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/FP3032UZ
The Operator is:	Whitebirk Pet Foods
The Installation is:	Pets Choice Limited
This Variation Notice number is:	EPR/FP3032UZ/V002

What this document is about

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

We have reviewed the permit for this installation against the BAT Conclusions for the Food, Drink and Milk Industries published on 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 31/05/2022.

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

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

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

Based on our records and previous experience in the regulation of the installation we consider that the Operator will be able to comply with the techniques and standards described in the BAT Conclusions other than for those techniques and requirements described in BAT Conclusion 14. The operator does not currently comply with the requirements of BATc 14. In relation to this BAT Conclusion, the operator has committed compliance by 4 December 2023. We have therefore included Improvement Condition IC8 in the Consolidated Variation Notice to ensure that the requirements of the BAT Conclusions are delivered before 4 December 2023.

2.3 Requests for further information during determination

Although we were able to consider the Regulation 61 Notice response generally satisfactory at receipt, we did in fact need more information in order to complete our permit review assessment, and issued a further information request on 12/05/2023. A copy of the 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	**Environmental Management System - Improve overall environmental performance.** Implement an EMS that incorporates all the features as described within BATc 1.	**FC**	The operator has stated they are currently not complaint with BATc 1. We have assessed the information provided and we agree with the Operator that they are currently not compliant with BATc 1. The operator does not currently have an appropriate Environmental Management System in place. However, they have stated this will be implemented prior to 4 December 2023. We have included an improvement condition IC8 to ensure an appropriate EMS is implemented and submitted for approval to ensure compliance against BATc1. The operator is required to complete the improvement condition and demonstrate compliance with BATc1 by the compliance date, 4 December 2023. See Annex 3.
2	**EMS Inventory of inputs & outputs. Increase resource efficiency and reduce emissions.** Establish, maintain and regularly review (including when a significa occurs) an inventory of water, energy and raw materials consumpti as of waste water and waste gas streams, as part of the environme management system (see BAT 1), that incorporates all of the featu detailed within the BATCs.	**FC**	The operator has stated they are currently not complaint with BATc 2. We have assessed the information provided and we agree with the Operator that they are currently not compliant with BATc 2. The operator does not currently integrate the requirements of BATc2 in an Environmental Management System. However, they have stated these will be implemented prior to 4 December 2023. We have included an improvement condition IC8 to ensure an appropriate EMS is implemented and submitted for approval to ensure compliance against BATc2. The operator is required to complete the improvement condition and demonstrate compliance with BATc2 by the compliance date, 4 December 2023. See Annex 3.
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. Effluent from cleaning operations (wastewater) is captured by bunds immediately surrounding the extrusion equipment. The water is fed through a drainage system to IBC's which are manually monitored to ensure maximum volume is not exceeded. These IBCs are then transferred to a different facility for treatment.

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 site discharges uncontaminated surface water run off to sewer no monitoring is required.
4	**Monitoring emissions to water to the required frequencies and standards.** BAT is to monitor emissions to water with at least the frequency given [refer to BAT 4 table in BATc] and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.	**NA**	We are satisfied that BATc 4 is not applicable to this Installation. Effluent from cleaning operations (wastewater) is captured by bunds immediately surrounding the extrusion equipment. The water is fed through a drainage system to IBC's which are manually monitored to ensure maximum volume is not exceeded. These IBCs are then transferred to a different facility for treatment. The site discharges uncontaminated surface water run off to sewer no monitoring is required.
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 stated they are currently not complaint with BATc 5. We have assessed the information provided and we agree with the Operator that they are currently not compliant with BATc 5. The site does not currently monitor channelled air emissions. The operator has stated that they will implement the required monitoring in line with BATc 5 and will implement annual monitoring to the correct standard. We have included future dated monitoring requirements in the permit for the emissions relating to pellet cooling and extrusion of dry pet food. We have included an improvement condition IC8 to ensure compliance against BATc5. The operator is required to complete the improvement condition and demonstrate compliance with BATc5 by the compliance date, 4 December 2023. See Annex 3.

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	**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 stated they are currently not complaint with BATc 6. We have assessed the information provided and we agree with the Operator that they are currently not compliant with BATc 6. The operator does not currently have an Energy Efficiency Plan in place. However, they have stated they will be future compliant with BATc 6 by 4 December 2023. We have included an improvement condition IC8 to ensure an appropriate Energy Efficiency Plan with appropriate techniques are implemented onsite and submitted for approval to ensure compliance against BATc6. The operator is required to complete the improvement condition and demonstrate compliance with BATc6 by the compliance date, 4 December 2023. See Annex 3.
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 (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	**FC**	The operator has stated they are currently not complaint with BATc 7. We have assessed the information provided and we agree with the Operator that they are currently not compliant with BATc 7. The operator reuses cooling water from the process by feeding it into the boiler to be re-used as part of the steam generation. However, they do not currently implement any other water and waste water minimisation techniques. They have stated they will be future compliant with BATc 7 and will implement one or a combination of other techniques by 4th December 2023. We have included an improvement condition IC8 to ensure compliance against BATc 7. The operator is required to complete the improvement condition and demonstrate compliance with BATc 7 by the compliance date, 4 December 2023. See Annex 3.

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
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	**FC**	The operator has stated they are currently not complaint with BATc 8. We have assessed the information provided and we agree with the Operator that they are currently not compliant with BATc 8. The operator has stated they only use one type of detergent soap for all clean down operations on the process plant. However, the operator has not provided any evidence of the environmental impacts of the substances used at site, or other techniques to reduce the use of harmful substances. The operator has stated they will implement a formal procedure in line with BAT8. We have included an improvement condition IC8 to ensure compliance against BATc 8. The operator is required to complete the improvement condition and demonstrate compliance with BATc 8 by the compliance date, 4 December 2023. See Annex 3.
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 stated they are currently not complaint with BATc 9. We have assessed the information provided and we agree with the Operator that they are currently not compliant with BATc 9. The operator uses refrigerants on site for the storage of raw meat. The operator keeps records of all on-site equipment containing F gases as well as documentation associated with their installation, maintenance, and servicing (including legal checks). These records include: • The quantity and type of F gases in the equipment; • The quantities of F gases added during installation, maintenance, servicing, or due to leakage; • Dates and results of all mandatory leak checks; and • If equipment is de-commissioned, the measures taken to recover and dispose of the F gases. All equipment containing F gases are labelled including the F gas quantity expressed in weight and in CO_2 equivalent illustrating the global warming potential of those gases. However, the operator was not able to confirm compliance with BATc9, we have included an improvement condition IC9 to ensure

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
			compliance against BATc 9. The operator is required to complete the improvement condition and demonstrate compliance with BATc 9 by the compliance date, 4 December 2023. 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. Pets Choice Limited have historically identified and implemented actions to increase their resource efficiency. Effluent produced on site is transferred off-site to be treated via a DAF plant. The residues generated through the treated effluent are collected and treated via an Anaerobic Digestion plant near Doncaster.
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. Effluent from cleaning operations (wastewater) is captured by bunds immediately surrounding the extrusion equipment. The water is fed through a drainage system to IBC's which are manually monitored to ensure maximum volume is not exceeded. If an issue occurred which prevented effluent being transferred to the DAF plant, IBCs are available to act as an emergency storage buffer to prevent uncontrolled emissions to water. The site discharges uncontaminated surface water run-off (roof water, yard and road drainage) drains into the United Utilities foul sewer which is ultimately treated in Salmesbury wastewater treatment plant.
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	**NA**	We are satisfied that BATc 12 is not applicable to this Installation. Effluent (wastewater) produced on site is currently captured in IBCs and transferred to a separate facility for treatment. No treatment is carried out on site. The only emissions to water from site are

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	(b) 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) Nitification and/or denitrification (f) Partial nitration - 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		discharges of uncontaminated surface water runoff to United Utilities sewer.
12	**Emissions to water – treatment** **BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body** Parameter | BAT-AEL (1) (2) (daily average) Chemical oxygen demand (COD) (3) (4) | 25-100 mg/l (5) Total suspended solids (TSS) | 4-50 mg/l (6) Total nitrogen (TN) | 2-20 mg/l (7) (8) Total phosphorus (TP) | 0,2-2 mg/l (9)	**NA**	We are satisfied that BATc 12 BAT-AELs is not applicable to this Installation. There are no direct discharges to surface water from the installation.
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	**NA**	BATc 13 is only applicable to cases where a noise nuisance at sensitive receptors is expected and/or has been substantiated, or if it forms part of an existing permit requirement.

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
	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; - 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..		There is no existing permit requirement for a NMP and the site has no recent history of noise complaints. Therefore a noise management plan is currently not required at the 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	**FC**	The operator has stated they are currently complaint with BATc 14. We have assessed the information provided and we do not agree with the Operator, we do not believe they are currently compliant with BATc 14. The operator stated that there are no sensitive receptors surrounding the site, however, BATc14 is applicable to all site. The operator did not provide any information to confirm compliance with BATc14, we have included an improvement condition IC8 to ensure compliance against BATc 14. The operator is required to complete the improvement condition and demonstrate compliance with BATc 14 by the compliance date, 4 December 2023. See Annex 3.
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;	**NA**	BATc 15 is only applicable to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated, or if it forms part of an existing permit requirement. There is no existing permit requirement, the site has had occasional ongoing odour complaints but we do not think an odour management plan is currently required for 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
	- 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.		
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**	We are satisfied that BATc 16 is not applicable for this site. The site does not process green fodder.
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.	**CC**	The operator has provided information to support compliance with BATc 17. The facility undertakes drying on site, emission point A2 is from Conveyor, Process Dryer, and Product Cooler Cyclones, the operator has implemented both a bag filter and a cyclone which is BAT. BAT-AELs are only applicable to grinding and pellet cooling from compound animal feed. However, we are implementing ELVs for particulate matter emitted from the cooling process onsite. The operator has stated they will implement monitoring which will allow them to calculate an Associated Emission Levels by 4 December 2023. We have included ELVs in the permit for the process cooling for emission point A2, at 20mg/m^3. We consider that the operator is compliant against BAT17.
	Pet Food Environmental Performance Levels		

<table>
<tr><th>BATC No.</th><th>Summary of BAT Conclusion requirement for Food, Drink and Milk Industries</th><th>Status NA/ CC / FC / NC</th><th>Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement</th></tr>
<tr><td>EPL</td><td>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></table>(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><td>CC</td><td>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

The operator reports that between during 2021 – 2022, the site achieved an specific energy consumption of 0.17MWh/tonne of products, which is below the EPL range for dry pet food demonstrating good energy efficiency.</td></tr>
<tr><td>EPL</td><td>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></td><td>NA</td><td>Not applicable – dry process only.</td></tr>
</table>

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

Updating permit during permit review consolidation

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

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

Capacity Threshold

The Environment Agency is looking to draw a “line in the sand” for permitted production capacity; a common understanding between the Operator and regulator for the emissions associated with a (maximum) level of production, whereby the maximum emissions have been demonstrated as causing no significant environmental impact.

We have included a permitted production level (capacity) within table S1.1 of the permit for the section 6.8 listed activity and we need to be confident that the level of emissions associated with this production level have been demonstrated to be acceptable.

The H1 assessment is not valid for the maximum capacity stated within the permit or if production is now higher. We have included an improvement condition within the permit (IC10) which requires the operator to revisit their H1 risk assessment for particulate emissions to air at the capacity limit figure that is now stated 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 not provided an up to date air emission plan, we have included an improvement condition within the permit (IC15) which requires the operator to submit an updated Air Emissions Point Plan in line with the emission points listed in table S3.1.

Implementing the requirements of the Medium Combustion Plant Directive

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

- Number of combustion plant (CHP engines, back-up generators, boilers);

- Size of combustion plant – rated thermal input (MWth)
- Date each combustion plant came into operation

The Operator provided the information in the table below:

Boilers

1. Rated thermal input (MW) of the medium combustion plant.	4.1 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	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

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

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

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

Particulate Emissions

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 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).

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 implement the relevant emission limit value (ELV) from the date of permit issue. This is relevant for emission points A2 against BAT 17 for dust emissions from the onsite coolers and dryers. The dryer and cooler emission points are abatement by a cyclone and bag filter.

We have added an improvement condition (IC11) 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 PM2.5) 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.

The effluent treatment plant which was included in the previous permit has been removed as it has been decommissioned from site. The site now transfer effluent via IBC's to an effluent treatment plant which is permitted under a separate environmental 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 during the original application received on 23/07/2007. 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 has indicated they are not able to locate the SCR to review the site condition and have not carried out a risk assessment to consider the current condition of the soil and groundwater. We have included an Improvement condition in the permit (IC13) which requires the Operator to submit an updated site condition report. 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 not provided an appropriate risk assessment on the hazardous substances stored and used at the installation.

The operator is required to submit a risk assessment for the relevant hazardous substances for review to the Environment Agency via improvement condition (IC12).

Climate Change Adaptation

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

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

Containment

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

The Operator provided details of all tanks;

- Tank reference/name
- Contents
- Capacity (litres)
- Location
- Construction material(s) of each tank
- The bunding specification including
    - Whether the tank is bunded
    - If the bund is shared with other tanks
    - The capacity of the bund
    - The bund capacity as % of tank capacity
    - Construction material of the bund
    - Whether the bund has a drain point
    - Whether any pipes penetrate the bund wall
- Details of overfill prevention
- Drainage arrangements outside of bunded areas
- Tank filling/emptying mitigation measures (drips/splashes)
- Leak detection measures
- Details of when last bund integrity test was carried out
- Maintenance measures in place for tank and bund (inspections)
- How the bund is emptied
- Details of tertiary containment

and whether the 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 (IC14). See Improvement conditions 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**
IC1	The Operator shall complete a condition survey of all subsurface structures such as pipework, drains and sumps having regard to Section 2.2.5 of SGN S6.10. A written report shall be submitted to the Agency for approval that summarises the findings of the survey, provides details of any necessary improvements and indicates the proposed implementation timetable. The report shall also include plans for regular inspections, condition surveys and maintenance in the future. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report.
IC2	The Operator shall, with the approval of the Agency and in line with TGN IPPC H4 or any other relevant technical guidance, carry out an appropriate dour impact assessment or dour source-pathway-receptor conceptual model for the installation. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the assessment/conceptual model.
IC3	Based on the odour impact assessment carried out under IC3, the Operator shall carry out a BAT review for odour control having regard for TGN IPPC H4 and any other relevant technical guidance. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the review summary. A summary of the review shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified.
IC4	The Operator shall carry out an energy efficiency audit of the installation. The audit shall have regard to Section 2.7 of SGN S6.10 and shall provide information on existing lighting, compressors, packaging equipment, utilities monitoring and controls. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the audit summary. A summary of the audit shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified.
IC5	The Operator shall carry out a waste minimisation audit of the installation. The assessment shall have regard to Section 2.4.2 of SGN S6.10 and shall provide information on any lines and operations

	identified as causing a process loss specifying for each line or operation or department, the amount lost (tonnes/year) and the percentage recovered in process or recycled. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the audit summary. A summary of the audit shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified.
IC6	The Operator shall carry out a noise impact assessment for the installation based on HGN IPPC H3 Part 2 - Noise Assessment and Control. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the assessment summary. A summary of the assessment shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified.
IC7	The Operator shall undertake a review of particulate abatement on release point A2. The review shall have regard to Section 2.2.1 of SGN S6.10 and consider but not be limited to, the efficiency of the cyclones to ensure particulate releases are below benchmark figures. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the review summary. A summary of the review shall be sent to the Agency in writing together with a timetable to implement any necessary improvements identified to improve particulate abatement.

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**
IC8	The operator shall submit, for approval by Environment Agency, a report setting out how the 'Narrative' BAT has been achieved 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: 1) Methodology for achieving BAT 2) Associated targets/timelines, if applicable, for reaching compliance by 4 December 2023. 3) Demonstration of compliance with BAT. The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BAT 1, 2, 5, 6, 7, 8, and 14. Refer to BAT Conclusions for a full description of the BAT requirement.	04/12/2023

IC9	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 develop a replacement plan for the refrigerant systems at the installation. This shall be incorporated within the existing environmental management system by the specified date. 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.	04/12/2023
IC10	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.	12/09/2024 unless otherwise agreed in writing with the Environment Agency
IC11	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 point A2, 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.	12/09/2024 unless otherwise agreed in writing with the Environment Agency
IC12	The operator shall submit to the Environment Agency for approval a risk assessment considering the possibility of soil and groundwater contamination at the installation where the activity involves the use, production or release of a hazardous substances (as defined in Article 3 of Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures). A stage 1-3 assessment should be completed (as detailed within the EC Commission Guidance 2014/C 136/-3) as follows; Stage 1 – Identify hazardous substance(s) used / stored on site. Stage 2 – Identify if the hazardous substance(s) are capable of causing pollution. If they are capable of causing pollution, they are then termed Relevant Hazardous Substances (RHS).	12/03/2023 unless otherwise agreed in writing with the Environment Agency

	Stage 3 – Identify if pollution prevention measures & drains are fit for purpose in areas where hazardous substances are used / stored. If the outcomes of Stage 3 identifies that pollution of soil / ground water to be possible. The operator shall produce and submit a monitoring plan to the Environment Agency for approval detailing how the substance(s) will be monitored to demonstrate no pollution. The operator shall commence monitoring of the RHS within a timescale as agreed by the Environment Agency.	
IC13	The Operator shall review or produce an updated 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 by using the results to better inform the SPMP. The report shall be submitted to the Environment Agency for review.	12/09/2024 unless otherwise agreed in writing with the Environment Agency
IC14	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 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. The operator shall implement the proposed improvements in line with the timescales agreed by the Environment Agency.	12/09/2024 unless otherwise agreed in writing with the Environment Agency
IC15	Submit an air emissions point plan to the Environment Agency for approval. The plan must accurately represent all emission points to air from the installation. Labelled in line with the emission points listed in table S3.1. The plan shall be submitted to the Environment Agency for review.	12/12/2023 unless otherwise agreed in writing with the Environment Agency