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/GP3133TW
The Operator is: GLW Feeds Limited

The Installation is: Shepshed Animal Feed Mill This Variation Notice number is: EPR/GP3133TW/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 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 and any changes to the operation of the installation.

Such as, in this case, there was a variation application made by the Operator (V004) at around the same time that the Regulation 61 notice response was submitted. On that basis, this variation (V005) incorporates that variation application, together with the permit review.

The scope of V004 is to reflect the multi-operator status of the installation, add some additional storage silos and re-orientate the position of an existing emission point.

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 05/05/2021 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 23/07/2021.

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 have no reason to consider that the Operator will not be able to comply with the techniques and standards described in the BAT Conclusions.

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 15/10/2021. A copy of the further information request was placed on our public register.

2.4 Our assessment of variation application V004

As part of this permit review process, we have decided to grant the concurrent permit variation application.

The scope of this variation is to reflect the multi-operator status of the installation (inclusion of the adjacent new directly associated activity (DAA) – Shepshed Mill CHP Plant), inclusion of two new raw material storage tanks and their associated vent emission points (A47 & A48), together with the re-orientation of the emission point for Cooler 3 (A3) from a horizontal discharge (via a 90 degree bend) to vertical discharge (through a jet cap).

2.4.1 Decision considerations for V004

The key issues are the impact of the changes to the emission points. In terms of A47 & A48, there are for safety reasons, and the emissions will largely be fugitive and of low environmental impact.

The proposed re-orientation of emission point A3 is a similar project to previous changes on site. This change will enable better dispersion, and therefore is considered an environmental improvement.

We consider in reaching our decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Confidential information

A claim for commercial or industrial confidentiality has not been made. The decision was taken in accordance with our guidance on confidentiality.

Identifying confidential information

We have not identified information provided as part of the application that we consider to be confidential.

The decision was taken in accordance with our guidance on confidentiality.

Consultation

This is a minor technical variation, so no consultation is required.

General operating techniques

We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.

The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.

Management System

We are not aware of any reason to consider that the operator will not have the management system to enable it to comply with the permit conditions.

The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.

Growth duty

We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit.

Paragraph 1.3 of the guidance says:

"The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation." We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.

We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.

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
BAT	1 – 15: General BAT Conclusions		
1	Environmental Management System - Improve overall environmental performance. Implement an EMS that incorporates all the features as described within BATc 1.	CC	Environment Agency assessment The operator has provided information to support compliance with BATc 1. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 1.
			The operator has an externally accredited EMS 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 following features:	СС	Environment Agency assessment 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
	I. Information about the food, drink and milk production processes, including: (a) simplified process flow sheets that show the origin of the emissions; (b) descriptions of process-integrated techniques and waste water/waste gas treatment techniques to prevent or reduce emissions, including their performance.		The operator has an externally accredited EMS to the ISO14001 standard, for which procedures are in place to ensure raw material inventories are undertaken; with resource efficiency and reduction of emissions as key drivers, together with achieving internal targets and those driven by Climate Change Agreements.

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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
	II. Information about water consumption and usage (e.g. flow diagrams and water mass balances), and identification of actions to reduce water consumption and waste water volume (see BAT 7).		
	III. Information about the quantity and characteristics of the waste water streams, such as:(a) average values and variability of flow, pH and temperature;(b) average concentration and load values of relevant pollutants/parameters(e.g. TOC or COD, nitrogen species, phosphorus, chloride, conductivity) and their variability.		
	IV. Information about the characteristics of the waste gas streams, such as: (a) average values and variability of flow and temperature; (b) average concentration and load values of relevant pollutants/parameters (e.g. dust, TVOC, CO, NOX, SOX) and their variability; (c) presence of other substances that may affect the waste gas treatment system or plant safety (e.g. oxygen, water vapour, dust).		
	V. Information about energy consumption and usage, the quantity of raw materials used, as well as the quantity and characteristics of residues generated, and identification of actions for continuous improvement of resource efficiency (see for example BAT 6 and BAT 10).		

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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
	VI. Identification and implementation of an appropriate monitoring strategy with the aim of increasing resource efficiency, taking into account energy, water and raw materials consumption. Monitoring can include direct measurements, calculations or recording with an appropriate frequency. The monitoring is broken down at the most appropriate level (e.g. at process or plant/installation level).		
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	No process effluent is produced and there are no direct emissions of effluent to surface water, other than clean and uncontaminated surface water run-off. For the emissions to sewer; chloride is not a key parameter of concern for the animal feed sector. We are therefore satisfied that BATc 3 is not applicable for this site.
4	Monitoring emissions to water to the required frequencies and standards. BAT is to monitor emissions to water with at least the frequency given in the table for BAT 4 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 [refer to BAT5 table in BATc] and in accordance with EN standards.	СС	Environment Agency assessment 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.

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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 monitoring of particulate emissions is currently undertaken to MCERTS standards at the product coolers - emission points A1, A2, A3, & A4, as per the previous permit requirements.
		The operator stated in their Regulation 61 response that they would install monitoring equipment to the grinders – emission points A45 & A46, to MCERTS standards, prior to the compliance deadline (FC).
		However, when a timeline was requested by RFI, the operator confirmed in their response, dated 21/10/2021 that they have now installed the equipment (CC).
Energy Efficiency	СС	Environment Agency assessment
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.		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 currently has a CCA Agreement in place with energy efficiency targets. The operator undertakes regular monitoring & internal targeting. In addition, they have installed LED lighting, energy efficient motors & equipment, variable speed drives, changed from coal to gas fired steam raising with economiser & burner control plus optimised
	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	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

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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
			steam leaks (including steam traps), insulation of tanks & pipework, process control system. The operator will also ensure cogeneration with heat recovery, further energy efficient equipment with energy efficient motors and is considering the installation of solar panels.
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 [for detail of each technique, refer BAT 7 table in BATc]	NA	Animal feed milling is an essentially dry process, with little use of water. We are therefore satisfied that BATc 7 is not applicable for this site.
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 in BAT 8 [for detail of each technique, refer BAT 8 table in BATc]	cc	Environment Agency assessment The operator has provided information to support compliance with BATc 8. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 8. The operator undertakes dry cleaning and no routine wet cleaning or CIP takes place for process plant. The use of disinfectant is minimised to key areas for food hygiene purposes. Stainless steel equipment is used to minimise build up in key areas. All materials including disinfectants and cleaning materials assessed for safety before

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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
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	No refrigerants are used in the permitted process. We are therefore satisfied that BATc 9 is not applicable for this 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	Environment Agency assessment 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 minimal waste is produced from the process, where out of specification product is re-worked into the process. In the unlikely case that waste feed is unsuitable for re-use, it is sent for composting.
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.	NA	The process is largely a dry process, with limited scope for uncontrolled aqueous releases, therefore buffer storage is not deemed to be required. We are satisfied therefore that BATc11 is not applicable for this site.
12	Emissions to water – treatment In order to reduce emissions to water, BAT is to use an appropriate combination of the techniques given in BAT 12 [for detail of each technique, refer BAT 12 table 1]	NA	Due to the low volumes of effluent produced, effluent treatment is not required.

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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 are therefore satisfied that BATc12 is not applicable for this site.
13	In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to set up, implement and regularly review a noise management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements: - a protocol containing actions and timelines; - a protocol for conducting noise emissions monitoring; - a protocol for response to identified noise events, eg complaints; - 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. Note: BAT13 is only applicable where a noise nuisance at sensitive receptors is expected and/or has been substantiated.		A NMP is not a current permit requirement for this site. The Operator states that although complaints have been raised; noise and noise sources measured and reviewed as a result were not attributable to GLW Feeds (unsubstantiated). We are therefore satisfied that BATc 13 is not applicable for this site. It should be noted that Condition 3.4.2 has been reinstated on the permit, as it appears this was erroneously omitted previously.
14	Noise management	СС	Environment Agency assessment
	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 [for detail of each technique, refer BAT 14 table in BATCs]		The operator has provided information to support compliance with BATc 14. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 14. The operator will ensure that noise reduction is a key consideration for any future alterations and new 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
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. Note: BAT 15 is only applicable to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated.	CC	An Odour Management Plan is in already place for this site, which meets the requirements of BATc 15.
ВАТ	16 – 17: BAT Conclusions for Animal Feed		
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 in the BATcs.	NA	The site does not process green fodder. We are therefore satisfied that BATc 16 is not applicable for this site.
17	Emissions to air – particulates In order to reduce channelled dust emissions to air, BAT is to use one of the techniques given; a. bag filter, b. cyclone.		Environment Agency assessment 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, either now or before the compliance deadline.

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BATC No.	,				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	
	Parameter	process (average over the sampling period)		emission points A1 & A4 and for	For cooler emission points A1 & A4 and grinder emission points A45 & A46; the operator has demonstrated that they can currently meet the BAT-AELs, so we have		
				New plants	Existing plants	points A45 & A46	included these emission limit values from date
	Dust	Grinding	mg/Nm³	<2-5	<2-10		of permit issue.
		Pellet cooling		<2-20		FC for the cooler emission points A2 & A3	For cooler emission points A2 & A3; the operator has stated that they have proposed improvements in place (replacement abatement) to achieve the BAT-AEL prior to the compliance deadline. On that basis, we have included post-dated emission limit values, linked to the satisfaction of improvement conditions IP8 and IP9.

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BATC No.	Summary of BAT Conclu Industries	sion requirement for Foo	od, Drink and Milk	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	Environmental Performa	nce Level – Energy Cons	sumption for Animal Feed	CC	Environment Agency assessment
	Product	Unit	Specific energy consumption (yearly average)		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 they can currently achieve 0.077 MWh/Tonne, which is well
	Compound food	MWh/tonne of products	0.01-0.10 (1)(2)(3)		
EPL	Dry pet food		0.39-0.50		
	Wet pet food		0.33-0.85		
	(2) The specific energy consump	s 0.12 MWh/tonne of products for installation	d. er aquatic animals are used as raw material. ens located in cold climates and/or when teat		within the APL range.
	Environmental performance level – Waste water discharge for Animal Feed			NA	The site does not produce wet pet food.
된	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.
- An updated site plan in Schedule 7.
- The addition of finished product production capacity in Table S1.1.
- Standardisation of the directly associated activities (DAAs) in Table S1.1.
- Standardisation of reporting parameters.

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

Capacity Threshold

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

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

The Operator has completed an H1 assessment of emissions for typical figures of production at the time of permitting. The H1 assessment is not valid for the maximum capacity or if production is now higher. We have included an improvement condition within the permit (IP11) 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 emissions plan.

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:

1. Rated thermal input (MW) of the medium combustion plant.	2.5 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine,	Boiler
dual fuel engine, other engine or other medium combustion plant).	
3. Type and share of fuels used according to the fuel categories laid	Natural gas
down in Annex II.	
4. Date of the start of the operation of the medium combustion plant or,	June 2014
where the exact date of the start of the operation is unknown, proof of	
the fact that the operation started before 20 December 2018.	

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 and monitoring requirements for existing medium combustion plant as part of this permit review in Table S3.1 of the permit.

We have also included a new condition 3.1.4 within the permit which specifies the monitoring requirements for the combustion plant in accordance with the MCPD.

Particulate Emissions

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

If the operator has identified current compliance against BAT-AELs we will implement the relevant emission limit value (ELV) from the date of permit issue. This is relevant for emission points A1, A2, A45 & A46 against BAT 17 for particulate emissions from the pellet coolers and grinders.

We have added an improvement condition (IP10) 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 (PM₁₀ 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. The aim should be to carry to as much monitoring as they can in a single day.

Emissions to Water and 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.

In this case, there are no direct discharges of process effluent to surface or ground water. There are emissions of vehicle wash and boiler blowdown to sewer.

However, due to the low volumes and the disposal route, we are satisfied that the discharge will not impact on the WFD requirements, and demonstrate BAT.

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 in 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.

The Operator submitted a summary report which referenced the site condition report and baseline report. We have reviewed the information and we consider that it adequately describes the current condition of the soil and groundwater. Consequently, we are satisfied that the baseline conditions have not changed.

Hazardous Substances

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

The operator has 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 groundwater to be unlikely. Therefore, we consider the generic condition 3.1.3 for periodic monitoring of soil and groundwater to be appropriate for this site, no additional monitoring is required at this time.

Climate Change Adaptation

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

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

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

Underground Structures

The operator provided information on what they consider to be underground structures in their Regulation 61 response. These comprise the subterranean infrastructure to support the weighbridge, and the underground interceptor.

We do not consider these to be relevant underground structures for the purposes of this permit review.

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.

IP 1 - 7 were marked as complete in the previous permit.

Reference	Requirements	Deadline for submission
IP8	The operator shall submit, for approval by the Environment Agency, a report setting out progress to achieving the Best Available Techniques Associated Emission Levels (BAT-AELs) where BAT is currently not achieved but will be achieved before 4 December 2023 (emission points A2 & A3). 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 in compound feed manufacture) Refer to BAT Conclusions for a full description of the BAT requirement.	11/01/2023
IP9	The operator shall submit, for approval by the Environment Agency, a report demonstrating compliance against BAT17 Table 4 for channelled dust emissions to air from grinding for emission points A2 & A3.	By 04/12/2023
IP10	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, A3, A4, A45 & A46 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.	01/06/2024
IP11	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.	11/01/2022