# 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/VP3732VD
The Operator is: Hovis Limited
The Installation is: Forest Gate Bakery
This Variation Notice number is: EPR/VP3732VD/V002

## 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 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 31/10/2024.

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 BATc 6 Energy Efficiency Plan, BATc 9 refrigerants, BATc 11 Buffer capacity and BATc 12 effluent treatment. 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 7, 8, 9 and 10 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 the 22/11/2024 requesting a copy of the original site condition report. 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.	СС	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 which incorporates all the features as listed within BATc1. The EMS is not externally accredited to the ISO 14001 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 site holds inventories for water, energy, emissions, raw material consumption and waste.
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 not satisfied that the Operator has demonstrated compliance with BATc 3.  The operator does not monitor emission into the public sewer. They confirm effluent volumes discharged to sewer are calculated on the basis of mains water use minus measured water addition to the product.  They also state periodic effluent monitoring is undertaken by Thames Water.

FDM Permit Review 2021 24/12/2024 Page 6 of 20

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
			BAT requires operators to understand the key emissions leaving their site – to at least monitor the volume and pH of their effluent. Whilst real time monitoring isn't undertaken we consider the present set up acceptable as it is accepted by the sewerage operator.
			In addition, effluent treatment is not undertaken onsite. We have included IC10 below requiring the operator investigate potential on-site treatment options. If deemed appropriate, suitable effluent monitoring will be required.
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.	N/A	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.  We are therefore satisfied that BATc 4 is not applicable for this site.
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.	N/A	The site produces bread. There are no relevant channelled emissions to air from the installation.  We are therefore satisfied BATc 5 is not applicable to the site.
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.
			The site does not have an Energy Efficiency plan as described in 6a. They state they are a member of the ESOS audit scheme however 6a requires a dedicated energy efficiency plan

FDM Permit Review 2021 24/12/2024 Page 7 of 20

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
			to be in place. We have added IC7 in order to achieve compliance.  The operator has confirmed the following energy saving techniques are used on site:  Burner regulation and control Energy efficient motors LED lighting and movement sensors used
			<ul> <li>Ovens and provers operated under thermostatic controls</li> <li>Reduce compressed air leaks – surveys using ultrasonic test equipment</li> <li>Insulation used throughout site on all hot processes.</li> <li>We consider that the Operator will be future compliant with BATc 6. Improvement condition 7 has been included in the permit to achieve compliance (see Annex 3).</li> </ul>
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	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 has confirmed that both the automatic basket and belt washers incorporate water recycling. They use a ball float system to ensure water within the system is only topped up when required. Water in both tanks is emptied weekly for food hygiene reasons.
	(h) Optimisation of chemical dosing and water use in cleaning-in-place (CIP)		In addition the site employs the following water saving techniques:

FDM Permit Review 2021 24/12/2024 Page 8 of 20

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
	(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		<ul> <li>Dry cleaning – the majority of on-site cleaning uses vacuum units and manual sweeping. Conveyer belts and machinery are cleaned with brushes and wiped with sanitiser. Compressed air is also used as a pre clean to remove solids.</li> <li>High pressure, low flow cleaning used as required – CIP and manual tub wash</li> <li>Optimised design and layout</li> <li>Cleaning equipment as soon as possible</li> </ul>
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 works with a specialist chemical company to select chemicals on performance and reduced environmental impact.
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.  High GWP refrigerants R134a, R410a and R407c are used on site. The operator stated the use of these systems will be gradually reduced by replacing these with ultra-low GWP alternatives at the end of their economic life.

FDM Permit Review 2021 24/12/2024 Page 9 of 20

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 have added IC8 to ensure a formal plan with appropriate timescales is produced.
			We consider that the Operator will be future compliant with BATc 9. Improvement condition 8 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	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		The operator has confirmed food waste including dough and bread is segregated and sent off site for use as animal feed.
			They have a documented waste management procedures in place to control the segregation, storage, handing and transfer of wastes to appropriately licenced contractors, with options for waste recycling and disposal regularly reviewed.
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.	FC	The operator has provided information to support compliance with BATc 11. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 11.
			The site does not have effluent treatment or any buffer capacity onsite. Effluent and surface waters discharge directly to foul sewer for treatment at Thames Water's Beckton Waste Water Treatment plant.

FDM Permit Review 2021 24/12/2024 Page 10 of 20

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 states the site lacks any available space for a buffer tank and they consider there would be risks associated with effluent storage and odour. They also consider their discharges less significant (than other sectors) in terms of strength and volume.
			We have no record of previous investigations into this. This is also relevant for techniques such as slam shut valves, drain covers etc for which no information has been provided. We have added IC9 for the operator to consider this further and document their findings for approval.
			We consider that the Operator will be future compliant with BATc 11. Improvement condition 9 has been included in the permit to achieve compliance (see Annex 3).
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	FC	The operator has provided information to support compliance with BATc 12. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 12.  As above, there is no effluent treatment on site. BAT requires operators to take more responsibility for their effluent. However we accept that this site is in a sensitive location.
	<ul> <li>(f) Partial nitration - anaerobic ammonium oxidation</li> <li>Phosphorus recovery and/or removal</li> <li>(g) Phosphorus recovery as struvite</li> <li>(h) Precipitation</li> <li>(i) Enhanced biological phosphorus removal</li> </ul>		We consider that the Operator will be future compliant with 12. Improvement condition 10 has been included in the permit to achieve compliance (see Annex 3).

FDM Permit Review 2021 24/12/2024 Page 11 of 20

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
	Final solids removal  (j) Coagulation and flocculation  (k) Sedimentation  (l) Filtration (eg sand filtration, microfiltration, ultrafiltration)  (m) Flotation		
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.	CC	The operator has provided information to support compliance with BATc 13. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 13.  There have been two substantiated noise complaints from the site in recent years. The operator provided a Noise Management Plan (dated 30/10/2024) as part of the Reg 61 review. We have assessed this document and consider it to be satisfactory however the operator will be required to revise in the near future. A future variation is required to extend the permit boundary to accommodate new chiller units.
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 has confirmed the following noise mitigation measures are used on site  Planned preventative maintenance Doors kept closed except when access is required Acoustic screens and foam attenuators fitted around external chillers, blowers and fans Internal baffles added to fan ducting

FDM Permit Review 2021 24/12/2024 Page 12 of 20

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>5mph speed limit in place across the site</li> <li>Limitations on noisy activities and staff noise (shouting, whistling) during unsociable hours</li> </ul>
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.	N/A	A odour management plan is only required where odour nuisance at sensitive receptors is expected or has been substantiated. There have been no substantiated odour nuisance from the site therefore an OMP is not a requirement for this site.  We are satisfied that BATc 15 is not applicable to this site.

FDM Permit Review 2021 24/12/2024 Page 13 of 20

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

#### Updating permit during permit review consolidation

- Activity name
- Introductory note (Site plan
- Table S1.1 overhaul
  - o Activity Reference (AR) renumbering
  - Updated listed activities
  - o 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.

#### **Emissions to Air**

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

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

#### Implementing the requirements of the Medium Combustion Plant Directive

For the existing combustion plant with a rated thermal input less than 1 MW 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.

There are a 5 oven burners onsite which each have a power of 1.2MWth. These are used as a direct heat source and are excluded from the requirements of the MCPD.

These plant were permitted, along with a number of other ovens and provers <1MWth with the original permit application. The existing monitoring requirements and emission limits have been retained within the permit.

#### <u>Emissions to Water and implementing the requirements of the Water</u> 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 [by White, Young, Green Environmental] during the original application received on April 2002]. 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 and/or ground water to be unlikely.

#### **Climate Change Adaptation**

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

The Operator has stated that the installation is not likely to be or has previously not been affected by climate change.

#### **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. 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).

Previous improvement conditions marked as complete in the previous permit.

-	Superseded Improvement Conditions – Removed from permit as marked as "complete"		
Reference	Improvement Condition		
9.1	A report shall be sent to the Agency on establishing an		
	Environmental Management System having regard to section 2.1 of the relevant IPPC Sectoral or other Technical Guidance. The report		
	shall include any proposals to implement such a programme		
9.2	The operator shall undertake further monitoring or releases to air to adequately characterise all emission points. A report detailing the results shall be sent to the Agency		
9.3	The operator shall undertake further monitoring of releases to air to adequately characterise all emission points. A report detailing the results shall be sent to the Agency		
9.4	The operator shall review all emissions to air from the process investigate the potential for energy recovery. A report detailing the results shall be sent to the Agency		
9.5	The operator shall carry out a noise survey to demonstrate compliance with the requirement that the increase in noise levels from the development shall not be greater than a BS4142 rating of zero		
9.6	The operator shall investigate methods for abatement of VOC emissions and determine what represents BAT for this. A report detailing the results shall be sent to the Agency		

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			
IC7	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:	as agreed in writing by the Environment			
	Methodology applied for achieving BAT				
	Demonstrating that BAT has been achieved.				

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The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BATc 6a Energy Efficiency Plan.	
Refer to BAT Conclusions for a full description of the BAT requirement.	
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.	31/03/2025 or as agreed in writing by the Environment Agency
To demonstrate compliance against BAT 9, the operator shall produce a plan for the onsite refrigerant system(s) at the installation. The plan is to be assessed by the Environment Agency and shall be incorporated within the existing environmental management system.	
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.	
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 11	31/03/2025 or as agreed in writing by the Environment Agency
Refer to BAT Conclusions for a full description of the BAT requirement.	
The Operator shall undertake a survey of the waste water buffer storage at the site and review measures against relevant standard including:	
The operator shall submit a written report that meets the Narrative BAT requirements for the BAT Conclusions for Food, Drink and Milk Industries with respect to BAT 11, to the Environment Agency for approval, outlining the results of the survey and the review of feasibility of options and provide details of:	
current containment measures	
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.	
	Food, Drink and Milk Industries with respect to BATc 6a Energy Efficiency Plan.  Refer to BAT Conclusions for a full description of the BAT requirement.  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 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.  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 11  Refer to BAT Conclusions for a full description of the BAT requirement.  The Operator shall undertake a survey of the waste water buffer storage at the site and review measures against relevant standard including:  The operator shall submit a written report that meets the Narrative BAT requirements for the BAT Conclusions for Food, Drink and Milk Industries with respect to BAT 11, to the Environment Agency for approval, outlining the results of the survey and the review of feasibility of options and provide details of:  • current containment measures  • improvements proposed  • time scale for implementation of improvements.  The operator shall implement the proposed improvements in line with the timescales agreed by