

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/DP3036JK
The Operator is: NWF Agriculture Limited
The Installation is: Sandysike Mill
This Variation Notice number is: EPR/DP3036JK/V002

What this document is about

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

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

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

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

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

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

How this document is structured

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

1 Our decision

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

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

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

2 How we reached our decision

2.1 Requesting information to demonstrate compliance with BAT Conclusion techniques

We issued a Notice under Regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 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, 5, 6 and 17. The operator does not currently comply with the requirements of BATc 1, 5, 6 and 17. In relation to these BAT Conclusions, the operator has committed compliance by 4 December 2023. We have therefore included Improvement Conditions 3, 4 and 5 in the Consolidated Variation Notice to ensure that the requirements of the BAT Conclusions are delivered before 4 December 2023.

2.3 Requests for further information during determination

Although we were able to consider the Regulation 61 Notice response generally satisfactory at receipt, we did in fact need more information in order to complete our permit review assessment, and issued a further information request on 01/04/2022 requesting further information on the following BATc 1, 6, 11 and 17 in addition to seeking clarity on the discharge of boiler blowdown and compressor condensate and the completion of the Baseline Report Tool. A copy of the further information request was placed on our public register.

3 The legal framework

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

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

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

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

Annex 1: decision checklist regarding relevant BAT Conclusions

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

There are 37 BAT Conclusions.

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

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

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

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

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

NA – Not Applicable

CC – Currently Compliant

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

NC – Not Compliant

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	GENERAL BAT CONCLUSIONS (BAT 1-15)		
1	<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 IC3 has been included in the permit to achieve compliance (see Annex 3).</p>
2	<p>EMS Inventory of inputs & outputs. Increase resource efficiency and reduce emissions.</p> <p>Establish, maintain and regularly review (including when a significant change occurs) an inventory of water, energy and raw materials consumption as well as of waste water and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all of the features as detailed within the BATCs.</p>	CC	<p>The operator has provided information to support compliance with BATc 2. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 2.</p> <p>The Operator demonstrated how the site will monitor water consumption and characterise waste water and gas streams. In addition the Operator maintains and regularly reviews an inventory of water, energy and raw material consumption as well as of waste water and waste gas streams.</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.</p> <p>Uncontaminated surface water originating from roofs is discharged direct to a surface water ditch (SW2). Runoff from yard areas, vehicle wash down water and roofs is discharged to a surface water ditch via an interceptor (SW1). Effluent arising from boiler blow down and compressor condensate is collected on site and removed for offsite treatment and disposal.</p> <p>For the emissions to sewer; chloride is not a key parameter of concern for the animal feed sector.</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>

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
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>	<p>CC for the product coolers</p> <p>FC for the raw material grinder</p>	<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 A2 and A3 as per the previous permit requirements..</p> <p>The Operator has confirmed that the new BAT AELs are achievable for each of the coolers and emissions will be monitored to EN 13284-1 standards.</p> <p>The grinder (A1) isn't currently required to be monitored. Improvement Condition IC6 has been included within the variation for the Operator to demonstrate compliance against BATc 5 for the monitoring of particulates from the grinder emission point A1.</p>
6	<p>Energy Efficiency In order to increase energy efficiency, BAT is to use an energy efficiency plan (BAT 6a) and an appropriate combination of the common techniques listed in technique 6b within the table in the BATc.</p>	<p>FC</p>	<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 has the Operator</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>provided details of the common techniques used on site.</p> <p>We consider that the operator will be future compliant with BATc 6. Improvement condition IC3 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 uses minimal amounts of 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> <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 	CC	<p>The operator has provided information to support compliance with BATc 8. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 8.</p> <p>Cleaning of production areas is undertaken by dry cleaning methods only such as vacuuming. Any chemicals used on site are to maintain an acceptable standard of housekeeping, to complement pest control and to support corrective actions implemented for minor</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
			environmental incidents. All cleaning and disinfection agents are selected on the basis they are suitable for use on feed contact services.
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	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 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: <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

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
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>	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 11.</p> <p>Boiler blow down and compressor condensate are collected onsite and removed for offsite treatment and discharge.</p> <p>Surface water and wash waters from the onsite vehicle wash are captured by engineered drains and discharged to a watercourse to the south-west of the site via an interceptor (SW1). Vehicles are washed with water only, no detergents are used.</p> <p>Uncontaminated roof water and surface waters from the west of the site are discharged directly to the surface water system (SW2)</p> <p>To further reduce risk of uncontrolled releases, the storage of fuels and liquid raw materials are within bunded areas. Filling points are located within the secondary containment areas or provided with spill trays.</p> <p>In the event of an uncontrolled release the site utilises the following control measures; spill kits and inflatable drain covers.</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
12	<p>Emissions to water – treatment</p> <p>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</p> <p>In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to set up, implement and regularly review a noise management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:</p> <ul style="list-style-type: none"> - a protocol containing actions and timelines; - a protocol for conducting noise emissions monitoring; - a protocol for response to identified noise events, eg complaints; - a noise reduction programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures. <p>Note: BAT13 is only applicable where a noise nuisance at sensitive receptors is expected and/or has been substantiated.</p>	CC	<p>The operator has provided information to support compliance with BATc 13. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 13.</p> <p>The site operates with an approved noise management plan (NMP). The noise management plan is supported by a noise impact assessment which has been undertaken in accordance with BS4142:2014. The NMP identifies and employs all appropriate measures to minimise the generation of noise and subsequent exposure, prevents exposure of people outside the site to levels of noise which would result in complaints and minimise the risk of unplanned events which have the potential to result in off-site noise complaints. The NMP also details how the site will deal with noise complaints should they arise.</p>
14	<p>Noise management</p>	CC	<p>The operator has provided information to support compliance with BATc 14. We have assessed the information provided and we are</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>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> <ul style="list-style-type: none"> (a) Appropriate location of equipment and buildings (b) Operational measures (c) Low-noise equipment (d) Noise control equipment (e) Noise abatement 		<p>satisfied that the operator has demonstrated compliance with BATc 13.</p> <p>The site employs a number of techniques to minimise noise emissions, these include</p> <ul style="list-style-type: none"> - Plant and equipment are regularly maintained to minimise noise resulting from deterioration and inefficient operation; - Daily audits and inspections are undertaken by two full-time site engineers; - Milling/Processing building - the building is fully enclosed and access from the yard is gained via a single roller shutter door except when to allow a pedestrian through. - Product loading bays are fully enclosed as far as practicable other than loading lanes for wagons. - HGV's on site are restricted to operating hours between 06:00 and 19:00 hours. - Telehandler on site is restricted to operating hours between 06:00 and 19:00 hours. - All plant machinery on site is selected and operated to manufacturers specified to minimise noise; - Quiet plant operations are used wherever possible and where new plant is needed the quietest replacement will be chosen;

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"> - When servicing and maintenance is required, this is undertaken as far away from receptors as possible - 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).
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>BAT 15 is only applicable to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated.</p>	CC	<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.</p> <p>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	Energy efficiency – Green fodder only	N/A	The site does not process green fodder.

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement															
	<p>In order to increase energy efficiency in green fodder processing, BAT is to use an appropriate combination of the techniques specified in BAT 6 and of the techniques given below.</p> <p>(a) Use of predried fodder</p> <p>(b) Recycling of waste gas from the dryer</p> <p>(c) Use of waste heat for pre-drying</p> <p>Applicable in addition to BAT6</p>		<p>We are therefore satisfied that BATc 16 is not applicable for this site.</p>															
17	<p>Emissions to air – particulates</p> <p>In order to reduce channelled dust emissions to air, BAT is to use one of the techniques given; a. bag filter, b. cyclone.</p> <table border="1" data-bbox="277 831 1229 1075"> <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		<p>CC for the product coolers A2 & A3</p>	<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 20mg/m³ for the product coolers and emission limit of 20 mg/m³ 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>
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															

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>FC for the raw material grinder A1</p>	<p>The operator stated in their Regulation 61 response that the emission point for the grinder (A1) will be tested prior to the compliance deadline. Improvement condition (IC 6) has been included in the permit for the Operator to comply with the monitoring requirements and IC 4 & 5 has been included in the permit for the Operator to comply with the BAT AELs by 04/12/2023.</p> <p>An ELV of 10mg/Nm³ has been included in the varied permit which will apply upon completion of IC4 IC5 and IC6, to ensure compliance with the BAT-AEL, until this point the existing emission limit of 20 mg/Nm³ will remain.</p>												
Animal Feed Environmental Performance Levels															
EPL	Environmental Performance Level – Energy Consumption for Animal Feed		CC	<p>The operator has provided information to support compliance with BATc 17. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 17</p> <p>The operator reports that they can currently achieve 0.09 MWh/Tonne, which is within the accepted EPL range for compound food</p>											
	<table border="1"> <thead> <tr> <th data-bbox="277 954 595 1058">Product</th> <th data-bbox="595 954 913 1058">Unit</th> <th data-bbox="913 954 1245 1058">Specific energy consumption (yearly average)</th> </tr> </thead> <tbody> <tr> <td data-bbox="277 1058 595 1106">Compound food</td> <td data-bbox="595 1058 913 1106" rowspan="3">MWh/tonne of products</td> <td data-bbox="913 1058 1245 1106">0.01-0.10 ⁽¹⁾⁽²⁾⁽³⁾</td> </tr> <tr> <td data-bbox="277 1106 595 1153">Dry pet food</td> <td data-bbox="913 1106 1245 1153">0.39-0.50</td> </tr> <tr> <td data-bbox="277 1153 595 1201">Wet pet food</td> <td data-bbox="913 1153 1245 1201">0.33-0.85</td> </tr> </tbody> </table>	Product			Unit	Specific energy consumption (yearly average)	Compound food	MWh/tonne of products	0.01-0.10 ⁽¹⁾⁽²⁾⁽³⁾	Dry pet food	0.39-0.50	Wet pet food	0.33-0.85		
	Product	Unit			Specific energy consumption (yearly average)										
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Dry pet food		0.39-0.50													
Wet pet food		0.33-0.85													
<p>(1) The lower end of the range can be achieved when pelleting is not applied.</p> <p>(2) The specific energy consumption level may not apply when fish and other aquatic animals are used as raw material.</p> <p>(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>															

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	Environmental performance level – Waste water discharge for Animal Feed		<p>The site does not produce wet pet food.</p> <p>We are therefore satisfied this EPL is not applicable for this site.</p>				
	<table border="1"> <thead> <tr> <th data-bbox="277 427 600 496">Product</th> <th data-bbox="600 427 913 496">Unit</th> <th data-bbox="913 427 1236 496">Specific waste water discharge (yearly average)</th> </tr> </thead> <tbody> <tr> <td data-bbox="277 496 600 539">Wet pet food</td> <td data-bbox="600 496 913 539">m3/tonne of products</td> <td data-bbox="913 496 1236 539">1.3-2.4</td> </tr> </tbody> </table>	Product		Unit	Specific waste water discharge (yearly average)	Wet pet food	m3/tonne of products
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, all emission points listed with Table S3.1 are shown on the updated site emission point 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

Boiler

1. Rated thermal input (MW) of the medium combustion plant.	1.6 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.	Prior to 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 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 A2, and A3 against BAT 17 for particulate emissions from the coolers. Currently emissions from the raw material grinder (A1) aren't currently monitored improvement condition IC5 has been included in the variation notice for the Operator to demonstrate compliance against BATc 17.

We have added an improvement condition (IC7) 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. Consequently, we agree that the original risk assessments remain valid at this time.

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

Soil & groundwater risk assessment (baseline report)

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

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

The Operator submitted a site condition report [Sandysike Mill Site Condition Report Dated September 2018] during the original application received on 29/11/2018. 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 provided a short risk assessment on the hazardous substances stored and used at the installation. The risk assessment was a stage 1-3 assessment as detailed within EC Commission Guidance 2014/C 136/03.

The stage 1 assessment identified the hazardous substances used / stored on site. The stage 2 assessment identified if hazardous substances are capable of causing pollution. If they are capable of causing pollution they are then termed Relevant Hazardous Substances (RHS). The Stage 3 assessment identified if pollution prevention measures are fit for purpose in areas where hazardous substances are used / stored. This includes drains as well.

The outcomes of the three stage assessment identified that pollution of soil and/or ground water to be unlikely.

Climate Change Adaptation

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

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

Underground Structures

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

Annex 3: Improvement Conditions

Based on the information in the Operator's Regulation 61 Notice response and our own records of the capability and performance of the installation at this site, we consider that we need to set improvement conditions so that the outcome of the techniques detailed in the BAT Conclusions are achieved by the installation. These improvement conditions are set out below - justifications for them is provided at the relevant section of the decision document (Annex 1 or Annex 2).

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

Superseded Improvement programme requirements	
Reference	Reason for inclusion
IP1	The operator shall submit a written report to the Environment Agency for approval detailing the specification and design of the permanent tank, for the storage of boiler blow down water and compressor condensate, at the Installation. The operator shall review the design and specification for the storage tank against Best Available Techniques (BAT) in the Food and Drink Sector Guidance (EPR 6.10) and the Defra Process Guidance Note 6/26(13) – Statutory guidance for animal feed compounding.
IP2	Once the specification and design of the permanent tank, for the storage of boiler blow down water and compressor condensate, is approved in writing by the Environment Agency the tank shall be installed, subject to such amendments or additions as notified by the Environment Agency.

Improvement programme requirements		
Reference	Reason for inclusion	Justification of deadline
IC3	<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, 5 and 6.</p> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	08/06/2023
IC4	<p>The operator shall submit, for approval by the Environment Agency, a report setting out progress to achieving the Best Available Techniques Conclusion Associated Emission Levels (BAT-AELs) where BAT is currently not achieved, but will be achieved before 4 December 2023. The report shall include, but not be limited to, the following:</p> <ol style="list-style-type: none"> 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). <p>The report shall address the BAT Conclusions for Food, Drink and Milk industries with respect to the following:</p> <ul style="list-style-type: none"> • BAT 17 Table 4 (compliance with BAT-AELs for channelled dust emissions to air from grinding and pellet cooling in compound feed manufacture) <p>Refer to BAT Conclusions for a full description of the BAT requirement</p>	08/06/2023
IC5	<p>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 point A1.</p>	08/06/2023

IC6	<p>The Operator shall submit a report, for approval in writing by the Environment Agency, demonstrating the ability to comply with BAT 5 for monitoring of particulates from the grinder emissions point A1 in accordance with the MCERTS standard.</p> <p>The report shall include, but not be limited to, the installation of the sampling ports and platforms to enable particulate monitoring in accordance with table S3.1.</p>	08/06/2023
IC7	<p>The Operator shall submit a written report to the Environment Agency of monitoring carried out to determine the size distribution of particulate matter in the exhaust gas emissions to air from emission points A1, A2 and A3, identifying the fractions within the PM₁₀ and PM_{2.5} ranges. The monitoring shall be carried out under representative operating conditions and shall be in accordance with EN ISO 23210 unless otherwise agreed with the Environment Agency.</p>	08/06/2023 or other date as agreed in writing with the Environment Agency