# 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/BW9832IT The Operator is: AB Agri Limited

The Installation is: Northallerton Feed Mill This Variation Notice number is: EPR/BW9832IT/V005

#### What this document is about

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

We have reviewed the permit for this installation against the BAT Conclusions for the Food, Drink and Milk Industries published on 4<sup>th</sup> December 2019 in the Official Journal of the European Union. In this decision document, we set out the reasoning for the consolidated variation notice that we have issued.

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

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

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

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

#### How this document is structured

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

#### 1 Our decision

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

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

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

#### 2 How we reached our decision

#### 2.1 Requesting information to demonstrate compliance with BAT Conclusion techniques

We issued a Notice under Regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 04/05/2021 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 27/07/2021.

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 numbers 5 and 17. The operator does not currently comply with the requirements of BATc 5 and 17. In relation these BAT Conclusions, the operator has committed compliance by 4 December 2023. We have therefore included Improvement Condition 10 and 11 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 29/07/2022, requesting further details regarding the following BATc: 2, 6, 8 and 11. 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.	СС	The operator has provided information to support compliance with BATc 1. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 1.  The operator has a EMS externally accredited to the ISO14001 standard.
2	EMS Inventory of inputs & outputs. Increase resource efficiency and reduce emissions.  Establish, maintain and regularly review (including when a significant change occurs) an inventory of water, energy and raw materials consumption as well as of waste water and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all of the features as detailed within the BATCs.	CC	The operator has provided information to support compliance with BATc 2. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 2.  The operator is externally accredited to ISO14001.  The site holds inventories for water, energy and raw material consumption, waste water and waste gas streams. In addition there is also an energy performance procedure in place.
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	NA	There is no process effluent produced as the manufacturing of compound feed is a relatively dry process.

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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
	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).		Site process effluent, along with the discharge from the onsite vehicle wash and boiler and compressor blow down is discharged to foul sewer via an interceptor (S1). Uncontaminated run-off from roof and yard areas is discharged to surface water: Brompton Beck (W2).
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	No process effluent is produced and there are no direct emissions of effluent to surface water.  We are therefore satisfied that BATc 4 is not applicable for this site.
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: Pellet grinder	Pellet grinder Improvement condition (IC) 10 has been included in the permit for the Operator to comply with the monitoring requirements and IC 11 has been included in the permit for the Operator to comply with the BAT AELs by 4/12/2023.  The requirement for annual monitoring will be included in the varied permit to ensure compliance with the BAT-AELs.
		CC: Pellet coolers	Product coolers (A1 and A2)  The monitoring of particulate emissions is currently undertaken to British Standard (BS)  EN 13284-1 at the product coolers - emission points A1 and A2 as per the previous permit

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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
			requirements. The Operator has confirmed that the new BAT AELs are achievable for each of the coolers.
			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 for coolers (A1 and A2).
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.	cc	The operator has provided information to support compliance with BATc 6. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 6.
			The operator's response to our Request for Further Information, dated 10/08/2022, stated that energy-efficiency techniques used include co-generation, burner regulation and control, energy-efficient motors and minimising blowdown from the boiler.
			The operator is a participant in a Climate Change Agreement (CCA), has an accredited ISO 50001 Energy Management System and has participated in the Government's Energy Saving Opportunities Scheme (ESOS), where energy audits are mandatory.

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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
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	CC	The operator has provided information to support compliance with BATc 7. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 7.  Animal Feed Manufacture is essentially a dry process, with low water usage and limited potential for water saving and application of BAT techniques.  The site utilises dry cleaning for process area cleaning.  Little process effluent is produced and the operator takes all reasonable steps to monitor water usage in order to reduce water consumption and the volume of waste water produced.
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.	СС	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.  In support of dry cleaning processes on site the use of cleaning substances are only used minimally. Where substances are used they

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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
			are suitable to be used in the production of animal feed.  The Operator has identified priority Hazardous Substances / Specific Pollutants used at the site. The Operator has pollution prevention measures in place to prevent release to the environment. only DEFRA approved disinfectants are used when required.
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.	NA	We are satisfied that BATc 9 is not applicable to this Installation as there are no refrigerants used on site.
10	Resource efficiency In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below: (a) Anaerobic digestion (b) Use of residues (c) Separation of residues (d) Recovery and reuse of residues from the pasteuriser (e) Phosphorus recovery as struvite (f) Use of waste water for land spreading	cc	The operator has provided information to support compliance with BATc 10. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 10.  The Operator has demonstrated that the minimal waste is produced from the production of compound feed. Residues are re-worked into the production of compound feed.
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

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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
			satisfied that the operator has demonstrated compliance with BATc 11.  Spill kits are available on-site and there is an interceptor to prevent contaminants entering the drainage system.  Site process effluent, along with the discharge from the onsite vehicle wash and boiler and compressor blow down is discharged to foul sewer via an interceptor (S1). Uncontaminated run-off from roof and yard areas is discharged to surface water: Brompton Beck (W2).
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) Nitification and/or denitrification (f) Partial nitration - anaerobic ammonium oxidation Phosphorus recovery and/or removal (g) Phosphorus recovery as struvite	NA	Due to the low volumes of effluent produced, effluent treatment is not required.  We are therefore satisfied that BATc 12 is not applicable for this site.

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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
	(h) Precipitation (i) Enhanced biological phosphorus removal		
	Final solids removal		
	(j) Coagulation and flocculation		
	(k) Sedimentation		
	(I) Filtration (eg sand filtration, microfiltration, ultrafiltration)		
	(m) Flotation		
13	Noise management plan		
	In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to set up, implement and regularly review a noise management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:	NA	A noise management plan is only required where a noise nuisance at sensitive receptors is expected or has been substantiated. The site has no history of recent noise complaints therefore a NMP is not a requirement for this
	- a protocol containing actions and timelines;		
	- a protocol for conducting noise emissions monitoring;		site.
	- a protocol for response to identified noise events, eg complaints;		We are therefore satisfied that BATc 13 is not
	- 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.		applicable for this site.
14	Noise management	СС	The operator has provided information to
	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.		support compliance with BATc 14. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 14.
	(a) Appropriate location of equipment and buildings		
	(b) Operational measures		
	(c) Low-noise equipment		
	(d) Noise control equipment		

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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	
	(e) Noise abatement		<ul> <li>The Operator undertakes the following techniques to reduce noise emissions from the site.</li> <li>Restricting noisy activities to daytime hours</li> <li>Maintenance inspections</li> <li>Using low-noise equipment</li> <li>Enclosing noisy machinery and processes within buildings or acoustic enclosures</li> <li>Noise abatement such as cladding noisy equipment with acoustic panelling and impact deadening</li> <li>Site layout: placing noisy plant further away from site boundaries and sensitive receptors.</li> </ul>	
15	Odour Management In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to set up, implement and regularly review an odour management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:  - a protocol containing actions and timelines;  - a protocol for conducting odour monitoring.  - a protocol for response to identified odour incidents eg complaints;  - an odour prevention and reduction programme designed to identify the source(s); to measure/estimate odour exposure: to characterise the contributions of the sources; and to implement prevention and/or reduction measures.	NA	An odour management plan is only required where odour nuisance at sensitive receptors is expected or has been substantiated. There have been no substantiated odour nuisance from the site therefore an OMP is not a requirement for this site.  We are therefore satisfied that BATc 15 is not applicable for this site.	

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BATC No.	Summary of B Industries	AT Conclusion	requirement f	or Food, Drink a	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	
	ANIMAL FEED	BAT CONCLU	SIONS (BAT 16	6-17)			
16	Energy efficie	ncy – Green foo	der only			NA	The site does not process green fodder.
	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.					We are therefore satisfied that BATc 16 is not applicable for this site.	
	(a) Use of pred	ried fodder					
	(b) Recycling o	f waste gas from	the dryer				
	(c) Use of wast	e heat for pre-dr	ying				
	Applicable in a	ddition to BAT6	, ,				
	Applicable in ac	dation to BATO					
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.				FC for the grinder (A15)	FC for the grinder (A15) The emission point for the grinder (A15) will be	
	Parameter	Specific process	Unit	(average ov	T-AEL er the sampling eriod)		tested prior to the compliance deadline. Improvement condition (IC) 10 has been included in the permit for the Operator to comply with the monitoring requirements and
				New plants	Existing plants		IC 11 has been included in the permit for the
	Dust	Grinding	mg/Nm <sup>3</sup>	<2-5	<2-10		Operator to comply with the BAT AELs by 04/12/2023.
	Pellet cooling <2-20		<2-20				
							An ELV of 10mg/Nm³ has been included in the varied permit which will apply upon completion of IC 10 and IC 11, to ensure compliance with the BAT-AEL. Because this is existing plant

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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
			we believe it is appropriate to set the new ELV at the top of the range.
		CC for coolers	CC for cooler emission points A1 and A2
		(A1 and A2)	The existing emission limit value (ELV) for the pellet coolers A1 & A2 was 50mg/Nm³ for particulate emissions. As these are existing plants we believe it is appropriate to set the new ELV at the top of the range. An ELV of 20mg/Nm³ will be included in the varied permit to ensure compliance with the BAT-AEL.  Monitoring data suggests the Operator can comply with the revised ELV of 20mg/Nm³. Therefore we are including this limit within the permit from date of issue and are choosing to not future date this BAT AEL.
			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.

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	Animal Feed Environme	ental Performance Levels			
EPL	Environmental Performa	ance Level – Energy Cons	sumption for Animal Feed	cc	The operator has provided information to
	Product	Unit	Specific energy consumption (yearly average)		support compliance with the energy EPL. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with the energy
	Compound food	MWh/tonne of products	0.01-0.10 (1)(2)(3)		consumption for Animal Feed.
	Dry pet food		0.39-0.50		The compound food figure of 0.01-0.10 is appropriate for this installation.
	Wet pet food		0.33-0.85		
	(2) The specific energy consu	e is 0.12 MWh/tonne of products for installation	ed.  er aquatic animals are used as raw material.  ons located in cold climates and/or when teat		The site's energy consumption for 2021 was 0.077MWh/t, which is well within the target, reflecting the good energy management in place at this installation.
	Environmental performance level – Waste water discharge for Animal Feed			NA	The site does not produce wet pet food.
EPL	Product	Unit Specific waste water discharge (yearly average)			We are therefore satisfied this EPL is not
	Wet pet food	m3/tonne of products	1.3-2.4		applicable for this site.

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## 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 changes to the permit to ensure cross-sector consistency, including:

- An updated introductory note
- Site plan
- Table S1.1 overhaul
  - o Activity Reference (AR) renumbering
  - Updated listed activities
  - o Addition of production capacity
  - o 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 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 (IC9) 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 provided an up to date air emission plan.

Emission point A15 has been added for the bag filter abatement serving grinding.

#### Implementing the requirements of the Medium Combustion Plant Directive

The site has a 2.03 MWth gas-fired boiler to produce steam used in the process and a 1.34 MWth gas-fired Combined Heat and Power (CHP) engine. These are both classed as new Medium Combustion Plant and the CHP is classed as a Tranche B Specified Generator. Variation application reference: EPR/BW9832IT/V004 was issued on 01/04/2022 to add this plant and its monitoring requirements to the permit, see Table S3.1 in the permit. There have been no changes to the MCPD as a result of this permit review, reference: EPR/BW9832IT/V004.

As part of this permit review, further details of an existing 2.1MWth standby gas-fired steam raising boiler (emission point A3) were added to the permit. This is exempt from MCP Emission Limit Values as it operates less than 500 hours a year.

#### **Particulate Emissions**

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

If the operator has identified current compliance against BAT-AELs we will implement the relevant emission limit value (ELV) from the date of permit issue. This is relevant for emission points A1, A2 (product coolers) and A15 (raw material grinder) against BAT 17 for particulate emissions from the coolers and grinder.

We have added an improvement condition (IC10) for size fractionation of particulate emissions because a BAT-AEL applies for dust emissions to air. The justification for this IC is that there are a number of activities within the FDM sector which may result in release of particulates to air e.g. drying, milling and grinding. Overall there is little available information on how much fine particulates are released. This IC is a one-off exercise requiring operators to monitor and report on the fractions of fine particulate (PM $_{10}$  and PM $_{2.5}$ ) emissions and increase our understanding of potential health effects. Where BAT-AELS apply to multiple emission points e.g. grain milling, we may accept limited representative monitoring rather than expecting them to monitor every single emission point.

#### <u>Emissions to Water and implementing the requirements of the Water</u> <u>Framework Directive</u>

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

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

The operator has previously provided assessments for all emissions to water at the installation. The operator declares there has been no change to activities and subsequent effluents generated at the installation since this risk assessment was taken. Consequently, we agree that the original risk assessments remain valid at this time.

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

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

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

The Operator submitted a site condition report during the original application received on 31/03/2005. 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. Consequently, we are satisfied that the baseline conditions have not changed.

#### **Hazardous Substances**

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

The operator has 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.

#### **Underground Structures**

The operator has confirmed there are no underground structures at the installation.

#### **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).

If the consolidated permit contains existing improvement conditions that are not yet complete or the opportunity has been taken to delete completed improvement conditions then the numbering in the table below will not be consecutive as these are only the improvement conditions arising from this permit variation.

The following improvement conditions have been marked as complete and removed from the permit.

Supersede	Superseded Improvement Conditions				
Reference	Reason for inclusion				
IC5	The operator shall undertake an assessment of the suitability of the storage arrangements for the IBC's of Biocides and Enzymes and the oils in the oil store within the Mill building. The assessment shall highlight any deficiencies the current storage arrangements have with meeting the following minimum standards:				
	<ul> <li>The containers shall be stored within an identified area which is bunded to prevent the uncontrolled release of the stored substance;</li> </ul>				
	<ul> <li>Any bund shall be impermeable and resistant to the range of substances</li> </ul>				
	stored within that storage area;				
	<ul> <li>Any bund shall have no outlet (drain or valve) and drain to a blind collection point;</li> </ul>				
	The bund shall be designed to catch leaks from the containers;				
	<ul> <li>The bund shall have a capacity greater than 110% of the largest container or 25% of the total storage capacity; and</li> </ul>				
	<ul> <li>The containers shall have fill pints within the bund where possible or otherwise additional secondary containment for filling facilities shall be provided.</li> </ul>				
	A written report summarising the findings of the assessment and any				
	recommendations of improvements required to enable the bunding to meet the above standards, together with an implementation timetable shall be submitted to the Agency for approval.				
IC6	The operator shall develop an odour management plan. The plan shall be developed, making reference to relevant guidance including the Agency's Odour Horizontal Guidance Note H4 and shall detail the odour control and monitoring measures that are to be employed at the site.				
	A written report detailing the odour management plan shall be submitted to the Agency for approval.				

IC7	The operator shall carry out an assessment of the measures in place within the installation to ensure that the Brompton Beck through emission point W2 can only receive uncontaminated surface water and cannot be impacted by contaminated firewater, cleaning chemicals and minor spills.  A report detailing the findings of the assessment, recommendations for improvements to the surfacing, kerbing and bunding together with an implementation timetable shall be submitted to the Agency for approval.
IC8	The operator shall carry out a CCTV inspection of the integrity of the sub-surface drainage system within the installation. Any damage to the drains identified in the inspection shall be repaired.
	A written report detailing the findings on the inspection (including video evidence of all identified damage) and the repair work carried out shall be submitted to the Agency.

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

Improveme	nt programme requirements	
Reference	Reason for inclusion	Justification of deadline
IC9	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.	08/12/2023 or other date as agreed in writing with the Environment Agency
IC10	The Operator shall submit a written report to the Environment Agency of monitoring carried out to determine the size distribution of particulate matter in the exhaust gas emissions to air from emission points A1, A2 and A15, 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.	08/12/2023 or other date as agreed in writing with the Environment Agency
IC11	The operator shall submit, for approval by the Environment Agency, a report setting out progress to achieving the Best Available Techniques Conclusion Associated Emission Levels (BAT-AELs) 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) Current performance against the BAT-AELs. 2) Methodology for reaching the BAT-AELs. 3) Associated targets /timelines for reaching compliance by 4 December 2023. 4) Any alterations to the initial plan (in progress reports).  The report shall address the BAT Conclusions for Food, Drink and Milk industries with respect to the following:  BAT 17 Table 4 (compliance with BAT-AELs for channelled dust emissions to air from grinding and pellet cooling in compound feed manufacture)  Refer to BAT Conclusions for a full description of the BAT requirement.  The operator shall submit, for approval by the Environment Agency, a report demonstrating compliance against BAT 17 Table 4 for channelled dust emissions to air from the raw material grinder A15.	08/12/2023 or other date as agreed in writing with the Environment Agency

Environment Agency, a report demonstrating compliance against BAT 17 Table 4 for channelled dust emissions to air from the raw material grinder A15.	08/12/2023 or other date as agreed in writing with the Environment Agency
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