

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/BP3133WE
The Operator is: Greencore Prepared Meals Limited
The Installation is: Manton Wood Sandwiches
This Variation Notice number is: EPR/BP3133WE/V003

What this document is about

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

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

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

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

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

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

How this document is structured

1. Our decision
2. How we reached our decision
3. The legal framework
4. Annex 1 – Review of operating techniques within the Installation against BAT Conclusions.

5. Annex 2 – Review and assessment of changes that are not part of the BAT Conclusions derived permit review
6. Annex 3 – Improvement Conditions

1 Our decision

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

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

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

2 How we reached our decision

2.1 Requesting information to demonstrate compliance with BAT Conclusion techniques

We issued a Notice under Regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 04/10/2022 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 01/02/2023.

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 BATc 6a Energy Efficiency Plan and BATc 9 refrigerants. In relation to these BAT Conclusions, 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 IC7 and IC8 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 16/08/2024 requesting information on site capacity and energy efficiency. A copy of each further information requests was placed on our public register.

3 The legal framework

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

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

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

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

Annex 1: decision checklist regarding relevant BAT Conclusions

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

There are 37 BAT Conclusions.

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

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

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

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

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

NA – Not Applicable

CC – Currently Compliant

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

NC – Not Compliant

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the Operator to demonstrate compliance with the BAT Conclusion requirement
GENERAL BAT CONCLUSIONS (BAT 1-15)			
1	<p>Environmental Management System - Improve overall environmental performance.</p> <p>Implement an EMS that incorporates all the features as described within BATc 1.</p>	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 developed a central integrated health, safety and environmental management system which provides the framework and direction for individual sites to follow.</p> <p>They confirm the site has local procedures for operation, which comply with the requirements of the central system. They also confirm this system is aligned (but not accredited) with ISO.14001 and incorporated the features as described in BATc 1.</p>
2	<p>EMS Inventory of inputs & outputs. Increase resource efficiency and reduce emissions.</p> <p>Establish, maintain and regularly review (including when a significant change occurs) an inventory of water, energy and raw materials consumption as well as of waste water and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all of the features as detailed within the BATCs.</p>	CC	<p>The Operator has provided information to support compliance with BATc 2. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 2.</p> <p>The Operator confirms water, energy consumption, raw materials and waste streams are monitored and tracked with the data used to generate improvement projects. Performance is reported to site on a daily basis and at a group level on a monthly basis. The EMS and business Improvement programmes provides the governance for the setting, reporting and reviewing of objectives and targets with respect to consumption and usage.</p>

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the Operator to demonstrate compliance with the BAT Conclusion requirement
3	<p>Monitoring key process parameters at key locations for emissions to water. For relevant emissions to water as identified by the inventory of waste water streams (see BAT 2), BAT is to monitor key process parameters (e.g. continuous monitoring of waste water flow, pH and temperature) at key locations (e.g. at the inlet and/or outlet of the pre-treatment, at the inlet to the final treatment, at the point where the emission leaves the installation).</p>	CC	<p>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 site discharges process effluent to sewer following treatment within the on-site effluent treatment plant (ETP). The Operator measures effluent discharge after the V notch weir for flow, temperature pH, Total Suspended Solids (TSS), Chemical Oxygen Demand (COD) daily in line with their trade effluent consent. Total Phosphate (TP) is monitored monthly.</p>
4	<p>Monitoring emissions to water to the required frequencies and standards. BAT is to monitor emissions to water with at least the frequency given [refer to BAT 4 table in BATc] and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.</p>	N/A	<p>The only parameter relevant for discharges to sewer is chloride but this is not a parameter of concern for ready meal production and so is not applicable.</p> <p>We are therefore satisfied that BATc 4 is not applicable for this site</p>
5	<p>Monitoring channelled emissions to air to the required frequencies and standards. BAT is to monitor channelled emissions to air with at least the frequency given and in accordance with EN standards.</p>	N/A	<p>BATc 5 sets out air emissions monitoring requirements applicable to specific FDM sub-sectors. None of these monitoring requirements are applicable to this site as the activities undertaken (ready meal manufacture) are not specified in the sector and specific processes set out in BATc 5.</p> <p>We are therefore satisfied that BATc 5 is not applicable to this site.</p>
6	<p>Energy Efficiency In order to increase energy efficiency, BAT is to use an energy efficiency plan (BAT 6a) and an appropriate combination of the common techniques listed in technique 6b within the table in the BATc.</p>	FC	<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 not demonstrated compliance with BATc 6.</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>The Operator provided details of their ESOS audit in support of BAT 6a. This however is not an energy efficiency plan as described in BAT and we have therefore included IC7 in order to achieve compliance.</p> <p>The Operator confirmed their combustion plant are optimised through burner control, annual balancing and efficiency testing. In addition they outlined energy efficiency measures currently in consideration for the site. These will be laid down formally within the energy efficiency plan.</p>
7	<p>Water and wastewater minimisation</p> <p>In order to reduce water consumption and the volume of waste water discharged, BAT is to use BAT 7a and one or a combination of the techniques b to k 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>The Operator has stated the following water saving techniques are used on site:</p> <ul style="list-style-type: none"> Boiler condensate is returned to the hot well, minimising water consumption/discharge. Oxygen scavengers are used in the hot well to reduce chemical uses of water treatment. The manufacturing processes are controlled using a combination of set points including temperatures, flow rates, levels etc. The design of the installation incorporates flow meters, and video screen display (VSD) to reduce consumption and minimise discharge.

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"> • Hose guns and trigger controls are partially employed, with the pressure of the delivery systems regulated for the needs of the operator in the area. • Segregation of water streams. The routing and condition of raw, process and surface water drains are known and documented for the site. All process contaminated wastewater is directed to the on-site effluent drains for treatment. Uncontaminated rainwater and site run off is directed to surface water drains which outfall to controlled water. • The site operates a “Clean as You Go” policy and where possible dry cleaning techniques are used. • Foaming systems are used to allow more controlled dosing of chemicals and a reduction in rinse water. • Cleaning equipment is carried out to prevent product hardening through hygiene operations for specific equipment and as part of the “Clean as You Go” policy.
8	<p>Prevent or reduce the use of harmful substances</p> <p>In order to prevent or reduce the use of harmful substances, e.g. in cleaning and disinfection, BAT is to use one or a combination of the techniques given below.</p> <p>(a) Proper selection of cleaning chemicals and/or disinfectants</p> <p>(b) Reuse of cleaning chemicals in cleaning-in-place (CIP)</p> <p>(c) Dry cleaning</p> <p>(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>Chemicals are sourced from a specialist supplier who advises on their selection and formulations with minimal environmental impact.</p> <p>The provider is required (by Service Level Agreement) to undertake a rolling review and</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>assessment of chemical usage, in partnership with site representatives, to ensure appropriate stocks of chemicals are available on site and usage is in line with budget/production levels. The provider is contractually bound to identify reduction opportunities that are evaluated by site. This includes but is not limited to process validation exercises, problem solving and optimisation.</p> <p>Reuse, dry cleaning and CIP optimisation checks are carried out as detailed above.</p>
9	<p>Refrigerants In order to prevent emissions of ozone-depleting substances and of substances with a high global warming potential from cooling and freezing, BAT is to use refrigerants without ozone depletion potential and with a low global warming potential.</p>	FC	<p>The Operator has provided information to support compliance with BATc 9. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 9.</p> <p>The Operator provided an inventory of the refrigeration systems on site. Some associated with the manufacturing process have a high global warming potential (GWP). The operator stated their third party refrigeration provider will review the compatibility of existing assets. And any that require top up will use a gas of lower GWP or run to fail and replacement with equipment that use the lowest practical GWP refrigerant gas. We have added IC8 which requires the operator to produce concrete plans for all affected assets.</p>
10	<p>Resource efficiency In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below: (a) Anaerobic digestion (b) Use of residues (c) Separation of residues (d) Recovery and reuse of residues from the pasteuriser (e) Phosphorus recovery as struvite</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
	(f) Use of waste water for land spreading		<p>The Operator confirmed food residues and effluent sludge are sent offsite for anaerobic digestion.</p> <p>They also confirm they continuously review options for re-using residues however it's not currently feasible to achieve complete segregation for animal byproducts.</p>
11	<p>Waste water buffer storage In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.</p>	CC	<p>The Operator has provided information to support compliance with BATc 11. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 11.</p> <p>The site has a 180m³ buffer tank to contain trade effluent on site prior to discharge, in addition to an effluent sump (15m³). The operator states this provides 6 hours retention at normal site flow which provides the site with enough time to isolate any hazardous spillages to the effluent treatment plant and prevent discharge.</p> <p>Clean surface water from roads and roofs is discharged offsite via 1 surface water emission point. This is served by an interceptor which is inspected monthly by an onsite team and serviced 6 monthly.</p>
12	<p>Emissions to water – treatment In order to reduce emissions to water, BAT is to use an appropriate combination of the techniques given below. Preliminary, primary and general treatment (a) Equalisation (b) Neutralisation (c) Physical separate (eg screens, sieves, primary settlement tanks etc)</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 treats all process water on site within the permitted effluent treatment plant prior to discharge to Anglian Water sewer.</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										
	Aerobic and/or anaerobic treatment (secondary treatment) (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		The on-site effluent treatment plant incorporates screening, pH adjustment and Dissolver Air Flotation (DAF). Note: the effluent treatment plant was regulated as a Directly Associated Activity when first permitted in 2005. The operator has confirmed the site discharges up to 394m ³ per day which makes this a listed S5.4 activity. As no suitable activity reference existing when first permitted we have now included this as a stand-alone activity within the permit.										
12	<p>Emissions to water – treatment BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body</p> <table border="1" data-bbox="282 922 1211 1121"> <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 (°)	CC	The site discharges process effluent to the foul sewer, there are no direct discharges to the water course, as such BAT-AELs do not apply. We are therefore satisfied that BAT AELs associated with BATc 12 is not applicable for this site.
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	<p>Noise management plan</p> <p>In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to set up, implement and regularly review a noise management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:</p> <ul style="list-style-type: none"> - a protocol containing actions and timelines; - a protocol for conducting noise emissions monitoring; - a protocol for response to identified noise events, eg complaints; 	N/A	A noise management plan is only required where noise nuisance at sensitive receptors is expected or has been substantiated. There have been no substantiated noise nuisance from the site therefore an NMP is not a requirement for this site. We are therefore satisfied that BATc 13 is not applicable for this site.										

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the Operator to demonstrate compliance with the BAT Conclusion requirement
	<p>- a noise reduction programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures.</p>		
14	<p>Noise management 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. (a) Appropriate location of equipment and buildings (b) Operational measures (c) Low-noise equipment (d) Noise control equipment (e) Noise abatement</p>	CC	<p>The operator has provided information to support compliance with BATc 14. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 14.</p> <p>The operator has stated the following measures are undertaken on site to limit noise emissions:</p> <ul style="list-style-type: none"> • Plant and equipment are subject to planned preventative maintenance and condition-based inspection that would detect abnormalities in operation that could lead to excessive noise. • The site operates a closed-door policy with respect to all areas of production (loading operations excepted). • All areas of the site are subject to inspection and process confirmation audits that would identify abnormal operations/activities that may give rise to noise nuisance potential. • Consideration of noise is part of equipment specification, which would identify opportunities to include the requirement for low noise equipment such as fans, pumps, and compressors, where this is applicable for both temporary and new equipment. • The design of any new plant will include features to reduce plant noise leakage, sound suppression to external equipment and inherently

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
			quiet fan assemblies to ensure no increase on the current background noise.
15	<p>Odour Management</p> <p>In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to set up, implement and regularly review an odour management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:</p> <ul style="list-style-type: none"> - a protocol containing actions and timelines; - a protocol for conducting odour monitoring. - a protocol for response to identified odour incidents eg complaints; - an odour prevention and reduction programme designed to identify the source(s); to measure/estimate odour exposure: to characterise the contributions of the sources; and to implement prevention and/or reduction measures. 	N/A	<p>An odour management plan is only required where odour nuisance at sensitive receptors is expected or has been substantiated. There have been no substantiated odour nuisance from the site therefore an OMP is not a requirement for this site.</p> <p>We are therefore satisfied that BATc 15 is not applicable for this site.</p>

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 stated within their Reg 61 that production capacity is 375 tpd (approx. 136,875 tpa). The extant permit however states an annual production capacity of 24,111tpa. Following clarification the operator stated *“the original factory was designed to produce 2 million units weekly, over the years through changes in manufacturing process and efficiency the volume per week at peak is now 4 million units. The average daily tonnage YTD = 92.33 tonnes which equates to 33,700 annually.”*

We have included 93 tpd within the permit and require the H1 assessment as described below. Any future changes, particularly to the point initially described will require separate substantial variation.

The H1 assessment is not valid for the maximum capacity stated within the permit or if production is now higher. We have included an improvement condition within the permit (IC9) which requires the Operator to revisit their H1 risk assessment for effluent emissions to sewer at the capacity limit figure that is now stated within table S1.1 of the permit.

Emissions to Air

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

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

Implementing the requirements of the Medium Combustion Plant Directive

We asked the Operator to provide information on all combustion plant on site in the Regulation 61 Notice as follows:

- Number of combustion plant (CHP engines, back-up generators, boilers);
- Size of combustion plant – rated thermal input (MWth)
- Date each combustion plant came into operation

The Operator provided the information in the table below:

Boilers

	Boiler 1	Boiler 2
1. Rated thermal input (MW) of the medium combustion plant.	2.4MWth	2.4MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler	Boiler
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Natural gas	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.	Dec 2000	Dec 2000

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.

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 submitted a site condition report during the original application received on 15/07/2004. 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.

In addition and in support of the Reg 61 review 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 provided a short risk assessment on the hazardous substances stored and used at the installation. The risk assessment was a stage 1-3 assessment as detailed within EC Commission Guidance 2014/C 136/03.

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

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

Climate Change Adaptation

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

The Operator has identified the installation as likely to be or has been affected by prolonged dry weather/ drought, which we consider to be a severe weather event. The site relies on mains water. A climate change adaptation plan is not required.

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 of all tanks;

- Tank reference/name
- Contents details
- Capacity (litres)
- Location
- Construction material(s) of each tank
- The bunding specification including
 - Whether the tank is banded
 - 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 banded 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 improvement conditions in the permit to address the deficiencies in the existing tanks and containment measures on site (IC10). See Improvement condition(s) in Annex 3 of this decision document.

Annex 3: Improvement Conditions

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

Previous improvement conditions marked as complete in the previous permit.

Superseded Improvement Conditions – Removed from permit as marked as “complete”	
Reference	Improvement Condition
IC1	The Operator shall develop a written accident management plan having regard to the requirements set out in Section 2.8 of Agency Technical Guidance Note IPPC S6.10, issue 1, October 2003, and shall submit the plan in writing to the Agency.
IC2	The Operator shall undertake a review of options available for improvement of its effluent treatment in order to meet the requirements of its Trade Effluent Discharge Consent , (Severn Trent Consent dated 01/08/2000, as amended). In addition, the site shall undertake a programme of continuous improvement to improve effluent treatment in order to meet relevant sector ELV benchmarks. In this regard, the Operator shall have regard to the Agency's Sector Guidance Note IPPC S6.10, Issue 1, October 2003, section 2.2.2 and the methods detailed therein. A written report summarising the techniques shall be submitted to the Agency and include time scales for the implementation of preferred options. The report provided shall be agreed in writing with the Agency
IC3	The Operator shall develop and implement an Emissions Monitoring Programme based on the requirements of Table 2.10.1 in this Permit and the need to calculate monthly Chemical Oxygen Demand and suspended solids loadings. The Programme shall have regard for the Agency's Sector Guidance Note IPPC S6.10 Issue1, October 2003 and Technical Guidance Note M18, version 1, July 2004. The Programme shall have due regard for the Agency's requirement for MCERTS accreditation for the monitoring equipment, personnel and organisations employed and for the conformance of all monitoring methods and procedures with appropriate monitoring Standards such as CEN, BSI, ISO, etc. The Emissions Monitoring Programme shall be agreed in writing with the Agency prior to implementation.
IC4	The Operator shall undertake an assessment of the surfacing and containment measures on site with the purpose of preventing fugitive releases to ground or surface water. The assessment will take into account the requirements of section 2.2.5 of the Agency Guidance Note IPPC S6.10, October 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 carry out a review of all available monitoring data for the release to sewer, including those generated by the Emissions Monitoring Programme implemented under Improvement Condition IP6 (this is IP3). The review shall be submitted to the Agency and

	shall propose ELV's for the release to sewer, taking into account any variation to the Discharge Consent implemented by the Sewerage Undertaker. Where the proposed ELV's deviate from those consistent with the application of BAT, the Operator shall justify any such deviation in conjunction with the requirements of Improvement Condition IP6. The Agency shall consider the proposals submitted and may set such ELV's as it considers appropriate for the control of the release to sewer.
IC6	The Operator shall develop and implement a formalised Environmental Management System, having regard for section 2.3 of the Agency's Sector Guidance Note S6.10 Issue 1, October 2003.

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

Improvement programme requirements		
Reference	Reason for inclusion	Justification of deadline
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"> • Methodology applied for achieving BAT • Demonstrating that BAT has been achieved. <p>The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BATc 6a Energy Efficiency Plan.</p> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	3 months from date of permit issue or as agreed in writing by the Environment Agency
IC8	<p>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.</p> <p>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.</p> <p>The plan should include, but not be limited to, the following:</p>	3 months from date of permit issue or as agreed in writing by the Environment Agency

	<ul style="list-style-type: none"> • Where practicable, retro filling systems containing high GWP refrigerants e.g. R-404A with lower GWP alternatives as soon as possible. • An action log with timescales, for replacement of end-of-life equipment using refrigerants with the lowest practicable GWP. • Replacement of systems containing HCFCs as soon as possible 	
IC9	<p>The operator shall review and update the H1 risk assessment for effluent emissions to sewer at the capacity levels stated within table S1.1 of this permit. The H1 shall be submitted to the Environment Agency for review.</p>	<p>3 months from date of permit issue or as agreed in writing by the Environment Agency</p>
IC10	<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"> • CIRIA Containment systems for the prevention of pollution (C736) – Secondary, tertiary and other measures for industrial and commercial premises, • EEMUA 159 - Above ground flat bottomed storage tanks <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"> • current containment measures • any deficiencies identified in comparison to relevant standards, • improvements proposed • time scale for implementation of improvements. <p>The operator shall implement the proposed improvements in line with the timescales agreed by the Environment Agency."</p>	<p>12 months from date of permit issue or as agreed in writing by the Environment Agency</p>