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/PP3730VH
The Operator is:	Greencore Food To Go Limited
The Installation is:	Greencore Food To Go Ltd Northampton
This Variation Notice number is:	EPR/PP3730VH/V004

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 02/2/2023.

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 9. In relation to this BAT Conclusion, we do not fully agree with the Operator in respect of their current stated capability as recorded in their response to the Regulation 61 Notice. We have therefore included Improvement Condition IC3 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 11/11/2024 in relation to narrative BATc 6, 9 and non-narrative BAT in relation to production/capacity threshold, emissions to air, medium combustion plant (MCP), relevant hazardous substances (RHS), climate change adaptation, containment and site name. A copy of the further information request was placed on our public register.

3 The legal framework

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

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

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

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

Annex 1: decision checklist regarding relevant BAT Conclusions

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

There are 37 BAT Conclusions.

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

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

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

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

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

NA – Not Applicable
CC – Currently Compliant
FC – Compliant in the future (within 4 years of publication of BAT Conclusions)
NC – Not Compliant

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the Operator to demonstrate compliance with the BAT Conclusion requirement
GENERAL BAT CONCLUSIONS (BAT 1-15)			
1	**Environmental Management System - Improve overall environmental performance.** Implement an EMS that incorporates all the features as described within BATc 1.	**CC**	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. The Operator has an EMS which covers all the topics set out in BATc 1. This EMS is not accredited to ISO14001 however, upon review we agree that the EMS is written to ISO14001 standards.
2	**EMS Inventory of inputs & outputs. Increase resource efficiency and reduce emissions.** 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.	**CC**	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. The Operator declared: • The environmental management system (EMS) identifies and documents the site's interactions with the environment and references the site's normal, abnormal and emergency emissions. This exercise is informed by the input/output process flows that are core to the management of food hygiene and safety through the Hazard Analysis and Critical Control Point (HACCP) review process. HACCP plans show the input of raw materials and utilities (including heat and water) in addition to origin of emissions (including waste) from the production process. The site measures ingredient through mass

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			balance calculation for efficiency and traceability. • Main production processes are semi-automated, optimised and continually reviewed from a yield and efficiency perspective. • Plant performance objectives supported by a comprehensive metering, monitoring, measurement and KPI programme. • Annual reviews of objectives and targets. • Mapped and monitored water delivery, treatment, and distribution network. • Improvement initiatives are continuously reviewed and delivered through the continuous improvement process and in conjunction with third-party providers. • Control measures are formalised and documented within a raft of effluent plant procedures and a reporting of daily performance. • The site reports key performance indicator data on a weekly basis for the site and on a monthly basis for site and at a Group level for review. This allows ongoing trends to be tracked and managed. As a Group, Greencore is part of the Champions 12.3 initiative to halve per capita food waste by 2030. The site therefore reports to Group on food waste according to the Food Loss and Waste Reporting Standard and Food and publish this in the public domain annually. This reporting is sent to Group level on a monthly basis ahead of annual collation and includes all food losses –

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			food content of general waste, food waste and losses to drain (through effluent analysis). The Operator has an EMS which covers all the topics set out in BATc 2. This EMS is not accredited to ISO14001 however, upon review we agree that the EMS is written to ISO14001 standards.
3	**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).	**CC**	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. The Operator monitors waste water and records values for flow, pH, COD, and temperature daily. The sewerage authority, Anglian Water inspects these monitoring parameters and other additional monitoring parameters as set by the sewer authority.
4	**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.	**NA**	We are satisfied that BATc 4 is not applicable to this installation. BATc 4 is applicable only to installations discharging process effluent to water and this site discharges only to sewer under consent therefore, BATc 4 is not applicable.
5	**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.	**NA**	We are satisfied that BATc 5 is not applicable to this installation. This BATc is applicable to installations where dust emissions from processes such as drying, cooling, grinding, or milling are used.

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			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.
6	**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.	**CC**	The Operator has provided information to support compliance with BATc 6. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 6. The Operator has an energy efficiency plan in place which is incorporated into their EMS. This plan meets the requirements of BAT 6a. The Operator is current using the following (b) techniques: • Combustion plant operations are optimised through burner control, annual balancing and efficiency testing, PPM and inspections in line with the suppliers O&M. • Heat is recovered from various parts of the process that is inherent within the design and operation of the individual assets, including non-process units such as AC systems. • The site has replaced the majority of lights with LED units across all production areas and ancillary areas and is in an active replacement programme. • Boiler blowdown is undertaken and validated in conjunction with third

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
			party specialists and inhouse site services team. • Preheating of feedwater is undertaken. • Variable speed drives (VSD) specified on pumps and frequency controllers on motors is implemented where appropriate. • Programmable logic controllers (PLC) and manual control systems are employed variously for optimisation and track trend parameters; including pressure and temperature, VSDs and time. • Compressed air systems are automated, optimised and maintained inhouse and in conjunction with third party specialists. Compressed air leak surveys are undertaken periodically and improvement ideas tracked in improvement plans.
7	**Water and wastewater minimisation** 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. (a) water recycling and/or reuse (b) Optimisation of water flow (c) Optimisation of water nozzles and hoses (d) Segregation of water streams Techniques related to cleaning operations: (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	**CC**	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. The Operator is using the following techniques: (a) Water recycling and reuse – Boiler condensate returns to the hot well, further minimising water consumption/discharge. Oxygen scavengers on hot well to reduce chemical uses of water treatment. (b) Optimisation of water flow - Manufacturing processes are controlled using a combination of parameters including temperatures, flow

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
	(j) Optimised design and construction of equipment and process areas (k) Cleaning of equipment as soon as possible		rates and levels. The installation incorporates flow meters, VSD and timers that reduce consumption and minimise discharge. (c) Optimisation of water nozzles and hoses - Hygiene water is delivered to the point of use via satellite units which also deliver dilute cleaning chemical. The water is restricted at each of the satellites and in conjunction with using a removal water jet this reduces the flow of the water used for cleaning tasks down to 40 L/Minute. (d) Segregation of water streams - The routing and condition of raw, process and surface water drains is 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. (e) Dry cleaning - The site operates a “Clean As You Go” policy and where possible standard operating procedures (SOPs) prescribe dry cleaning techniques which is subject to process confirmation within each area. (j) Low-pressure foam and/or gel cleaning - Mobile foaming systems are employed to allow more controlled dosing of chemicals and a reduction in rinse water. (k) Cleaning of equipment as soon as possible - The cleaning of equipment is carried out once released from production, in the event that a full deep clean is not immediately possible then a rinse will be completed to ensure that food debris does not harden onto the surfaces and ensuring that excessive water is not used in the deep clean process. The site operates a “Clean As You Go” policy.

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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 is using the following techniques: (a) Proper selection of cleaning chemicals and/or disinfectants – The site has a contract with a third-party organisation, who provides the Operator with guidance on solutions for cleaning chemicals, and providing industry standard solutions for the cleaning needs of the food processing sector. (c) Dry cleaning - The site operates a “Clean As You Go” policy and where possible standard operating procedures (SOPs) prescribe dry cleaning techniques which is subject to process confirmation within each area. (d) Optimised design and construction of equipment and process areas - New equipment installations go through hazard identification and HACCP processes to identify any potential issues and opportunities. Existing optimisation opportunities are identified periodically in partnership with the operators and hygiene chemical supplier.
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.	**FC**	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.

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
			The Operator is using F-gases with a global warming potential (GWP) over 1400 GWP which we consider to be high. The Operator is using the following F-gases in their production process: • R404a – GWP of 3922 • R410a – GWP of 2088 • R4017c – GWP of 1774 • R134a – GWP of 1430 There is no F-gases replacement plan in place. An improvement condition (IC3) has been included to ensure compliance with the development of such a plan within 3 months of the date of permit issue (see Annex 3).
10	**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 (f) Use of waste water for land spreading	**CC**	The Operator has provided information to support compliance with BATc 10. We have assessed the information provided and we are satisfied that the Operator has demonstrated compliance with BATc 10. The Operator is using the following techniques: (a) Anaerobic digestion - Effluent sludge and food waste are sent off-site for energy recovery via AD plant. The Operator declared: The site continuously reviews options with respect to re-using residues. All waste crusts and bread is sent to an animal feed facility as part of UK service agreements with approved supplier. The site continually recycles for all plastics, food, bread, and general waste. All drains, lines and equipment have catchment

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
			trays and are controlled with on-site hygiene teams, any residues of food and waste are placed into the correct bins. A weekly report is generated and discussed on daily/weekly KPI performance and managed within each function.
11	**Waste water buffer storage** In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.	**CC**	The Operator has provided information to support compliance with BATc 11. We have assessed the information provided and we are satisfied that the Operator has demonstrated compliance with BATc 11. The Operator declared: The installation employs a dissolved air flotation (DAF) tank with a buffer storage capacity of circa 130m^3 treatment process effluent prior to discharge to foul sewer to 'Billing Waste Water Treatment Works'. This treatment process lowers the Chemical Oxygen Demand (COD) and Settleable Solids (SS) to ensure compliance as regulated by the Operators sewer authority, Anglian Water. Spill kits are located throughout the site.
12	**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) Aerobic and/or anaerobic treatment (secondary treatment) (d) Aerobic and/or anaerobic treatment (eg activated sludge, aerobic lagoon etc)	**CC**	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. There is an on-site effluent treatment plant. The site's process effluent is discharged via foul sewer under consent with Anglian Water.

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	(e) Nitification and/or denitrification (f) Partial nitration - 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 effluent travels to the waste water treatment works in Billing. The Operator is using the following techniques: (a) Equalisation – Used to smooth out the effluent characteristics through use of buffer tanks and inlet drainage sump. (b) Neutralisation – Adjustment of pH correction through both acid and alkaline dosing facilities for balancing, optimisation of coagulation dosing a trimming prior to discharge. (c) Physical separate – 1.5mm screening to remove coarse solids and physical separation via a rotary screen. (h) Precipitation - Phosphorous removal within the effluent treatment train will occur as a result of the removal of sludge component. (j) Coagulation and flocculation - Achieved via DAF technology. (k) Sedimentation - Sludge is removed from the DAF and directed to dedicated sludge storage facilities. Excess water carried over with the sludge will settle out within the tanks due to gravity/time. Decant drain lines from the sludge storage tanks allow the return of excess water back to the head of the treatment process. (m) Flotation - Achieved via DAF technology.
12	**Emissions to water – treatment** **BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body**	**NA**	We are satisfied that BATc 12 AEL is not applicable to this installation. BATc 12 AEL is applicable only to installations discharging process effluent to surface water and this site discharges only to foul sewer

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
	<table><tr><th>Parameter</th><th>BAT-AEL (1) (2) (daily average)</th></tr><tr><td>Chemical oxygen demand (COD) (3) (4)</td><td>25-100 mg/l (5)</td></tr><tr><td>Total suspended solids (TSS)</td><td>4-50 mg/l (6)</td></tr><tr><td>Total nitrogen (TN)</td><td>2-20 mg/l (7) (8)</td></tr><tr><td>Total phosphorus (TP)</td><td>0,2-2 mg/l (9)</td></tr></table>		under consent therefore, BATc 12 AEL is not applicable.
13	**Noise management plan** In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to set up, implement and regularly review a noise management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements: - a protocol containing actions and timelines; - a protocol for conducting noise emissions monitoring; - a protocol for response to identified noise events, 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.	**NA**	We are satisfied that BATc 13 is not applicable to this installation. BATc 13 is only applicable to cases where noise nuisance at sensitive receptors is expected and/or has been substantiated. The Operator declared: There is no formal noise management plan implemented however, within the site governance systems elements of a noise management plan are in place. The site has a formal complaints procedure that requires updating to state that in the event of an issue this would be recorded and investigated.
14	**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	**CC**	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. The Operator is using the following techniques: (b) Operational measures: • The site operates a closed-door policy with respect to all areas of production (loading operations excepted).

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			• The site is operated by trained personnel that are aware of the potential for the site to generate off-site impacts including statutory nuisance (noise, odour, dust, vermin, light and vibration). • Noise is a consideration of the activities of contractors and projects and is routinely assessed as part of internal evaluation during planned and reactive construction and maintenance activities.
15	**Odour Management** 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: - 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.	**NA**	We are satisfied that BATc 15 is not applicable to this Installation. An odour management plan (OMP) 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. The Operator submitted a summary OMP which provided a general overview of techniques and control measures in place to mitigate odour on-site. There is also a formal complaints procedure to record any record of odour from the site if required.

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

Updating permit during permit review consolidation

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

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

Production/Capacity Threshold

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

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

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

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

Emissions to Air

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

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

The two 1MWth boilers installed as per the previous variation EPR/PP3730VH/V002 were removed in 2021. Emission points D07 & D08 were submitted as part of EPR/PP3730VH/V002 for a project to introduce a continuous oven to Unit D. This project was cancelled, and the emission points were never commissioned. Emission point D07 then became utilised for the Ammonia Refrigeration plant and emission point D08 does not exist. The following source points emission to air have been decommissioned and removed from the permit: A10, A11, A12, B10, B11, B12, B13, B14, B15, C04 and C05.

Implementing the requirements of the Medium Combustion Plant Directive

Existing small combustion plant (<1MW)

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

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 'Site Condition Report -GCN-SCR' dated 04/08/2014 during the original application received on 08/08/2014. The site condition report included a report on the baseline conditions as required by Article 22. We reviewed that report and considered that it adequately described the condition of the soil and groundwater at that time.

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

Hazardous Substances

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

The Operator has confirmed there has been no change in the hazardous substances used, their capability of causing pollution and/or the pollution prevention measures at the installation since the risk assessment was submitted on 04/08/2014. Consequently, we are satisfied there has been no change to the assessment of risk for hazardous substances.

The outcomes of the three stage assessment identified that pollution of soil / groundwater to be possible and monitoring is required for these hazardous substance(s).

The Operator is required to submit a relevant hazardous substances monitoring plan for review to the Environment Agency via improvement condition (IC4).

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 and drought, which we consider to be a severe weather event.

We do not consider the Operator to have submitted a suitable climate change adaptation plan for the installation. We have included an improvement condition into the permit (IC5) to request a climate change adaptation plan is submitted by the Operator for approval from the Environment Agency.

Containment

We asked the Operator vis 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 appliable.

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 bunded
    - If the bund is shared with other tanks
    - The capacity of the bund
    - The bund capacity as % of tank capacity
    - Construction material of the bund
    - Whether the bund has a drain point

    - Whether any pipes penetrate the bund wall
- Details of overfill prevention
- Drainage arrangements outside of bunded areas
- Tank filling/emptying mitigation measures (drips/splashes)
- Leak detection measures
- Details of when last bund integrity test was carried out
- Maintenance measures in place for tank and bund (inspections)
- How the bund is emptied
- Details of tertiary containment

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

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

We have set improvement conditions in the permit to address the deficiencies in the existing tanks and containment measures on site (IC6). See Improvement condition(s) in Annex 3 of this decision document.

Annex 3: Improvement Conditions

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 undertake an assessment of the containment measures including the external chemical storage tanks, effluent treatment plant and subsurface structures. The assessment should include but not be limited to: • An assessment of site infrastructure against the requirements of the section titled 'Releases from liquids in containers' in our guidance document 'How to Comply with your Environmental Permit' and • An assessment of how the chemicals, diesel and effluent stored on site will be prevented from entering the surface water drainage system. A written report summarising the findings shall be submitted to the Environment Agency. A timescale for implementation of any improvements shall be agreed with the Environment Agency.
IC2	The Operator shall submit a written report to the Environment Agency for approval. The report must contain a written review of the effectiveness of the installation's odour management plan. The report shall include the dates for the implementation of individual measures identified in order to ensure compliance with indicative BAT as provided in Sector Guidance Note IPPC S5.06 and Horizontal Guidance Note H4. The notification requirements of condition 2.4.1 will be deemed to have been complied with on submission of the report. You must implement the actions and outcomes of the report as approved, and from the date stipulated by the Environment Agency.

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**
IC3	The operator shall use refrigerants without ozone depletion potential and with a low global warming potential (GWP) in accordance with BAT 9 from the Food, Drink and Milk Industries BATCs. To demonstrate compliance against BAT 9, the operator shall produce a plan for the onsite refrigerant system(s) at the installation. The plan is to be assessed by the Environment Agency and shall	3 months from date of issue or as agreed in writing by the Environment Agency 17/03/2025

	be incorporated within the existing environmental management system. The plan should include, but not be limited to, the following: • Where practicable, retro filling systems containing high GWP refrigerants e.g. R-404A with lower GWP alternatives as soon as possible. • An action log with timescales, for replacement of end-of-life equipment using refrigerants with the lowest practicable GWP.	
IC4	The operator shall produce a monitoring plan detailing how the management of relevant hazardous substances which did not screen out as low risk, based on the RHS baseline assessment, will be maintained and monitored to mitigate the risks of pollution. The plan shall be submitted for approval. The plan shall be implemented in accordance with the Environment Agency's written approval, including timescales to undertake any infrastructure improvements.	12 months from date of issue or as agreed in writing by the Environment Agency 17/12/2025
IC5	The operator shall produce a climate change adaptation plan, which will form part of the EMS. The plan shall include, but not be limited to: • Details of how the installation has or could be affected by severe weather; • The scale of the impact of severe weather on the operations within the installation; • An action plan and timetable for any improvements to be made to minimise the impact of severe weather at the installation. The Operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency.	12 months from date of issue or as agreed in writing by the Environment Agency 17/12/2025
IC6	The Operator shall undertake a survey of the primary, secondary and tertiary containment at the site and review measures against relevant standard including: • 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 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	12 months from date of issue or as agreed in writing by the Environment Agency 17/12/2025

	• current containment measures • any deficiencies identified in comparison to relevant standards, • improvements proposed • time scale for implementation of improvements. The operator shall implement the proposed improvements in line with the timescales agreed by the Environment Agency.	