

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/BQ1034IB
The Operator is: Weetabix Limited
The Installation is: Weetabix Burton Latymer Site
This Variation Notice number is: EPR/BQ1034IB/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 03/10/2022 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 03/02/2023.

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 5 monitoring emissions to air, 6 Energy Efficiency Plan, 11 Buffer storage, 12 Effluent Treatment. The operator does not currently comply with the requirements of BATc 5, 6, 11 and 12. In relation to these BAT Conclusions, the operator has committed compliance by 4 December 2023. We have therefore included Improvement Conditions IC10, IC11 and IC12 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 further information requests on 16/01/2024 requesting information on BATc1 ISO 14001 Certification, BATc 3 monitoring, BATc 6 Energy Efficiency Plan, BATc 8 Chemical use, BATc 9 Refrigerants, BATc 11 buffer storage capacity, BATc 12, BATc 14 noise, Medium Combustion Plant, Site Condition Report and Relative Hazardous Substances. We issued a further request on the 28/02/2024 requesting additional information on air emissions sources associated with the production process, including the emissions type and abatement in place. A copy of each further information request was placed on our public register.

3 The legal framework

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

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

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

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

Annex 1: decision checklist regarding relevant BAT Conclusions

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

There are 37 BAT Conclusions.

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

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

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

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

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

NA – Not Applicable

CC – Currently Compliant

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

NC – Not Compliant

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
GENERAL BAT CONCLUSIONS (BAT 1-15)			
1	<p>Environmental Management System - Improve overall environmental performance.</p> <p>Implement an EMS that incorporates all the features as described within BATc 1.</p>	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 that incorporates the features as described within BATc 1. They state their policy is aligned with the standards of ISO 14001 although they no longer hold accreditation.</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>Raw materials, water, waste water, energy and wastes are collated throughout the year, reported internally and to the Environment Agency as part of their pollution inventory returns.</p>
3	<p>Monitoring key process parameters at key locations for emissions to water.</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>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 demonstrate compliance with BATc 3.</p> <p>The site does not have an effluent treatment plant (ETP). All process water emissions are to sewer via 8 separate emission points. The operator confirm the discharge comprises water used for cleaning, wet cyclones, condensate and blow down from boilers chillers and compressors.</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 does not monitor their effluent. The local sewerage operator, Anglian Water carries out monthly spot sampling to check the Trade Effluent Consent.</p> <p>We questioned the operator as to why monitoring was not undertaken and they stated <i>“flow monitoring does not occur, it would be very onerous for the small amounts and variable volumes leaving the site via 8 discharge points. Effluent volume charging is based on water use, there has been significant reduction in water use since the original application, so there should be a corresponding decrease in the volume of effluent, so Weetabix would question the need or benefit of undertaking such an improvement item”</i></p> <p>We have reviewed the monitoring data presented in the Reg 61 tool. 24hr flow data for S2 to S8 varies from 9m³ to 70m³. Max flows at S1 was recorded at 168m³ which is not insignificant. BAT requires operators to take responsibility for emissions leaving their site however we agree that BATc 3 is complied with as some effluent monitoring is undertaken, albeit by the sewerage company.</p> <p>There may be opportunities to firm the monitoring up. We have included IC11 as described under BATc12 below. This requires the operator to investigate installing effluent treatment on site. Depending upon the outcome of these investigations monitoring under BATc 3 could be incorporated..</p>
4	<p>Monitoring emissions to water to the required frequencies and standards.</p> <p>BAT is to monitor emissions to water with at least the frequency given [refer to BAT 4 table in BATc] and in accordance with EN standards. If EN standards are not available, BAT is to use ISO,</p>	N/A	<p>BATc 4 applies in the case of direct discharge of effluent to a water body. All process effluent from the site is discharged to sewer.</p> <p>We are therefore satisfied that BATc 4 is not applicable for this site.</p>

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	national or other international standards that ensure the provision of data of an equivalent scientific quality.		
5	<p>Monitoring channelled emissions to air to the required frequencies and standards.</p> <p>BAT is to monitor channelled emissions to air with at least the frequency given and in accordance with EN standards.</p>	FC	<p>BATc 5 sets out air emissions monitoring requirements applicable to specific FDM sub-sectors. Cereals manufacture is not described within a sub set and BAT-AELs are not set. However the Bref isn't exhaustive and we are using our judgment to consider whether such sites may require monitoring and ELVs.</p> <p>There are multiple emission sources to air on site from various manufacturing lines (cereal bar, Weetabix, Weetabix Mini, muesli, flake, wheat cleaning plant and local exhaust ventilation (LEV).</p> <p>Each line goes through various processing stages (depending upon product) – cooking, drying, milling, mixing, moulding, cooling and packaging. All have emission sources to air with the exception of milling. The milling plant on each line use a recirculating cooling water system which does not have an emission point.</p> <p>With the exception of LEV, particulate emissions to air have not previously been monitored.</p> <p>We have therefore included IC10 to ensure the abatement on the key particulate emission sources is effective and working against an indicative benchmark of 10mg/m³ which us derived from the grain milling sector. If deficiencies are found the operator is required to agree improvements.</p>
6	<p>Energy Efficiency</p> <p>In order to increase energy efficiency, BAT is to use an energy efficiency plan (BAT 6a) and an appropriate combination of the</p>	FC	<p>The operator has provided information to support compliance with BATc 6. We have assessed the information provided and we are not satisfied that the operator has demonstrate 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
	common techniques listed in technique 6b within the table in the BATc.		<p>The operator stated they report under Energy Savings Opportunities Scheme (ESOS) and this feeds into the EEP. However when questioned they did not provide a full plan as described under BAT 6a, providing the ESOS report and Energy Scorecard which tracks energy use. We have therefore included IC11 in order to enable the operator to demonstrate compliance.</p> <p>The operator has confirmed the following energy saving techniques are used on site:</p> <ul style="list-style-type: none"> • Burners serviced at least once a year • 2 x CHP engines heat used in steam generation and heating of the hotwell • Motors are regularly inspected in line with preventative maintenance tasks • LED lighting • Insulation is provided on hot pipework and chilled water lines.
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: (e) Dry cleaning</p>	CC	<p>The operator has provided information to support compliance with BATc 7. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 7.</p> <p>The operator has confirmed boiler condensate from all factories is returned to the hotwell. There is also reuse within the CIP.</p> <p>Wet and dry cleaning methods are used on site. The operator has confirmed water is dosed with the correct amount of chemicals and then used for the clean down of process equipment. Manual cleaning using bucket and cloths is used on most process lines, CIP is used on a small</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) 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		number of plant, such as enrobing equipment, which have enclosed systems. Floors are cleaned using mopping, floor cleaning machines, and where needed hoses and low volume high pressure jetting. The operator states pigging is not appropriate as there are not long networks of pipes with wet product.
8	Prevent or reduce the use of harmful substances In order to prevent or reduce the use of harmful substances, e.g. in cleaning and disinfection, BAT is to use one or a combination of the techniques given below. (a) Proper selection of cleaning chemicals and/or disinfectants (b) Reuse of cleaning chemicals in cleaning-in-place (CIP) (c) Dry cleaning (d) Optimised design and construction of equipment and process areas	CC	The operator has provided information to support compliance with BATc 8. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 8. The operator confirms they work with suppliers and contractors with the aim of using compliant substances for cleaning and sanitation as well as for ground maintenance to avoid the use of priority hazardous substances on site. In addition, they use dry cleaning as above, which reduces the amount of harmful substances used. Cleaning of equipment and floors is carried out using a combination of detergents and disinfectants. Where CIP cleaning is used the cleaning liquid is reused.
9	Refrigerants In order to prevent emissions of ozone-depleting substances and of substances with a high global warming potential from cooling and freezing, BAT is to use refrigerants without ozone depletion potential and with a low global warming potential.	CC	The operator has provided information to support compliance with BATc 9. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 9.

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 applicant has provided a list of refrigeration equipment associated with the manufacturing process. Some of which uses high GWP refrigerants R410A, R422D and R407c.</p> <p>The register included details of the type and amount of refrigerants used, CO₂ equivalents, the inspection regime and records of inspections carried out. The operator states equipment is removed in accordance with the phase out required by legislation and they audit this process on an annual basis.</p>
10	<p>Resource efficiency In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below:</p> <ul style="list-style-type: none"> (a) Anaerobic digestion (b) Use of residues (c) Separation of residues (d) Recovery and reuse of residues from the pasteuriser (e) Phosphorus recovery as struvite (f) Use of waste water for land spreading 	CC	<p>The operator has provided information to support compliance with BATc 10. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 10.</p> <p>The operator has confirmed the largest proportion of waste is food surplus from different stages of the process which is separated and sent off site for use as animal feed.</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>	FC	<p>The operator has provided information to support compliance with BATc 11. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 11.</p> <p>The site discharges process effluent, water from the cyclones and boiler and compressor blowdown to sewer via 8 emission points. There is no means to hold back effluent in an emergency situation.</p> <p>The operator stated that as disposal is to sewer there is no significant risk to surface waters. They state emissions are within the recently revised trade</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>effluent consent values and that developing such facilities on site would present challenges in regard to space available, the dispersed nature of effluent sources. Such a scheme would involve considerable investment without any clear benefit in terms of environmental protection or cost benefits for effluent disposal. There would also be additional potential for odour impacts to nearby sensitive receptors.</p> <p>The operator however did not provide the report from which these statements were based or provided risk assessments as to why there is no significant risks to surface waters. As stated below a H1 risk assessment was not completed with the original application and nothing has been provided with the Reg 61 response.</p> <p>The operator does not undertake monitoring of the effluent themselves and could therefore be unaware of any contamination entering the sewers. Given this lack of information there appears to be no system in place to prior warn the sewerage operator that out of specification effluent has entered the system.</p> <p>BAT requires operators to take responsibility for their effluent and have means of capturing or preventing emissions to downstream treatment and surface waters. These minimum requirements are not in place and we have therefore included IC11 in order to achieve compliance.</p> <p>There are measures in place to protect the site surface water system and the River Ise which runs adjacent to the site. There are 5 storm drainage outlets which discharge to the River. The outlets are visually checked daily by third party. Booms are fitted to all culverts entering the River. Each outlet</p>

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			is also controlled by a penstock valve which can be manually controlled in the event of a known spillage.
12	<p>Emissions to water – treatment</p> <p>In order to reduce emissions to water, BAT is to use an appropriate combination of the techniques given below.</p> <p>Preliminary, primary and general treatment</p> <p>(a) Equalisation</p> <p>(b) Neutralisation</p> <p>(c) Physical separate (eg screens, sieves, primary settlement tanks etc)</p> <p>Aerobic and/or anaerobic treatment (secondary treatment)</p> <p>(d) Aerobic and/or anaerobic treatment (eg activated sludge, aerobic lagoon etc)</p> <p>(e) Nitrification and/or denitrification</p> <p>(f) Partial nitrification - anaerobic ammonium oxidation</p> <p>Phosphorus recovery and/or removal</p> <p>(g) Phosphorus recovery as struvite</p> <p>(h) Precipitation</p> <p>(i) Enhanced biological phosphorus removal</p> <p>Final solids removal</p> <p>(j) Coagulation and flocculation</p> <p>(k) Sedimentation</p> <p>(l) Filtration (eg sand filtration, microfiltration, ultrafiltration)</p> <p>(m) Flotation</p>	FC	<p>The operator has provided information to support compliance with BATc 12. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 12.</p> <p>The operator confirms screens and sieves are used to catch solids within the effluent streams. They state anaerobic treatment has been investigated in the past, however this showed that the load of digestible material was not high enough or consistent enough to enable treatment.</p> <p>The investigation stated has not been presented and considering the general lack of control of effluent on site we have include IC12 to more formally present investigations to the Environment Agency.</p> <p>BAT-AELs are not applicable as the site discharges to foul sewer rather than surface water.</p>

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
13	<p>Noise management plan</p> <p>In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to set up, implement and regularly review a noise management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:</p> <ul style="list-style-type: none"> - a protocol containing actions and timelines; - a protocol for conducting noise emissions monitoring; - a protocol for response to identified noise events, eg complaints; - a noise reduction programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures. 	N/A	<p>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.</p> <p>We are satisfied that BATc 13 is not applicable to this site.</p>
14	<p>Noise management</p> <p>In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to use one or a combination of the techniques given below.</p> <ul style="list-style-type: none"> (a) Appropriate location of equipment and buildings (b) Operational measures (c) Low-noise equipment (d) Noise control equipment (e) Noise abatement 	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 confirmed that in order to minimise harmful impacts on noise sensitive receptors. They state this is done through a combination of BAT techniques which focus on minimising noise at source and then implementing mitigation measures if required. Management of change processes include the assessment of potential noise impacts.</p>
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>	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>

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"> - 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. 		We are therefore satisfied that BATc 15 is not applicable for this site.

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.

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 confirmed that at H1 had previously not been undertaken at the site however the original permit application decision explains that Anglian Water submitted documentation on behalf of the operator evidencing the downstream treatment works could cope with the effluent it receives from the site.

Particulate emissions from this installation have also not been assessed. The operator referenced an Air Quality Assessment submitted in 2017 however this did not address particulates from the manufacturing process, considering only combustion gases.

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.

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

For the existing combustion plant with a rated thermal input less than 1 MW (82 burners serving ovens and production lines) 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.

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

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

The Operator provided the information in the table(s) below:

Combined heat and power (CHP) engines

	CHP1	CHP2
1. Rated thermal input (MW) of the medium combustion plant.	7 MWth	7 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	CHP engine	CHP engine
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.	Pre- Dec 2018	Pre- Dec 2018

Boilers

	Boiler 1	Boiler 2
1. Rated thermal input (MW) of the medium combustion plant.		
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	12 MWth	12MWth
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	Pre- Dec 2018	Pre- Dec 2018

that the operation started before 20 December 2018.		
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We have reviewed the information provided and we consider that the declared combustion plant qualify as “existing” medium combustion plant. These plant were permitted with the original permit application and the existing monitoring requirements (annual) and NOx ELV (150mg/m³) is retained within the permit.

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 confirmed that at H1 had previously not been undertaken at the site however the original permit application decision explains that Anglian Water submitted documentation on behalf of the operator evidencing the downstream treatment works could cope with the effluent it receives from the site. No H1 assessment could be located. However reference has been found to the permitted annual production capacity being agreed, we therefore do not consider the submission of H1 necessary.

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 an Application Site Report (January 2005) with original application received in 2005. The site condition report concluded there was little likelihood of pollution on or underground and no reference data was collected. 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.

Ground investigations were carried out in response to a significant diesel spillage from an underground tank in October 2016. The report "Environmental Assessment of Weetabix Facility August 2017" details a summary of the investigations and an ongoing monitoring regime.

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 in January 2005. 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 identified a small area of the installation as likely to be or has been affected by flooding which we consider to be a severe weather event.

The operator did not supply a suitable climate change adaptation plan for the installation however this has since been reviewed and agreed locally under their normal compliance assessment.

Containment

We asked the Operator via the Regulation 61 Notice to:

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

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

Annex 3: Improvement Conditions

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

We also consider that we need to set improvement conditions relating to changes in the permit not arising from the review of compliance with BAT conclusions. The justifications for these are provided in Annex 5 of this decision document.

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

Superseded Improvement Conditions	
IC1	The Operator shall submit a <u>5 year</u> rolling programme to the Agency for the fitting of Penstock Valves to emission points W1- W5 (points SW1 – SW5 on site plan in Schedule 5), with the purpose of preventing contaminated fugitive releases, having regard for the Environment Agency Sector Guidance Note IPPC S6.10, August 2003.
IC2	The Operator shall undertake a review of laboratory methods to ensure they are traceable to standard reference methods. The findings of the review shall be submitted to the Environment Agency in writing.
IC3	The Operator shall propose, for agreement with the Environment Agency, a site emissions monitoring programme.
IC4	The Operator shall produce a feasibility study of the provision of MCERTS accreditation for the personnel and test methods and equipment employed in the site emissions monitoring programme. If feasible, the review shall include a date by which MCERTS requirements shall be met. The findings of the review shall be submitted in writing to the Environment Agency.
IC5	The Operator shall submit to the Environment Agency a detailed report to demonstrate that the process ovens are operated in such a way that energy is used efficiently.
IC6	A feasibility study should be included for the removal of the Chinese hats, - the operator shall produce a report on feasibility of removing all " Chinese hats" from discharge stacks. If feasible, a timetable for the removal, shall we <u>submitted</u> , (for agreement) to the Environment Agency
IC7	The Operator shall review the written Site Closure Plan having regard for Agency Sector Guidance Note IPPC S6.10, August 2003 and shall submit a copy to the Environment Agency for approval.
IC8	The Operator shall submit a report to the Environment Agency providing details of the noise management plan to be used to control noise from the activities covered by this permit. The report shall include the identification of all significant sources of noise/vibration and proposals for the measurement of noise at appropriate locations at or beyond the site boundary to assess the specific noise level contribution at agreed noise sensitive locations. A report shall also include an assessment of further potential noise reduction measures and proposals with timescale, as appropriate, in accordance with BAT for their implementation.
IC9	The Operator shall implement procedures to ensure all waste materials, awaiting disposal, are stored in suitable containers located on hardstanding.

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

Improvement programme requirements		
Reference	Reason for inclusion	Justification of deadline
IC10	<p>The Operator shall submit a written report to the Environment Agency reviewing the efficiency and suitability of the onsite dust abatement from the emission sources that utilise bag filters. The report shall contain but not be limited to:</p> <ul style="list-style-type: none"> • Confirmation of the current abatement efficiency, based on monitoring data, with an appraisal of the performance against Best Available Techniques (BAT). • Comparison of the dust emissions data against an indicative benchmark of 10mg/m³. • Identification of any improvements that could be made to the plant, such as maintenance and operating techniques, to maintain or improve the performance in line with BAT. • Where required, an appraisal on other suitable abatement techniques as listed with Chapter 2 of the Food, Drink and Milk Industries Bref (2019). <p>The Operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency.</p>	12 months from permit issue or as agreed in writing with the Environment Agency
IC11	<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 6, 11 and 12.</p> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	3 months from permit issue or as agreed in writing with the Environment Agency

<p>IC12</p>	<p>The Operator shall submit a written report to the Environment Agency for technical assessment and approval on the feasibility of installing effluent treatment and include a review of treatment options available along with their associated benefits. Justification is required where no on-site treatment is provided, taking into account the nature of the wastewater and any subsequent off-site treatment. In addition the report needs to consider the appropriate on-site monitoring of the effluent stream prior to disposal. (BAT 3, and 12 Best Available Techniques Reference Document and BAT Conclusions document for the food, drink and milk industry dated December 2019).</p>	<p>12 months from permit issue</p>
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