applicable to this Installation. There are no channelled emissions to air from the on-site processes.
6	<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.	FC	The Operator has provided information to support compliance with BATc 6. We have assessed the information provided we are not satisfied that the

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> <li>Operator has demonstrated compliance with BATc 6.</li> <li>The Operator has not provided a standalone energy efficiency plan that incorporates the requirements of BATc 6a. We have included an improvement condition (IC8) for the Operator to submit an Energy Efficiency Plan for approval</li> <li>The Operator undertakes the following techniques on-site to increase energy efficiency as summarised below.</li> <li>burner regulation and control.</li> <li>energy-efficient motors.</li> <li>heat recovery with heat exchangers and/</li> <li>On going process of installing energy efficient lighting across the site.</li> <li>minimising blowdown from the boiler.</li> <li>optimising steam distribution systems.</li> <li>preheating feed water.</li> <li>process control systems.</li> <li>Planned preventative maintenance to reduce compressed air system leaks.</li> <li>reducing heat losses by insulation.</li> <li>variable speed drives.</li> </ul>
7	Water and wastewater minimisation 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	СС	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.

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> <li>(b) Optimisation of water flow</li> <li>(c) Optimisation of water nozzles and hoses</li> <li>(d) Segregation of water streams</li> <li>Techniques related to cleaning operations:</li> <li>(e) Dry cleaning</li> <li>(f) Pigging system for pipes</li> <li>(g) High-pressure cleaning</li> <li>(h) Optimisation of chemical dosing and water use in cleaning-in-place</li> <li>(CIP)</li> <li>(i) Low-pressure foam and/or gel cleaning</li> <li>(j) Optimised design and construction of equipment and process areas</li> <li>(k) Cleaning of equipment as soon as possible</li> </ul>		<ul> <li>The Operator has confirmed that due to food safety reasons there are limited opportunities for the recycling and/or the reuse of water within the production processes. We are satisfied that Operator has provided sufficient justification as to why BATc 7a is not applicable to the site.</li> <li>The Operator has identified the following techniques to reduce water consumption and waste water discharge at the site.</li> <li>(b) Optimisation of water flow</li> <li>(c) Optimisation of water streams, uncontaminated surface water from roofs and yard areas is separated and discharged separately to process effluent.</li> <li>(e) Dry cleaning</li> <li>(h) Optimisation of chemical dosing and water use is in place</li> <li>(i) Low-pressure foam and/or gel cleaning</li> <li>(j) Optimised design and construction of equipment and process areas</li> <li>(k) Cleaning of equipment as soon as possible</li> </ul>
8	<ul> <li>Prevent or reduce the use of harmful substances</li> <li>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.</li> <li>(a) Proper selection of cleaning chemicals and/or disinfectants</li> <li>(b) Reuse of cleaning chemicals in cleaning-in-place (CIP)</li> <li>(c) Dry cleaning</li> <li>(d) Optimised design and construction of equipment and process areas</li> </ul>	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 has confirmed that chemicals used at the site are sourced appropriately and their usage is audited. Drying cleaning is used where suitable in addition, equipment and areas are designed and considered with ease of cleaning

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
			and water efficiency in mind at time of major change or replacement of equipment
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.	cc	The Operator has provided information to support compliance with BATc 9. We have assessed the information provided and we are satisfied that the Operator has demonstrated compliance with BATc 9.
			The site utilises a mixture of carbon dioxide and ammonia for the on-site refrigeration and freezing for the main production processes, this is considered to be compliant with the requirements of BATc 9.
			The systems serving the air condition units and the refrigeration systems in the technical office use refrigerants with a high global warming potential (GWP) such as R410A R134a both of these refrigerants have a GWP above 1400, which is consider to be high. However as these units serve domestic air conditioning and refrigeration units the requirements of BATc 9 do not apply. BATc 9 only applies to the units associated with the main production processes on-site.
10	Resource efficiencyIn order to increase resource efficiency, BAT is to use one or a combinationof the techniques given below:(a) Anaerobic digestion(b) Use of residues(c) Separation of residues(d) Recovery and reuse of residues from the pasteuriser	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.
	<ul><li>(e) Phosphorus recovery as struvite</li><li>(f) Use of waste water for land spreading</li></ul>		<ul> <li>The Operator has identified the following techniques to increase resource efficiency.</li> <li>Waste streams are segregated and removed for appropriate recovery operations, which can include animal</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
			feed/pet food; biodiesel; anaerobic digestion; land application as fertiliser.
11	Waste water buffer storage In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.	СС	The Operator has provided information to support compliance with BATc 11. We have assessed the information provided and we are satisfied that the Operator has demonstrated compliance with BATc 11.
			The Operator has provided the following justification to demonstrate compliance with the requirements of BATc 11.
			The on-site grease interceptor have a buffer capacity volume of 30m <sup>3</sup> this is calculate as two chambers each with an approximate capacity of 10,000 litres, followed by an approximate 10,000 litres pump chamber.
			The interceptor's discharge operates on a high level switch, with pump to discharge only activating when water within the tanks reaches high level (approx. 90% capacity). Trade effluent is only generated during operating hours. The interceptor therefore provides storage for approximately a full day's average wastewater generation (based off current water usage across the site). In the event of an issue with effluent discharge, or incident which could lead to effluent not being suitable for compliant discharge, the following actions would occur:
			Pump switched off to ensure no discharge
			Manual pump to suitable vessels (IBC) on- site (for removal as controlled waste), or
			Provision of wastewater collection tanker for effluent removal as controlled waste

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> <li>If volumes and the situation meant that safe production could not continue, production and subsequent generation of further effluent would be stopped until the situation was resolved.</li> </ul>
			The drainage within the high risk areas of the site all flows to the trade effluent system, which comprises of buffer storage and discharge pump shut off to isolate the system if required. All other external areas are considered lower risk with storage containers holding smaller volumes of liquids, the surface drainage within this area are fitted with interceptors the storage locations and volumes handled are such that any spills or leaks are highly unlikely to reach surface drainage gulleys, but spill kits with drain covers are also provided at these storage locations.
12	Emissions to water – treatment In order to reduce emissions to water, BAT is to use an appropriate combination of the techniques given below. Preliminary, primary and general treatment (a) Equalisation	FC	The Operator has provided information to support compliance with BATc 12. We have assessed the information provided we are not satisfied that the Operator has demonstrated compliance with BATc 12.
	<ul> <li>(b) Neutralisation</li> <li>(c) Physical separate (eg screens, sieves, primary settlement tanks etc)</li> <li>Aerobic and/or anaerobic treatment (secondary treatment)</li> <li>(d) Aerobic and/or anaerobic treatment (eg activated sludge, aerobic lagoon etc)</li> </ul>		The Operator currently has no form of effluent treatment on-site other than the use of interceptors to screen out solids prior to discharging directly to the Anglian Water foul sewer under a trade effluent consent.
	<ul> <li>(e) Nitification and/or denitrification</li> <li>(f) Partial nitration - anaerobic ammonium oxidation</li> <li>Phosphorus recovery and/or removal</li> <li>(g) Phosphorus recovery as struvite</li> <li>(h) Precipitation</li> <li>(i) Enhanced biological phosphorus removal</li> </ul>		BATc 12 requires a combination of the stated techniques to be implemented at the site to reduce emissions to water. We have included improvement condition (IC9) for the Operator to undertake a feasibility study for the installation of effluent treatment and include a review of

BATC No.	Summary of BAT Conclusion requirements Industries	ent for Food, Drink and Milk	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
	Final solids removal (j) Coagulation and flocculation (k) Sedimentation (l) Filtration (eg sand filtration, microfiltration, ultrafiltration) (m) Flotation			associated benefits. Where no effluent treatment is provided justification is required, taking into account the nature of the wastewater and any subsequent off-site treatment. We consider that the operator will be future compliant with BATc 12. Improvement condition (IC9) has been included in the permit to achieve compliance (see Annex 3).
12	Emissions to water – treatment BAT-associated emission levels (BAT-A receiving water body	ELs) for direct emissions to a	NA	We are satisfied that the BAT-AELs associated with BATc 12 are not applicable to this Installation. The site discharges all process effluent to the foul sewer under a trade effluent consent from Anglian
	Parameter	BAT-AEL (1) (2) (daily average)		Water. There are no direct discharges to surface
	Chemical oxygen demand (COD) (3) (4)	25-100 mg/l ( <sup>5</sup> )		water.
	Total suspended solids (TSS)	4-50 mg/l (°)		
	Total nitrogen (TN)	2-20 mg/l ( <sup>7</sup> ) ( <sup>8</sup> )		
	Total phosphorus (TP)	0,2-2 mg/l ( <sup>9</sup> )		
13	Noise management plan In order to prevent or, where that is not pra- emissions, BAT is to set up, implement an management plan, as part of the environm BAT 1), that includes all of the following el- - a protocol containing actions and timeline - a protocol for conducting noise emissions - a protocol for response to identified noise - a noise reduction programme designed to measure/estimate noise and vibration expo- contributions of the sources and to implem measures. Note: BAT13 is only applicable where a no- receptors is expected and/or has been sub-	d regularly review a noise ental management system (see ements: es; s monitoring; e events, eg complaints; o identify the source(s), to osure, to characterise the ent prevention and/or reduction vise nuisance at sensitive	NA	<ul> <li>We are satisfied that the BATc 13 is not applicable to this Installation.</li> <li>BAT 13 is only applicable to cases where a noise nuisance at sensitive receptors is expected and/or has been substantiated, or if forms part of an existing permit requirement.</li> <li>The site does not have a history of substantiated noise complaints either directly to the site or via the regulator.</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
14	Noise management 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. (a) Appropriate location of equipment and buildings (b) Operational measures (c) Low-noise equipment (d) Noise control equipment (e) Noise abatement	CC	<ul> <li>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.</li> <li>The site utilises the following techniques to reduce noise emissions; <ul> <li>Regular maintenance of on-site plant.</li> <li>Regular training of staff to operate machinery and plant without causing excess noise.</li> <li>Closing of doors and windows and avoiding noisy activities at night.</li> <li>Equipment is replaced (when required) with equipment with a lower noise rating at end of life.</li> <li>Buildings are insulated to prevent and reduce noise emissions.</li> </ul> </li> <li>Site speed is controlled to reduce the impact from vehicle movements, in addition HGVs are prohibited from idling on-site.</li> </ul>
15	<ul> <li>Odour Management</li> <li>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: <ul> <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> </li> </ul>	NA	We are satisfied that the BATc 15 is not applicable to this Installation. BAT 15 is only applicable to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated, or if forms part of an existing permit requirement. The site does not have a history of substantiated odour complaints either directly to the site or via the regulator. There is no formal odour management plan implemented however, within

BATC No.	Summary of BAT Conclu Industries	sion requirement for Foo	d, Drink and Milk	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
	receptors is expected and/		uisance at sensitive		the site governance systems elements of a odour management plan are in place.
PET F	OOD BAT CONCLUSIONS	6 (BAT 16-17)			
16	<ul> <li>Energy efficiency – Green fodder only</li> <li>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.</li> <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 Applicable in addition to BAT6</li> </ul>		N/A	The site does not process green fodder. We are therefore satisfied that BATc 16 is not applicable for this site.	
17	Emissions to air – partic	<b>ulates</b> Iled dust emissions to air, E	3AT is to use one of the	NA	We are satisfied that the BATc 17 is not applicable to this Installation. The site only produces 'wet' pet food, as such there are no direct emissions to air that contain dust (particulate matter).
	Animal Feed Environment	al Performance Levels			
	Environmental Performan Product Compound food Dry pet food	Ce Level – Energy Consu Unit MWh/tonne of products	Imption for Pet FoodSpecific energy consumption (yearly average)0.01-0.10 (1)(2)(3)0.39-0.50	CC	The Operator has provided information to support compliance with BATc 17. We have assessed the information provided and we are satisfied that the Operator has demonstrated compliance with BATc 17.
EPL	Dry pet food       0.33-0.85         (1)       The lower end of the range can be achieved when pelleting is not applied.         (2)       The specific energy consumption level may not apply when fish and other aquatic animals are used as raw material.         (3)       The upper end of the range is 0.12 MWh/tonne of products for installations located in cold climates and/or when teat treatment is used for Salmonella decontamination.				The site processes raw materials that can be manufactured into products for both use in both the human and pet food market. As such we have assessed the site against the EPLs for both the Animal Feed and Meat Processing sector.
					The Operator reports that the sites EPL for specific energy consumption is 0.53MWh/tonne of product produced, which is within the EPL range.

Product         Unit         Specific waste water discharge (yearly average)           Wet pet food         m3/tonne of products         1.3-2.4           T         The Superator has glowed monitone appendice information provided and we are satisfied that the Operator has demonstrated compliance with BATC 17. We have assessed the information provided and we are satisfied that the Operator has demonstrated compliance with BATC 17.           The superator has demonstrated compliance with BATC 17.         The superator has demonstrated compliance with BATC 17.           T         The superator has demonstrated compliance with BATC 17.         The superator has demonstrated compliance with BATC 17.           T         The superator has demonstrated compliance with BATC 17.         The superator has demonstrated compliance with BATC 17.           T         The superator has demonstrated compliance with BATC 17.         The superator has demonstrated compliance with BATC 17.           T         The superator has demonstrated compliance with BATC 17.         The superator has demonstrated compliance with BATC 17.           T         The superator has demonstrated compliance with BATC 17.         The superator has demonstrated compliance with BATC 17.           T         The superator has demonstrated compliance with BATC 17.         The superator has demonstrated compliance with BATC 17.           T         The superator has demonstrated compliance with BATC 17.         The operator has demonstrated compliance with BATC 17.           10 </th <th>BATC No.</th> <th>Summary of BAT Concl Industries</th> <th>lusion requirement for</th> <th>Food, Drink and Milk</th> <th>Status NA/ CC / FC / NC</th> <th>Assessment of the installation capability and any alternative techniques proposed by the Operator to demonstrate compliance with the BAT Conclusion requirement</th>	BATC No.	Summary of BAT Concl Industries	lusion requirement for	Food, Drink and Milk	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
MEAT PROCESSING BAT CONCLUSIONS (BAT 29)       NA         29       In order to reduce channelled emissions of organic compounds to air from meat smoking, BAT is to use one or a combination of the techniques given below.       NA       We are satisfied that the BATc 29 is not applicable to this Installation.         (a) Adsorption       (b) Thermal oxidation       The site doesn't undertake any form of smoking, as such the techniques listed within BATc 29 to reduce channelled emission to air do not apply.         29       BAT-associated emission level (BAT-AEL) for channelled TVOC emissions to air from a smoke chamber       NA         29       BAT-associated emission level (BAT-AEL) for channelled TVOC emissions to air from a smoke chamber       NA         29       BAT-associated emission level (BAT-AEL) for channelled TVOC emissions to air from a smoke chamber       NA         Table 18       BAT-associated emission level (BAT-AEL) for channelled TVOC emissions to air from a smoke chamber       NA         EAT-associated emission level (BAT-AEL) for channelled TVOC emissions to air from a smoke chamber       The site doesn't undertake any form of smoking, as such the BAT-AEL sassociated with BATc 29 is not applicable to this Installation.         10       Tube user end of the range is typically advergence the ampling period)       The site doesn't undertake any form of smoking, as such the BAT-AEL sassociated with BATc 29 do not apply.         10       The bat-AEL does not apply when the TVOC emissions to air from a smoke chamber       SAT associated emission level (bat-AEL) for channe	EPL	Product	Unit	Specific waste water discharge (yearly average)	CC	<ul> <li>compliance with BATc 17. We have assessed the information provided and we are satisfied that the Operator has demonstrated compliance with BATc 17</li> <li>The site processes raw materials that can be manufactured into products for both use in both the human and pet food market. As such we have assessed the site against the EPLs for both the Animal Feed and Meat Processing sector.</li> <li>The Operator reports that the sites EPL for specific</li> </ul>
from meat smoking, BAT is to use one or a combination of the techniques given below.       applicable to this Installation.         (a) Adsorption       (b) Thermal oxidation       The site doesn't undertake any form of smoking, as such the techniques listed within BATc 29 to reduce channelled emission to air do not apply.         29       BAT-associated emission level (BAT-AEL) for channelled TVOC emissions to air from a smoke chamber       NA       We are satisfied that the BATc 29 is not apply.         29       BAT-associated emission level (BAT-AEL) for channelled TVOC emissions to air from a smoke chamber       Table 15       NA       We are satisfied that the BATc 29 is not applicable to this Installation.         10       Troc       Table 15       Intertake any form of smoking, as such the BAT-AELs associated with BATc 29 is not applicable to this Installation.         11       Troc       Intertake any form of smoking, as such the BAT-AELs associated with BATc 29 is not apply.         12       Intertake any form of smoking, as such the BAT-AEL associated emission level (BAT-AEL) for channelled TVOC emissions to air from a smoke chamber       The site doesn't undertake any form of smoking, as such the BAT-AELs associated with BATc 29 is not apply.         13       Too       inglimit       3-50 (?) (?)       Intertake any form of smoking.         13       The bat-AEL does not apply when the TVOC emission load is below 300 g/h.       South the BAT-AEL as associated with BATc 29						
emissions to air from a smoke chamber Table 18 BAT-associated emission level (BAT-AEL) for channelled TVOC emissions to air from a smoke chamber $ \frac{Parameter}{Voc} \frac{Voc}{(average over the sampling period)}}{Voc} \frac{Voc}{(e^{i})} Voc$	29	from meat smoking, BAT is to use one or a combination of the techniques given below. (a) Adsorption (b) Thermal oxidation (c) Wet scrubber			NA	applicable to this Installation. The site doesn't undertake any form of smoking, as such the techniques listed within BATc 29 to
Parameter     Unit     BAT-AEL (average over the sampling period)       TVOC     mg/Nm <sup>3</sup> 3-50 ( <sup>1</sup> ) ( <sup>2</sup> )       ( <sup>1</sup> ) The lower end of the range is typically achieved when using adsorption or thermal oxidation.     ( <sup>1</sup> ) The BAT-AEL does not apply when the TVOC emission load is below 500 g/h.	29	emissions to air from a smoke chamber Table 18		NA	applicable to this Installation. The site doesn't undertake any form of smoking,	
<ul> <li>(i) The lower end of the range is typically achieved when using adsorption or thermal oxidation.</li> <li>(ii) The BAT-AEL does not apply when the TVOC emission load is below 500 g/h.</li> </ul>		Parameter	Unit			
		(1) The lower end of the range is typically achieved when using adsorption or thermal oxidation.				

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries		Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the Operator to demonstrate compliance with the BAT Conclusion requirement
EPL	Environmental Performance Level – Energy consumption for the meat processing sector         Table 16         Indicative environmental performance level for specific energy consumption (yearly average)         MWh/tonne of raw materials       0.25-2.6 (²) (²)         (²) The specific energy consumption level does not apply to the production of ready meals and soups.       (²) The upper end of the range may not apply in the case of a high percentage of cooked products.		CC	The Operator has provided information to support compliance with BATc 29. We have assessed the information provided and we are satisfied that the Operator has demonstrated compliance with BATc 29. The site processes raw materials that can be manufactured into products for both use in both the human and pet food market. As such we have assessed the site against the EPLs for both the Animal Feed and Meat Processing sector. The Operator reports that the sites EPL for specific energy consumption is 0.6 MWh/ tone of raw material, which is within the EPL range
EPL	for the meat processing sector Indicative environmental perform Unit m <sup>3</sup> /tonne of raw materials	- Specific waste water discharge         Table 17         nance level for specific waste water discharge         Specific waste water discharge(yearly average)         1,5-8,0 ( <sup>1</sup> )         v to processes using direct water cooling and to the production	CC	The Operator has provided information to support compliance with BATc 29. We have assessed the information provided and we are satisfied that the Operator has demonstrated compliance with BATc 29 The site processes raw materials that can be manufactured into products for both use in both the human and pet food market. As such we have assessed the site against the EPLs for both the Animal Feed and Meat Processing sector. The Operator reports that the sites EPL for specific waste water discharge is 1.36m <sup>3</sup> /tonne of raw material, which is within the EPL range.

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

#### Updating permit during permit review consolidation

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.

This included some other administrative changes to the permit to ensure cross-sector consistency, including:

- An updated introductory note
- Site plan
- Table S1.1 overhaul
  - Activity Reference (AR) renumbering
  - Updated listed activities
  - Addition of production capacity
  - Directly associated activities (DAAs) standardisation
- Standardisation of reporting parameters.

#### 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

#### **Boilers**

1. Rated thermal input (MW) of the medium combustion plant.	1.1 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Diesel
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.	September 2007

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

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

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

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

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

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

The Operator has previously provided assessments for all emissions to water at the installation. The Operator declares there has been no change to activities and subsequent effluents generated at the installation since this risk assessment was

taken. Consequently, we agree that the original risk assessments remain valid at this time.

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

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

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

The existing site condition report could not be located by either the Operator or the Environment Agency. In response to our request for further information (dated 25 November 2024) the Operator has provided a desktop assessment of the site conditions in line with our H5 guidance [Site Condition Report, dated 02 December 2024]. No site baseline condition was included in the submission. The site condition report concludes that the activities undertaken on-site are low risk and the risk of the activities impacting underlying ground and ground water are low/insignificant, due a combination of the control measures in place. The Operator has stated that there have been no known previous pollution incidents, nor any use of the land, which may have led to significant ground contamination issues that they are aware of.

The Operator has accepted 'zero contamination' beneath the site. This means that when the Operator applies to surrender the Permit, any contamination by substances used at, produced or released from the facility would be considered to have resulted from the operation of the installation. This is in accordance with the Environment Agency Guidance H5 – Site Condition Report.

#### Hazardous Substances

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

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

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

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

#### Climate Change Adaptation

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

The Operator has identified the installation as likely to be or has been affected by flooding and prolonged dry weather/ drought, which we consider to be a severe weather event.

The Operator has submitted a climate change adaptation plan, which considers, as a minimum the impact of severe weather on the operations within the installation.

We consider the climate change adaptation plan to be appropriate for the installation.

#### **Containment**

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

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 on-site tanks currently meet the relevant standard in the Ciria "Containment systems for the prevention of pollution (C736)" report.

We reviewed the information provided by the Operator. We are satisfied that the existing tanks and containment measures on-site meet the standards set out in CIRIA C736.

# **Annex 3: Improvement Conditions**

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

Previous improvement conditions marked as complete in the previous permit.

Superseded Improvement Conditions – Removed from permit as marked as "complete"				
Reference	Improvement Condition			
IC1	The Operator shall remove surface water emission point WE003 (on Figure KR006 of the application) from the site. The emission from this point shall be re-routed to trade effluent drainage. A written report shall be submitted to the Agency detailing the method used to re-route the effluent on completion of the work			
IC2	The Operator shall install physical protection around the gas oil storage tanks to prevent damage from the movement of vehicles. A written report shall be sent to the Agency detailing the work carried out once complete.			
IC3	The Operator shall develop and implement documented procedures for the minimisation of odour from the waste compactor. This shall especially include provisions for periods of hot weather and waste removal frequency. A written copy of the procedures shall be submitted to the Agency.			
IC4	The Operator shall meet the requirements of Sector Guidance Note IPPC 6.11, October 2003, Section 2.2.5 with particular reference to subsurface structures and hardstanding. A written report detailing any improvements required shall be submitted to the Agency. The report shall also include a timetable for implementation of the required work Prioritised by risk.			
IC5	The Operator shall develop an Environmental Manegement System (EMS) for the installation with regards to Section 2.3 of Sector Guidance Note IPPC S6.11. A written report detailing the EMS shall be submitted to the Agency for approval.			
IC6	The Operator shall provide a written report to the Environment Agency after the commissioning of the refrigeration system demonstrating that the expected performance improvement in energy efficiency has been achieved. A copy of the summary report shall be submitted to the Environment Agency for approval.			
IC7	The Operator shall carry out an assessment of the new equipment installed in terms of its releases to atmosphere (AE010, AE011 and AE012) and ensure any releases detected have the appropriate odour abatement systems in place. A written copy of the assessment shall be submitted to the Environment Agency.			

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

Improveme	Improvement programme requirements					
Reference	Reason for inclusion	Justification of deadline				
IC8	<ul> <li>The operator shall submit, for approval by the Environment Agency, a report demonstrating achievement of the 'Narrative' BAT conclusions as identified in the Food, Drink and Milk Bref published on 4 December 2019 where BAT is currently not demonstrated or achieved. The report shall include, but not be limited to, the following:</li> <li>Methodology applied for achieving BAT</li> <li>Demonstrating that BAT has been achieved.</li> </ul>	ing as agreed in as writing by the ned Environment not Agency				
	The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BATc 6 Refer to BAT Conclusions for a full description of the BAT requirement.					
IC9	The Operator shall submit a written report to the Environment Agency for technical assessment and approval on the feasibility of installing effluent treatment in line with requirements of BATc 12 and include a review of treatment options available along with their associated benefits. Justification is required where no on-site treatment is provided, taking into account the nature of the wastewater and any subsequent off-site treatment. In addition, the report needs to consider the appropriate on-site monitoring of the effluent stream prior to disposal in line with the requirements of BATc 3.	as agreed in				
	Best Available Techniques Reference Document and BAT Conclusions document for the food, drink and milk industry dated December 2019).					