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/LP3232EGThe Operator is:Dunhills (Pontefract) P L CThe Installation is:Haribo UK - Pontefract ConfectioneryThis Variation Notice number is:EPR/LP3232EG/V004

# What this document is about

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

We have reviewed the permit for this installation against the BAT Conclusions for the Food, Drink and Milk Industries published on 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 <u>Requesting information to demonstrate compliance with BAT Conclusion techniques</u>

We issued a Notice under Regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 30/09/2022 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 26/01/2023.

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

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

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

Based on our records and previous experience in the regulation of the installation we consider that the Operator will be able to comply with the techniques and standards described in the BAT Conclusions other than for those techniques and requirements described in BAT Conclusion 9. The operator currently has not demonstrated compliance with the requirements of BATc 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 IC5 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 relating to BATc6 and Relevant Hazardous Substances was sent on 12/01/2024. 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
GENE	RAL BAT CONCLUSIONS (BAT 1-15)		
1	Environmental Management System - Improve overall environmental performance. Implement an EMS that incorporates all the features as described within BATc 1.	CC	The operator has provided information to support compliance with BATc 1. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 1. The operator has an Environment Management System (EMS) and has confirmed the EMS will integrate all relevant features of BATc1.
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 an Environment Management System (EMS) and has confirmed the EMS will integrate all relevant features of BATc2.
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).	NA	We are satisfied that BATc 3 is not applicable to this Installation. There are no point source emissions to water from the production areas. All effluent is collected into a storage vessel prior to being removed from the site by road tanker.
4	<b>Monitoring emissions to water to the required frequencies and standards.</b> 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. There are no point source emissions to water from the production areas. All effluent is

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
			collected into a storage vessel prior to being removed from the site by road tanker.
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.
			air to require monitoring.
6	<b>Energy Efficiency</b> 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.
			The operator has an Energy Efficiency Plan which is accredited to ISO 50001 which incorporates appropriate techniques as described in BATc 6b.
7	Water and wastewater minimisation	CC	The operator has provided information to
	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.		support compliance with BATc 7. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 7
	(a) water recycling and/or reuse		
	(b) Optimisation of water flow		The operator uses the following techniques to
	(c) Optimisation of water nozzles and hoses		reduce water consumption and waste water:
	(d) Segregation of water streams		(a) condensate from the use of steam is
	Techniques related to cleaning operations:		returned to the steam boiler and used as
	(e) Dry cleaning		pre-heated feed water. Water used for
	(t) Pigging system for pipes		recirculated or is used as feed water to the
	(g) High-pressure cleaning		heat exchangers and ultimately used in
	(h) Optimisation of chemical dosing and water use in cleaning-in-place (CIP)		the product, or as general hot water.

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>(i) Low-pressure foam and/or gel cleaning</li> <li>(j) Optimised design and construction of equipment and process areas</li> <li>(k) Cleaning of equipment as soon as possible</li> </ul>		<ul> <li>Sequential reuse of water for the cleaning of Vessels, supply lines, vacuum chambers, jelly dispensers and machine beds</li> <li>(c) there are trigger operated spray guns which are used in cleaning processes</li> <li>(f) pigging system is in place on foam lines</li> <li>(k) cleaning of equipment as soon as possible</li> </ul>
8	<ul> <li>Prevent or reduce the use of harmful substances</li> <li>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.</li> <li>(a) Proper selection of cleaning chemicals and/or disinfectants</li> <li>(b) Reuse of cleaning chemicals in cleaning-in-place (CIP)</li> <li>(c) Dry cleaning</li> <li>(d) Optimised design and construction of equipment and process areas</li> </ul>	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. Production machines are cleaned with either just water or a caustic solution and mild detergent. Chemical use is undertaken in accordance with established standard operating procedures which detail dosing requirements. All cleaning processes are documented and all staff are provided with training prior to being permitted to carry out the cleaning processes without supervision.
9	<b>Refrigerants</b> 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. However, we have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 9. The site uses several refrigerants in the production process with a high global warming potential. The operator has confirmed the

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
			current refrigerants used on site are R22, R32, R410A,R407C, R134A, R404A,R600A, R448. They have stated that refrigerants with ozone depleting potential and high global warming potential will be gradually phased out of use. However, no further information is provided IC5 has been included to ensure an appropriate plan is in place to meet compliance with BATc9.
10	Resource efficiency In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below: (a) Anaerobic digestion (b) Use of residues (c) Separation of residues (d) Recovery and reuse of residues from the pasteuriser (e) Phosphorus recovery as struvite (f) Use of waste water for land spreading	CC	The operator has provided information to support compliance with BATc 10. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 10. The operator utilises the following techniques: Where waste water is generated, all effluent from the production process is collected into a storage vessel prior to being removed from the site by road tanker. The preferred method of disposal is for the effluent to be taken to an anaerobic digestion plant. If this is not possible, the waste water is used for land spreading. Throughout the production process starch is used to create a form into which the jelly is poured to set. After setting the jellies are separated from the starch. The starch is then de-hydrated using steam, is filtered and then used to create new forms for the next batch of jellies.

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
			remaining jelly. The resultant starch is then returned to the production machines. The remaining waste starch and jelly is then disposed of as an animal feed. The production machines are designed to maximize the recovery of the starch by having fillets around all openings into the filling chamber. This avoids the build-up of starch at openings which may then be lost on opening the machine for cleaning and servicing. Where waste product cannot be prevented or reused internally, it is utilised to make animal feed.
11	Waste water buffer storage In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.	CC	The operator has provided information to support compliance with BATc 11. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 11. The effluent storage tank is contained within a fixed bund. There is a 1m <sup>3</sup> sump adjacent to the road tanker collection point entrance to collect any spills onto the concrete during collection.
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 (e.g. screens, sieves, primary settlement tanks etc) Aerobic and/or anaerobic treatment (secondary treatment) (d) Aerobic and/or anaerobic treatment (e.g. activated sludge, aerobic lagoon etc)	NA	We are satisfied that BATc 12 is not applicable to this Installation. There are no point source emissions to water from the production areas. All effluent is collected into a storage vessel prior to being removed from the site by road tanker.

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
	(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, 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, e.g. 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.		to this Installation. BAT 13 is only applicable to cases where noise nuisance at sensitive receptors is expected and/or has been substantiated. There have been no incidents involving noise pollution at the premises, therefore a noise management plan has not deemed to be necessary.
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. (a) Appropriate location of equipment and buildings (b) Operational measures		support compliance with BATc 14. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 14.
	(c) Low-noise equipment		
	(d) Noise control equipment		The operator has confirmed that all production
	(e) Noise abatement		providing significant noise attenuation.
			Optical sorting machines are located internally within acoustic enclosures. A/C and cooling

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
			plant is located on the internal courtyard of the building to mitigate the impact they may have.
			All doors and openings into buildings are self- closing doors. Roller shutter doors are alarmed if left open for excessive periods of time.
			All plant is maintained periodically to minimise excessive noise from poor performance. The site has three loading bays, delivery slots are allocated and timings provided to drivers so to restrict the number of vehicles on site or waiting to access the site at any one time. Apart from the loading bays all other vehicular access to the site is via a public highway. Loading bays are located to the north of the site adjacent to the site car park.
			Tanker points for glucose and sugar delivery is enclosed by buildings on three sides. Raw material deliveries are planned and are always in bulk to minimise the number of vehicles visiting the site.
			External monitoring of noise levels is undertaken on a weekly basis at various locations around the site's perimeter .
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, 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:		to this Installation. BAT 15 is only applicable to cases where an
	- a protocol containing actions and timelines;		expected and/or has been substantiated.
	- a protocol for conducting odour monitoring.		
	- a protocol for response to identified odour incidents e.g. complaints;		The operator has an odour management plan which is integrated into their EMS.

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
	- 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
  - 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 existing H1 assessment 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

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 below:

1. Rated thermal input (MW) of the medium combustion plant.	7.0 MWth	7.0 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler	Boiler
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Natural gas	Natural gas
4. Date of the start of the operation of the medium combustion plant or, where the exact date of the start of the operation is unknown, proof of the fact that the operation started before 20 December 2018.	October 2000	November 1970

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

For existing medium combustion plant with a rated thermal input greater than 5 MW, the emission limit values set out in tables 2 and 3 of Part 1 of Annex II MCPD shall apply from 1 January 2025.

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 confirmed there are no point source emissions to water from the production areas. All effluent from these areas is collected into a storage vessel prior to being removed from the site by road tanker. All other point source emissions to water are from domestic uses in office areas which discharge to the combined public sewer.

#### 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 (SCR) during the original application received on 17/03/2015 and a second SCR was submitted in V003 received on 17/09/18 [Ramboll - RUK16-24178 Site Condition Report Summary, 5081 Haribo SCR amended 050914]. 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 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 during normal operating conditions. However, the operator did identify that pollution of soil / groundwater to be possible and monitoring is required for these hazardous substances.

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 unavailability of land for land spreading of waste and prolonged 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 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 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
    - 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 or appropriate standards.

We reviewed the information provided by the operator. We are satisfied that the existing tanks and containment measures on site meet appropriate standards.

## **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		
IC1	The Operator shall review the measures in place to prevent spillage and loss of containment during the transfer of trade effluent from the holding tank to the road tanker. The operator shall submit a summary report setting out the improvements to be made, with timescales, to minimise the risks and demonstrate Best Available Technique for approval in writing by the Environment Agency.		
IC2	The Operator shall produce an Odour Management Plan in accordance with Environment Agency guidance, H4 Odour Management, having regard and addressing the shortfalls in question 6 of Schedule 5 dated 04/10/16. The Operator should submit the plan for review and approval in writing by the Environment Agency.		
IC3	The Operator shall review their refrigerant used on site and cease to use any which are no longer deemed as unacceptable. The Operator shall substitute unacceptable refrigerants with suitable alternatives as soon as reasonably practicable. The operator shall submit a summary report setting out the operators intensions, with appropriate timescales, for approval in writing by the Environment Agency.		
IC4	The Operator shall review the containment measures in place to prevent spillage and loss of containment during the transfer of trade effluent from production to the effluent tank. The review shall take into account the requirements of CIRIA guidance 'Containment systems for the prevention of pollution Secondary, tertiary and other measures or industrial and commercial premises' (London, 2014).		
	The Operator shall submit a written report to the Environment Agency for approval, which summarises the findings of the review, details identified improvements and provides a timetable for their implementation. The Operator shall implement the improvements in accordance with the approved timetable.		

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	
IC5	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.	14/06/2024	
	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.		
	The plan should include, but not be limited to, the following:		
	<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>		
	<ul> <li>Replacement of systems containing HCFCs as soon as possible.</li> </ul>		
IC6	The operator shall produce a monitoring plan detailing how the management of relevant hazardous substances which pose a risk during abnormal/ emergency situations, based on the RHS baseline assessment, will be maintained and monitored to mitigate the risks of pollution. The plan shall be submitted for approval.	14/03/2025	
	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.	14/03/2025	
	<ul> <li>The plan shall include, but not be limited to:</li> <li>Details of how the installation has or could be affected by severe weather;</li> <li>The scale of the impact of severe weather on the operations within the installation;</li> <li>An action plan and timetable for any improvements to be made to minimise the impact of severe weather at the installation.</li> </ul>		

	The Operator shall implement any necessary	
	improvements to a timetable agreed in writing with	
	the Environment Agency.	