

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/ZP3330BV
The Operator is: Fold Hill Foods Limited
The Installation is: Fold Hill Foods
This Variation Notice number is: EPR/ZP3330BV/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 4th December 2019 in the Official Journal of the European Union. In this decision document, we set out the reasoning for the consolidated variation notice that we have issued.

It explains how we have reviewed and considered the techniques used by the Operator in the operation and control of the plant and activities of the installation. It is our record of our decision-making process and shows how we have taken into account all relevant factors in reaching our position.

As well as considering the review of the operating techniques used by the Operator for the operation of the plant and activities of the installation, the consolidated variation notice takes into account and brings together in a single document all previous variations that relate to the original permit issue. Where this has not already been done, it also modernises the entire permit to reflect the conditions contained in our current generic permit template.

The introduction of new template conditions makes the Permit consistent with our current general approach and with other permits issued to Installations in this sector. Although the wording of some conditions has changed, while others have been deleted because of the new regulatory approach, it does not reduce the level of environmental protection achieved by the Permit in any way. In this document, we therefore address only our determination of substantive issues relating to the new BAT Conclusions.

We try to explain our decision as accurately, comprehensively and plainly as possible. Achieving all three objectives is not always easy, and we would welcome any feedback as to how we might improve our decision documents in future.

How this document is structured

1. Our decision
2. How we reached our decision
3. The legal framework
4. Annex 1 – Review of operating techniques within the Installation against BAT Conclusions.
5. Annex 2 – Review and assessment of changes that are not part of the BAT Conclusions derived permit review
6. Annex 3 – Improvement Conditions

1 Our decision

We have decided to issue the Variation Notice to the Operator. This will allow the Operator to continue to operate the Installation, subject to the conditions in the Consolidated Variation Notice that updates the whole permit.

We consider that, in reaching our decision, we have taken into account all relevant considerations and legal requirements and that the varied permit will ensure that a high level of protection is provided for the environment and human health.

The Consolidated Variation Notice contains many conditions taken from our standard Environmental Permit template including the relevant annexes. We developed these conditions in consultation with industry, having regard to the legal requirements of the Environmental Permitting Regulations and other relevant legislation. This document does not therefore include an explanation for these standard conditions. Where they are included in the Notice, we have considered the techniques identified by the Operator for the operation of their installation, and have accepted that the details are sufficient and satisfactory to make those standard conditions appropriate. This document does, however, provide an explanation of our use of “tailor-made” or installation-specific conditions, or where our Permit template provides two or more options.

2 How we reached our decision

2.1 Requesting information to demonstrate compliance with BAT Conclusion techniques

We issued a Notice under Regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 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 30/05/2022.

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, due to the permit being transferred to a new Operator. We therefore asked the new Operator to update the response. Suitable further information was provided by the new Operator on the 05/03/2025 and 12/03/2025.

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 5, 6, 9, 15, 17 and in relation to EPL for energy consumption, capacity threshold, boiler blowdown, hazardous substances and containment. 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: IC7, IC8, IC9 and IC11, in the Consolidated Variation Notice to ensure that the requirements of the BAT Conclusions are delivered within 3 months of the variation being issued and IC10, IC12, IC13, IC14 and IC15 in the Consolidated Variation Notice to ensure that the requirements of the BAT Conclusions are delivered within 12 months of the variation being issued.

2.3 Requests for further information during determination

Although we were able to consider the Regulation 61 Notice response generally satisfactory at receipt a transfer of Operator meant we did in fact need more information in order to complete our permit review assessment and issued further information requests on 29/01/2025, 18/03/2025, 01/04/2025, 07/04/2025 and 25/04/2025 regarding updating the Reg61 Tool and associated documents. Copies of each further information request was placed on our public register.

In addition to the responses to our further information requests, we received additional information during the determination from the consultant representing the Operator on 09/04/2025 relating to the onsite Heat Exchanger and on the 02/06/2025 regarding air emission points, surface water emissions, silo systems and clarification of biofilter system onsite. We made a copy of this information available to the public in the same way as the responses to our information requests.

3 The legal framework

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

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

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

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

Annex 1: decision checklist regarding relevant BAT Conclusions

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

There are 37 BAT Conclusions.

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

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

BAT 16 & 17	BAT Conclusions for Animal Feed
BAT 18 – 20	BAT Conclusions for Brewing
BAT 21 – 23	BAT Conclusions for Dairies
BAT 24	BAT Conclusions for Ethanol Production
BAT 25 & 26	BAT Conclusions for Fish and Shellfish Processing
BAT 27	BAT Conclusions for Fruit and Vegetable Processing
BAT 28	BAT Conclusions for Grain Milling
BAT 29	BAT Conclusions for Meat Processing
BAT 30 – 32	BAT Conclusions for Oilseed Processing and Vegetable Oil Refining
BAT 33	BAT Conclusions for Soft Drinks and Nectar/Fruit Juice Processed from Fruit and Vegetables
BAT 34	BAT Conclusions for Starch Production
BAT 35 – 37	BAT Conclusions for Sugar Manufacturing

This annex provides a record of decisions made in relation to each relevant BAT Conclusion applicable to the installation. This annex should be read in conjunction with the Consolidated Variation Notice.

The overall status of compliance with the BAT conclusion is indicated in the table as:

NA – Not Applicable

CC – Currently Compliant

FC – Compliant in the future (within 4 years of publication of BAT Conclusions)

NC – Not Compliant

BATC No	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the Operator to demonstrate compliance with the BAT Conclusion requirement
GENERAL BAT CONCLUSIONS (BAT 1-15)			
1	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 EMS, although it is not externally accredited. The Operator declared: - An EMS manual is in place, with written procedures to control activities with significant environmental impact, as well as internal auditing - An annual EMS management review meeting against objectives and targets - Procedures in place for reporting and mitigating incidents - Processes controlled via operating procedures - Preventative maintenance schedules in place - Training of relevant staff and induction - Environmental Advisor employed on site
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 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.	CC	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. The Operator has provided: - A description of the management of air distribution systems throughout the site (EMS (FHEMS001 V7) Section 6.2 and an inventory of locations of the releases to air in Section 6.3. A site diagram shows emission points onsite. - Information on energy consumption and raw materials usage (for 2024). Energy usage is

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			audited annually as part of the Climate Change Levy. - An appropriate monitoring strategy for increasing resource efficiency has been put in place. It is noted that the installation utilises green energy production in the form of solar panels, which currently provide 20% of the site's energy needs. The Operator declared that no monitoring of quantity or characteristics of waste water has been undertaken, as all process waste water is tanked offsite. Currently there is no monitoring for air emissions undertaken at site currently, as none are required. However, a commitment to review the "Fold Hill Monitoring and Measurement Procedure" at the site has been made once the new permit is issued (V004).
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).	NA	We are satisfied that BATc 3 is not applicable to this installation. This BATc is concerned with monitoring of process generated wastewater parameters where there are direct or indirect discharges to controlled waters. This installation does not discharge to water or sewer but all process effluent is tankered offsite for treatment in an anaerobic digestion plant therefore, BATc 3 is not applicable. This site produces dry pet food, thus resulting in little wastewater being generated.

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 Operator has provided a copy of the site's Trade Effluent to Surface Water Consent (PRNNF/12927), which has been added to Table B in the permit. However, as stated above, the Operator confirmed that no effluent discharge from the process currently takes place.
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 BATc4 is not applicable to this installation. This BATc is concerned with discharges of process effluent to controlled waters and this installation does not have such discharges, all effluent being taken off-site to an anaerobic digestion (AD) plant. As such, BATc 4 is not applicable.
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.	FC	The Operator has provided information to support compliance with BATc 5. We have assessed the information provided and we not are satisfied that the Operator has demonstrated compliance with BATc5. Although the Operator has provided information about abatement of dust emissions from the dust extraction systems (in EMS FHEMS001 – V7 section 6.2), they state this system has a design limitation of 50mg/m³ of dust. There is no monitoring of channelled emissions to air. BAT is to monitor channelled emissions to air annually and in accordance with EN standards. The Operator declared production of dry petfood at the site has the specific processes: - 2 x small grinders within the mill unit and a separate grinder house within the main production unit, all fitted with reverse jet bag filters and venting internally - treatment of raw materials in ovens

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
			- internal pellet cooling in compound feed manufacture, via ambient cooling with no forced extraction - drying and extrusion of dry pet food Monitoring is associated with BATc 17. We have included an Improvement Condition (IC7) to provide a monitoring programme for any channelled emissions to air, to meet the requirements for BATc 5.
6	Energy Efficiency 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 and we not are satisfied that the Operator has demonstrated compliance with BATc 6. Energy usage onsite has been submitted. There is however, no integrated energy efficiency plan or management oversight. We have included an Improvement Condition (IC7) to provide an Energy Efficiency Plan to support meeting the requirements for BATc 6.
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 (b) Optimisation of water flow (c) Optimisation of water nozzles and hoses (d) Segregation of water streams Techniques related to cleaning operations: (e) Dry cleaning (f) Pigging system for pipes	CC	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: b) Optimisation of water flow through flow meters, and Variable Speed Drives that reduce consumption and minimise discharge. c) Optimisation of water nozzles and hoses, pistol grips fitted to high pressure hoses

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
	(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		e) The site operates dry cleaning throughout production areas j) All machinery and equipment is designed specifically for the intended product k) Cleaning of equipment is carried out through set cleaning schedule
8	Prevent or reduce the use of harmful substances 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: - Proper selection of cleaning chemicals and disinfectants - Dry cleaning is used on the production line where appropriate - The equipment and process areas are designed in a way that facilitates cleaning
9	Refrigerants 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.	FC	The Operator has provided information to support compliance with BATc 9. We have assessed the information provided and we are not satisfied that the Operator has demonstrated compliance with BATc 9. The Operator declared: - Refrigeration units with A410A. A410A has a GWP of 2088. - 2 x chillers with 7kg of R-448 each. R-448 has a GWP of 1387. F-Gas systems are maintained by approved contractors.

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			We consider that the Operator will be future compliant with BATc 9. An Improvement condition (IC8) has been included in the permit to achieve compliance (see Annex 3).
10	Resource efficiency 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: - Suitable waste sent to an offsite anaerobic digestion providing biogas for energy production. - Use of residues – usable waste residues added to recipes
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.	CC	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. Due to the nature of the activity undertaken, namely dry petfood manufacture, the Operator states they have very low flow rate for spent process water and adequate capacity for waste water buffer storage.
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 (b) Neutralisation (c) Physical separate (eg screens, sieves, primary settlement tanks etc) Aerobic and/or anaerobic treatment (secondary treatment)	NA	We are satisfied that BATc 12 is not applicable to this installation. The BAT-AELs do not apply to the production of dry pet food and compound feed. The Operator has confirmed there is a Trade Effluent Surface Water Consent (PRNNF/12927)

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	(d) Aerobic and/or anaerobic treatment (eg activated sludge, aerobic lagoon etc) (e) Nitification and/or denitrification (f) Partial nitrification - anaerobic ammonium oxidation Phosphorus recovery and/or removal (g) Phosphorus recovery as struvite (h) Precipitation (i) Enhanced biological phosphorus removal Final solids removal (j) Coagulation and flocculation (k) Sedimentation (l) Filtration (eg sand filtration, microfiltration, ultrafiltration) (m) Flotation		for process effluent water. Currently this is not in use as process waters are tankered off-site to an anaerobic digestion plant. Because BATc 12 is asking the Operator to use an appropriate combination of effluent treatment techniques for their wastewater discharge, direct or indirect, and because there are no uncontrolled discharges from this installation, we consider that BATc 12 is not applicable.										
12	Emissions to water – treatment BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body <table><tr><th>Parameter</th><th>BAT-AEL ⁽ⁱ⁾ ^(j) (daily average)</th></tr><tr><td>Chemical oxygen demand (COD) ⁽ⁱ⁾ ^(j)</td><td>25-100 mg/l ⁽ⁱ⁾</td></tr><tr><td>Total suspended solids (TSS)</td><td>4-50 mg/l ^(j)</td></tr><tr><td>Total nitrogen (TN)</td><td>2-20 mg/l ⁽ⁱ⁾ ^(j)</td></tr><tr><td>Total phosphorus (TP)</td><td>0,2-2 mg/l ^(j)</td></tr></table>	Parameter	BAT-AEL ⁽ⁱ⁾ ^(j) (daily average)	Chemical oxygen demand (COD) ⁽ⁱ⁾ ^(j)	25-100 mg/l ⁽ⁱ⁾	Total suspended solids (TSS)	4-50 mg/l ^(j)	Total nitrogen (TN)	2-20 mg/l ⁽ⁱ⁾ ^(j)	Total phosphorus (TP)	0,2-2 mg/l ^(j)	NA	We are satisfied that BATc 12 is not directly applicable to this installation. The BAT-AELs do not apply to the production of dry pet food and compound feed. Because BATc 12 is asking the Operator to use an appropriate combination of effluent treatment techniques for their wastewater discharge, direct or indirect, and because there are no discharges from this installation's principal activity, we consider that BATc 12 is not applicable.
Parameter	BAT-AEL ⁽ⁱ⁾ ^(j) (daily average)												
Chemical oxygen demand (COD) ⁽ⁱ⁾ ^(j)	25-100 mg/l ⁽ⁱ⁾												
Total suspended solids (TSS)	4-50 mg/l ^(j)												
Total nitrogen (TN)	2-20 mg/l ⁽ⁱ⁾ ^(j)												
Total phosphorus (TP)	0,2-2 mg/l ^(j)												
13	Noise management plan 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: - a protocol containing actions and timelines; - a protocol for conducting noise emissions monitoring; - a protocol for response to identified noise events, eg complaints;	NA	We are satisfied that BATc 13 is not applicable to this Installation. 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 nuisances from the site										

BATC No	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the Operator to demonstrate compliance with the BAT Conclusion requirement
	- a noise reduction programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures.		therefore an NMP is not a requirement for this site.
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	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. The Operator declared the noise management technique used at this site to be: (a) Appropriate location of equipment and buildings with emissions being monitored by onsite Peak Program Monitoring (PPM) (b) Operational measures, include equipment being fitted with silencers which are covered by PPM. (d) Noise control equipment, acoustic containment fitted to appropriate equipment, and again being monitored via PPM.
15	Odour Management 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: - a protocol containing actions and timelines; - a protocol for conducting odour monitoring. - a protocol for response to identified odour incidents eg complaints; - an odour prevention and reduction programme designed to identify the source(s); to measure/estimate odour exposure: to characterise the contributions of the sources; and to implement prevention and/or reduction measures.	FC	The Operator has provided information to support compliance with BATc 15. We have assessed the information provided and we are not satisfied that the Operator has demonstrated compliance with BATc 15. An Odour Management Plan was submitted in 2011 via an Improvement Condition which was approved, but this cannot be verified. Due to operational changes, the Operator is now required to review and update their OMP in line with any new processes onsite. We consider that the Operator will be future compliant with BATc 15. An Improvement

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
			condition (IC9) has been included in the permit to achieve compliance (see Annex 3).
PET FOOD BAT CONCLUSIONS (BAT 16-17)			
16	Energy efficiency – Green fodder only 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. (a) Use of predried fodder (b) Recycling of waste gas from the dryer (c) Use of waste heat for pre-drying Applicable in addition to BAT6	NA	The site does not process green fodder. We are therefore satisfied that BATc 16 is not applicable for this site.
17	Emissions to air – particulates In order to reduce channelled dust emissions to air, BAT is to use one of the techniques given; a. bag filter, b. cyclone. 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 compound animal feed BAT-AELs (10mg/m ³ for grinding and/or 20mg/m ³ for cooling). However, as it 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.	FC	The Operator has provided information to support compliance with BATc 17. We have assessed the information provided and we are not satisfied that the Operator has demonstrated compliance with BATc 17. The Operator declared that they are aware of the annual monitoring requirements set by BAT 5. They confirm no monitoring is in place currently. Also the current dust extraction system will abate dust to 50mg/m ³ . However, confirmation has been provided that grinders on site only vent internally and are fitted with reverse jet bags to collect particulates and pellet cooling has no forced extraction. We therefore take this opportunity to include in the consolidated permit the following upper ELVs for: Cooling A4, A12, A15 & A18– 20 mg/Nm ³ We have included an Improvement Condition (IC10) as a one-off exercise requiring the Operator to report on fine particulate emissions related to extrusion, to increase our understanding of potential

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													
			health effects. All Operators involved in drying, milling and grinding are being asked to carry out this monitoring.													
	Animal Feed Environmental Performance Levels															
EPL	Environmental Performance Level – Energy Consumption for Pet Food <table><tr><th>Product</th><th>Unit</th><th>Specific energy consumption (yearly average)</th></tr><tr><td>Compound food</td><td rowspan="3">MWh/tonne of products</td><td>0.01-0.10 ⁽¹⁾⁽²⁾⁽³⁾</td></tr><tr><td>Dry pet food</td><td>0.39-0.50</td></tr><tr><td>Wet pet food</td><td>0.33-0.85</td></tr><tr><td colspan="3"> (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. </td></tr></table>	Product	Unit	Specific energy consumption (yearly average)	Compound food	MWh/tonne of products	0.01-0.10 ⁽¹⁾⁽²⁾⁽³⁾	Dry pet food	0.39-0.50	Wet 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.			FC	The Operator has provided information to support compliance with this EPL- Energy consumption for Pet Food. We have assessed the information provided and we are not satisfied that the Operator has demonstrated compliance with this Environmental Performance Level. The Operator reports that through 2022 the site achieved a specific energy consumption of 1.1MWh/tonne, which is above the EPL range for dry pet food. We have included an Improvement Condition (IC11) for the Operator to confirm they have achieved specific EPLs for energy consumption, to support meeting the requirements.
Product	Unit	Specific energy consumption (yearly average)														
Compound food	MWh/tonne of products	0.01-0.10 ⁽¹⁾⁽²⁾⁽³⁾														
Dry pet food		0.39-0.50														
Wet 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.																
EPL	Environmental performance level – Waste water discharge for Pet Food <table><tr><th>Product</th><th>Unit</th><th>Specific waste water discharge (yearly average)</th></tr><tr><td>Wet pet food</td><td>m3/tonne of products</td><td>1.3-2.4</td></tr></table>	Product	Unit	Specific waste water discharge (yearly average)	Wet pet food	m3/tonne of products	1.3-2.4	NA	We are satisfied BAT-EPL for wastewater discharge is not applicable to this installation. Being a dry pet food manufacturer, there is little water used in the process and what little process water is produced is tankered offsite to be used for anaerobic digestion.							
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

- Activity name
- Introductory note
- Site plan
- Table S1.1 overhaul
 - Activity Reference (AR) renumbering
 - Updated listed activities
 - Addition of production capacity
 - Directly associated activities (DAAs) standardisation

We have updated permit conditions to those in the current generic permit template as a part of permit consolidation. The conditions will provide the same level of protection as those in the previous permit.

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 not completed an H1 assessment of emissions for typical figures of production at the time of permitting.

Although the Operator submitted a production figure in both the Reg 61 response tool submission and Form C3 of the 2019 Variation, that figure represents normal operating product production. However, the Operator latterly confirmed the maximum finished product production capacity is higher. Therefore the permit will reflect this figure going forwards and there will be a requirement to submit an updated H1 assessment.

We have included an improvement condition within the permit (IC12) which requires the Operator to submit an H1 risk assessment to more reflect the current operations carried out at site.

Emissions to Air

We asked the Operator to list all emission points to air from the installation in the Regulation 61 notice. And to provide a site plan indicating the locations of all air emission points.

The Operator has provided an up to date air emission plan.

Implementing the requirements of the Medium Combustion Plant Directive

Existing Medium Combustion Plant (1MW-50MW)

We asked the Operator to provide information on all combustion plant on site in the Regulation 61 Notice as follows:

- Number of combustion plant (CHP engines, back-up generators, boilers);
- Size of combustion plant – rated thermal input (MWth)
- Date each combustion plant came into operation

The Operator provided the information in the table(s) below:

Boilers

1. Rated thermal input (MW) of the medium combustion plant.	2.5MWth
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.	LPG (liquid petroleum gas)
4. Date of the start of the operation of the medium combustion plant or, where the exact date of the start of the operation is unknown, proof of the fact that the operation started before 20 December 2018.	1996

We have reviewed the information provided and we consider that the declared combustion plant qualify as “existing” medium combustion plant. The Operator has also declared there are two existing 8MWth direct-fire ovens used in the production process, fuelled with LPG. In line with MCPD directive, these ovens are excluded from the emission limit requirements.

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 A4, A12, A15 and A18 against BAT 17 for dust emissions from the final points of abatement on site (extruder systems).

We have added an Improvement Programme (IC10) for size fractionation of particulate emissions because a BAT-AEL applies for dust emissions to air. The justification for this Improvement Programme 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 Improvement Programme is a one-off exercise requiring Operators to monitor and report on the fractions of fine particulate (PM₁₀ and PM_{2.5}) 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.

The Operator has identified emissions to water (boiler blowdown via emission point W6) which have not been assessed in terms of their volume and quality. We have requested an assessment of these emissions to be submitted to the Environment Agency under an improvement condition (IC13).

The Water Quality permit (EPR/CB3890DG) which discharges via emission point W5 is now removed from V004, as it is in the process of being surrendered and the heat exchanger has been removed from site (see RFI response 25/04/2025). The Operator currently removes all waste waters from process, via tanker to an offsite anaerobic digestion plant.

The Operator has conducted a review of emissions to surface water. As a result they have stated that W1 (effluent treatment plant) and W7 (domestic sewerage) are no longer required, as waste waters are tankered offsite. These have been removed from the permit.

Soil & groundwater risk assessment (baseline report)

The IED requires that the Operator of any IED installation using, producing or releasing “relevant hazardous substances” (RHS) shall, having regarded the possibility that they might cause pollution of soil and groundwater, submit a “baseline report” with its permit application. The baseline report is an important reference document in the assessment of contamination that might arise during the operational lifetime of the regulated facility

and at cessation of activities. It must enable a quantified comparison to be made between the baseline and the state of the site at surrender.

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

The Operator submitted a site condition report [Application Variation – Site Condition Report 10989593, received: 19/08/2019] during the application to vary (V003) received on 14/03/2019. 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.

The Operator is required to submit a relevant hazardous substances monitoring plan for review to the Environment Agency via improvement condition (IC14).

Climate Change Adaptation

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

The Operator has identified the installation as likely to be or has been affected by flooding which we consider to be a severe weather event.

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 via 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.

The Operator did not provide a response to the Regulation 61 Notice with respect to the existing tanks and their containment measures on site.

We have set improvement conditions in the permit to address the deficiencies in the existing tanks and containment measures on site (IC15). See Improvement condition(s) in Annex 3 of this decision document.

Annex 3: Improvement Conditions

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

Previous improvement conditions marked as complete in the previous permit.

Superseded Improvement Conditions – Removed from permit as marked as “complete”	
Reference	Improvement Condition
IP1	The Operator shall develop a written Site Closure Plan having regard for the Agency Sector Guidance Note IPPC S6.10, Issue 1, August 2003 and shall submit a copy to the Agency for approval.
IP2	The Operator shall develop and implement an Odour Management Plan for the Installation, having regard for techniques described in the Agency Sector Guidance Note IPPC S6.10, Issue 1, August 2003 and Technical Guidance Note IPPC H4, Horizontal Guidance for Odour Part 1 (Regulation and Permitting) and Part 2 (Assessment and Control). A copy of the Odour Management Plan shall be submitted to the Agency.
IP3	The Operator shall develop and implement a Noise Management Plan for the Installation, having regard for techniques described in the Agency Sector Guidance Note IPPC S6.10, Issue 1, August 2003 and Technical Guidance Note IPPC H3, Horizontal Guidance for Noise Part 1 (Regulation and Permitting) and Part 2 (Assessment and Control). A copy of the Noise Management Plan shall be submitted to the Agency.
IP4	The Operator shall develop and implement a formalised Environmental Management System, having regard for the Agency Sector Guidance Note IPPC S6.10, Issue 1, August 2003.
IP5	The Operator shall develop and implement a detailed and formalised Accident Management Plan (including refrigerant gases), to include appropriate operational procedures, with the purpose of preventing or minimising releases to the environment in accident scenarios, having regard for the Agency Sector Guidance Note IPPC S6.10, Issue 1, August 2003. The accident management plan shall include an appropriate methodology for identifying hazards posed by the Installation, for assessing the risks of those hazards identified and for identifying techniques necessary to reduce those risks. A copy of the accident management plan shall be submitted to the Agency.
IP6	The Operator shall assess the level of particulates released to atmosphere from the site operations and provide a report to the Agency identifying as necessary an Action Plan to minimise such releases and assessing the impact.

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

Improvement programme requirements		
Reference	Reason for inclusion	Justification of deadline
IC7	The Operator shall submit, for approval by the Environment Agency, a report demonstrating achievement of the 'Narrative' BAT conclusions as identified in the Food, Drink and Milk Bref published on 4 December 2019 where BAT is currently not demonstrated or achieved. The report shall include, but not be limited to, the following: • Methodology applied for achieving BAT • Demonstrating that BAT has been achieved. The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BATc 5 and 6. Refer to BAT Conclusions for a full description of the BAT requirement.	3 months from date of issue or as agreed in writing by the Environment Agency
IC8	The Operator shall use refrigerants without ozone depletion potential and with a low global warming potential (GWP) in accordance with BAT 9 from the Food, Drink and Milk Industries BATCs. To demonstrate compliance against BAT 9, the Operator shall produce a plan for the onsite refrigerant system(s) at the installation. The plan is to be approved by the Environment Agency and shall be incorporated within the existing environmental management system. The plan should include, but not be limited to, the following: • Where practicable, retro filling systems containing high GWP refrigerants e.g. R-404A with lower GWP alternatives as soon as possible. • An action log with timescales, for replacement of end-of-life equipment using refrigerants with the lowest practicable GWP.	3 months from date of issue or as agreed in writing by the Environment Agency
IC9	The Operator shall confirm, with the Environment Agency's agreement, achievement of the 'Narrative' BAT conclusions as identified in the Food, Drink and Milk Bref published on 4 December 2019 where BAT is currently not demonstrated or achieved with respect to BATc 15. Refer to BAT Conclusions for a full description of the BAT requirement.	3 months from date of issue or as agreed in writing by the Environment Agency

IC10	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 [A4, 12, 15, 18], identifying the fractions within the PM10 and PM2.5 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.	12 months from permit issue or as agreed in writing by the Environment Agency
IC11	The Operator shall confirm in writing to the Environment Agency for approval that they have achieved the specific Environmental Performance Levels (EPLs) for specific energy consumption, where compliance with the EPL was not demonstrated at the time of R61 submission. Where an Operator cannot achieve the EPL, they should provide a justification and derive a site specific benchmark. Refer to BAT Conclusions for a full description of the requirements.	3 months from the date of issue or as agreed in writing by the Environment Agency
IC12	The Operator shall review and update the H1 risk assessment [for particulate emissions to air] at the capacity levels stated within table S1.1 of this permit. The H1 shall be submitted to the Environment Agency for review.	12 months from permit issue
IC13	The Operator shall review the disposal of boiler blowdown, compressor condensate and wash waters from the installation. Following the assessment the operator shall submit the report to the Environment Agency for approval. The report shall include (but not be limited to) the following; • An assessment of the impact for the proposed route using the Environment Agency's H1 methodology taking into consideration the characteristics of the boiler blowdown, compressor condensate and wash waters (temperature, pH, suspended solids, metals and any other potentially polluting substances). • Detail the specific arrangements for disposal of the blowdown associated with annual inspection and servicing. • List the options for disposal, justifying the proposed route (disposals not being treated in an onsite or offsite waste water treatment plant should be fully justified). • A proposed timetable for completion of any improvement works required. The Operator shall implement any necessary improvements to a timetable agreed in writing by the Environment Agency.	12 months or other date as agreed with the Environment Agency

IC14	The Operator shall produce a monitoring plan detailing how the management of relevant hazardous substances which did not screen out as low risk, based on the RHS baseline assessment, will be maintained and monitored to mitigate the risks of pollution. The plan shall be submitted for approval. The plan shall be implemented in accordance with the Environment Agency's written approval, including timescales to undertake any infrastructure improvements.	12 months from permit issue
IC15	The Operator shall undertake a survey of the primary, secondary and tertiary containment at the site and review measures against relevant standard including: • CIRIA Containment systems for the prevention of pollution (C736) – Secondary, tertiary and other measures for industrial and commercial premises, • EEMUA 159 - Above ground flat bottomed storage tanks The Operator shall submit a written report to the Environment Agency for approval which outlines the results of the survey and the review of standard and provide details of • current containment measures • any deficiencies identified in comparison to relevant standards, • improvements proposed • time scale for implementation of improvements. After completion of a drainage survey the Operator shall submit technical drawing(s) of all onsite drainage for Environment Agency approval. The Operator shall implement the proposed improvements in line with the timescales agreed by the Environment Agency.	12 months from permit issue