

# **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/NP3332PJ  
The Operator is:                         Kerry Ingredients (UK) Limited  
The Installation is:                       Gainsborough Grain Mill  
This Variation Notice number is:   EPR/NP3332PJ/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 and any changes to the operation of the installation.

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 31/01/2022 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 20/07/2022.

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 6. In relation to this BAT Conclusion 6, we do not fully agree with the Operator in respect of their current stated capability as recorded in their response to the Regulation 61 Notice. We have therefore included Improvement Condition IC7 in the Consolidated Variation Notice to ensure that the requirements of the BAT Conclusions are delivered within 3 months of the variation being issued.

## 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 14/03/2023. A request was made to complete the tabs in the R61 response tool where further information was required which included information relating to BAT28, specific energy EPL, water emissions, combustion plants on site, climate change adaptation, site condition report, and containment. A copy of the further information requests has been placed on our public register.

In addition we received further information during a meeting with the operator on the 23/11/2023, this information was summarised in an email and has been 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>	<b>CC</b>	<p>The operator has provided information to support compliance with BATc 1. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 1.</p> <p>The operator has claimed Business has ISO 14001 accreditation.</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>	<b>CC</b>	<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 has claimed Business has ISO 14001 accreditation.</p>
3	<p><b>Monitoring key process parameters at key locations for emissions to water.</b></p> <p>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>	<b>NA</b>	<p>We are satisfied that BATc 3 is not applicable to this Installation.</p> <p>There are no discharges of process effluent arising from this installation. There are no discharges of process effluent arising from this installation. The only wastewater produced from the site are from cleaning process and boiler blowdown, these are discharged to Severn Trent sewer. Uncontaminated surface water runoff is discharged to surface water body Humble Carr Dyke leading to River Trent.</p>
4	<p><b>Monitoring emissions to water to the required frequencies and standards.</b></p>	<b>NA</b>	<p>We are satisfied that BATc 4 is not applicable to this Installation.</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>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>		<p>There are no discharges of process effluent arising from this installation. There are no discharges of process effluent arising from this installation. The only wastewater produced from the site are from cleaning process and boiler blowdown, these are discharged to Severn Trent sewer. Uncontaminated surface water runoff is discharged to surface water body Humble Carr Dyke leading to River Trent.</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 [refer to BAT5 table in BATc] and in accordance with EN standards.</p>	<p><b>FC</b></p>	<p>The operator has provided information to support compliance with BATc 5. However, as we are changing the monitoring frequency in line with our approach the operator needs to produce a rolling monitoring programme in order to demonstrated compliance with BATc 5.</p> <p>We have included improvement condition IC6 in the permit to achieve compliance. The operator is required to complete the improvement condition and demonstrate compliance with the BAT Conclusions within 3 months of the variation being issued.</p> <p>The site has undertaken MCERTS accredited testing of particulate air emissions from all relevant emission points on site using an approved contractor following EN 13284-1 standard.</p> <p>The current permit has annual monitoring implemented however, due to the large number of emission points of dust at various stages of the milling process and the relatively low environmental risk of the dust emissions the Environment Agency position is to implement a proportionate approach to monitoring. 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
			should produce a rolling monitoring procedure focusing on the principal emission points on site. This procedure should implement a monitoring protocol which should include 3 samples per annum on the key processing stages wheat cleaning, wheat milling and finished product handling.
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 has stated they are currently not complaint with BATc 6. We agree with the Operator that they are currently not compliant with BATc 6.</p> <p>The operator does not currently have an Energy Efficiency Plan in place.</p> <p>We have included improvement condition IC7 in the permit to ensure an Energy Efficiency Plan is provided to achieve compliance. The operator is required to complete the improvement condition and demonstrate compliance with the BAT Conclusions within 3 months of the variation being issued.</p>
7	<p><b>Water and wastewater minimisation</b></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 given below. [for detail of each technique, refer BAT 7 table in BATc]</p> <p>(a) water recycling and/or reuse</p> <p>(b) Optimisation of water flow</p> <p>(c) Optimisation of water nozzles and hoses</p> <p>(d) Segregation of water streams</p> <p>Techniques related to cleaning operations:</p>	<b>CC</b>	<p>The operator has provided information to support compliance with BATc 7. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 7.</p> <p>Minimal water is used in the grain milling process on site, the only water used in the processes are for the conditioning of wheat and during the 'bread' making process in the crumb plant. No water is wasted in the conditioning process due to the closed loop water conditioning system and all water in the crumb plant is absorbed into the product. The site also utilises dry cleaning techniques</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
	(e) Dry cleaning (f) Pigging system for pipes (g) High-pressure cleaning (h) Optimisation of chemical dosing and water use in cleaning-in-place (CIP) (i) Low-pressure foam and/or gel cleaning (j) Optimised design and construction of equipment and process areas (k) Cleaning of equipment as soon as possible		where appropriate to minimise water usage.
8	<b>Prevent or reduce the use of harmful substances</b> In order to prevent or reduce the use of harmful substances, e.g. in cleaning and disinfection, BAT is to use one or a combination of the techniques given below. (a) Proper selection of cleaning chemicals and/or disinfectants (b) Reuse of cleaning chemicals in cleaning-in-place (CIP) (c) Dry cleaning (d) Optimised design and construction of equipment and process areas [for detail of each technique, refer BAT 8 table in BATc]	<b>CC</b>	The operator has provided information to support compliance with BATc 8. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 8.  The operator has systems in place to ensure appropriate review and selection of cleaning and/or disinfectant chemicals is appropriate with consideration of environmental impact. The site also utilises dry cleaning techniques where appropriate.
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.	<b>CC</b>	The operator has provided information to support compliance with BATc 9. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 9.  The operator uses refrigerants in the crumb plant for the storage of yeast. The refrigerant used in this plant is RS44 which is an

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
			alternative refrigerant to R22 which has zero ozone depletion. The refrigerant is considered to have a lower global warming potential than other replacements for R22 but is still relatively high. However, the operator provided confirmation that they do review the refrigerants on site and do plan to replace refrigerants with lower global warming potential overtime. This understanding and review process satisfies compliance with BAT9.
10	<p><b>Resource efficiency</b> In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below:</p> <ul style="list-style-type: none"> <li>(a) Anaerobic digestion</li> <li>(b) Use of residues</li> <li>(c) Separation of residues</li> <li>(d) Recovery and reuse of residues from the pasteuriser</li> <li>(e) Phosphorus recovery as struvite</li> <li>(f) Use of waste water for land spreading</li> </ul>	<b>CC</b>	<p>The operator has provided information to support compliance with BATc 10. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 10.</p> <p>The grain milling process is highly efficiency residues are fed back into the grain milling system. The site also uses residues to produce wheatfeed.</p>
11	<p><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.</p>	<b>NA</b>	<p>We are satisfied that BATc 11 is not applicable to this Installation.</p> <p>The site does not discharge any process effluent. No additional buffer storage is required on site.</p>
12	<p><b>Emissions to water – treatment</b> In order to reduce emissions to water, BAT is to use an appropriate combination of the techniques given below. Preliminary, primary and general treatment</p> <ul style="list-style-type: none"> <li>(a) Equalisation</li> </ul>	<b>NA</b>	<p>We are satisfied that BATc 12 is not applicable to this Installation.</p> <p>There are no discharges of process effluent arising from this installation. Uncontaminated surface water runoff is discharged to surface water.</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) Neutralisation (c) Physical separate (e.g. screens, sieves, primary settlement tanks etc) Aerobic and/or anaerobic treatment (secondary treatment) (d) Aerobic and/or anaerobic treatment (e.g. activated sludge, aerobic lagoon etc) (e) Nitrification and/or denitrification (f) Partial nitrification - anaerobic ammonium oxidation Phosphorus recovery and/or removal (g) Phosphorus recovery as struvite (h) Precipitation (i) Enhanced biological phosphorus removal Final solids removal (j) Coagulation and flocculation (k) Sedimentation (l) Filtration (eg sand filtration, microfiltration, ultrafiltration) (m) Flotation		
13	<b>Noise management plan</b> 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: <ul style="list-style-type: none"> <li>- a protocol containing actions and timelines;</li> <li>- a protocol for conducting noise emissions monitoring;</li> <li>- a protocol for response to identified noise events, e.g. complaints;</li> <li>- a noise reduction programme designed to identify the source(s), to</li> </ul>	NA	BAT 13 is only applicable to cases where a noise nuisance at sensitive receptors is expected and/or has been substantiated, or if forms part of an existing permit requirement.  There is no existing permit requirement and the site has no recent history of noise complaints therefore a noise management plan 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
	measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures.		
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> <p>(a) Appropriate location of equipment and buildings  (b) Operational measures  (c) Low-noise equipment  (d) Noise control equipment  (e) Noise abatement</p>	<b>CC</b>	<p>The operator has provided information to support compliance with BATc 14. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 14.</p> <p>The site has a management of change process which ensures the noise of new plan is considered including the location on site. The site also has low-noise equipment such as electrical forklift trucks.</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 e.g. 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>BAT 15 is only applicable to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated, or if forms part of an existing permit requirement.</p> <p>There is no existing permit requirement and the site has no recent history of odour complaints therefore an odour management plan is not required.</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>GRAIN MILLING BAT CONCLUSION (BAT 28)</b>									
28	<p>Emissions to air In order to reduce channelled dust emission to air, BAT is to use a bag filter.</p> <table border="1" data-bbox="259 655 1061 828"> <thead> <tr> <th data-bbox="259 655 488 764">Parameter</th> <th data-bbox="488 655 723 764">Unit</th> <th data-bbox="723 655 1061 764">BAT-AEL (average over the sampling period)</th> </tr> </thead> <tbody> <tr> <td data-bbox="259 764 488 828">Dust</td> <td data-bbox="488 764 723 828">mg/Nm3</td> <td data-bbox="723 764 1061 828">&lt;2-5</td> </tr> </tbody> </table>	Parameter	Unit	BAT-AEL (average over the sampling period)	Dust	mg/Nm3	<2-5	CC	<p>The operator has provided information to support compliance with BATc 28. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 28.</p> <p>All of the relevant channelled emission points to air are abated appropriately via bag filters. The operator has undertaken monitoring for the emission points which BAT-AELs apply to. They provided the results for this monitoring which indicated that the majority of emission points are currently compliant with the BAT-AEL.</p> <p>We have included new emission limit values in line with the BAT-AEL of 5mg/m<sup>3</sup> for emission points A3, A4, A5, A6, A7, A8, A9, A10, A11, A16, A18, A19, A20, A21, A30, A32/A47, A33/A48, A34/A49, A35, A36, and A37 as the operator has demonstrated compliance these limits apply from the date of issue.</p> <p>However, the rolling monitoring programme which will be agreed as part of the improvement programme (IC6) will ensure monitoring is produced. On that basis, compliance will be continued to be achieved through the rolling programme.</p>
Parameter	Unit	BAT-AEL (average over the sampling period)							
Dust	mg/Nm3	<2-5							

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>Grain Milling Environmental Performance Levels</b>						
EPL	<b>Environmental Performance Level – Energy Consumption for Grain Milling</b> <table border="1" data-bbox="264 539 1061 663"> <thead> <tr> <th data-bbox="264 539 663 616">Unit</th> <th data-bbox="669 539 1061 616">Specific energy consumption (yearly average)</th> </tr> </thead> <tbody> <tr> <td data-bbox="264 620 663 663">MWh/tonne of products</td> <td data-bbox="669 620 1061 663">0.05 – 0.13</td> </tr> </tbody> </table>	Unit	Specific energy consumption (yearly average)	MWh/tonne of products	0.05 – 0.13	FC	<p>The operator has stated they are currently investigating the best way they can understand their energy consumption but have stated they do not currently have appropriate data to calculate the specific energy consumption.</p> <p>We have implemented reporting requirements for energy usage and to report specific energy consumption to the permit, which will ensure we assess the operator's compliance against the energy consumption EPL for grain milling.</p> <p>We consider the requirements in the permit are sufficient and any further action once we have data can be taken through the compliance route.</p>
	Unit	Specific energy consumption (yearly average)					
MWh/tonne of products	0.05 – 0.13						

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

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

- 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

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.

We have updated table S1.1 to integrate processes on the site which are directly associated activities which were previously not captured by the permit. These include Flour Heat Treatment, Flour Blending, and Crumb Plant.

### **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 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 not provided an up to date air emission plan, we have included improvement condition IC10 in order to obtain an updated air emissions point plan.

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

#### **Existing small combustion plant (<1MW)**

For the existing combustion plant with a rated thermal input less than 1 MW we will not be including any emission limit values or monitoring requirements within the permit, unless any site specific conditions require us to do this.

Existing Medium Combustion Plant (1MW-50MW)

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 tables below:

Boilers

1. Rated thermal input (MW) of the medium combustion plant.	1.16MWth
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.	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.	Sep 2013

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.

Information regarding other MCPs was provided by the operator however, these two boilers are not included in the permit, as these boilers produce steam which is utilised in an extrusion plant which does not form part of this permit. The extrusion plant produces textured vegetable proteins in a standalone factory from the receipt of raw materials from other third parties. The flour produced on site is not processed in the extrusion plant and the extrusion plant does not process at a capacity which would constitute a scheduled activity.



### **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.

### **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 has stated they have not got a Site Condition Report, we have included an Improvement condition in the permit (IC9) which requires the Operator to submit an updated site condition report which includes baseline soil and groundwater data. See Improvement Condition in Annex 3 of this decision document.

### **Hazardous Substances**

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

The operator has not provided an appropriate risk assessment on the hazardous substances stored and used at the installation.

The operator is required to submit a risk assessment for the relevant hazardous substances for review to the Environment Agency via improvement condition (IC8).

### **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.

### **Containment**

We asked the Operator via the Regulation 61 Notice to:

- Provide details of any above-ground storage or process tanks including;
  - Contents;
  - Capacity;
  - Construction material(s);
  - Preventative maintenance measures;
  - Additional containment;

We reviewed the information provided by the operator. We are satisfied that the existing site containment measures for above-ground storage or process tanks are appropriate to minimise the risk of fugitive emissions from these tanks.

## 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 removed from the permit as they have either been superseded or completed and so they have been removed from the permit.

<b>Superseded Improvement Conditions</b>	
IC1	The Operator shall develop an integrated management procedure with the neighbouring installation (ABN Gainsborough PPC Permit No. YP3639SK) to define responsibility for the maintenance of both the foul and surface water drainage system. The Operator shall provide the Agency with a written report detailing any improvements to be made with timescales for implementation.
IC2	The Operator shall provide the Agency with a written description of measures in place or proposed to ensure that contaminated water (or other substances) be prevented from entering the surface water drainage taking into consideration section 2.2.5 of Sector Guidance Note S6.10 "Guidance for the Food and Drink sector" version 5 August 2003. A written report shall be provided in a format to be approved by the Agency detailing timescales for the implementation of any improvements.
IC3	The Operator shall provide the Agency with written details of the proposed CCTV monitoring of the roof exhaust ducts for approval.
IC4	The Operator shall undertake an assessment of subsurface structures (surface water and foul drainage structure) and their potential to cause fugitive emissions to surface water and groundwater. The assessment will take into account the requirements of section 2.2.5 of the Agency guidance Note IPPC S6.10, August 2003. A written report summarising the findings shall be submitted to the Agency. A timescale for the implementation of any improvements shall be agreed with the Agency.
IC5	The Operator shall undertake an assessment of the noise impact of the installation and provide a noise monitoring report that identifies the most significant noise sources and includes measurements, and an assessment of their significance, taken at the nearest sensitive receptors. The Operator shall provide the Agency with a written report detailing any improvements to be made with timescales for implementation.

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.

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
IC6	<p>The operator shall submit, for approval by the Environment Agency, a monitoring procedure for particulate matter emissions from principal emission points on site. The procedure must describe how the operator will implement a rolling monitoring programme which shall include, but not be limited to the following:</p> <ol style="list-style-type: none"> <li>1. Methodology for how representative monitoring will be carried out annually, with a minimum of 3 point sources on a rolling-basis.</li> <li>2. Ensuring the key process stages, wheat cleaning, wheat milling and finished product handling including wheatfeed, are prioritised.</li> <li>3. Identify any principal emission points excluded from the rolling monitoring programme and provide a justification for this.</li> <li>4. Provide a commencement date for the programme which will demonstrate compliance with the permit requirements.</li> </ol> <p>The monitoring procedure shall address the requirements of BAT Conclusions for Food, Drink and Milk Industries with respect to BAT 5.</p>	12/06/2024 unless otherwise agreed in writing by the Environment Agency
IC7	<p>The operator shall submit, for approval by the Environment Agency, a report demonstrating achievement of the 'Narrative' BAT conclusions as identified in the Food, Drink and Milk Bref published on 4 December 2019 where BAT is currently not demonstrated or achieved. The report shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> <li>• Methodology applied for achieving BAT</li> <li>• Demonstrating that BAT has been achieved</li> </ul> <p>The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BATc 6 (Energy Efficiency Plan).</p> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	12/06/2024
IC8	<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</p>	12/12/2024 unless otherwise agreed in writing by the

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
	<p>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>	Environment Agency
IC9	The Operator shall produce a Site Condition Report (SCR) in line with our H5 Guidance. The report shall contain the information necessary to determine the state of soil and groundwater and ensure this is maintained throughout the life of the permit by using the results to better inform the SPMP. The report shall be submitted to the Environment Agency for review.	12/03/2025 unless otherwise agreed in writing by the Environment Agency