

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/BQ0526IZ
The Operator is: Inspired Pet Nutrition Limited
The Installation is: Dalton Pet Foods Manufacturer
This Variation Notice number is: EPR/BQ0526IZ/V008

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 08/07/2022.

We considered it was in the correct form and contained sufficient information for us to begin our determination of the permit review.

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 Conclusions BATc 1, BATc 2, BATc 6, BATc 9. The operator does not currently comply with the requirements of BATc 1, BATc 2, BATc 6. In relation to these BAT Conclusions, the operator has committed to compliance by 4 December 2023. We have therefore included Improvement Conditions; IC4 in order for the Operator to meet the requirements of BATc 1(xvi), 2 and 6 and IC 5 has been included for the Operator to meet the requirements of BATc 9 in the Consolidated Variation Notice to ensure that the requirements of the BAT Conclusions are delivered before 4 December 2023.

2.3 Requests for further information during determination

Although we were able to consider the Regulation 61 Notice response generally satisfactory at receipt, we did in fact need more information in order to complete our permit review assessment, and issued further information requests on 23/05/2023 in regard to BATc's 1 -7, 9, 11, 12, 14, 15 & 17 and a further request was issued on 23/06/2023 to seek further clarification on BATc's 1, 2, 3, 6, 7, 8, 9, 10, 11 & 14. A copy of each further information request was placed on our public register.

3 The legal framework

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

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

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

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

Annex 1: decision checklist regarding relevant BAT Conclusions

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

There are 37 BAT Conclusions.

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

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

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

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

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

NA – Not Applicable

CC – Currently Compliant

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

NC – Not Compliant

BATC No	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
GENERAL BAT CONCLUSIONS (BAT 1-15)			
1	<p>Environmental Management System - Improve overall environmental performance.</p> <p>Implement an EMS that incorporates all the features as described within BATc 1.</p>	FC	<p>The operator has provided information to support compliance with BATc 1. We have assessed the information provided. We are not satisfied that the operator has demonstrated compliance with BATc 1.</p> <p>The operator does not have an EMS externally accredited to the ISO14001 standard.</p> <p>The Operator currently does not undertake any sectorial benchmarking (xvi).</p> <p>We consider that the operator will be future compliant with BATc 1. Improvement condition 4 has been included in the permit to achieve compliance (see Annex 3).</p>
2	<p>EMS Inventory of inputs & outputs. Increase resource efficiency and reduce emissions.</p> <p>Establish, maintain and regularly review (including when a significant change occurs) an inventory of water, energy and raw materials consumption as well as of waste water and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all of the features as detailed within the BATCs.</p>	CC	<p>The operator has provided information to support compliance with BATc 2. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 2.</p> <p>The Operator has provided the following to demonstrate compliance to BATc 2</p> <ul style="list-style-type: none"> • Simplified process diagram • Water consumption is measured against production and forms part of the sites continuous improvement • No waste water information is collected from the site as very little processes effluent is created, due to the site being a predominantly dry process. Any process effluent created is contained and removed from site for treatment and discharge. • Energy consumption monitoring and raw materials usage inventory

BATC No	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
			<ul style="list-style-type: none"> • Energy performance surveys
3	<p>Monitoring key process parameters at key locations for emissions to water.</p> <p>For relevant emissions to water as identified by the inventory of waste water streams (see BAT 2), BAT is to monitor key process parameters (e.g. continuous monitoring of waste water flow, pH and temperature) at key locations (e.g. at the inlet and/or outlet of the pre-treatment, at the inlet to the final treatment, at the point where the emission leaves the installation).</p>	NA	<p>We are satisfied that BATc 3 is not applicable to this Installation.</p> <p>The processes on site are mainly dry processes with very little water usage. Effluent from the main production area is collected and tankered off site along with domestic effluent. Cleaning of the main factory is undertaken by hand (mop and bucket) with the resulting water tipped into the septic system, waste from the fresh ingredient kitchen is washed down the internal drainage system and pumped to IBCs which is taken to a local anaerobic digestion plant for treatment. The Operator does not have a connection to the foul sewer.</p>
4	<p>Monitoring emissions to water to the required frequencies and standards.</p> <p>BAT is to monitor emissions to water with at least the frequency given [refer to BAT 4 table in BATc] and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.</p>	NA	<p>We are satisfied that BATc 4 is not applicable to this Installation.</p> <p>There is no discharge to surface water of process effluent; surface runoff from non-process areas is directed to a drainage ditch.</p>
5	<p>Monitoring channelled emissions to air to the required frequencies and standards.</p> <p>BAT is to monitor channelled emissions to air with at least the frequency given refer to BAT5 table in BATc and in accordance with EN standards.</p>	CC	<p>The operator has provided information to support compliance with BATc 5. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 5.</p> <p>The monitoring of particulate matter is undertaken using monitoring method BS EN 13284-1 from the emissions of all the coolers (A1a, A1b, A4a, A4b, A7a, A7b, A10 and A11) and grinders (A2, A3, A5, A6 and A12) emission points, as per the current permit requirements.</p>

BATC No	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
6	<p>Energy Efficiency</p> <p>In order to increase energy efficiency, BAT is to use an energy efficiency plan (BAT 6a) and an appropriate combination of the common techniques listed in technique 6b within the table in the BATc.</p>	FC	<p>The operator has provided information to support compliance with BATc 6. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 6.</p> <p>The Operator does not currently have an Energy efficiency plan as per BATc 6(a) requirement but declared that it will be compliant by 04/12/2023.</p> <p>In addition the Operator has not provided a summary of the energy efficiency techniques used on site other than the air exhaust is used to pre-heat the intake air.</p> <p>We consider that the operator will be future compliant with BATc 6. Improvement condition IC 4 has been included in the permit to achieve compliance (see Annex 3).</p>
7	<p>Water and wastewater minimisation</p> <p>In order to reduce water consumption and the volume of waste water discharged, BAT is to use BAT 7a and one or a combination of the techniques b to k given below.</p> <p>(a) water recycling and/or reuse</p> <p>(b) Optimisation of water flow</p> <p>(c) Optimisation of water nozzles and hoses</p> <p>(d) Segregation of water streams</p> <p>Techniques related to cleaning operations:</p> <p>(e) Dry cleaning</p> <p>(f) Pigging system for pipes</p> <p>(g) High-pressure cleaning</p> <p>(h) Optimisation of chemical dosing and water use in cleaning-in-place (CIP)</p> <p>(i) Low-pressure foam and/or gel cleaning</p>	CC	<p>The operator has provided information to support compliance with BATc 7. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 7.</p> <p>Due to low volume of water used on site and that site is bound by food safety laws water recycling and reuse is not appropriate. The site uses minimal amounts of water in the production of pet food and the cleaning of equipment. Dry cleaning and brushing is predominantly used on processing machinery with cleaning being carried out by hand (floors are mopped and surfaces wiped by hand).</p>

BATC No	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	(j) Optimised design and construction of equipment and process areas (k) Cleaning of equipment as soon as possible		
8	<p>Prevent or reduce the use of harmful substances</p> <p>In order to prevent or reduce the use of harmful substances, e.g. in cleaning and disinfection, BAT is to use one or a combination of the techniques given below.</p> <p>(a) Proper selection of cleaning chemicals and/or disinfectants (b) Reuse of cleaning chemicals in cleaning-in-place (CIP) (c) Dry cleaning (d) Optimised design and construction of equipment and process areas</p>	CC	<p>The operator has provided information to support compliance with BATc 8. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 8.</p> <p>The Operator has provided information to demonstrate compliance with BATc 8</p> <ul style="list-style-type: none"> • Proper selection of chemicals and/or disinfectants • Dry cleaning • Optimised design and construction of equipment and process areas
9	<p>Refrigerants</p> <p>In order to prevent emissions of ozone-depleting substances and of substances with a high global warming potential from cooling and freezing, BAT is to use refrigerants without ozone depletion potential and with a low global warming potential.</p>	FC	<p>The operator has identified that they are not compliant with BATc 9 . We have assessed the information provided and we agree that the operator has not demonstrated compliance with BATc 9.</p> <p>The Operator uses two industrial chiller trailers which are on hire from a 3rd party for the fresh ingredient kitchen. The on hire chillers currently use refrigerants with a GWP greater than 1400. The Operator is considering expanding the site to build their own chiller rooms</p> <p>We consider that the operator will be future compliant with BATc 9. Improvement condition IC 5 has been included in the permit to achieve compliance (see Annex 3).</p>
10	<p>Resource efficiency</p> <p>In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below:</p> <p>(a) Anaerobic digestion (b) Use of residues</p>	CC	<p>The operator has provided information to support compliance with BATc 10. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 10.</p>

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
	(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		The manufacturing of pet feed is an efficient process, where possible residues from the process are re-grinded and reworked into the process. Off-spec products are sent off-site for anaerobic digestion.
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. All chemicals are stored within IBCs within the main production building, oils associated with the fresh ingredient kitchen are stored within tanks within a tank farm. The tank farm is bunded C736 standards, and to prevent overfilling the tanks have high alarms. The fresh ingredient kitchen is self-bunded and meets the C736 standards. All pumping equipment is set with high and high, high alarms and interlocks.
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) (d) Aerobic and/or anaerobic treatment (eg activated sludge, aerobic lagoon etc) (e) Nitrification and/or denitrification (f) Partial nitrification - anaerobic ammonium oxidation	NA	We are satisfied that BATc 12 is not applicable to this Installation. The site produces small amounts of process effluent, with the majority arising from the washing of floors and surfaces. All effluent is captured before being tankered off site for treatment and disposal.

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										
	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												
12	<p>Emissions to water – treatment BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body</p> <table border="1" data-bbox="282 767 1211 967"> <thead> <tr> <th>Parameter</th> <th>BAT-AEL (°) (°) (daily average)</th> </tr> </thead> <tbody> <tr> <td>Chemical oxygen demand (COD) (°) (°)</td> <td>25-100 mg/l (°)</td> </tr> <tr> <td>Total suspended solids (TSS)</td> <td>4-50 mg/l (°)</td> </tr> <tr> <td>Total nitrogen (TN)</td> <td>2-20 mg/l (°) (°)</td> </tr> <tr> <td>Total phosphorus (TP)</td> <td>0,2-2 mg/l (°)</td> </tr> </tbody> </table>	Parameter	BAT-AEL (°) (°) (daily average)	Chemical oxygen demand (COD) (°) (°)	25-100 mg/l (°)	Total suspended solids (TSS)	4-50 mg/l (°)	Total nitrogen (TN)	2-20 mg/l (°) (°)	Total phosphorus (TP)	0,2-2 mg/l (°)	NA	We are satisfied that BAT-AELs are not applicable to this Installation. This BAT-AELs are only applicable where there are direct discharges of wastewaters to surface water and this site does not have direct discharges of wastewaters.
Parameter	BAT-AEL (°) (°) (daily average)												
Chemical oxygen demand (COD) (°) (°)	25-100 mg/l (°)												
Total suspended solids (TSS)	4-50 mg/l (°)												
Total nitrogen (TN)	2-20 mg/l (°) (°)												
Total phosphorus (TP)	0,2-2 mg/l (°)												
13	<p>Noise management plan</p> <p>In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to set up, implement and regularly review a noise management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:</p> <ul style="list-style-type: none"> - a protocol containing actions and timelines; - a protocol for conducting noise emissions monitoring; - a protocol for response to identified noise events, eg complaints; - 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. 	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 nuisance from the site therefore an NMP is not a requirement for this 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
	Note: BAT13 is only applicable where a noise nuisance at sensitive receptors is expected and/or has been substantiated.		
14	<p>Noise management</p> <p>In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to use one or a combination of the techniques given below.</p> <p>(a) Appropriate location of equipment and buildings</p> <p>(b) Operational measures</p> <p>(c) Low-noise equipment</p> <p>(d) Noise control equipment</p> <p>(e) Noise abatement</p>	CC	<p>The operator has provided information to support compliance with BATc 14. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 14.</p> <p>The Operator has confirmed the following measures are implemented at the site to reduce/mitigate noise emissions.</p> <ul style="list-style-type: none"> • The closing of all doors and windows • Bulk deliveries are limited to 7am-7pm • Noisy equipment is housed within the factory in acoustic cabinets or limited access rooms
15	<p>Odour Management</p> <p>In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to set up, implement and regularly review an odour management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:</p> <ul style="list-style-type: none"> - 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. <p>Note: BAT 15 is only applicable to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated.</p>	CC	<p>The operator has provided information to support compliance with BATc 15. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 15.</p> <p>The site operates with an approved odour management plan (approved under previous variation V007).The odour management plan incorporates the elements as listed under BATc 15.</p>
PET FOOD BAT CONCLUSIONS (BAT 16-17)			
16	Energy efficiency – Green fodder only	N/A	The site does not process green fodder.

BATC No	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	<p>In order to increase energy efficiency in green fodder processing, BAT is to use an appropriate combination of the techniques specified in BAT 6 and of the techniques given below.</p> <p>(a) Use of predried fodder (b) Recycling of waste gas from the dryer (c) Use of waste heat for pre-drying</p> <p>Applicable in addition to BAT6</p>		<p>We are therefore satisfied that BATc 16 is not applicable for this site.</p>
17	<p>Emissions to air – particulates</p> <p>In order to reduce channelled dust emissions to air, BAT is to use one of the techniques given; a. bag filter, b. cyclone.</p> <p>Note: There is no BAT-AEL for dry pet food production. However, we want to set an ELV to ensure this parameter is adequately controlled. These should be based on what the operator can achieve (if monitoring data is available) and should be in line with the compound animal feed BAT-AELs (10mg/m³ for grinding and/or 20mg/m³ 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.</p>	CC	<p>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.</p> <p>BAT-AELs are only applicable to grinding and pellet cooling from compound animal feed. However, we are implementing ELVs for particulate matter emitted from cooling process onsite.</p> <p>The permit currently has ELV's of 20mg/m³ for the emissions of particulate matter from both the product coolers and grinders. Through submission of monitoring data the operator has demonstrated that they can currently meet the ELV's of 20mg/m³ for emissions from the product coolers and 10mg/m³ for the emissions from the product grinders. We have included these emission limit values from date of permit issue.</p>
	Animal Feed Environmental Performance Levels		

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	<p>Environmental Performance Level – Energy Consumption for Pet Food</p> <table border="1" data-bbox="284 277 1171 601"> <thead> <tr> <th>Product</th> <th>Unit</th> <th>Specific energy consumption (yearly average)</th> </tr> </thead> <tbody> <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> </tbody> </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.			CC	<p>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</p> <p>The operator reports that for 2022 the site achieved a specific energy consumption of 0.45MWh/tonne, which is within the EPL range for dry pet food.</p>
	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	<p>Environmental performance level – Waste water discharge for Pet Food</p> <table border="1" data-bbox="284 667 1207 766"> <thead> <tr> <th>Product</th> <th>Unit</th> <th>Specific waste water discharge (yearly average)</th> </tr> </thead> <tbody> <tr> <td>Wet pet food</td> <td>m3/tonne of products</td> <td>1.3-2.4</td> </tr> </tbody> </table>	Product	Unit	Specific waste water discharge (yearly average)	Wet pet food	m3/tonne of products	1.3-2.4	NA	<p>The site does not process wet pet food . We are therefore satisfied that EPL for water does not apply to this site.</p>							
Product	Unit	Specific waste water discharge (yearly average)														
Wet pet food	m3/tonne of products	1.3-2.4														

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

Updating permit during permit review consolidation

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

Emissions to Air

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

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

Implementing the requirements of the Medium Combustion Plant Directive

Existing Medium Combustion Plant (1MW-50MW)

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

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

The Operator provided the information in the tables below:

Combined heat and power (CHP) engines

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).	Combined Heat and Power plant (waste heat boiler)
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Natural gas
4. Date of the start of the operation of the medium combustion plant or, where the exact date of the start of the operation is unknown, proof of the fact that the operation started before 20 December 2018.	June 2013

Boilers

	Boiler 1	Boiler 2
1. Rated thermal input (MW) of the medium combustion plant.	4.6 MWth	6.0 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler	Boiler
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Natural gas	Natural gas
4. Date of the start of the operation of the medium combustion plant or, where the exact date of the start of the operation is unknown, proof of the fact that the operation started before 20 December 2018.	June 2011	June 2017

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

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

of less than or equal to 5 MW (CHP and Boiler 1), 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

There are no BAT-AEL associated with dry pet food production. However, we want to set an ELV to ensure this parameter is adequately controlled. These are 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/m³ for grinding and/or 20mg/m³ for cooling).

The operator has identified that they are currently able to achieve compliance in line with the BAT-AELs for the compound feed sector. We have implemented the relevant emission limit values (ELVs) from the date of permit issue. This is relevant for emission points A1a, A1b, A4a, A4b, A7a, A7b, A10 and A11 against BAT 17 for dust emissions from the onsite coolers and dryers and emission points A2, A3, A5, A6 and A12 for dust emissions from the onsite grinders. The dryer and cooler emission points are abated by cyclones with the grinder emission points being abated by bag filters.

We have added an improvement condition (IC6) for size fractionation of particulate emissions because. The justification for this IC is that there are a number of activities within the FDM sector which may result in release of particulates to air e.g. drying, milling and grinding. Overall there is little available information on how much fine particulates are released. This IC is a one-off exercise requiring operators to monitor and report on the fractions of fine particulate (PM₁₀ and PM_{2.5}) emissions and increase our understanding of potential health effects.

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.

Process effluent arising from the onsite processes is captured in and tankered off site for treatment and disposal. Whilst this is not considered to be BAT, due to the low volumes of effluent produced it would be cost prohibitive to install an onsite treatment plant. The Operator is exploring reinstating the connection to the foul sewer.

We agree with the operators justification and proposed route as the best option for the installation.

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.

A copy of the site condition report for the site could not be located during the determination. A site condition report was undertaken and submitted for the recently permitted Fresh Ingredient Kitchen (FIK) that was authorised under V007. However, this only focused on the area of the site associated with the FIK and not the site as a whole.

We have included an Improvement condition in the permit (IC7) which requires the Operator to submit an updated site condition report which includes baseline soil and groundwater data. See Improvement conditions in Annex 3 of this decision document.

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

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.

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).

We also consider that we need to set improvement conditions relating to changes in the permit not arising from the review of compliance with BAT conclusions. The justifications for these are provided in Annex 5 of this decision document.

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 produce an Energy Efficiency Plan having regard to the Agency Guidance Note (IPPC S6.10, Issue 1 August 2003 Section 2.7.2) A summary shall be submitted to the Agency in writing.
IC2	The Operator shall develop a written Site Closure Plan having regard to the Agency Guidance Note (IPPC S6.10, Issue 1 August 2003 Section 2.11). The plan shall be submitted to the Agency in writing.
IC3	The Operator shall review and develop the written site accident plan having regard to the requirements set out in Section 2.8 of the Agency Guidance Note (IPPC S6.10, Issue 1 August 2003) and particularly the risk of fire, vandalism, leakage from the underground fuel oil pipe and failure of abatement equipment and shall submit the plan in writing to the Agency.

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
IC4	<p>The operator shall submit, for approval by Environment Agency, a report setting out progress to achieving the 'Narrative' BAT where BAT is currently not achieved, but will be achieved before 4 December 2023. The report shall include, but not be limited to, the following:</p> <ol style="list-style-type: none"> 1. Methodology for achieving BAT 2. Associated targets /timelines for reaching compliance by 4 December 2023. 3. Associated targets/timelines, if applicable, for reaching compliance by 4 December 2023. <p>The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BATc's 1, 2, and 6.</p> <p>Refer to BAT Conclusions for a full description of the BAT requirement</p>	04/12/2023
IC 5	The operator shall use refrigerants without ozone depletion potential and with a low global warming potential (GWP) in	04/12/2023

	<p>accordance with BAT 9 from the Food, Drink and Milk Industries BATCs.</p> <p>To demonstrate compliance against BAT 9, the operator shall develop a replacement plan for the refrigerant system(s) at the installation. This shall be incorporated within the existing environmental management system by the specified date.</p> <p>The plan should include, but not be limited to, the following:</p> <ul style="list-style-type: none"> • 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. 	
IC 6	<p>The Operator shall submit a written report to the Environment Agency of monitoring carried out to determine the size distribution of particulate matter in the exhaust gas emissions to air from emission points A1a, A1b, A2, A3, A4a, A4b, A5, A6, A7a, A7b, A10, A11, and A12, identifying the fractions within the PM₁₀ and PM_{2.5} 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.</p>	<p>23/08/2023 or as agreed in writing with the Environment Agency</p>
IC 7	<p>The Operator shall produce a Site Condition Report (SCR) in line with our H5 Guidance. The report shall contain the information necessary to determine the state of soil and groundwater, and ensure this is maintained throughout the life of the permit.</p> <p>The report shall be submitted to the Environment Agency for review.</p>	<p>23/08/2023 or as agreed in writing with the Environment Agency</p>