# 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/AP3139AM

The Operator is: Pilgrim's Food Masters UK Limited The Installation is: Southall Ready Meals Factory

This Variation Notice number is: EPR/AP3139AM/V003

#### What this document is about

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

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

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

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

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

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

#### How this document is structured

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

#### 1 Our decision

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

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

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

#### 2 How we reached our decision

#### 2.1 Requesting information to demonstrate compliance with BAT Conclusion techniques

We issued a Notice under Regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 03/08/2022 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 02/12/2022.

We considered it was in the correct form and contained sufficient information for us to begin our determination of the permit review but not that it necessarily contained all the information we would need to complete that determination.

The Operator made no claim for commercial confidentiality. We have not received any information in relation to the Regulation 61 Notice response that appears to be confidential in relation to any party.

### 2.2 Review of our own information in respect to the capability of the Installation to meet revised standards included in the BAT Conclusions document

Based on our records and previous experience in the regulation of the installation we consider that the Operator will be able to comply with the techniques and standards described in the BAT Conclusions other than for those techniques and requirements described in BAT Conclusions BAT 6 and BAT 9. In relation to these BAT Conclusions, we do not fully agree with the Operator in respect of their current stated capability as recorded in their response to the Regulation 61 Notice. We have therefore included Improvement Conditions IC3 and IC4 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 in relation to BAT 3, BAT 6, BAT 7, BAT 8, BAT 9, BAT 11, BAT 12, emissions to air, Medium Combustion Plant (MCP), and site plan on 15/10/2024. 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-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 a EMS externally accredited to the ISO14001 standard.
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 has a EMS externally accredited to the ISO14001 standard. It includes:  • frequent monitoring and assessment of environmental performance measures in addition to characteristics of waste water streams.  • Recording of energy consumption and usage, quantity of raw materials used and characteristics of residues generated.
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.  Operator monitors the following parameters at the final effluent chamber:  PH, Ammoniacal Nitrogen as N, Sulphate as S04, Chloride, Total suspended solids,

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
			Settleable solids, Non Settleable solids, COD, Total Phosphorus, Sulphide, FOG, and Total Mercury in water.
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 surface water and this site discharges to sewer under consent of Thames Water 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.  BATc 5 sets out air emissions monitoring requirements applicable to specific FDM subsectors. 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.	FC	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 demonstrated compliance with BATc 6.  Operator uses a combination techniques on the BAT 6b such as;  Burner regulation and control

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
			Energy efficiency motor replacement programme (Replacing as they fail ) Lighting – Full LED in the warehouse & replacement programmed when old light fitting fails to replace with LED Preheating feed water Reducing compressed air system leaks Reducing heat losses by insulation Variable speed drives  Operator currently does not have an energy efficiency plan.  We consider that the Operator will be future compliant with BATc 6 Improvement condition IC3 has been included in the permit to achieve compliance (see Annex 3).
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	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.  Operator employs a combination of techniques such as  (a) recycling and/or reuse of rinse water during their tray-washing process  (b) Reduction in water pressure for hygiene cleaning process  (c) Hose guns and lances are used during cleaning to reduce water consumption during the cleaning process

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
	(k) Cleaning of equipment as soon as possible		(d) Different water streams. Fresh water for drinking and cooking. Softened water used for cleaning (h) Chemical dosing in place at the tray and trolley wash equipment (i) Low-pressure foam cleaning is used during the hygiene process (j) Optimised design of food manufacturing process, ensuring the most efficiency in utilities. (k) Cleaning of equipment after every change over and every night shift
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.  Operator employs combination of techniques such as;  (a) Proper selection of cleaning chemicals and/or disinfectants, and  (d) Optimised design and construction of equipment and process areas
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. We are not satisfied that the Operator has demonstrated compliance with BATc 9  Operator has a refrigerant that is high in global warming potential (GWP).  R134a = 1480.

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
			We consider that the Operator will be future compliant with BATc 9. Improvement condition IC4 has been included in the permit to achieve compliance (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.  Operator sends all food waste to an anaerobic digestion facility. Sludge is repurposed as animal feed and an active recycling programme is in place for plastics, cardboard, paper, metals, and dry mixed recyclables (DMR), where possible.
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.  Operator has a balance tank with a capacity of 123 cubic metres and is constructed from individual rolled stainless steel sheets fixed together using M10 bolts.  A mastic-type sealant is applied to each of the edges of the steel sheets.  The tank has been constructed onto a reinforced concrete base.  The tank consists of 4 levels made up of 7 individual overlapping steel sections, which are 2.40 meters in width and 1.40 meters in height.

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
			Therefore, the tank outer circumference calculates to be 16.80-meters and the tank external radius to be 2.67-meters. The tank is approximately 5.60-meters in height.
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) (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	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.  Operator has effluent treatment in place and a combination of physical and chemical techniques to reduce emissions to water. They employ techniques such as:  (a) Equalisation – Balance tanks with mixer pump to homogenous  (b) Neutralisation – DAF unit with Polymer & Coaglant to neutralise effluent  (c) Physical separate – Rake, and screen Aerobic and/or anaerobic treatment (secondary treatment)  Phosphorus recovery as struvite  (e) Notification and/or denitrification  Final solids removal  (j) Coagulation and flocculation  (k) Sedimentation  (l) Filtration (eg sand filtration, microfiltration, ultrafiltration)  (m) Flotation
12	Emissions to water – treatment  BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body	NA	We are satisfied that BAT - AELs is not applicable to this Installation.

BATC	Summary of BAT Conclusion Industries	on requirement for Food, Drink and M	lilk	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
	Parameter	BAT-AEL ( <sup>15</sup> ) ( <sup>16</sup> ) (daily average)			BAT - AELs is applicable only to installations discharging process effluent to surface water
	Chemical oxygen demand (COD) (17) (18)	25-100 mg/1 ( <sup>19</sup> )			and this site discharges only to sewer under consent of Thames Water therefore, BAT -
	Total suspended solids (TSS)	4-50 mg/1 ( <sup>20</sup> )			AELs is not applicable.
	Total nitrogen (TN)	2-20 mg/1 ( <sup>21</sup> ) ( <sup>22</sup> )			
	Total phosphorus (TP)	0,2-2 mg/1 ( <sup>23</sup> )			
	in the effluent from a biological waste wate (18) The BAT-AEL for COD may be replace determined on a case-by-case basis. The not rely on the use of very toxic compound (20) The lower end of the range is typically membrane bioreactor), while the upper end (21) The upper end of the range is 30 mg/average or as an average over the production.	oxygen demand (BOD). As an indication, the yearly average treatment plant will generally be ≤ 20 mg/l.  sed by a BAT-AEL for TOC. The correlation between COBAT-AEL for TOC is the preferred option because TOC is.  vachieved when using filtration (e.g. sand filtration, microd of the range is typically achieved when using sediment if as a daily average only if the abatement efficiency is ≥	D and TOC is monitoring does ofiltration, tation only.		
13	Noise management plan			CC	The operator has provided information to
	In order to prevent or, where t BAT is to set up, implement a	that is not practicable, to reduce noise on the regularly review a noise management thagement system (see BAT 1), that incl	nt plan, as		support compliance with BATc 13. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 13.
	- a protocol containing actions	s and timelines;			
	- a protocol for conducting noi	G.			Operator has noise management plan in place as a best practice approach and is monitored
		entified noise events, eg complaints;			through an external third-party contractor.
	measure/estimate noise and v	e designed to identify the source(s), to vibration exposure, to characterise the or ent prevention and/or reduction measur			Periodic Noise Assessment are conducted by 3rd party independent specialist contractors. No noise complaints have been received in 2023.
14	Noise management			СС	The operator has provided information to
		that is not practicable, to reduce noise $\epsilon$ nation of the techniques given below.	emissions,		support compliance with BATc 14. 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
	<ul> <li>(a) Appropriate location of equipment and buildings</li> <li>(b) Operational measures</li> <li>(c) Low-noise equipment</li> <li>(d) Noise control equipment</li> <li>(e) Noise abatement</li> </ul>		satisfied that the operator has demonstrated compliance with BATc 14.  Operator employs noise minimisation techniques through noise enclosures and plant placement. Only low-noise equipment is purchased in compliance with their environmental ISO 14001 accreditation and Pilgrim's OpEx Safety Management Standard for Noise.
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.  The site does not have an history of odour nuisance complaints, and has not been required to submit an odour management plan (OMP) in accordance with the conditions of it environmental permit.

## 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
  - o Activity Reference (AR) renumbering
  - 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.

#### **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 H1 assessment is not valid for the maximum capacity stated within the permit or if production is now higher. We have included an improvement condition within the permit (IC5) which requires the operator to revisit their H1 risk assessment of water emissions at the capacity limit figure that is now stated within table S1.1 of the permit.

#### **Emissions to Air**

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

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

#### 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:

#### **Boilers**

	Boiler 1	Boiler 2	Boiler 3
Rated thermal input	2.5MWth	2.5MWth	2.5MWth
(MW) of the medium			
combustion plant.			
2. Type of the medium	Boiler	Boiler	Boiler
combustion plant (diesel			
engine, gas turbine, dual			
fuel engine, other engine			
or other medium			
combustion plant).			
3. Type and share of fuels	Natural Gas	Natural Gas	Natural Gas
used according to the fuel			
categories laid down in			
Annex II.			
4. Date of the start of the	2017	2003	2020
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.			

We have reviewed the information provided and we consider that the declared combustion plant qualify as "existing" medium combustion plant with the exception of Boiler 3.

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.

## <u>Emissions to Water and implementing the requirements of the Water Framework Directive</u>

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 Bespoke - SCR Additional Supporting Information 9470230.pdf 25/08/2016] during the original application received on 27/03/2015. The site condition report included a report on the baseline conditions as required by Article 22. We reviewed that report and considered that it adequately described the condition of the soil and groundwater at that time.

#### **Hazardous Substances**

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

The operator has provided a short risk assessment on the hazardous substances stored and used at the installation. The risk assessment was a stage 1-3 assessment as detailed within EC Commission Guidance 2014/C 136/03.

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

The outcomes of the three stage assessment identified that pollution of soil / 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 (IC6).

#### **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 [dry weather/ 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 (IC7) to request a climate change adaptation plan is submitted by the operator for approval from the Environment Agency.

#### **Containment**

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

The Operator provided details of all tanks;

- Tank reference/name
- Contents
- Capacity (litres)
- Location
- Construction material(s) of each tank
- The bunding specification including
  - Whether the tank is bunded
  - If the bund is shared with other tanks
  - The capacity of the bund
  - The bund capacity as % of tank capacity
  - o 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. The ETP Balance and sludge tanks are not being bunded and requires secondary/tertiary

containment measures. 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 (IC8). See Improvement conditions in Annex 3 of this decision document.

#### **Annex 3: Improvement Conditions**

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

Previous improvement conditions marked as complete in the previous permit.

	Superseded Improvement Conditions – Removed from permit as marked as "complete" IC1 superseded by IC7			
Reference	Improvement Condition			
IC1	In addition to the findings of the Bunding Integrity Report submitted with the application, the Operator must review all containment measures on site to ensure they comply with the requirements set out in CIRIA Report C736. The operator shall produce a final report to reflect this review and submit it to the Environment Agency for approval in writing. Where any shortfalls in the containment measures are identified, the operator shall include a timescale for improvements within the written report.			

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

Improveme	Improvement programme requirements					
Reference	Reason for inclusion	Justification of deadline				
IC2	The operator shall undertake representative monitoring of the point source air emissions A1 – A6 and A11 – A15 as listed in table S3.1. and b. Following the completion of (a) above, the operator shall use the monitoring results to undertake and submit to the Environment Agency for review: i) A full assessment of the emissions to air from the installation in accordance with our guidance; and ii) Proposals for appropriate measures to mitigate the impact of the emissions where the assessment determines they are not insignificant, including emission limits, monitoring frequencies and methods, and dates for implementation of individual measures. Note: Standard reference conditions in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a	25/09/2025				

	pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels.	
IC3	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:  Methodology applied for achieving BAT  Demonstrating that BAT has been achieved.  The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BATc 6  Refer to BAT Conclusions for a full description of the	3 months from date of issue or as agreed in writing by the Environment Agency
	BAT requirement.	
IC4	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 submitted to the Environment Agency for approval and shall be incorporated within the existing environmental management system.  The plan should include, but not be limited to, the following:	3 months from date of issue or as agreed in writing by the Environment Agency
	<ul> <li>Where practicable, retro filling systems containing high GWP refrigerants e.g. R-404A with lower GWP alternatives as soon as possible.</li> <li>An action log with timescales, for replacement of end-of-life equipment using refrigerants with the lowest practicable GWP.</li> </ul>	
IC5	The operator shall review and update the H1 risk assessment for emissions at the capacity levels stated within table S1.1 of this permit. The H1 shall be submitted to the Environment Agency for review.	12 months
IC6	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.	10/03/2026 12 months from date of issue

	The plan shall be implemented in accordance with the Environment Agency's written approval, including timescales to undertake any infrastructure improvements.	
IC7	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 plan will be submitted to the Environment agency for approval and the Operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency.	10/03/2026 12 months from date of issue or as agreed in writing by the Environment Agency
IC8	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 for approval, which outlines the results of the survey and the review of standard and provide details of  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 for additional secondary and tertiary containment measures for the Balance tank and sludge tank, associated with the Effluent treatment plant, in line with the timescales agreed by the Environment Agency.	