

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/BP3937PK
The Operator is: NWF Agriculture Limited
The Installation is: Wardle Mill
This Variation Notice number is: EPR/BP3937PK/V003

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 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 29/07/2021.

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 1, 2, 6 & 11. The operator does not currently comply with the requirements of BATc 1, 2 6 & 11. In relation to this/these BAT Conclusion(s), the operator has committed compliance by 4 December 2023. We have therefore included Improvement Condition IC 8 in the Consolidated Variation Notice to ensure that the requirements of the BAT Conclusions are delivered before 4 December 2023.

3 The legal framework

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

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

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

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

Annex 1: decision checklist regarding relevant BAT Conclusions

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

There are 37 BAT Conclusions.

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

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

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

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

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

NA – Not Applicable

CC – Currently Compliant

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

NC – Not Compliant

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	GENERAL BAT CONCLUSIONS (BAT 1-15)		
1	<p>Environmental Management System - Improve overall environmental performance.</p> <p>Implement an EMS that incorporates all the features as described within BATc 1.</p>	FC	<p>The operator has provided information to support compliance with BATc1. We have assessed the information provided we are not satisfied that the operator has demonstrated compliance with BATc1.</p> <p>The Operator has been unable to effectively demonstrate that the sites EMS incorporates all the features as described in BATc 1.</p> <p>We consider that the operator will be future compliant with BATc1. Improvement condition IC8 has been included in the permit to achieve compliance (see Annex 3).</p>
2	<p>EMS Inventory of inputs & outputs. Increase resource efficiency and reduce emissions.</p> <p>Establish, maintain and regularly review (including when a significant change occurs) an inventory of water, energy and raw materials consumption as well as of waste water and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all of the features as detailed within the BATCs.</p>	FC	<p>The operator has provided information to support compliance with BATc2. We have assessed the information provided we are not satisfied that the operator has demonstrated compliance with BATc2.</p> <p>The Operator has been unable to effectively demonstrate that the sites EMS incorporates all the features as described in BATc 2.</p> <p>We consider that the operator will be future compliant with BATc2. Improvement condition IC8 has been included in the permit to achieve compliance (see Annex 3).</p>

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
3	<p>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).</p>	NA	<p>The site does not use water in the production of animal feed as such there is no process effluent produced and there are no direct emissions of effluent to surface water. Uncontaminated surface water originating from roof and yard areas is discharged to the Shropshire Union Canal via an interceptor.</p> <p>We are therefore satisfied that BATc 3 is not applicable for this site.</p>
4	<p>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.</p>	NA	<p>No process effluent is produced and there are no direct emissions of effluent to surface water.</p> <p>We are therefore satisfied that BATc 4 is not applicable for this site.</p>
5	<p>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.</p>	CC	<p>The operator has provided information to support compliance with BATc 5. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 5.</p> <p>The monitoring of particulate emissions is currently undertaken to MCERTS standards at the product coolers - emission points A1, A2, A3 and A4 as per the previous permit requirements. The product grinder A6 is also currently monitored to MCERTs standard. The</p>

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
			Operator has confirmed that the new BAT AELs are achievable for each of the coolers and the grinder.
6	<p>Energy Efficiency</p> <p>In order to increase energy efficiency, BAT is to use an energy efficiency plan (BAT 6a) and an appropriate combination of the common techniques listed in technique 6b within the table in the BATc.</p>	FC	<p>The operator has provided information to support compliance with BATc 6. We have assessed the information provided. We are not satisfied that the operator has demonstrated compliance with BATc 6. The operator has not provided an energy efficiency plan to support compliance with BATc 6a nor have they provided energy efficiency techniques as listed within 6b.</p> <p>We consider that the operator will be future compliant with BATc 6. Improvement condition IC8 has been included in the permit to achieve compliance (see Annex 3).</p>
7	<p>Water and wastewater minimisation</p> <p>In order to reduce water consumption and the volume of waste water discharged, BAT is to use BAT 7a and one or a combination of the techniques b to k for detail of each technique, refer BAT 7 table in BATc.</p>	NA	<p>Animal Feed manufacture is essentially a dry process, with low water usage and limited potential for water saving & application of BAT techniques. The site does not use water in the production of animal feed and uses dry cleaning techniques only (vacuum and sweeping).</p> <p>We are therefore satisfied that BATc 7 is not applicable for this site.</p>
8	<p>Prevent or reduce the use of harmful substances</p>	CC	The operator has provided information to support compliance with BATc 8. We have

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	<p>In order to prevent or reduce the use of harmful substances, e.g. in cleaning and disinfection, BAT is to use one or a combination of the techniques given below.</p> <ul style="list-style-type: none"> (a) Proper selection of cleaning chemicals and/or disinfectants (b) Reuse of cleaning chemicals in cleaning-in-place (CIP) (c) Dry cleaning (d) Optimised design and construction of equipment and process areas 		<p>assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 8.</p> <p>Cleaning of production areas is undertaken by dry cleaning methods only such as vacuuming and sweeping. Cleaning agents used on site are selected for use on the basis they are suitable for use in the feed industry. All chemicals that are used on site are stored appropriately.</p>
9	<p>Refrigerants</p> <p>In order to prevent emissions of ozone-depleting substances and of substances with a high global warming potential from cooling and freezing, BAT is to use refrigerants without ozone depletion potential and with a low global warming potential.</p>	NA	<p>No refrigerants are used in the permitted process.</p> <p>We are therefore satisfied that BATc 9 is not applicable for this site.</p>
10	<p>Resource efficiency</p> <p>In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below:</p> <ul style="list-style-type: none"> (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	<p>The operator has provided information to support compliance with BATc 10. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 10.</p> <p>The Operator has demonstrated that minimal waste is produced from the process. Where possible and within feed safety QA residues and by-products can be re-worked into the process. Optimisation techniques are also employed at the site to reduce or eliminate process loss, including:</p>

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
			<ul style="list-style-type: none"> • Monitoring of raw material usage • Process wide quality control to minimise product rejects • Design of plant to ensure recoverable materials are reworked in the process or sold as an animal feed ingredient
11	<p>Waste water buffer storage In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.</p>	FC	<p>The operator did not provide any information to support compliance with BATc 11 in response to the Regulation 61 Notice dated 05/05/2021.</p> <p>We have included improvement conditions (IC 8 & 11) in the permit to achieve compliance. The operator is required to complete the improvement conditions and demonstrate compliance with the BAT Conclusions by the compliance date, 4 December 2023.</p>
12	<p>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]</p>	NA	<p>Due to the low volumes of effluent produced, effluent treatment is not required.</p> <p>We are therefore satisfied that BATc12 is not applicable for this site.</p>
13	<p>Noise management plan In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to set up, implement and regularly review a noise management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements: - a protocol containing actions and timelines;</p>	NA	<p>A NMP is only required for sites where a noise nuisance at sensitive receptors is expected and/or has been substantiate. There is no history of noise complaints at the site. – Despite this the Operator provided a NMP in response to the Regulation 61 Notice. However, based on the above, we have not</p>

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	<p>- a protocol for conducting noise emissions monitoring;</p> <p>- a protocol for response to identified noise events, eg complaints;</p> <p>- 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.</p> <p>Note: BAT13 is only applicable where a noise nuisance at sensitive receptors is expected and/or has been substantiated.</p>		<p>reviewed or approved this plan. We deem it to form part of the EMS</p> <p>We are therefore satisfied that BATc 13 is not applicable for this site</p>
14	<p>Noise management</p> <p>In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to use one or a combination of the techniques given below.</p> <p>(a) Appropriate location of equipment and buildings</p> <p>(b) Operational measures</p> <p>(c) Low-noise equipment</p> <p>(d) Noise control equipment</p> <p>(e) Noise abatement</p>	CC	<p>The operator has provided information to support compliance with BATc 14. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 14.</p> <p>The operator has stated that the site will utilise a number of noise reduction techniques including;</p> <ul style="list-style-type: none"> • Daily site inspections • Regular maintenance of plant • The use of automatic greasing units on all outside conveyor and elevators. • Vehicle engine hatches are kept closed and engines switched off when not in use; and • Plant and materials on site will be handled in a manner that minimises noise (e.g. minimisation of drop heights, no unnecessary revving of engines).

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	<p>Odour Management</p> <p>In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to set up, implement and regularly review an odour management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:</p> <ul style="list-style-type: none"> - a protocol containing actions and timelines; - a protocol for conducting odour monitoring. - a protocol for response to identified odour incidents eg complaints; - an odour prevention and reduction programme designed to identify the source(s); to measure/estimate odour exposure: to characterise the contributions of the sources; and to implement prevention and/or reduction measures. <p>Note: BAT 15 is only applicable to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated.</p>	NA	<p>An OMP is only required for sites where a noise nuisance at sensitive receptors is expected and/or has been substantiated. There is no history of odour complaints at the site. Is it worth stating here that – Despite this the Operator provided an OMP in response to the Regulation 61 Notice. However, based on the above, we have not reviewed or approved this plan. We deem it to form part of the EMS.</p> <p>We are therefore satisfied that BATc 15 is not applicable for this site</p>
ANIMAL FEED BAT CONCLUSIONS (BAT 16-17)			
16	<p>Energy efficiency – Green fodder only</p> <p>In order to increase energy efficiency in green fodder processing, BAT is to use an appropriate combination of the techniques specified in BAT 6 and of the techniques given below.</p> <ul style="list-style-type: none"> (a) Use of predried fodder (b) Recycling of waste gas from the dryer (c) Use of waste heat for pre-drying <p>Applicable in addition to BAT6</p>	N/A	<p>The site does not process green fodder.</p> <p>We are therefore satisfied that BATc 16 is not applicable for this site.</p>

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement															
17	<p>Emissions to air – particulates</p> <p>In order to reduce channelled dust emissions to air, BAT is to use one of the techniques given; a. bag filter, b. cyclone.</p> <table border="1" data-bbox="275 491 1232 735"> <thead> <tr> <th rowspan="2">Parameter</th> <th rowspan="2">Specific process</th> <th rowspan="2">Unit</th> <th colspan="2">BAT-AEL (average over the sampling period)</th> </tr> <tr> <th>New plants</th> <th>Existing plants</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Dust</td> <td>Grinding</td> <td rowspan="2">mg/Nm³</td> <td><2-5</td> <td><2-10</td> </tr> <tr> <td>Pellet cooling</td> <td colspan="2"><2-20</td> </tr> </tbody> </table>	Parameter	Specific process	Unit	BAT-AEL (average over the sampling period)		New plants	Existing plants	Dust	Grinding	mg/Nm ³	<2-5	<2-10	Pellet cooling	<2-20		CC	<p>The operator has provided information to support compliance with BATc 17. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 17.</p> <p>The existing permit contains an emission limit of 50mg/m³ for each of the product cooler. There is no emission limit for the grinder.</p> <p>As the product coolers are existing plants we believe it is appropriate to set the new ELV at the top of the range. The operator has demonstrated through the submission of monitoring data that they can currently meet the upper range of the BAT-AELs, so we have included the BAT AEL of 20 mg/Nm³ from date of permit issue.</p> <p>As the product grinder is existing plant we believe it is appropriate to set the new ELV at the top of the range. The operator has demonstrated through the submission of monitoring data that the grinder can currently meet the upper range of the BAT-AELs, have included the BAT AEL of 10 mg/Nm³ from date of permit issue.</p>
Parameter	Specific process				Unit	BAT-AEL (average over the sampling period)												
		New plants	Existing plants															
Dust	Grinding	mg/Nm ³	<2-5	<2-10														
	Pellet cooling		<2-20															
Animal Feed Environmental Performance Levels																		

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement										
EPL	<p>Environmental Performance Level – Energy Consumption for Animal Feed</p> <table border="1" data-bbox="275 421 1232 655"> <thead> <tr> <th data-bbox="275 421 595 523">Product</th> <th data-bbox="595 421 913 523">Unit</th> <th data-bbox="913 421 1232 523">Specific energy consumption (yearly average)</th> </tr> </thead> <tbody> <tr> <td data-bbox="275 523 595 568">Compound food</td> <td data-bbox="595 523 913 655" rowspan="3">MWh/tonne of products</td> <td data-bbox="913 523 1232 568">0.01-0.10 ⁽¹⁾⁽²⁾⁽³⁾</td> </tr> <tr> <td data-bbox="275 568 595 612">Dry pet food</td> <td data-bbox="913 568 1232 612">0.39-0.50</td> </tr> <tr> <td data-bbox="275 612 595 655">Wet pet food</td> <td data-bbox="913 612 1232 655">0.33-0.85</td> </tr> </tbody> </table> <p data-bbox="275 655 1232 791"> (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. </p>	Product	Unit	Specific energy consumption (yearly average)	Compound food	MWh/tonne of products	0.01-0.10 ⁽¹⁾⁽²⁾⁽³⁾	Dry pet food	0.39-0.50	Wet pet food	0.33-0.85	FC	<p>The operator has provided information to support compliance with BATc 17. We have assessed the information provided. We are not satisfied that the operator has demonstrated compliance with BATc 17. The operator has provided a Specific energy consumption figure (0.13 MWh/tonne of product) which is outside of the acceptable range.</p> <p>We consider that the operator will be future compliant with BATc 17. Improvement condition IC 12 has been included in the permit to achieve compliance (see Annex 3).</p>
	Product	Unit	Specific energy consumption (yearly average)										
	Compound food	MWh/tonne of products	0.01-0.10 ⁽¹⁾⁽²⁾⁽³⁾										
	Dry pet food		0.39-0.50										
	Wet pet food		0.33-0.85										
EPL	<p>Environmental performance level – Waste water discharge for Animal Feed</p> <table border="1" data-bbox="275 841 1232 956"> <thead> <tr> <th data-bbox="275 841 595 911">Product</th> <th data-bbox="595 841 913 911">Unit</th> <th data-bbox="913 841 1232 911">Specific waste water discharge (yearly average)</th> </tr> </thead> <tbody> <tr> <td data-bbox="275 911 595 956">Wet pet food</td> <td data-bbox="595 911 913 956">m3/tonne of products</td> <td data-bbox="913 911 1232 956">1.3-2.4</td> </tr> </tbody> </table>	Product	Unit	Specific waste water discharge (yearly average)	Wet pet food	m3/tonne of products	1.3-2.4	NA	<p>The site does not produce wet pet food.</p> <p>We are therefore satisfied this EPL is not applicable for this site.</p>				
	Product	Unit	Specific waste water discharge (yearly average)										
Wet pet food	m3/tonne of products	1.3-2.4											

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

Updating permit during permit review consolidation

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

This included some other changes to the permit to ensure cross-sector consistency, including:

- An updated introductory note
- Site plan
- Table S1.1 overhaul
 - Activity Reference (AR) renumbering
 - Updated listed activities
 - Addition of production capacity
 - Directly associated activities (DAAs) standardisation
- Standardisation of reporting parameters.

Capacity Threshold

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

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

The Operator has completed a H1 assessment of emissions for typical figures of production at the time of permitting.

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

Emissions to Air

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

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

Implementing the requirements of the Medium Combustion Plant Directive

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.	3.5 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.	kerosene
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.	January 1995

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

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, A3 & A4 against BAT 17 for particulate emissions from the coolers and A6 for the product 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 eg 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 may apply to multiple emission points eg grain milling, we may accept limited representative monitoring rather than expecting them to monitor every single emission point.

Emissions to Water and implementing the requirements of the Water Framework Directive

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

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

The operator has previously provided assessments for all emissions to water at the installation. The operator declares there has been no change to activities and subsequent effluents generated at the installation since this risk assessment was taken. However, we do not agree with the operators justification for disposal of untreated boiler blowdown and compressor condensate to water at emission point W2. We have incorporated an improvement condition (IC9) for the operator to review the disposal route of the discharge which includes the undertaking of monitoring and a characterisation of the discharge.

Soil & groundwater risk assessment (baseline report)

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

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

The Operator submitted a site condition report [Application Site Report, Wardle Mill NWF Agriculture Ltd. Dated January 2005] during the original application received on 24/03/2005. 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.

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 a risk assessment on the hazardous substances stored and used at the installation. Improvement Condition (IC 13) has been included in the variation for the Operator to submit 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).

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

We asked the Operator via the Regulation 61 Notice to:

- Provide details of any underground structures including;
 - Contents;
 - Capacity;
 - Construction material(s);
 - Preventative maintenance measures;
 - Leak detection;
 - Additional containment;
 - and if it is currently operational or redundant.
- and whether it currently meets the relevant standard in the Ciria “Containment systems for the prevention of pollution (C736)” report.

We reviewed the information provided by the operator and their findings. We are not satisfied that the existing site underground structure meet the standards set out in CIRIA C736.

We have set improvement conditions in the permit to address the deficiencies in the existing site underground structure (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	
Reference	Reason for Inclusion
IC 1	<p>The Operator shall, having regard to section 2.2.5 of Agency Guidance Note IPPC S6.10, undertake a review of the measures in place to prevent fugitive losses associated with the storage of raw materials. The review shall consider, but not be limited to the following;</p> <ul style="list-style-type: none"> • Bund specifications • The location of fill points <p>A summary of the review, including a timetable for the implementation of the improvements identified, shall be submitted in writing to the Agency</p>
IC 2	<p>The Operator shall develop a plan for the containment of firewater, having regard to Agency PPG18: Managing Firewater and Major Spillages. A copy of the plan shall be submitted to the Agency</p>
IC 3	<p>The Operator shall, having regard to section 2.2 of Agency Guidance Note IPPC S6.10, undertake a review of the techniques available to minimise particulate releases to air from the cyclone systems during start up, product changeover and shutdown. The review shall consider, but not be limited, to the following;</p> <ul style="list-style-type: none"> • The use of dampers; and • The use of variable speed fans <p>A written summary of the review highlighting the favoured technique together with a timetable for the implementation shall be submitted to the Agency</p>
IC 4	<p>The Operator shall implement measures to allow water consumption within the Permitted Installation to be monitored.</p>
IC 5	<p>The Operator shall develop a written Site Closure Plan with regard to Section 2.11 of the Agency Sector Guidance Note IPPC S6.10. Upon completion of the plan a summary of the document shall be submitted to the Agency in writing.</p>
IC 6	<p>The Operator shall, having regard to Section 2.10.1 of Agency Guidance Note IPPC S6.10, assess the feasibility of installing continuous indicative monitoring for particulate matter from the Grinder exhaust (including visual and audible alarms activated at a specified reference level). A summary of the assessment including a timetable for installation, where appropriate, shall be submitted in writing to the Agency.</p>
IC7	<ul style="list-style-type: none"> • The Operator shall assess the environment impact of the discharge of boiler and compressor blowdown, including, but not limited to, the following: • Characterisation of the effluent

	<ul style="list-style-type: none"> • The effect of treatment prior to discharge; and • Alternative means of disposal <p>A report summarising the assessment shall be submitted in writing to the agency</p>
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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
IC 8	<p>The operator shall submit, for approval by Environment Agency, a report setting out progress to achieving the 'Narrative' BAT where BAT is currently not achieved, but will be achieved before 4 December 2023. The report shall include, but not be limited to, the following:</p> <ol style="list-style-type: none"> 1) Methodology for achieving BAT 2) Associated targets /timelines for reaching compliance by 4 December 2023 3) Any alterations to the initial plan (in progress reports). <p>The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BAT 1, 2, 6 & 11. Refer to BAT Conclusions for a full description of the BAT requirement.</p>	07/07/2023
IC 9	<p>The Operator shall review the disposal of boiler blowdown, compressor condensate and wash waters from the installation. Following the assessment the operator shall submit the report to the Environment Agency for approval. The report shall include (but not be limited to) the following;</p> <ul style="list-style-type: none"> • An assessment of the impact for the proposed route using the Environment Agency's H1 methodology taking into consideration the characteristics of the boiler blowdown, compressor condensate and wash waters (temperature, pH, suspended solids, metals and any other potentially polluting substances). • Detail the specific arrangements for disposal of the blowdown associated with annual inspection and servicing. • List the options for disposal, justifying the proposed route (disposals not being treated in an onsite or offsite waste water treatment plant should be fully justified). • A proposed timetable for completion of any improvement works required. <p>The Operator shall implement any necessary improvements to a timetable</p>	31/10/2023 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	07/07/2023 or other date

	determine the size distribution of particulate matter in the exhaust gas emissions to air from emission points A1, A2, A3, A4 & A6 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.	as agreed in writing with the Environment Agency
IC 11	The Operator shall submit an assessment to demonstrate that appropriate pollution prevention measures are in place (such as the installation of interceptor(s) or similar) prior to the discharge point W1 to the Shropshire Union Canal, to prevent pollution of surface run off, having regard for the requirements of BAT 11 of the FDM BATCs, which requires that measures are in place to detect uncontrolled releases and prevent their discharge off site.	07/07/2023 or other date as agreed in writing with the Environment Agency
IC 12	The operator shall submit, for approval by the Environment Agency, a report setting out progress to achieving the Environmental Performance Levels (EPLs) for specific energy consumption, where the EPL is not currently achieved. The report shall include, but not be limited to, the following: 1) Methodology for achieving EPL in accordance with general techniques given in section 1.3 of the BAT conclusions 2) Associated targets /timelines for reaching compliance by 4 December 2023 3) 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 sections 1.3 and 2.1 of the BAT conclusions. Refer to BAT Conclusions for a full description of the requirements.	07/07/2023 or other date as agreed in writing with the Environment Agency
IC 13	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.	31/10/2023 or other date as agreed in writing with the Environment Agency

	<p>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).</p> <p>Stage 3 – Identify if pollution prevention measures & drains are fit for purpose in areas where hazardous substances are used / stored.</p> <p>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.</p>	
IC14	<p>The operator shall submit a written 'underground structures plan' and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of a review conducted, by a competent person, in accordance with the risk assessment methodology detailed within CIRIA C736 (2014) guidance, of the condition and extent of secondary and tertiary containment systems where all polluting liquids and solids are being stored.</p> <p>The review shall include, but not be limited to, the following for all underground structures at the installation;</p> <ul style="list-style-type: none"> • The physical condition of all underground structures; • The suitability of providing containment when subjected to the dynamic and static loads caused by the vessels' contents; • A preventative maintenance inspection regime. <p>The plan must contain dates for the implementation of individual improvement measures necessary for the underground structures to adhere to the standards detailed/referenced within CIRIA C736 (2014) guidance, or equivalent.</p> <p>The plan shall be implemented in accordance with the Environment Agency's written approval.</p>	31/10/2023 or other date as agreed in writing with the Environment Agency