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/KP3407LPThe Operator is:Aqua Operations LimitedThe Installation is:Amsterdam Road Effluent Treatment PlantThis Variation Notice number is:EPR/KP3407LP/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 4th December 2019 in the Official Journal of the European Union. In this decision document, we set out the reasoning for the consolidated variation notice that we have issued.

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

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

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

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

How this document is structured

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

1 Our decision

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

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

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

2 How we reached our decision

2.1 <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 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 <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 have no reason to consider that the Operator will not be able to comply with the techniques and standards described in the BAT Conclusions.

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

Although we were able to consider the Regulation 61 Notice response generally satisfactory at receipt, we did in fact need more information in order to complete our permit review assessment, and issued a further information request on 28/03/2024 and 26/04/2024. A copy of each 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
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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 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 an EMS externally accredited to the ISO14001 standard.
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. This installation operates an effluent treatment plant that processes wastewater generated by Amsterdam Road Bakery that is operated by Bright Blue Foods (BBF) under its own environmental permit, EPR/QP3200LC. The Operator monitors waste water and records values for flow, pH, chemical oxygen demand (COD), total nitrogen (TN), total phosphorus (TP), and temperature daily before final discharge to sewer to the sewerage authority, Yorkshire 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
4	Monitoring emissions to water to the required frequencies and standards. BAT is to monitor emissions to water with at least the frequency given [refer to BAT 4 table in BATc] and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.	NA	We are satisfied that BATc 4 is not applicable to this installation. BATc 4 is applicable only to installations discharging process effluent to water and this site discharges only to sewer under consent therefore, BATc 4 is not applicable.
5	Monitoring channelled emissions to air to the required frequencies and standards. BAT is to monitor channelled emissions to air with at least the frequency given and in accordance with EN standards.	NA	We are satisfied that BATc 5 is not applicable to this installation. This permit is for an effluent treatment plant (ETP) where the process water generated by the Amsterdam Road Bakery site therefore, BATc 5 is not applicable to this installation as it has no relevant channelled emissions to air.
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.	NA	We are satisfied that BATc 6 is not applicable to this Installation. This site only operates an effluent treatment plant which is responsible for treating process effluent generated by Amsterdam Road Bakery. As such an energy efficiency plan and the techniques in BATc 6 are not applicable to effluent treatment plants.
7	Water and wastewater minimisationIn 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:	NA	We are satisfied that BATc 7 is not applicable to this Installation. This site only operates an effluent treatment plant which is responsible for treating process effluent generated by Amsterdam Road Bakery. As such, none of the techniques in BATc 7 are applicable to effluent treatment plants.

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) Dry cleaning (f) Pigging system for pipes (g) High-pressure cleaning (h) Optimisation of chemical dosing and water use in cleaning-in-place (CIP) (i) Low-pressure foam and/or gel cleaning (j) Optimised design and construction of equipment and process areas (k) Cleaning of equipment as soon as possible 		
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 	NA	We are satisfied that BATc 8 is not applicable to this Installation. This site only operates an effluent treatment plant which is responsible for treating process effluent generated by Amsterdam Road Bakery. As such, none of the techniques in BATc 8 are applicable to effluent treatment plants. The operator reviews the chemicals used by the operator BBF at the Amsterdam Road Bakery site to determine any impact on the ETP process.
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.	NA	We are satisfied that BATc 9 is not applicable to this installation. BATc 9 is concerned with refrigerants used in the production process. This installation operates an ETP where refrigeration processes are not required or used therefore, this BATc 9 is not applicable.
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	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.

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
	 (d) Recovery and reuse of residues from the pasteuriser (e) Phosphorus recovery as struvite (f) Use of waste water for land spreading 		The operator is using the following techniques: a) Anaerobic digestion (AD) – Process effluent sludge is removed and transported to an off- site AD plant that produces gas for the electric grid and organic fertiliser for land spreading. c) Separation of residues – The ETP employs dissolved air flotation (DAF) and membrane system with recirculation and sludge removal (MBR). f) Use of waste water for land spreading – Removed process sludge is sent to an off-site AD plant that produces gas for the electric grid and organic fertiliser for land spreading.
11	Waste water buffer storage In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.	CC	The operator has provided information to support compliance with BATc 11. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 11. The operator has emergency procedures in place for spillages such as spill kits and uses preventative measures such as continuous monitoring during the process that links to the supervisory control and data acquisition system in use by the operator, with a callout system and remote monitoring. The installation has a balance (220m ³) & biological tank (1028m ³) in place which offers sufficient buffer storage, in addition the ETP has full recirculation capability. The is no individual bunding to the tanks as the ETP as a whole is operated together in one large drainage area that acts as bunding in the event of a leak.

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
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. The Operator operates an ETP which undertakes the following treatment of process effluence: (c) Physical separate – Through use of screens and sieves and the use of a DAF plant. (d) Anaerobic treatment – Process effluent. sludge is removed and transported to an offsite AD plant that produces gas for the electric grid and organic fertiliser for land spreading. (l) Filtration – Through microfiltration. Prior to discharge of the treated effluent to sewer to the sewerage authority, Yorkshire Water via water emission point S1 and S2 in schedule 7 of the permit.
12	Emissions to water – treatment BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body	NA	We are satisfied that BATc 12 AELs is not applicable to this installation. BATc 12 AELs is concerned with direct discharges to water from the production process. This installation discharge is indirect. The final product effluent is discharged to sewer under trade effluent discharge consent with Yorkshire Water. therefore, BATc 12 AELs is not applicable.

BATC No.	Summary of BAT Conclusion require Industries	ement for Food, Drink and Milk	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 (1) (2) (daily average)		
	Chemical oxygen demand (COD) (3) (4)	25-100 mg/l (⁵)		
	Total suspended solids (TSS)	4-50 mg/l (⁶)		
	Total nitrogen (TN)	2-20 mg/l (⁷) (⁸)		
	Total phosphorus (TP)	0,2-2 mg/l (⁹)		
	 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, 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. 			 We are satisfied that BATC 13 is not applicable to this installation. A Noise Management Plan (NMP) is only required where noise nuisance at sensitive receptors is expected or has been substantiated. There have been no substantiated noise nuisances from the site therefore an NMP is not a requirement for this site. While BATc 13 is not applicable to this site, the operator has implemented a method of tracking actions and timelines, conducting noise monitoring. The operator works under the installation's product producer operator, BBF Limited complaints procedure where they provide information to BBF Limited to respond to a complainant where necessary and take corrective action accordingly at the ETP if it is found to be the cause.
14	Noise management In order to prevent or, where that is not BAT is to use one or a combination of (a) Appropriate location of equipment a (b) Operational measures (c) Low-noise equipment	practicable, to reduce noise emissions, the techniques given below. and buildings	CC	The operator has provided information to support compliance with BATc 1 <u>4</u> . We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 14. The operator is using the following techniques:

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
	(d) Noise control equipment (e) Noise abatement		 b) Operational measures - The plant and equipment are subject to planned preventative maintenance (PPM) and condition-based inspection that detect abnormalities in operation that could lead to excessive noise. c) Low-noise equipment - Consideration of noise is part of equipment specification, which would identify opportunities to include the requirement for low noise equipment such as fans, pumps and compressors, where this is applicable for both temporary or new equipment. Equipment performance is part of the procurement specification which will consider the use and applicability of low noise equipment options or equipment will be otherwise enclosed.
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. BATc 15 is only applicable to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated, or if forms part of an existing permit requirement. The installation has no recent history of odour complaints therefore an odour management plan is not required and BATc 15 is not applicable.

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

Updating permit during permit review consolidation

- Site 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

Treatment 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.

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 risk assessment which includes a description of the condition of the site and a consideration of the possibility of soil and groundwater

contamination at the installation. No site baseline condition was included in the submission.

We have assessed the risk assessment in accordance with our guidance on site condition reports and baseline reporting under the Industrial Emissions Directive – Operational instruction 233_06 [Assessing application site condition reports and surrender site condition reports submitted under the Environmental Permitting regime]. We consider the risk assessment is not satisfactory as it does not adequately describe the current condition of the site.

Under agreement with BBF Limited and the Environment Agency, the improvement condition for an updated site condition report (SCR) which includes baseline soil and groundwater data will be issued to BBF. See improvement condition IC12 in Annex 3 of the EPR/QP3200LC/V002 decision document.

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 substances.

Under agreement with BBF Limited and the Environment Agency, the operator, BBF, is required to submit a relevant hazardous substances monitoring plan for review to the Environment Agency via improvement condition IC13 in Annex 3 of the EPR/QP3200LC/V002 decision document.

Climate Change Adaptation

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

The operator has identified the installation as likely to be or has been affected by prolonged dry weather and drought, which we consider to be a severe weather event.

We do not consider the operator to have submitted a suitable climate change adaptation plan for the installation. We have included an improvement condition into the permit (IC11) 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
 - Construction material of the bund
 - Whether the bund has a drain point
 - Whether any pipes penetrate the bund wall
- Details of overfill prevention
- Drainage arrangements outside of bunded areas
- Tank filling/emptying mitigation measures (drips/splashes)
- Leak detection measures
- Details of when last bund integrity test was carried out
- Maintenance measures in place for tank and bund (inspections)
- How the bund is emptied
- Details of tertiary containment

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

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

We have set improvement conditions in the permit to address the deficiencies in the existing tanks and containment measures on site (IC12). 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 from EPR/XP3337PA marked as complete in the previous permit.

Superseded Improvement Conditions – Removed from permit as marked as			
Reference	Improvement Condition		
IC1	The Operator shall undertake air emission monitoring (method to be agreed in writing with the Agency) of oxides of nitrogen (NOx) and carbon monoxide from emission points 6,18, 21, 25, 37, 39, 44, 50, 61, 64 and 68, as defined in table 2.2.1. The monitoring schedule shall be designed to provide data representative of typical and worst case operating conditions. However as a minimum the monitoring shall be for the duration of a full shift and shall be repeated for two such shifts, and shall include measurement of concentration and efflux velocity. The Operator shall submit a written report to the Agency detailing the monitoring undertaken and results obtained.		
IC2	The Operator shall undertake an environmental impact assessment of releases to air of oxides of nitrogen (NOx) and carbon monoxide from the installation. An electronic copy of the H1 assessment (or other equivalent assessment tool used with the written agreement of the Agency) shall be submitted to the Agency.		
IC3	The operator shall undertake a review of their noise abatement and management systems with regard to the Agency Guidance Note IPPC S6.10 Section 2.9, August 2003. Attention shall be given to the noise levels at the sensitive receptors 1 and 2, identified in site layout plan B1312 and noise monitoring performed shall comply with the relevant British Standard as agreed with the Agency. A copy of the results and conclusions of this review (including a timetable for implementation of any recommendations) shall be submitted to the Agency for approval.		
IC4	The operator shall carry out a water efficiency audit of the installation. The audit shall have regard to the Agency Guidance Note IPPC S6.10 Section 2.4.3, August 2003, and shall provide a breakdown of significant water use by department or activity and shall establish the current installation performance (for example litre water/kg of product) and water efficiency objective(s) for this installation. A summary of the audit shall be sent to the Agency.		
IC5	 The Operator shall review the protection measures of the waste storage area in order to minimise any risk to the environment. This shall include, but not be restricted solely to, consideration of; Protection of surface water drains / channels from fugitive emissions Condition of hardstanding within the storage area Segregation/ identification of waste areas 		

	A summary of the review shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified.
IC6	 The Operator shall amend the organisation section of their Environmental Management System, having regard to the Agency Guidance Note IPPC S6.10 Section 2.3, August 2004, and to include; Procedures that incorporate environmental issues into; the control of process change; design and review of new facilities and other capital projects; capital approval; purchasing policy. Annual audits to check conformity with the above procedures Annual reporting on environmental performance, objectives and targets, and future planned improvements Consideration on the production of a public environmental statement The Operator shall submit a written report to the Agency, detailing the amendments made.
IC7	The Operator shall carry out a waste minimisation audit of the Installation. The assessment shall have regard to the Agency Guidance Note S6.10 Section 2.4.2, August 2004. The audit report shall provide information on any lines and operations identified as causing a process loss, specifying for each, the amount lost (tonnes/year) and the percentage recovered in process or recycled. A summary of the audit shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified.
IC8	The Operator shall review the provision of UKAS accreditation for the monitoring equipment, personnel and organisations employed to sample and analyse samples taken from release point F3. A report shall be submitted that details a timetable for achieving this standard for any parameters identified by the review as not meeting UKAS accreditation.
IC9	The Operator shall carry out an assessment to identify measures to reduce the risk of a pollution incident caused by flooding, produce a flood protection management plan and an improvement programme covering any measures identified in the assessment. A written report summarising the assessment and the improvement programme, with timetable for implementation, shall be submitted to the Agency.
IC10	The Operator shall carry out a study to determine whether treated effluent can be re-used within the installation. The Operator shall submit a written report to the Environment Agency on the study. Where applicable it shall list where water can be re-used with a timetable for implementing the uses.

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			
IC11	 The operator shall produce a climate change adaptation plan, which will form part of the EMS. The plan shall include, but not be limited to: Details of how the installation has or could be affected by severe weather; The scale of the impact of severe weather on the operations within the installation; An action plan and timetable for any improvements to be made to minimise the impact of severe weather at the installation. The Operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency. 	12 months from date of permit issue: 10/07/2025			
IC12	 The Operator shall undertake a survey of the primary, secondary and tertiary containment at the site and review measures against relevant standard including: CIRIA Containment systems for the prevention of pollution (C736) – Secondary, tertiary and other measures for industrial and commercial premises, EEMUA 159 - Above ground flat bottomed storage tanks The operator shall submit a written report to the Environment Agency approval which outlines the results of the survey and the review of standard and provide details of current containment measures any deficiencies identified in comparison to relevant standards, improvements proposed time scale for implementation of improvements. The operator shall implement the proposed improvements in line with the timescales agreed by the Environment Agency. 	12 months from date of permit issue: 10/07/2025			