

# **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/QP3836AM  
The Operator is:                         Nestle UK Ltd and General Mills Canada Holding Three Corporation  
The Installation is:                     Cereal Partners UK, Bromborough  
This Variation Notice number is:   EPR/QP3836AM/V003

### **What this document is about**

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

We have reviewed the permit for this installation against the BAT Conclusions for the Food, Drink and Milk Industries published on 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 09/06/2022 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 29/11/2022.

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 9. In relation to this BAT Conclusion, 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 Conditions IC 6 and 7 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 28/03/2024. We requested further information regarding BAT Conclusion Numbers 9, 11 and 14; and confirmation to remove emission points A3 and A4. 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>	CC	<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 an EMS externally accredited to the ISO 14001 standard which takes into account all relevant requirements to improve overall environmental performance.</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>	CC	<p>The Operator has provided information to support compliance with BATc 2. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 2.</p> <p>The Operator has an EMS externally accredited to the ISO 14001 standard which takes into account all relevant requirements to increase resource efficiency and reduce emissions.</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>	CC	<p>In their response to other questions in their Regulation 61 response, the Operator has provided information to support compliance with BATc 3. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 3.</p> <p>The Operator monitors waste water for pH, which they balance, before it is discharged to sewer under a discharge consent with United Utilities Water (UUW).</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
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 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>We are satisfied that BATc 4 is not applicable to this Installation.</p> <p>The operator carries out screening to remove solids from the waste water stream; they also balance pH before effluent is discharged to sewer under a discharge consent with U UW. U UW undertake 24 hour sampling.</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>	NA	<p>We are satisfied that BATc 5 is not applicable to this Installation.</p> <p>None of the activities carried out on site are listed within BATc 5 and as such the BAT conclusion is not applicable.</p>
6	<p><b>Energy Efficiency</b>            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>	CC	<p>The operator has provided information to support compliance with BATc 6. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 6.</p> <p>The operator has a ISO 50001 accredited Energy Management System and therefore includes an effective energy efficiency plan.</p> <p>Cogeneration: the site has a Combined Heat and Power (CHP) gas turbine with an associated Heat Recovery Steam Generator (HRSG). This reduces gas consumption. There are three additional backup boilers to provide steam for plant activities. Combustion plant is frequently maintained to ensure optimisation of efficiency.</p> <p>Site steam systems are insulated to minimise heat losses.</p> <p>The site has implemented a number of energy efficiency measures including LED lighting, energy efficient motors and inverters. There is</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
			an ongoing programme of continual improvements targeting equipment which uses the highest amount of energy.
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.</p> <p>(a) water recycling and/or reuse  (b) Optimisation of water flow  (c) Optimisation of water nozzles and hoses  (d) Segregation of water streams</p> <p>Techniques related to cleaning operations:</p> <p>(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</p>	CC	<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>Water use within the production processes is controlled according to the product recipes. The defined water use within production is optimised to align with the product recipe and to ensure that a balance is maintained between water usage and subsequent energy use in drying the product.</p> <p>Cleaning operations within the process are undertaken using a cleaning in place (CIP) system and localised foam cleaning where required. Production cycles are pre-planned to minimise the requirement for cleaning between product batches.</p> <p>The operator uses the following techniques listed in BATc 7:</p> <p>(h) Optimisation of chemical dosing and water use in CIP  (i) Low-pressure foam and/or gel cleaning.</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> <p>(a) Proper selection of cleaning chemicals and/or disinfectants  (b) Reuse of cleaning chemicals in cleaning-in-place (CIP)  (c) Dry cleaning  (d) Optimised design and construction of equipment and process areas</p>	CC	<p>The operator has provided information to support compliance with BATc 8. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 8.</p> <p>Most CIP processes on-site are undertaken using hot water with occasional, minimum usage of caustic.</p> <p>Localised foam cleaning is undertaken where required. The foams used are suitable for food</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>grade production; these do not included named priority substances.</p> <p>The operator uses the following technique listed in BATc 8:</p> <p>(a) Proper selection of cleaning chemicals and/or disinfectants.</p>
9	<p><b>Refrigerants</b></p> <p>In order to prevent emissions of ozone-depleting substances and of substances with a high global warming potential from cooling and freezing, BAT is to use refrigerants without ozone depletion potential and with a low global warming potential.</p>	FC	<p>The site currently uses refrigerants with a higher-end global warming potential (GWP), including R410A, R32, and R407C.</p> <p>The operator does not currently have a plan in place for investigating or using retrofillable alternatives.</p> <p>The operator provided Nestle company-wide policies for end-of-life replacement in response to our request for further information, received on 02/04/2024. These policies mention low GWP end-of-life replacements and are titled:</p> <ul style="list-style-type: none"> <li>• St.14-020-02 Annex 5 Appendix 3</li> <li>• St-14-020-04 - Appendix 2 - Nestle accepted refrigerants</li> </ul> <p>However, the operator did not provide a site-specific plan for reducing the GWP of process refrigeration systems before end-of-life. Therefore, we are not satisfied that the operator has demonstrated compliance with BATc 9.</p> <p>We consider that the operator will be future compliant with BATc 9. Improvement condition IC7 has been included in the permit to achieve compliance (see Annex 3).</p>
10	<p><b>Resource efficiency</b></p> <p>In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below:</p> <p>(a) Anaerobic digestion</p> <p>(b) Use of residues</p> <p>(c) Separation of residues</p> <p>(d) Recovery and reuse of residues from the pasteuriser</p>	CC	<p>The operator has provided information to support compliance with BATc 10. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 10.</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) Phosphorus recovery as struvite (f) Use of waste water for land spreading		The operator uses the following technique listed in BATc 10:  b) Use of residues: all suitable food waste from the process is collected by Sugarich for re-use into the animal feed chain.
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>	CC	<p>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.</p> <p>In the operator's response to our request for further information, received on 02/04/2024, they provided an Environmental Risk Assessment with further details of containment. This details that secondary containment for over 110% is in place for each chemical and fuel tank, to minimise the likelihood of uncontrolled emissions to water or sewer.</p> <p>Waste water is collected in a 50m<sup>3</sup> balancing tank where it is pH balanced. The effluent is discharged with flow rate control before it is discharged to sewer under a discharge consent with U UW.</p> <p>Spill kits are available adjacent to the caustic tank and would be used to clean up any small spills.</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 (a) Equalisation (b) Neutralisation (c) Physical separate (e.g. screens, sieves, primary settlement tanks etc) Aerobic and/or anaerobic treatment (secondary treatment)</p>	CC	<p>The operator has provided information to support compliance with BATc 12. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 12.</p> <p>The operator uses the following techniques listed in BATc 12: (a) Equalisation (b) Neutralisation</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										
	(d) Aerobic and/or anaerobic treatment (eg 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		(c) Physical separate (e.g. screens, sieves, primary settlement tanks etc) Aerobic and/or anaerobic treatment (secondary treatment).  The effluent is screened to remove solids, collected in a balancing tank where pH is balanced and discharged with flow rate control to sewer.										
12	<b>Emissions to water – treatment</b> <b>BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body</b>  <table border="1" data-bbox="309 912 1234 1114"> <thead> <tr> <th>Parameter</th> <th>BAT-AEL (°) (°) (daily average)</th> </tr> </thead> <tbody> <tr> <td>Chemical oxygen demand (COD) (°) (°)</td> <td>25-100 mg/l (°)</td> </tr> <tr> <td>Total suspended solids (TSS)</td> <td>4-50 mg/l (°)</td> </tr> <tr> <td>Total nitrogen (TN)</td> <td>2-20 mg/l (°) (°)</td> </tr> <tr> <td>Total phosphorus (TP)</td> <td>0,2-2 mg/l (°)</td> </tr> </tbody> </table>	Parameter	BAT-AEL (°) (°) (daily average)	Chemical oxygen demand (COD) (°) (°)	25-100 mg/l (°)	Total suspended solids (TSS)	4-50 mg/l (°)	Total nitrogen (TN)	2-20 mg/l (°) (°)	Total phosphorus (TP)	0,2-2 mg/l (°)	NA	We are satisfied that BATc 12-AELs are not applicable to this Installation.  There is no direct discharge to a water body. All treated waste water is discharged directly to sewer under consent of UUW.
Parameter	BAT-AEL (°) (°) (daily average)												
Chemical oxygen demand (COD) (°) (°)	25-100 mg/l (°)												
Total suspended solids (TSS)	4-50 mg/l (°)												
Total nitrogen (TN)	2-20 mg/l (°) (°)												
Total phosphorus (TP)	0,2-2 mg/l (°)												
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: - a protocol containing actions and timelines; - a protocol for conducting noise emissions monitoring; - a protocol for response to identified noise events, e.g. complaints;	NA	We are satisfied that BATc 13 is not applicable to this installation. The site has not received any noise complaints since 2020, when a maintenance issue was identified and rectified. We are satisfied that the reasons behind all historic complaints have been addressed and as such no noise management plan is 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
	- 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.		
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</p> <p>(b) Operational measures</p> <p>(c) Low-noise equipment</p> <p>(d) Noise control equipment</p> <p>(e) Noise abatement</p>	CC	<p>The operator has provided information to support compliance with BATc 14. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 14.</p> <p>In response to our request for further information, received on 02/04/2024, the operator provided a document titled: "Noise Assessment Compliance with requirements of Environmental Permit", dated 23/06/2017. This contains a BS4142:2014 assessment. This report stated:</p> <ul style="list-style-type: none"> <li>• part of the site had been levelled to reduce the impacts for forklift noise to reduce the likelihood of complaints</li> <li>• noise producing activities are either carried out inside buildings or on the north side of the site, near Thermal Road. This is considered by the operator and the noise consultant to be less sensitive than the rest of the site due nearby buildings consisting of businesses and other industry, rather than the south west side which has many sensitive receptors.</li> </ul> <p>The operator's risk assessment includes the following measures to manage noise on site:</p> <ul style="list-style-type: none"> <li>• processing equipment located inside buildings</li> <li>• processing equipment maintained regularly</li> </ul>

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>• silencers on the boiler house</li> <li>• slower fans.</li> </ul>
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>	CC	<p>An odour management plan (OMP) was requested under Improvement Condition IC2 when the permit was first issued, as it was seen as a standard requirement for the Food, Drink and Milk sector. IC2 is deemed complete.</p> <p>There is no recent history of substantiated odour complaints, therefore we are satisfied the installation is compliant with BAT 15.</p>
	<p><b>Fruit and vegetable processing sector BAT conclusions</b></p>		
27	<p><b>Energy efficiency – vegetable processing sector</b></p> <p>In order to increase energy efficiency, BAT is to use an appropriate combination of the techniques specified in BAT 6 and to cool fruit and vegetables before deep freezing.</p> <p>The temperature of the fruit and vegetables is lowered to around 4 °C before they enter the freezing tunnel by bringing them into direct or indirect contact with cold water or cooling air. Water can be removed from the food and then collected for reuse in the cooling process.</p>	NA	<p>The installation only processes cereal, rather than tomatoes and potatoes, to which this BATc applies. In addition to this, deep freezing is not carried out on site. Therefore we are satisfied that BATc 27 is not applicable to this installation.</p>

Vegetable Processing Sector Environmental Performance Levels					
EPL	<b>Environmental Performance Level (EPL) – energy consumption for the vegetable processing sub-sector</b>		NA	The operator has confirmed that none of the specific processes described in the BAT EPL are carried out on-site. Therefore the EPL does not apply to this installation.	
	Specific process	Unit			Specific energy consumption (yearly average)
	Potato processing (excluding starch production)	MWh/tonne of products			1,0-2,1 <sup>(1)</sup>
	Tomato processing				0,15-2,4 <sup>(2)</sup> <sup>(3)</sup>
<sup>(1)</sup> The specific energy consumption level may not apply to the production of potato flakes and powder. <sup>(2)</sup> The lower end of the range is typically associated with the production of peeled tomatoes. <sup>(3)</sup> The upper end of the range is typically associated with the production of tomato powder or concentrate.					
EPL	<b>Environmental Performance Level – Specific waste water discharge for the vegetable processing sub-sector</b>		NA	<p>The operator has confirmed that none of the specific processes described in the BAT EPL are carried out on-site.</p> <p>However, although an EPL does not apply, the Operator provided some data so we can ensure they are demonstrating the achievement of an appropriate, site-specific benchmark.</p> <p>The operator has stated that they can achieve a EPL of 0.0076 m<sup>3</sup>/tonne of products, which is within the range for the vegetable processing sector.</p>	
	Specific process	Unit			Specific waste water discharge (yearly average)
	Potato processing (excluding starch production)	m <sup>3</sup> /tonne of products			4,0-6,0 <sup>(1)</sup>
	Tomato processing when water recycling is possible				8,0-10,0 <sup>(2)</sup>
<sup>(1)</sup> The specific waste water discharge level may not apply to the production of potato flakes and powder. <sup>(2)</sup> The specific waste water discharge level may not apply to the production of tomato powder.					

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

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

- Activity name
- 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.

### **Production/Capacity threshold**

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

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

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

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

### **Emissions to Air**

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

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

We removed emission points boilers A3 and A4 from the permit as part of this variation, this is because they are disconnected and will not be used again. The Operator confirmed this in their response to our request for further information, dated 02/04/2024.

## 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 table below:

#### Combined heat and power (CHP) engine

1. Rated thermal input (MW) of the medium combustion plant.	13.2 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	CHP turbine
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.	June 2010

We have reviewed the information provided and we consider that the declared combustion plant qualify as “existing” medium combustion plant.

For existing medium combustion plant with a rated thermal input greater than 5 MW, the emission limit values set out in tables 2 and 3 of Part 1 of Annex II MCPD shall apply from 1 January 2025.

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.

Emission point A2 is a shared windshield for 3 standby boilers fuelled by natural gas, Boilers 1, 2 and 3. As these boilers operate for less than 500 hours for standby only, they are classed as existing, limited operating hours MCP and are therefore exempt from Emission Limit Values (ELVs).



## **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.

As part of this permit review we removed the limits for COD and flow rate from Table S3.2 of the permit, for emission point S1 to the UUW sewer on Dock Road South. The limits are specified in the Trade Effluent Consent, and were therefore removed from the permit to avoid double regulation between us and UUW.

### **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 titled: “Site Condition Report, FINAL Rev 3”, document reference: 47071888/LERP0002, dated June 2016; during the determination of the original application received on 10/08/2015. The site condition report included a report on the baseline conditions as required by Article 22. We reviewed that report and considered that it adequately described the condition of the soil and groundwater at that time.

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

## **Hazardous Substances**

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

The operator has confirmed there has been no change in the hazardous substances used, their capability of causing pollution and/or the pollution prevention measures at the installation since the risk assessment was submitted on 10/08/2015. Consequently, we are satisfied there has been no change to the assessment of risk for hazardous substances.

## **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. Despite this, the operator stated that they have produced a climate change adaptation plan and incorporated it as part of their ISO 14001 Environmental Management System (EMS). The plan is reviewed and updated periodically as part of the EMS.

## **Containment**

We asked the Operator via the Regulation 61 Notice to provide details of the each above ground tanks which contain potentially polluting liquids at the site, including tanks associated with the effluent treatment process where applicable.

The Operator provided details of all tanks;

- Tank reference/name
- Contents
- Capacity (litres)
- Location
- Construction material(s) of each tank
- The bunding specification including
  - Whether the tank is bunded
  - If the bund is shared with other tanks
  - The capacity of the bund
  - The bund capacity as % of tank capacity
  - Construction material of the bund
  - Whether the bund has a drain point
  - Whether any pipes penetrate the bund wall
- Details of overfill prevention
- Drainage arrangements outside of bunded areas
- Tank filling/emptying mitigation measures (drips/splashes)
- Leak detection measures
- Details of when last bund integrity test was carried out
- Maintenance measures in place for tank and bund (inspections)

- How the bund is emptied
- Details of tertiary containment

and whether the onsite tanks currently meet the relevant standard in the CIRIA “Containment systems for the prevention of pollution (C736)” report.

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

We have set an improvement condition in the permit to address the deficiencies in the existing tanks and containment measures on site (IC8). See Improvement conditions in Annex 3 of this decision document.

## Annex 3: Improvement Conditions

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

Previous improvement conditions marked as complete in the previous permit.

<b>Superseded Improvement Conditions – Removed from permit as marked as “complete”</b>	
<b>Reference</b>	<b>Improvement Condition</b>
IC1	The operator shall submit a report on the baseline conditions of soil and groundwater at the installation. The report shall contain information, supplementary to that already provided in the application Site Condition Report (June 2016), needed to meet the information requirements of Article 22(2) of the Industrial Emissions Directive. The notification requirements of condition 2.4.2 shall be deemed to have been complied with on submission of the report.
IC2	The operator shall develop an odour management plan (OMP) in line with the Environment Agency's Horizontal Guidance H4 Odour Management with particular regard to Appendix 4. The OMP shall include detail and commitments on: the design and engineering of any odour abatement; operational procedures related to odorous emissions; odour monitoring; and maintenance and contingency plans. The operator shall implement the approved OMP from the date of approval by the Environment Agency. The notification requirements of condition 2.4.2 shall be deemed to have been complied with on submission of the OMP.
IC3	The operator shall conduct a noise monitoring survey (in line with current Environment Agency guidance) to quantify the noise on site and, if necessary, identify additional noise abatement or reduction measures to ensure noise levels do not cause pollution outside the site boundary. The operator shall provide a report to the Environment Agency detailing noise survey results and include a plan for the implementation of any recommendations made as a result of the noise survey. The operator must implement the plan as agreed, and from the date stipulated by the Environment Agency. The notification requirements of condition 2.4.2 shall be deemed to have been complied with on submission of the report.
IC4	The operator shall undertake a programme of stack emissions monitoring in line with the Environment Agency's monitoring guidance M1 and M2 (having first agreed the methodology with the Environment Agency). This shall address emissions from:  The CHP stack to establish the normal and maximum likely concentration of oxides of nitrogen, carbon monoxide and particulate matter.  Process emission points to establish the normal and maximum likely concentration of particulate matter.

	Once the monitoring data has been collected, the operator shall use this to validate their risk assessment for emissions to air and submit a written report to the Environment Agency containing the monitoring results, assessment and conclusions. Where improvements are required (such as emission points without particulate abatement), the report shall include timescales for agreement with the Environment Agency. The notification requirements of condition 2.4.2 shall be deemed to have been complied with on submission of the report.
IC5	The operator shall carry out a review assessing surfacing, containment measures and subsurface structures and their potential to cause fugitive emissions to surface water and groundwater. The operator shall submit a written report to the Environment Agency following this review. The report shall take into account the requirements in the sections on 'emissions to water' and 'leaks from containers' in <a href="https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit">https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit</a> . Where improvements can be made, the report shall include timescales for agreement with the Environment Agency. The report shall also include a drainage and surfacing plan, with any updates as necessary. The notification requirements of condition 2.4.2 shall be deemed to have been complied with on submission of the report.

The following improvement conditions have added to the permit as a result of the variation.

<b>Improvement programme requirements</b>		
<b>Reference</b>	<b>Reason for inclusion</b>	<b>Justification of deadline</b>
IC6	The operator shall confirm, 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 with respect to BATc 9. Refer to BAT Conclusions for a full description of the BAT requirement.	3 months from date of issue or as agreed in writing by the Environment Agency
IC7	The operator shall use refrigerants without ozone depletion potential and with a low global warming potential (GWP) in accordance with BAT 9 from the Food, Drink and Milk Industries BATCs.  To demonstrate compliance against BAT 9, the operator shall produce a plan for the onsite refrigerant system(s) at the installation. The plan is to be assessed by the Environment Agency and shall be incorporated within the existing environmental management system.  The plan should include, but not be limited to, the following: • Where practicable, retro filling systems containing high GWP refrigerants e.g. R-404A with lower GWP alternatives as soon as possible.	3 months from date of issue or as agreed in writing by the Environment Agency

	<ul style="list-style-type: none"> <li>• An action log with timescales, for replacement of end-of-life equipment using refrigerants with the lowest practicable GWP.</li> </ul>	
IC8	<p>The Operator shall undertake a survey of the primary, secondary and tertiary containment at the site and review measures against relevant standard including:</p> <ul style="list-style-type: none"> <li>• CIRIA Containment systems for the prevention of pollution (C736) – Secondary, tertiary and other measures for industrial and commercial premises,</li> <li>• EEMUA 159 - Above ground flat bottomed storage tanks</li> </ul> <p>The operator shall submit a written report to the Environment Agency approval which outlines the results of the survey and the review of standard and provide details of:</p> <ul style="list-style-type: none"> <li>• current containment measures</li> <li>• any deficiencies identified in comparison to relevant standards,</li> <li>• improvements proposed</li> <li>• time scale for implementation of improvements.</li> </ul> <p>The operator shall implement the proposed improvements in line with the timescales agreed by the Environment Agency.</p>	12 months from permit issue