

# **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/AP3834S  
The Operator is:                         J. E. Porter Limited  
The Installation is:                     Navenby Feed Mill  
This Variation Notice number is:   EPR/AP3834SS/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 4<sup>th</sup> December 2019 in the Official Journal of the European Union. In this decision document, we set out the reasoning for the consolidated variation notice that we have issued.

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

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

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

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

## **How this document is structured**

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

# 1 Our decision

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

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

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

## 2 How we reached our decision

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

We issued a Notice under Regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 25/08/2021 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 25/08/2021.

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 Conclusions 1, 2, 6, 8, 14 and 17. The operator does not currently comply with the requirements of BATc 1, 2, 6, 8, 14 and 17. In relation to these BAT Conclusions, the operator has committed compliance by 4 December 2023. We have therefore included Improvement Conditions (ICs) 10, 12, 13, 14 and 15 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 23/11/2022, requesting further details regarding the following BATc: 1, 2, 3, 6, 7, 8, 10, 11, 14 and 17 . 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
<b>GENERAL BAT CONCLUSIONS (BAT 1-15)</b>			
1	<p><b>Environmental Management System - Improve overall environmental performance.</b></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 IC12 has been included in the permit to achieve compliance (see Annex 3).</p>
2	<p><b>EMS Inventory of inputs &amp; outputs. Increase resource efficiency and reduce emissions.</b></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 Site holds Inventories for Water, Energy, and Raw Material Consumption. However, no information was provided in terms of BAT sub-points i, ii, iv or vi.</p> <p>We consider that the operator will be future compliant with BATc2. Improvement condition IC12 has been included in the permit to</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
			achieve compliance and demonstrate how resource efficiency can be increased and emissions reduced (see Annex 3).
3	<p><b>Monitoring key process parameters at key locations for emissions to water.</b> 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	We are satisfied that BATc 3 is not applicable to this Installation. This is because there is no process effluent produced as the manufacturing of compound feed is a relatively dry process.
4	<p><b>Monitoring emissions to water to the required frequencies and standards.</b> 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><b>Monitoring channelled emissions to air to the required frequencies and standards.</b> BAT is to monitor channelled emissions to air with at least the frequency given and in accordance with EN standards.</p>	<p><b>CC: Pellet coolers</b></p> <p><b>FC: Raw material grinder</b></p>	<p><b>Product coolers (A1 and A2)</b> The monitoring of particulate emissions is currently undertaken for the coolers and confirms that the AELs are being met. The operator has provided information to support compliance with BATc 5. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 5 for coolers (A1 and A2).</p> <p><b>Raw material grinder (A5)</b> The raw material grinder is existing plant, however, there is not a limit in the extant</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>permit for its emission point (A5) and monitoring has not yet been carried out for the grinder.</p> <p>The requirement for annual monitoring will be included in the varied permit to ensure compliance with the BAT-AELs.</p> <p>As a result of this permit review IC 13 has been included in the permit for the Operator to comply with the monitoring requirements and IC 14 has been included in the permit for the Operator to comply with the BAT AELs by 4/12/2023.</p>
6	<p><b>Energy Efficiency</b></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>	<b>FC</b>	<p>The operator did not provide any information to support compliance with BATc 6 in response to the Regulation 61 Notice dated 25/08/2021.</p> <p>The operator has not provided an energy efficiency plan to support compliance with BATc 6a nor has the Operator provided details of the common techniques used on site as stated in BATc 6b.</p> <p>We have included ICs 12 and 15 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>
7	<b>Water and wastewater minimisation</b>	<b>CC</b>	<p>The operator has provided information to support compliance with BATc 7. We have</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 reduce water consumption and the volume of waste water discharged, BAT is to use BAT 7a and one or a combination of the techniques b to k given below.</p> <ul style="list-style-type: none"> <li>(a) water recycling and/or reuse</li> <li>(b) Optimisation of water flow</li> <li>(c) Optimisation of water nozzles and hoses</li> <li>(d) Segregation of water streams</li> </ul> <p>Techniques related to cleaning operations:</p> <ul style="list-style-type: none"> <li>(e) Dry cleaning</li> <li>(f) Pigging system for pipes</li> <li>(g) High-pressure cleaning</li> <li>(h) Optimisation of chemical dosing and water use in cleaning-in-place (CIP)</li> <li>(i) Low-pressure foam and/or gel cleaning</li> <li>(j) Optimised design and construction of equipment and process areas</li> <li>(k) Cleaning of equipment as soon as possible</li> </ul>		<p>assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 7.</p> <p>Water consumption figures were provided.</p> <p>Plant cleaning is a dry process. No water hoses are used for cleaning within the plant.</p> <p>Animal Feed Manufacture is essentially a dry process, with low water usage and limited potential for water saving and application of BAT.</p> <p>Little process effluent is produced and the operator takes all reasonable steps to monitor water usage in order to reduce water consumption and the volume of waste water produced. The operator reports water usage per tonne of product.</p>
8	<p><b>Prevent or reduce the use of harmful substances</b></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"> <li>(a) Proper selection of cleaning chemicals and/or disinfectants</li> <li>(b) Reuse of cleaning chemicals in cleaning-in-place (CIP)</li> <li>(c) Dry cleaning</li> <li>(d) Optimised design and construction of equipment and process areas</li> </ul>	FC	<p>The operator did not provide any information to support compliance with BATc 8 in response to the Regulation 61 Notice dated 25/08/2021.</p> <p>The Operator has not provided a detailed response as to the cleaning techniques used on site or provided details on the chemicals used.</p> <p>We have included IC12 in the permit to achieve compliance. The operator is required to complete the improvement conditions and demonstrate compliance with the BAT</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
			Conclusions by the compliance date, 4 December 2023.
9	<b>Refrigerants</b> In order to prevent emissions of ozone-depleting substances and of substances with a high global warming potential from cooling and freezing, BAT is to use refrigerants without ozone depletion potential and with a low global warming potential.	NA	We are satisfied that BATc 9 is not applicable to this Installation as there are no refrigerants used for production and storage purposes on site.
10	<b>Resource efficiency</b> In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below: (a) Anaerobic digestion (b) Use of residues (c) Separation of residues (d) Recovery and reuse of residues from the pasteuriser (e) Phosphorus recovery as struvite (f) Use of waste water for land spreading	CC	The operator has provided information to support compliance with BATc 10. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 10.  The Operator has demonstrated that the minimal waste is produced from the production of compound feed. Residues are re-worked into the production of compound feed.
11	<b>Waste water buffer storage</b> In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.	CC	The operator has provided information to support compliance with BATc 11. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 11.  Spill kits are available on-site and there is an interceptor to prevent contaminants entering the drainage system.  See the assessment for BAT 3 above.
12	<b>Emissions to water – treatment</b>	NA	Due to the low volumes of effluent produced, effluent treatment is not required.

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 reduce emissions to water, BAT is to use an appropriate combination of the techniques given below.</p> <p>Preliminary, primary and general treatment</p> <p>(a) Equalisation</p> <p>(b) Neutralisation</p> <p>(c) Physical separate (eg screens, sieves, primary settlement tanks etc)</p> <p>Aerobic and/or anaerobic treatment (secondary treatment)</p> <p>(d) Aerobic and/or anaerobic treatment (eg activated sludge, aerobic lagoon etc)</p> <p>(e) Nitrification and/or denitrification</p> <p>(f) Partial nitrification - anaerobic ammonium oxidation</p> <p>Phosphorus recovery and/or removal</p> <p>(g) Phosphorus recovery as struvite</p> <p>(h) Precipitation</p> <p>(i) Enhanced biological phosphorus removal</p> <p>Final solids removal</p> <p>(j) Coagulation and flocculation</p> <p>(k) Sedimentation</p> <p>(l) Filtration (eg sand filtration, microfiltration, ultrafiltration)</p> <p>(m) Flotation</p>		<p>We are therefore satisfied that BATc 12 is not applicable for this site.</p>
13	<p><b>Noise management plan</b></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"> <li>- a protocol containing actions and timelines;</li> </ul>	NA	<p>A noise management plan is only required where a noise nuisance at sensitive receptors is expected or has been substantiated. The site has no history of recent noise complaints therefore a NMP is not a requirement for this 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
	<ul style="list-style-type: none"> <li>- a protocol for conducting noise emissions monitoring;</li> <li>- a protocol for response to identified noise events, eg complaints;</li> <li>- 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.</li> </ul>		We are therefore satisfied that BATc 13 is not applicable for this site.
14	<p><b>Noise management</b></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> <ul style="list-style-type: none"> <li>(a) Appropriate location of equipment and buildings</li> <li>(b) Operational measures</li> <li>(c) Low-noise equipment</li> <li>(d) Noise control equipment</li> <li>(e) Noise abatement</li> </ul>	<b>FC</b>	<p>The operator did not provide any information to support compliance with BATc 14 in response to the Regulation 61 Notice dated 25/08/2021.</p> <p>We have included IC12 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>
15	<p><b>Odour Management</b></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"> <li>- a protocol containing actions and timelines;</li> <li>- a protocol for conducting odour monitoring.</li> <li>- a protocol for response to identified odour incidents eg complaints;</li> <li>- 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.</li> </ul>	<b>NA</b>	<p>An odour management plan is only required where odour nuisance at sensitive receptors is expected or has been substantiated. There have been no substantiated odour nuisance from the site therefore an OMP is not a requirement for this site.</p> <p>We are therefore satisfied that BATc 15 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															
<b>ANIMAL FEED BAT CONCLUSIONS (BAT 16-17)</b>																		
16	<p><b>Energy efficiency – Green fodder only</b></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> <p>(a) Use of pre-dried 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>	<b>NA</b>	<p>Not applicable for this site as it does not process green fodder.</p> <p>We are therefore satisfied that BATc 16 is not applicable for this site.</p>															
17	<p><b>Emissions to air – particulates</b></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="277 935 1229 1179"> <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/Nm<sup>3</sup></td> <td>&lt;2-5</td> <td>&lt;2-10</td> </tr> <tr> <td>Pellet cooling</td> <td colspan="2">&lt;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 <sup>3</sup>	<2-5	<2-10	Pellet cooling	<2-20		<b>CC</b>	<p><b>Product coolers (A1 and A2)</b></p> <p>The existing emission limit values (ELV) for the pellet coolers A1 &amp; A2 were 50mg/Nm<sup>3</sup> for particulate emissions. As these coolers are existing plant we believe it is appropriate to set the new ELV at the top of the range. An ELV of 20mg/Nm<sup>3</sup> will be included in the varied permit to ensure compliance with the BAT-AEL.</p> <p>Monitoring data shows the Operator can comply with the revised ELV of 20mg/Nm<sup>3</sup>. Therefore we are including this limit within the permit from date of issue and are choosing to not future date this BAT AEL.</p>
Parameter	Specific process				Unit	BAT-AEL (average over the sampling period)												
		New plants	Existing plants															
Dust	Grinding	mg/Nm <sup>3</sup>	<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
		FC	<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><b>Grinder (A5)</b>  There was no existing ELV for particulate emissions from the grinder (A5) in the extant permit. As this grinder is existing plant we believe it is appropriate to set the new ELV at the top of the range. An ELV of 10mg/Nm<sup>3</sup> will be included in the varied permit to ensure compliance with the BAT-AEL.</p> <p>The emission point for the grinder will be tested prior to the compliance deadline. IC13 has been included in the permit for the Operator to comply with the monitoring requirements and IC14 has been included in the permit for the Operator to comply with the BAT AELs by 04/12/2023.</p>

Animal Feed Environmental Performance Levels					
EPL	<b>Environmental Performance Level – Energy Consumption for Animal Feed</b>			<b>CC</b>	<p>The operator has provided information to support compliance with the energy EPL. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with the energy consumption for Animal Feed. The compound food figure of 0.01-0.10 is appropriate for this installation.</p> <p>The sites energy consumption for 2021 was 0.079MWh/t, which is within the target, reflecting the good energy management in place at this installation.</p>
	Product	Unit	Specific energy consumption (yearly average)		
	Compound food	MWh/tonne of products	0.01-0.10 <sup>(1)(2)(3)</sup>		
	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>					
EPL	<b>Environmental performance level – Waste water discharge for Animal Feed</b>			<b>NA</b>	<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**

Although an updated site plan was submitted with the Regulation 61 Notice where the permit boundary appeared to have increased, the Operator has not applied to increase the permitted area and site boundary. If requested, this change would fall outside the scope of the Food, Drink and Milk sector review. Therefore permit boundary remains the same as when the permit was originally issued.

### **Updating permit during permit review consolidation**

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

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

### **Capacity Threshold**

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

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

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

The H1 assessment is not valid for the maximum capacity stated within the permit or if production is now higher. When the permit was first issued, the site was producing approximately 195,000 tonnes of feed per annum. In the Operator’s Regulation 61 response, their maximum finished production capacity was listed as 850 tonnes per day. Therefore, we have included an improvement condition within the permit (IC9) which requires the operator to revisit their H1 risk assessment for particulate emissions to air at the capacity limit figure that is now stated within table S1.1 of the permit.



## **Emissions to Air**

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

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

## **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(s) below:

### **Boilers**

1. Rated thermal input (MW) of the medium combustion plant.	2 x 2.33 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.	Propane gas (liquefied petroleum gas, LPG), classed as “gaseous fuels other than natural gas”
4. Date of the start of the operation of the medium combustion plant or, where the exact date of the start of the operation is unknown, proof of the fact that the operation started before 20 December 2018.	Boiler 1: July 1994 Boiler 2: March 2002

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 and A2 against BAT 17 for particulate emissions from the coolers.

For emission points noted to be future complaint we would incorporate an interim ELV and monitoring requirements from the date of permit issue. This is relevant for emission point A5.

We have incorporated an improvement condition (IC10) to ensure the monitoring is carried out as soon as reasonably practical prior to December 2023 for these emission points

We have added an improvement condition (IC10) for size fractionation of particulate emissions because a BAT-AEL applies for dust emissions to air. The justification for this IC is that there are a number of activities within the FDM sector which may result in release of particulates to air e.g. milling and grinding. Overall there is little available information on how much fine particulates are released. This IC is a one-off exercise requiring operators to monitor and report on the fractions of fine particulate (PM<sub>10</sub> and PM<sub>2.5</sub>) emissions and increase our understanding of potential health effects.

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

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

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

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

We do not agree with the operators justification for disposal of boiler blowdown, compressor condensate, wash waters (including vehicle wash waters) from the installation to water at emission point W2 unless tankered away. We have incorporated an improvement condition (IC16) for the operator to find an alternative route for disposal.

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

The IED requires that the operator of any IED installation using, producing or releasing “relevant hazardous substances” (RHS) shall, having regarded the possibility that they might cause pollution of soil and groundwater, submit a “baseline report” with its permit application. The baseline report is an important reference document in the assessment

of contamination that might arise during the operational lifetime of the regulated facility and at cessation of activities. It must enable a quantified comparison to be made between the baseline and the state of the site at surrender.

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

The Operator submitted a site condition report during the original application received on 06/06/2005. 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 completed the Site Baseline Conditions and Hazardous Substances Response Tool, which includes a short risk assessment on the hazardous substances stored and used at the installation.

We have included improvement condition (IC8) which requires the Operator to complete the Site Baseline Conditions and Hazardous Substances Response Tool. If the outcome of the assessment identifies that pollution of soil / ground water to be possible, a monitoring plan is required to be produced and submitted to the Environment Agency for assessment.

### **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;
  - 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.

Adequate information was not provided by the Operator in response to the Regulation 61 Notice. Therefore we do not have enough information to be satisfied that the existing site underground structure meets the standards set out in CIRIA C736.

We have set improvement conditions in the permit to address the deficiencies in the existing site underground structures (IC11). See Improvement condition 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).

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

The following improvement conditions have been removed from the permit:

### IC1 previously stated:

"Provide bunding for all tanks, tank fill and draw points, and chemical storage containers, and replace the existing red diesel tank and paraffin tank."

We have previously assessed the bunding of the tanks on-site. There is one underground fuel tank and the operator has previously reported that they carry out routine dip testing. We have recommended annual pressure testing.

### IC2 previously stated:

"Develop a plan for the containment of firewater."

Operational Incident Plan was received (see Compliance Assessment Report, CAR, form reference: A/100628/AP3834SS). The Operator has advised that the site has recently installed an emergency shut-off-valve to prevent surface water entering the lagoon system in the event of a spillage or pollution event. This will be check at the next compliance visit.

### IC3 previously stated:

"Provide a written programme of monitoring for particulate releases from emission points A3 to A5". <sup>[Note 1]</sup>

### IC4 previously stated:

"Review procedure for the disposal and recovery of waste, including techniques to minimise waste streams. Implement any identified improvements." <sup>[Note 1]</sup>

### IC5 previously stated:

"Develop a written Site Closure Plan." <sup>[Note 1]</sup>

Note 1: IC3, IC4 and IC5 above, were considered complete as of 22/08/2008 (according to CAR form reference: RDR/080822/AP3834SS).

**IC6 previously stated:**

“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.”

This improvement condition has been deemed complete according to previous compliance visit records.

**IC7 previously stated:**

“The Operator shall identify and assess alternative options for the disposal of vehicle wash down waters resulting from the cleaning of vehicles within the installation in order to prevent discharges of contaminated waters being made to the lagoon. The assessment shall take into consideration the economic viability and potential environmental impact of the identified disposal options. The Operator shall submit a written report to the Agency detailing the alternative disposal options available and assessing the viability of their implementation at the installation. The Operator shall install and implement an alternative disposal option for the vehicle wash down water generated from the installation's to a time-scale agreed with the Agency.”

IC7 has been superseded by IC16 in the table below:

<b>Improvement programme requirements</b>		
<b>Reference</b>	<b>Reason for inclusion</b>	<b>Justification of deadline</b>
IC 8	<p>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).</p> <p>A stage 1-3 assessment should be completed (as detailed within the EC Commission Guidance 2014/C 136/-3) as follows;</p> <ul style="list-style-type: none"> <li>• Stage 1 – Identify hazardous substance(s) used / stored on site.</li> <li>• 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).</li> <li>• Stage 3 – Identify if pollution prevention measures &amp; drains are fit for purpose in areas where hazardous substances are used / stored.</li> </ul> <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>	17/05/2024 or other date as agreed in writing with the Environment Agency
IC 9	The operator shall review and update the H1 risk assessment for particulate emissions to air at the capacity levels stated within table S1.1 of this permit. The H1 shall be submitted to the Environment Agency for review.	17/05/2024 or other date as agreed in writing with the Environment Agency
IC 10	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 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.	17/05/2024 or other date as agreed in writing with the Environment Agency

IC 11	<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"> <li>• The physical condition of all underground structures;</li> <li>• The suitability of providing containment when subjected to the dynamic and static loads caused by the vessels’ contents;</li> <li>• A preventative maintenance inspection regime.</li> </ul> <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>	17/05/2024 or other date as agreed in writing with the Environment Agency
IC 12	<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"> <li>1) Methodology for achieving BAT</li> <li>2) Associated targets /timelines for reaching compliance by 4 December 2023</li> <li>3) Any alterations to the initial plan (in progress reports).</li> </ol> <p>The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BAT conclusions 1, 2, 6, 8 and 14.</p> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	04/12/2023



IC13	<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"> <li>1) Current performance against the BAT-AELs.</li> <li>2) Methodology for reaching the BAT-AELs.</li> <li>3) Associated targets /timelines for reaching compliance by 4 December 2023.</li> <li>4) Any alterations to the initial plan (in progress reports).</li> </ol> <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"> <li>• BAT 17 Table 4 (compliance with BAT-AELs for channelled dust emissions to air from grinding and pellet cooling in compound feed manufacture)</li> </ul> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	17/11/2023 or other date as agreed in writing by the Environment Agency
IC14	<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 emission point A5 in accordance with the MCERTS standard.</p>	04/12/2023
IC15	<p>The operator shall submit, for approval by the Environment Agency, a report to demonstrate compliance for the 'Narrative' BAT previously not achieved. This report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BAT 6, the operator should also provide an energy efficiency plan for approval.</p>	04/12/2023

<p>IC16</p>	<p>The Operator shall review the disposal of boiler blowdown, compressor condensate, wash waters (including vehicle wash waters) from the installation. Following the assessment the operator shall submit the report to the Environment Agency for approval.</p> <p>The report shall include (but not be limited to) the following;</p> <ul style="list-style-type: none"> <li>• 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, wash waters and vehicle wash waters (temperature, pH, suspended solids, metals and any other potentially polluting substances).</li> <li>• Detail the specific arrangements for disposal of the blowdown associated with annual inspection and servicing.</li> <li>• 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).</li> <li>• A proposed timetable for completion of any improvement works required.</li> </ul> <p>The Operator shall implement any necessary improvements to a timetable agreed in writing by the Environment Agency.</p>	<p>17/05/2024 or other date as agreed in writing with the Environment Agency</p>
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