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/DP3531SWThe Operator is:ABF Grain Products LimitedThe Installation is:Cross Lane Bakery - BradfordThis Variation Notice number is:EPR/DP3531SW/V005

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 and any changes to the operation of the installation.

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

How this document is structured

- 1. Our decision
- 2. How we reached our decision
- 3. The legal framework
- 4. Annex 1 Review of operating techniques within the Installation against BAT Conclusions
- 5. Annex 2 Review and assessment of changes that are not part of the BAT Conclusions derived permit review
- 6. Annex 3 Improvement Conditions

1 Our decision

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

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

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

2 How we reached our decision

2.1 Requesting information to demonstrate compliance with BAT Conclusion techniques

We issued a Notice under Regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 02/08/2022 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 03/01/2023.

2.2 <u>Review of our own information in respect to the capability of the Installation to meet revised</u> <u>standards included in the BAT Conclusions document</u>

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 IC1 for BATc 9 and IC2 for BATc 7 in the Consolidated Variation Notice to ensure that the requirements of the BAT

Conclusions are delivered within 3 months of the variation being issued.

2.3 <u>Requests for further information during determination</u>

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 requests on 12/07/2024 and 04/11/2024. A copy of the further information requests was placed on our public register. The following information was requested:

- BATc 6 Clarification of what techniques are currently being used on site to meet energy efficiency and if there is an energy efficiency plan in place and to provide a copy
- BATc 9 provide a copy of the plan in place to replace the higher GWP models
- Information regarding ovens as per the current permit
- BATc 7 provide details of techniques relating to 'BATc 7 (a) water recycling and/or reuse' if this is something you are currently unable to do on site, please provide details.

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-AELs):

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
GEN	ERAL 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 declared they have an internal EMS that has been developed to an equivalent of ISO 14001 standard.
			The site is committed to ensure effective arrangements are in place to both reduce the business impact to the environment and seek to continuously improve its operations.
			Site has identified internal and external factors which has an impact on their ability to successfully implement the EMS and put in place measures to overcome any barriers identified.
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	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.
	detailed within the BATCs.		Site submit to the EA annual returns and a pollution inventory that includes water, energy, waste and raw material consumption, as part of their permit requirements.
			Daily manual gas, electricity and water readings taken and usage continually monitored.

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
			Site is registered under the Climate Change Agreement and their target is 1188 KW/h/tonne.
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. There is a monitoring programme in place to
			identify, quantify and characterise all sources of process effluent.
			This includes the monitoring of each area through a mass balance calculation of the final outfall to sewer agreed with Yorkshire Water.
			The site has suitable and sufficient data on the flow and loading of the combined effluent streams. Escalation and reporting procedures are in place. The consequential impact of normal, abnormal and emergency releases to sewer and the ability to control and minimise impact on the release are understood.
4	Monitoring emissions to water to the required frequencies and standards.	NA	We are satisfied that BATc 4 is not applicable to this Installation.
	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.		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. The site does not discharge directly to surface water.
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	NA	We are satisfied that BATc 5 is not applicable to this Installation.
	and in accordance with EN standards.		This BATc 5 is concerned with channelled dust emissions to air from processes such as grinding, cooling, or drying. This installation does not have any of these processes therefore, BATc 5 is not applicable.

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
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.	сс	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.
			A copy of the Energy Management Plan for year 2024-2025 has been provided which covers all aspects of the food manufacturing process, including processing, packaging, storage, and office operations.
			An energy review was conducted to identify areas of high energy consumption and opportunities for improvement. The audit revealed the following:
			- Heating, ventilation, and air conditioning (HVAC) systems are a significant source of energy consumption
			 Continue to replace existing lighting with LED Process equipment is not optimized for energy efficiency
			- Office equipment is not being turned off when not in use
			The plan outlines the following objectives, action plan and techniques:
			- Energy consumption to be reduced by 5% in the next 12 months
			- Energy cost reduction where practical
			- Implementation of energy-efficient technologies and practices
			- Upgrade to Energy Star-rated HVAC systems with implementation of scheduling system to optimize system operation based on production schedules

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
			- Replace remainder of existing lighting with LED or fluorescent lighting systems
			- Installation of occupancy sensors and timers to turn off lights when not in use
			 Installation of daylight harvesting controls to reduce artificial lighting during daylight hours
			The plan also highlights the projects that have been completed - a copy of the plan has been uploaded to DMS
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 (j) Optimised design and construction of equipment and process areas (k) Cleaning of equipment as soon as possible 	FC	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. Water is primarily used on site as an ingredient as well as for mixing, proving, cooling and cleaning processes. Compliance with BAT includes: - Use of hose guns and trigger controls - Cleaning team is trained to help reduce water consumption - Equipment procurement such as floor machines and dosing systems to reduce water usage - Foaming systems are employed to allow
			 reduction in rinse water Daily 'clean as you go' operations use dry cleaning methods

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
			 There is no requirement for high-pressure cleaning to be employed across the site The site reportedly saw 7.2% reduction in water use. Water recycling such as reusing rain water is currently not an option as the site have an asbestos roof, however, site have not demonstrated any other techniques for BATc 7(a) – i.e reusing water from cleaning-in-place (CIP) or wash waters, using pre-rinse water as final wash water and therefore an improvement condition, IC2 has been added until the above has been fully completed.
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 in partnership with a specialist third party advisor (Holchem). They have identified the range and application of cleaning chemicals that are appropriate to the individual cleaning systems, plus other chemicals that are used for hygiene, water and effluent treatment. Any changes to the chemical inventory are assessed through the site's change management procedure before use. This is to ensure that their use and disposal via the effluent drains cannot impact the site's ability to comply with its consent. The site chemical inventory will be assessed and benchmarked through the Surface Water Impact Assessment. This is to identify specific materials that may contain substances considered harmful to the aquatic environment or listed under the Water Framework Directive 2000/60/EC.

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
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. The spiral freezers and cold store use Ammonia that has a 0 GWP potential. Remaining refrigerants are documented on the site F-Gas register. Site have a maintenance contract with a
			refrigeration specialist company who would guide and advise on this matter. 6 monthly reviews are conducted with the company where matters relating to possible phase out options would be considered. Investment has been secured to carry out a 4 week survey on the entire refrigeration system in October 2024 The site will seek input from 3 rd party based on the results of the survey to create a phase out plan that is achievable based on costs, age of current units and replacement options.
			added until the above has been fully completed.
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	СС	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.
	(d) Recovery and reuse of residues from the pasteuriser (e) Phosphorus recovery as struvite (f) Use of waste water for land spreading		It is stated that the site has adapted a preventative approach to waste by effective plant design. There are teams working on projects to help reduce plant waste and where not possible there is prevent, reuse, recycle, recovery and as a last resort disposal plan. Some waste streams and residues are sent off site for recovery via AD. Site has zero waste to

No.	BATC	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
				landfill target that it demonstrates effective compliance with.
				 b) The site have compactors used for food waste that is sent for animal feed
				 c) Residues are separated at the point of generation so a decision can actively be made on how the material is to be handled and further treated/recovered. This is done via catch trays, drip trays, manual separation using colour coded bins d) N/A e) N/A
				 f) use of waste water from effluent is used for land spreading
	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.	СС	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 site has interception in place that acts as buffer storage in event of uncontrolled release.
				Yard from cake wash room has 3 interceptors with a total capacity of 10,000lt
				Carpark interceptors with an overall capacity of 3,000lt
				3 Interceptors in the effluent plant with total capacity of 10,000lt.
				Site have emergency spill procedures and have evaluated risk and deployed bins with drain covers at key areas in the yard.
	12	Emissions to water – treatment In order to reduce emissions to water, BAT is to use an appropriate combination of the techniques given below.	сс	The Operator has provided information to support compliance with BATc 12. We have assessed the information provided and we are

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
	Preliminary, primary and general treatment		satisfied that the Operator has demonstrated
	(a) Equalisation		compliance with BATc 12.
	(b) Neutralisation		There is an effluent treatment plant on site and
	(c) Physical separate (eg screens, sieves, primary settlement tanks etc)		Operator uses the following techniques.
	Aerobic and/or anaerobic treatment (secondary treatment)		for gross debris
	(d) Aerobic and/or anaerobic treatment (eg activated sludge, aerobic lagoon etc)		- pH correction
	(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		
	(I) Filtration (eg sand filtration, microfiltration, ultrafiltration)		
	(m) Flotation		
13	Noise management plan	NA	We are satisfied that BATc 13 is not applicable
	In order to prevent or, where that is not practicable, to reduce noise emissions,		to this installation.
	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		I he site does not have history of substantiated
	the following elements:		noise management plan.
	- 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.		
14	Noise management	CC	The Operator has provided information to
	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		assessed the information provided and we are
	(a) Appropriate location of equipment and buildings		satisfied that the Operator has demonstrated
	a repropriate location of equipment and buildings		compliance with BATc 14.

 BATC	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	(b) Operational measures		The site operates a closed-door policy with
	(c) Low-noise equipment		respect to all areas of production (loading
	(d) Noise control equipment		trained personnel that are aware of the
	(e) Noise abatement		potential for the site to generate off-site
			impacts including statutory nuisance (noise,
			odour, dust, vermin, light, vibration etc). Noise
			contractors and projects and is routinely
			assessed as part of the evaluation of RAMS
			maintenance activities. All areas of the site are
			subject to inspection and process confirmation
			audits that would identify abnormal
			puisance potential
			Consideration of noise is part of equipment
			specification, which would identify
			opportunities to include the requirement for
			compressors, where this is applicable for both
			temporary or new equipment. Certain activities
			are scheduled during normal operational
			noise nuisance potential, in addition to other
			measures such as white noise reversing on
			vehicles operational in the yard area.
			Equipment performance is part of the
			the use and applicability of low noise
			equipment options or equipment will be
			otherwise enclosed.
			The design of any new plant will include features to reduce plant poise leakage, sound
			suppression to external equipment and
			inherently quiet fan assemblies to ensure no
			increase on the current background noise.

NU .	BATC	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
	15	Odour Management	NA	We are satisfied that BATc 15 is not applicable
		In order to prevent or, where that is not practicable, to reduce odour emissions,		to this installation.
		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:		The site has reviewed all aspects and odour is deemed low risk therefore does not require an odour management plan.
		- 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.		

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 updated
- Site plan
 - Table S1.1 overhaul
 - Activity Reference (AR) renumbering
 - o Updated listed activities
 - Addition of production capacity
 - o 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 Operator's stated production capacity is 75 tonnes per day.

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.

Implementing the requirements of the Medium Combustion Plant Directive

Existing small combustion plant (<1MW)

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

Existing Medium Combustion Plant (1MW-50MW)

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

• Number of combustion plant (CHP engines, back-up generators, boilers);

- Size of combustion plant rated thermal input (MWth)
- Date each combustion plant came into operation

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

1. Rated thermal input (MW) of the medium combustion plant.	Steam Boiler 1 – 1.2MWth Steam Boiler 2 – 1.2MWth Muffin 2 Thermal Oil Heater – 1.1MWth Muffin 3 Thermal Oil Heater – 1.1MWth
2. Type of the medium combustion plant	2x Boilers
(diesel engine, gas turbine, dual fuel engine,	2x Heaters
other engine or other medium combustion	
plant).	
3. Type and share of fuels used according to	100% Natural Gas
the fuel categories laid down in Annex II.	
4. Date of the start of the operation of the	Steam Boiler 1 – 1983
medium combustion plant or, where the	Steam Boiler 2 – 2014
exact date of the start of the operation is	Muffin 2 Thermal Oil Heater – 2015
unknown, proof of the fact that the operation	Muffin 3 Thermal Oil Heater – 2012
started before 20 December 2018.	

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

For existing MCP with a rated thermal input of less than or equal to 5 MW, the emission limit values set out in tables 1 and 3 of Part 1 of Annex II MCPD shall apply from 1 January 2030.

We have included the appropriate emission limit values for existing medium combustion plant as part of this permit review. See Table S3.1 in the permit. We have also included a new condition 3.1.4 within the permit which specifies the monitoring requirements for the combustion plant in accordance with the MCPD.

Emissions to Water and implementing the requirements of the Water Framework Directive

We asked the Operator to provide information on all emissions to water at the installation in the Regulation 61 Notice as follows;

- Identify any effluents which discharge directly to surface or groundwater;
- Provide an assessment of volume and quality, including results of any monitoring data available;
- and for any discharges to water / soakaway whether a recent assessment of the feasibility of connection to sewer has been carried out.

The operator has previously provided assessments for all emissions to water at the installation. The operator declares there has been no change to activities and subsequent effluents generated at the installation since this risk assessment was taken. Consequently, we agree that the original risk assessments remain valid at this time.

Soil & groundwater risk assessment (baseline report)

The IED requires that the operator of any IED installation using, producing or releasing "relevant hazardous substances" (RHS) shall, having regarded the possibility that they might cause pollution of soil and groundwater, submit a "baseline report" with its permit application. The baseline report is an important reference document in the assessment of contamination that might arise during the operational lifetime of the regulated facility and at cessation of activities. It must enable a quantified comparison to be made between the baseline and the state of the site at surrender.

At the definitive cessation of activities, the Operator has to satisfy us that the necessary measures have been taken so that the site ceases to pose a risk to soil or groundwater, taking into account both the baseline conditions and the site's current or approved future use. To do this, the Operator has to submit a surrender application to us, which we will not grant unless and until we are satisfied that these requirements have been met.

The Operator submitted a site condition report [Application Variation Reg 61 Response 03012023-V005 - 6 Speedibake Site Condition Response Review Nov 2022 SCR Review] during the original application received on 03/01/2023. 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 03/01/2023. Consequently, we are satisfied there has been no change to the assessment of risk for hazardous substances.

Climate Change Adaptation

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

The operator has stated that the installation is not likely to be or has previously not been affected by climate change other than land-spreading where the sludge is removed and recycled by Enviroclean.

There is no climate change adaptation plan in place however the Operator has identified risks and has an appropriate contingency management plan in place.

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

- \circ Whether the tank is bunded
- o 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. We are satisfied that the existing tanks and containment measures on site meet the standards set out in CIRIA C736.

Annex 3: Improvement Conditions

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

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

Improvement programme requirements			
Reference	Reason for inclusion	Justification of deadline	
IC1	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.	3 months from the issuing of the permit variation or as otherwise	
	To demonstrate compliance against BAT 9, the operator shall develop a replacement plan for the refrigerant system(s) at the installation. This shall be incorporated within the existing environmental management system by the specified date.	agreed by the Environment Agency.	
	 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. 		
IC2	The operator shall confirm, achievement of the 'Narrative' BAT conclusions as identified in the Food, Drink and Milk Bref published on 4 December 2019 where BAT is currently not demonstrated or achieved with respect to BATc 7. Refer to BAT Conclusions for a full description of the BAT requirement.	3 months from date of issue or as agreed in writing by the Environment Agency.	