

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/BN4169IZ
The Operator is: Cargill Plc
The Installation is: Seaforth Mill & Refinery
This Variation Notice number is: EPR/BN4169IZ/V009

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
7. Annex 4 – Pre-operational 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 08/06/2022 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 21/10/2022.

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

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

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

Based on our records and previous experience in the regulation of the installation we consider that the Operator will be able to comply with the techniques and standards described in the BAT Conclusions other than for those techniques and requirements described in BAT Conclusion 5, 6 and achievement of the hexane BAT-AEL associated with BATc 32. 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 IC8 and IC9 in the Consolidated Variation Notice to ensure 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 24/05/2023 concerning BATc's 1, 4, 6(b), 8, 9, 11, 13, 14, 30, 31, BAT-AELs, BAT-EPL, MCPs, containment, and updated site plan. A copy of the further information request was placed on our public register. In addition to the response to our further information request, we received additional information during the determination from the Operator on 06/07/2023 regarding the fate of uncontaminated water discharge, BATc 11, and water discharge points W1, W2 and W3. We made a copy of this information available to the public in the same way as the response to our information request.

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-AEPLs):

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
GENERAL BAT CONCLUSIONS (BAT 1-15)			
1	<p>Environmental Management System - Improve overall environmental performance.</p> <p>Implement an EMS that incorporates all the features as described within BATc 1.</p>	CC	<p>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.</p> <p>The Operator declared that that the EMS in use addresses all this BATc requirements, including:</p> <ul style="list-style-type: none"> • Organizational context and commitments • Environmental charter • Objectives and planning • Performance, evaluation and improvements • Competence, awareness and communications • Environment in operations • Sectorial benchmarking <p>The EMS is not accredited to ISO 14001 standard.</p>
2	<p>EMS Inventory of inputs & outputs. Increase resource efficiency and reduce emissions.</p> <p>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.</p>	CC	<p>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.</p> <p>The Operator demonstrated that it has:</p> <ul style="list-style-type: none"> • A simplified process diagram • Description of processes and techniques that identify emissions points • Monitoring of water inputs and outputs • Effluent quality monitored prior to sewer discharge

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			<ul style="list-style-type: none"> Identified waste gas streams and chemical composition Information regarding energy consumption, resource used, and waste generation Monitoring of inputs and outputs based on company's agreed KPIs and environmental targets
3	<p>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).</p>	CC	<p>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.</p> <p>Trade effluent quality is monitored in terms of flow, temperature, pH, TSS, and TOC at intake and discharge to Gladstone Dock and Rimrose sewer.</p>
4	<p>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.</p>	NA	<p>We are satisfied that BATc 4 is not applicable to this installation.</p> <p>The Operator declared that it is actively monitoring pH, TSS, flow, temperature and FOG at point of discharge to Gladstone Dock via emission points W2 and W3.</p> <p>COD, SS, pH, and temperature parameters are monitored prior to discharge still to Gladstone Dock via water emission point W1.</p> <p>Effluent generated in the refinery plant is discharged to Rimrose Brook Sewer via emission point S1 while effluent from the Crush Plant is discharge via emission point S2.</p> <p>However, based on the information provided by the Operator as part of the clarifications request, because the water discharged through emission point W1 is only used in the cooling process and does not enter in contact with any materials or</p>

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
			<p>substances used in the production process, we consider that monitoring of COD, TSS Endosulphan, Aldrin, Lindane and DDT are not required anymore; the water abstracted from the Dock is returned unaltered.</p> <p>All other parameters shown in the extant permit relating to water emission points W1, W2 and W3 will be carried forward in the consolidated permit.</p>
5	<p>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.</p>	FC	<p>The operator has provided information to support compliance with BATc 5. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 5.</p> <p>The Operator declared that monitoring of PM is conducted yearly for dust emission points A3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, and 18 at BS EN 13284-1:2017 standard.</p> <p>This BATc requires annual monitoring of total volatile organic carbon (TVOCs) at EN 12619 standard. However, because we do not have a clear understanding of the air emission points through which TVOCs are release into the atmosphere, we have included improvement condition IC8 asking the operator to produce a rolling monitoring procedure focusing on the principal TVOCs emission points on site.</p>
6	<p>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.</p>	FC	<p>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.</p>

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			<p>The following energy efficiency techniques are currently used at this installation:</p> <ul style="list-style-type: none"> • Burner regulation and control • Heat recovery with heat exchangers • Energy efficient LED lighting • Optimised steam distribution system • Pre-heated feed water • Reducing compressed air leaks • Insulation to reduce heat loss • Variable speed drives • Multi-effect evaporation <p>The Operator declared that an energy management plan was being developed at the time of submitting the Reg.61 Response, and that compliance with BATc 6(a) will be achieved.</p> <p>Improvement Condition IC9 has been included in the permit for the Operator to achieve compliance with BATc 6(a) requirement. (see Annex 3).</p>
7	<p>Water and wastewater minimisation</p> <p>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.</p> <p>(a) water recycling and/or reuse (b) Optimisation of water flow (c) Optimisation of water nozzles and hoses (d) Segregation of water streams</p> <p>Techniques related to cleaning operations:</p> <p>(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</p>	CC	<p>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.</p> <p>The Operator declared using the following techniques:</p> <ul style="list-style-type: none"> • Water recycling and reuse • Optimisation of water flow • Segregation of water streams • High-pressure cleaning

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	(j) Optimised design and construction of equipment and process areas (k) Cleaning of equipment as soon as possible		
8	<p>Prevent or reduce the use of harmful substances</p> <p>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.</p> <p>(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</p>	CC	<p>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.</p> <p>The Operator declared that it is using the following techniques:</p> <ul style="list-style-type: none"> • Proper selection of cleaning chemicals and/or disinfectants • Reuse of chemicals in CIP • Dry cleaning
9	<p>Refrigerants</p> <p>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.</p>	NA	<p>We are satisfied that BATc 9 is not applicable to this installation.</p> <p>This installation does not use refrigeration process that would be subject to this BATc. The Operator did provide a list of refrigerants used in the air conditioning systems but these are out of scope and not considered at this stage.</p>
10	<p>Resource efficiency</p> <p>In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below:</p> <p>(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</p>	CC	<p>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.</p> <p>The Operator declared that it is using:</p> <ul style="list-style-type: none"> • Off-site anaerobic digestion of soapstock • Land spreading of waste material
11	<p>Waste water buffer storage</p> <p>In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.</p>	CC	<p>The operator has provided information to support compliance with BATc 11. We have assessed the information provided and we are</p>

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			<p>satisfied that the operator has demonstrated compliance with BATc 11.</p> <p>The Operator declared that is has sufficient buffering capacity in the form of DAF plant to provide emergency storage, a skim pit and a tank with weirs to prevent accidental discharges reaching the environment.</p>
12	<p>Emissions to water – treatment</p> <p>In order to reduce emissions to water, BAT is to use an appropriate combination of the techniques given below.</p> <p>Preliminary, primary and general treatment</p> <p>(a) Equalisation</p> <p>(b) Neutralisation</p> <p>(c) Physical separate (eg screens, sieves, primary settlement tanks etc)</p> <p>Aerobic and/or anaerobic treatment (secondary treatment)</p> <p>(d) Aerobic and/or anaerobic treatment (eg activated sludge, aerobic lagoon etc)</p> <p>(e) Nitrification and/or denitrification</p> <p>(f) Partial nitrification - anaerobic ammonium oxidation</p> <p>Phosphorus recovery and/or removal</p> <p>(g) Phosphorus recovery as struvite</p> <p>(h) Precipitation</p> <p>(i) Enhanced biological phosphorus removal</p> <p>Final solids removal</p> <p>(j) Coagulation and flocculation</p> <p>(k) Sedimentation</p> <p>(l) Filtration (eg sand filtration, microfiltration, ultrafiltration)</p> <p>(m) Flotation</p>	CC	<p>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.</p> <p>The Operator declared using Dissolved Air Flotation (DAF) and skim pit to remove un-settable solids, oils, and hexane.</p> <p>The site does not have direct discharges to surface water. All process water is discharged to Rimrose sewer.</p> <p>Removal of COD and TSS parameters as part of the permit review process is explained in BATc 4. Process water discharged to sewer is subject to conditions imposed by the sewage undertaker.</p>
12	<p>Emissions to water – treatment</p> <p>BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body</p>	NA	<p>We are satisfied that BAT-AELs are not applicable to this installation.</p> <p>The Operator had monitoring requirements for COD, TSS, Endosulphan, Aldrin, Lindane and DDT in the extant permit for the return of</p>

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	<table border="1"> <thead> <tr> <th>Parameter</th> <th>BAT-AEL (°) (°) (daily average)</th> </tr> </thead> <tbody> <tr> <td>Chemical oxygen demand (COD) (°) (°)</td> <td>25-100 mg/l (°)</td> </tr> <tr> <td>Total suspended solids (TSS)</td> <td>4-50 mg/l (°)</td> </tr> <tr> <td>Total nitrogen (TN)</td> <td>2-20 mg/l (°) (°)</td> </tr> <tr> <td>Total phosphorus (TP)</td> <td>0.2-2 mg/l (°)</td> </tr> </tbody> </table>	Parameter	BAT-AEL (°) (°) (daily average)	Chemical oxygen demand (COD) (°) (°)	25-100 mg/l (°)	Total suspended solids (TSS)	4-50 mg/l (°)	Total nitrogen (TN)	2-20 mg/l (°) (°)	Total phosphorus (TP)	0.2-2 mg/l (°)		<p>cooling water. However, following the review of the wastewater stream discharged via emission point W1, we have removed these monitoring requirements. The water released to Gladstone Dock is abstracted from this dock, used as a cooling agent in a close system and then returned to the dock.</p> <p>All other monitoring parameters relating to water emission points W1, W2 and W3 will be carried forward from the extant permit; these are not part of BAT-AELs.</p>
Parameter	BAT-AEL (°) (°) (daily average)												
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13	<p>Noise management plan</p> <p>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:</p> <ul style="list-style-type: none"> - 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	<p>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.</p> <p>The Operator has submitted a copy of the noise management plan (NMP) containing of:</p> <ul style="list-style-type: none"> • Scope and objectives • Goals and responsibilities • Noise sources, impacts and receptors • Management measures • Monitoring and reporting • Stakeholders engagement • NMP review approach. <p>The Operator declared that it has submitted the NMP on 12/10/2022 to the Agency, pending approval.</p>										
14	<p>Noise management</p> <p>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.</p> <ul style="list-style-type: none"> (a) Appropriate location of equipment and buildings (b) Operational measures (c) Low-noise equipment 	CC	<p>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.</p> <p>The Operator declared that it is using:</p> <ul style="list-style-type: none"> • Appropriate location of equipment 										

Commented [BG1]: FAO Area: please let me know if this is the case.

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	(d) Noise control equipment (e) Noise abatement		<ul style="list-style-type: none"> • Operational measures • Low noise equipment • Noise control equipment • Noise generating equipment enclosed
15	<p>Odour Management</p> <p>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:</p> <ul style="list-style-type: none"> - 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	<p>We are satisfied that BATc 15 is not applicable to this Installation.</p> <p>An odour management plan is only required where odour nuisance at sensitive receptors is expected or has been substantiated. There has been no substantiated odour nuisance from the site recently, therefore this BATc is not applicable.</p> <p>It is understood that processing of soya beans has limited odour risk, and given the site doesn't have a history of odour complaints we deem that no further assessment of odour emissions is required at this time. The consolidated permit includes the standard odour condition that allows the Regulatory Officer to request an OMP should the need arise.</p>
	OILSEED PROCESSING & VEGETABLE OIL REFINING SECTOR BAT CONCLUSIONS (BAT 30-32)		
30	<p>Energy efficiency – Oilseed processing and vegetable oil</p> <p>In order to increase energy efficiency, BAT is to use an appropriate combination of the techniques specified in BAT 6 and to generate an auxiliary vacuum.</p>	CC	<p>The operator has provided information to support compliance with BATc 30. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 30.</p> <p>The Operator declared that it is using steam injectors and pumps to create an auxiliary vacuum.</p>

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31	<p>In order to reduce channelled dust emissions to air, BAT is to use one or a combination of the techniques given below.</p> <table border="1" data-bbox="226 422 952 659"> <thead> <tr> <th data-bbox="226 422 280 464">Technique</th> <th data-bbox="280 422 593 464">Description</th> <th data-bbox="593 422 952 464">Applicability</th> </tr> </thead> <tbody> <tr> <td data-bbox="226 464 280 539">(a) Bag filter</td> <td data-bbox="280 464 593 539" rowspan="3">See Section 14.2</td> <td data-bbox="593 464 952 539">May not be applicable to the abatement of sticky dust.</td> </tr> <tr> <td data-bbox="226 539 280 580">(b) Cyclone</td> <td data-bbox="593 539 952 580">Generally applicable.</td> </tr> <tr> <td data-bbox="226 580 280 659">(c) Wet scrubber</td> <td data-bbox="593 580 952 659"></td> </tr> </tbody> </table>	Technique	Description	Applicability	(a) Bag filter	See Section 14.2	May not be applicable to the abatement of sticky dust.	(b) Cyclone	Generally applicable.	(c) Wet scrubber		<p>CC</p>	<p>The operator has provided information to support compliance with BATc 31. We have assessed the information provided and we are satisfied that the Operator has demonstrated compliance with BATc 31.</p> <p>In relation to the following air emission points, the Operator declared that is using the following MCERTS abatement techniques:</p> <p>Bag filter</p> <ul style="list-style-type: none"> • A3, A5, A15 <p>Cyclone</p> <ul style="list-style-type: none"> • A7, A10, A11, A12, A13, A16, A17, A18 <p>Bag and cyclone</p> <ul style="list-style-type: none"> • A8
Technique	Description	Applicability											
(a) Bag filter	See Section 14.2	May not be applicable to the abatement of sticky dust.											
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(c) Wet scrubber													

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												
AEL	<p>BAT-associated emission level (BAT-AEL) for channelled dust emissions to air from handling and preparation of seeds as well as drying and cooling of meal.</p> <table border="1" data-bbox="226 448 952 651"> <thead> <tr> <th>Parameter</th> <th>Unit</th> <th colspan="2">BAT-AEL (average over the sampling period)</th> </tr> </thead> <tbody> <tr> <td>Dust</td> <td>mg/Nm³</td> <td>New plants</td> <td>Existing plants</td> </tr> <tr> <td></td> <td></td> <td><2-5 ⁽¹⁾</td> <td><2-10 ⁽¹⁾</td> </tr> </tbody> </table> <p>(1) The upper end of the range is 20 mg/Nm³ for drying and cooling of meal.</p>	Parameter	Unit	BAT-AEL (average over the sampling period)		Dust	mg/Nm ³	New plants	Existing plants			<2-5 ⁽¹⁾	<2-10 ⁽¹⁾	<p>CC</p>	<p>The operator has provided information to support compliance with BAT-AELs. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BAT-AEL.</p> <p>Emission value for A18 was recorded at 85.1 mg/m³ in 2021, a result of a technical issue. The Operator confirmed that A18 is able to meet the new ELV.</p> <p>We have taken this opportunity to set and include in the consolidated permit the following ELVs shown below, applicable from the time of permit issue.</p> <p>Retained ELVs at 5 mg/m³:</p> <ul style="list-style-type: none"> • A3, A5, A8, and A15 <p>New ELVs at 10 mg/m³ (handling)</p> <ul style="list-style-type: none"> • A4, A7, A9, A16, and A18 <p>New ELVs at 20 mg/m³ (the upper range of 20mg/m³ has been applied at the below emission points as per the footnote in Table 21 as these emission points are associated with drying and cooling of meal)</p> <ul style="list-style-type: none"> • A10, A11, A12, A13, and A17 <p>A14 – hexane final vent 2kg/h (retained)</p> <p>The ELVs are applicable from the time of permit issue.</p>
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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															
32	<p>In order to reduce the hexane losses from oilseed processing and refining, BAT is to use all of the techniques given below:</p> <table border="1" data-bbox="230 427 987 746"> <thead> <tr> <th data-bbox="230 427 275 451"></th> <th data-bbox="275 427 465 451">Technique</th> <th data-bbox="465 427 987 451">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="230 451 275 531">(a)</td> <td data-bbox="275 451 465 531">Countercurrent flow of meal and steam in the desolventiser-toaster</td> <td data-bbox="465 451 987 531">Hexane is removed from the hexane-laden meal in a desolventiser-toaster, involving a countercurrent flow of steam and meal.</td> </tr> <tr> <td data-bbox="230 531 275 611">(b)</td> <td data-bbox="275 531 465 611">Evaporation from the oil/hexane mixture</td> <td data-bbox="465 531 987 611">Hexane is removed from the oil/hexane mixture using evaporators. The vapours from the desolventiser-toaster (steam/hexane mixture) are used to provide thermal energy in the first stage of the evaporation.</td> </tr> <tr> <td data-bbox="230 611 275 675">(c)</td> <td data-bbox="275 611 465 675">Condensation in combination with a mineral oil wet scrubber</td> <td data-bbox="465 611 987 675">Hexane vapours are cooled to below their dew point so that they condense. Uncondensed hexane is absorbed in a scrubber using mineral oil as a scrubbing liquid for subsequent recovery.</td> </tr> <tr> <td data-bbox="230 675 275 746">(d)</td> <td data-bbox="275 675 465 746">Gravitational phase separation in combination with distillation</td> <td data-bbox="465 675 987 746">Undissolved hexane is separated from the aqueous phase by means of a gravitational phase separator. Any residual hexane is distilled off by heating the aqueous phase to approximately 80-95 °C.</td> </tr> </tbody> </table>		Technique	Description	(a)	Countercurrent flow of meal and steam in the desolventiser-toaster	Hexane is removed from the hexane-laden meal in a desolventiser-toaster, involving a countercurrent flow of steam and meal.	(b)	Evaporation from the oil/hexane mixture	Hexane is removed from the oil/hexane mixture using evaporators. The vapours from the desolventiser-toaster (steam/hexane mixture) are used to provide thermal energy in the first stage of the evaporation.	(c)	Condensation in combination with a mineral oil wet scrubber	Hexane vapours are cooled to below their dew point so that they condense. Uncondensed hexane is absorbed in a scrubber using mineral oil as a scrubbing liquid for subsequent recovery.	(d)	Gravitational phase separation in combination with distillation	Undissolved hexane is separated from the aqueous phase by means of a gravitational phase separator. Any residual hexane is distilled off by heating the aqueous phase to approximately 80-95 °C.	CC	<p>The operator has provided information to support compliance with BATc 32. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 32.</p> <p>The following techniques are used on the site:</p> <ul style="list-style-type: none"> • Counter current flow of meal and steam in the desolventiser-toaster • Evaporation from the oil/ hexane mixture • Condensation in combination with a mineral oil wet scrubber • Gravitational phase separation in combination with distillation
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AELS	<p>BAT-associated emission levels (BAT-AELs) for hexane losses from oilseed processing and refining:</p> <table border="1" data-bbox="230 850 987 991"> <thead> <tr> <th data-bbox="230 850 387 898">Parameter</th> <th data-bbox="387 850 589 898">Type of seeds or beans processed</th> <th data-bbox="589 850 790 898">Unit</th> <th data-bbox="790 850 987 898">BAT-AEL (yearly average)</th> </tr> </thead> <tbody> <tr> <td data-bbox="230 898 387 991" rowspan="2">Hexane losses</td> <td data-bbox="387 898 589 938">Soybeans</td> <td data-bbox="589 898 790 991" rowspan="2">kg/tonne of seeds or beans processed</td> <td data-bbox="790 898 987 938">0,3-0,55</td> </tr> <tr> <td data-bbox="387 938 589 991">Rapeseeds and sunflower seeds</td> <td data-bbox="790 938 987 991">0,2-0,7</td> </tr> </tbody> </table>	Parameter	Type of seeds or beans processed	Unit	BAT-AEL (yearly average)	Hexane losses	Soybeans	kg/tonne of seeds or beans processed	0,3-0,55	Rapeseeds and sunflower seeds	0,2-0,7	CC	<p>The operator has provided information to support compliance with BAT-AEL. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BAT-AEL.</p> <p>The Operator declared hexane emissions to air have been measured at 0.53 kg/tonne for the month of December 2021, which is within the 0.3 – 0.55 kg/tonne limit for soybeans.</p> <p>Based on the above recorded hexane loss volume, we have taken the opportunity to include in the consolidated permit the new limit of 0.55 kg annual average of hexane loss per tonne of soybeans processed. This limit is applicable from the time of permit issue.</p>					
Parameter	Type of seeds or beans processed	Unit	BAT-AEL (yearly average)															
Hexane losses	Soybeans	kg/tonne of seeds or beans processed	0,3-0,55															
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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
			<p>The Operator has supplied the hexane mass balance formula used to assess solvent losses using the following equation: $a + c + f - b - g = h \rightarrow h / i = j$ where, a – starting hexane inventory c – hexane receipts f - In process hexane prior b - ending hexane inventory current result g - in process hexane current h – daily hexane loss i - daily crush j – hexane loss.</p> <p>However, the mass-balance calculation provided by the operator does not include recovery and reutilisation of hexane. Furthermore, it is unclear if hexane loss through chemical and/or physical reactions is measured and accounted for, or if uncertainties are included in the calculations.</p> <p>Because the Operator has not provided us with a solvent management plan (SMP) as part of the RFI and Clarifications requests to demonstrate how uncertainties and errors are dealt with and how fugitive emissions are minimised, we consider that a comprehensive, stand-alone SMP is required for the sustainable management of hexane.</p> <p>We consider that the operator will be future compliant with BATc. Improvement condition IC10 has been included in the permit to achieve compliance (see Annex 3).</p>
	Oilseed processing & vegetable oil refining sector Environmental Performance Levels		

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										
EPL	<p>Environmental Performance Level – Energy consumption</p> <table border="1" data-bbox="232 384 987 555"> <thead> <tr> <th>Specific process</th> <th>Unit</th> <th>Specific energy consumption (yearly average)</th> </tr> </thead> <tbody> <tr> <td>Integrated crushing and refining of rapeseeds and/or sunflower seeds</td> <td rowspan="3">MWh/tonne of oil produced</td> <td>0,45-1,05</td> </tr> <tr> <td>Integrated crushing and refining of soybeans</td> <td>0,65-1,65</td> </tr> <tr> <td>Stand-alone refining</td> <td>0,1-0,45</td> </tr> </tbody> </table>	Specific process	Unit	Specific energy consumption (yearly average)	Integrated crushing and refining of rapeseeds and/or sunflower seeds	MWh/tonne of oil produced	0,45-1,05	Integrated crushing and refining of soybeans	0,65-1,65	Stand-alone refining	0,1-0,45	CC	<p>The operator has provided information to support compliance with BAT EPL for energy consumption. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BAT EPL.</p> <p>The Operator recorded an energy consumption of 0.18 MWh/t of oil produced, which is within the range of 0.65 – 1.65 MWh per tonne range applicable for integrated crushing and refining of soybeans.</p>
	Specific process	Unit	Specific energy consumption (yearly average)										
Integrated crushing and refining of rapeseeds and/or sunflower seeds	MWh/tonne of oil produced	0,45-1,05											
Integrated crushing and refining of soybeans		0,65-1,65											
Stand-alone refining		0,1-0,45											
EPL	<p>Environmental Performance Level – Specific waste water discharge</p> <table border="1" data-bbox="232 713 987 884"> <thead> <tr> <th>Specific process</th> <th>Unit</th> <th>Specific waste water discharge (yearly average)</th> </tr> </thead> <tbody> <tr> <td>Integrated crushing and refining of rapeseeds and/or sunflower seeds</td> <td rowspan="3">m³/tonne of oil produced</td> <td>0,15-0,75</td> </tr> <tr> <td>Integrated crushing and refining of soybeans</td> <td>0,8-1,9</td> </tr> <tr> <td>Stand-alone refining</td> <td>0,15-0,9</td> </tr> </tbody> </table>	Specific process	Unit	Specific waste water discharge (yearly average)	Integrated crushing and refining of rapeseeds and/or sunflower seeds	m ³ /tonne of oil produced	0,15-0,75	Integrated crushing and refining of soybeans	0,8-1,9	Stand-alone refining	0,15-0,9	CC	<p>The operator has provided information to support compliance with BAT EPL for wastewater discharge. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BAT EPL.</p> <p>The Operator recorded a wastewater discharge volume of 0.69 m³/t of oil produced, which is above the 0.8 – 1.9 m³ per tonne range applicable for integrated crushing and refining of soybeans.</p>
	Specific process	Unit	Specific waste water discharge (yearly average)										
Integrated crushing and refining of rapeseeds and/or sunflower seeds	m ³ /tonne of oil produced	0,15-0,75											
Integrated crushing and refining of soybeans		0,8-1,9											
Stand-alone refining		0,15-0,9											

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

Other key considerations for the oilseed processing sector

Control of solvent emissions

This Installation utilises hexane as part of the process.

In part, this is considered by the FDM BAT Conclusions, as per BAT 32

In addition, Chapter V of the Industrial Emissions Directive sets out the requirements for installations that use organic solvents. Whilst this does not directly apply to oilseed processing, we are incorporating some of the methodologies as part of this permit review, to ensure the appropriate operational controls are in place.

Chapter V Annex VII Part 6 requires operators to continuously monitor solvent emissions where the mass emission rate is greater than 10 kg/h TOC.

The mass emission rate for this installation has not been provided. However, the site has a 2kg/h hexane emission limit for air emission point A14 set as a monthly rolling average therefore, we consider that solvent monitoring requirement is fulfilled through the continuous monitoring frequency shown in the extant permit.

Chapter V Annex VII Part 7 requires operators to have a solvent emissions management plan in place.

This is incorporated into the permit by the operating techniques.

The mass balance methodology for this site has been reviewed as part of BAT 32.

Updating permit during permit review consolidation

- Site plan
- Table S1.1 overhaul
 - Activity Reference (AR) renumbering
 - 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 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 existing volume of raw material permitted at the site has not increased since the previous variation and therefore the assessment for emissions to water/sewer remain valid for capacity threshold now placed within table S1.1 of the permit.

Note: The extant permit variation (V008) has two pre-operational conditions included in Table S1.3 that concern increasing the installation’s capacity to one million tonnes per year. It is noted that both of these pre-operational conditions have been complied with and removed from the consolidated variation.

Emissions to Air

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

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

Implementing the requirements of the Medium Combustion Plant Directive

Existing small combustion plant (<1MW)

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:

Boilers

1. Rated thermal input (MW) of the medium combustion plant.	0.75 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler 1 – 0.5 MWth Boiler 2 – 0.25 MWth
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	100% 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.	Boiler 1 – February 2014 Boiler 2 – February 2014

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

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 in the permit, unless any site-specific conditions require us to do this.

Particulate Emissions

BAT-AELs are derived for those substances identified as key environmental issues during the BREF review process.

If the operator has identified current compliance against BAT-AELs we will implement the relevant emission limit value (ELV) from the date of permit issue. This is relevant for emission points A1 & A2 against BAT 17 for particulate emissions from the product cooler and raw material grinder.

We have added an improvement condition IC11 for size fractionation of particulate emissions because a BAT-AEL applies for dust emissions to air. The justification for this IC is that there are a number of activities within the FDM sector which may result in release of particulates to air e.g., drying, milling and grinding. Overall, there is little available information on how much fine particulates are released. This IC is a one-off exercise requiring operators to monitor and report on the fractions of fine particulate (PM₁₀ and PM_{2.5}) emissions and increase our understanding of potential health effects. Where BAT-AELs may apply to multiple emission points e.g. grain milling, we may accept limited representative monitoring rather than expecting them to monitor every single emission point.

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

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

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

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

In addition, the risk to the environment has decreased with the isolation of the cooling water in a closed loop system that takes water from the Gladstone dock, circulates it, and return it unaltered to the same water body via emission point W1. As the water does not come into contact with any of the production processes and is returned unaltered, we considered it is appropriate to remove the monitoring requirements and associated ELVs for COD, TSS, Endosulphan, Aldrin, Lindane and DDT from the consolidated permit. We have retained the requirements for pH and temperature, as set out in Table S3.2.

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 [P0423 SFK (TLC944) rep RD RTD 181217 (Rev A-191217) dated 19/12/2017) submitted as part of the Reg.61 Response received 21/10/2022. 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 applicable.

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. 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
IC1	The Operator shall review the provision of MCERTS accreditation (or other standard where MCERTS is not applicable), for the monitoring equipment, personnel and organisations employed for the emissions monitoring programme in condition 2.10.1. The Operator shall submit in writing to the Agency the proposed timetable for achieving this standard for any elements that are not MCERTS or otherwise certified.
IC2	The Operator shall install an additional above-ground interceptor tank prior to emission point W1 to provide better oil/water separation and improve the quality of effluent discharged to the sewer. Upon completion of the works, the Operator shall provide written confirmation to the Agency.
IC3	The Operator shall review their written accident management plan with regard to the requirements set out in Section 2.8 of the Agency Guidance Note S6.10. Upon completion of the review, the document shall be submitted to the Agency.
IC4	The Operator shall develop and implement a formalised Environmental Management System, having regard for section 2.3 of the Agency's Sector Guidance Note S6.10.
IC5	The Operator shall develop a written Site Closure Plan having regard to Section 2.11 of the Agency Sector Guidance Note IPPC S6.10. Upon completion of the plan a summary of the document shall be submitted to the Agency in writing.
IC6	The Operator shall investigate additional measures to improve the abatement and thus reduce emissions of particulate matter from emission points A10, A11, A12 and A13. The outcome of the investigation shall be submitted in writing to the Agency.
IC7	The Operator shall investigate the reasons for changes to the concentration of Chemical Oxygen Demand and Suspended solids, between the dock water abstracted for cooling water and that which is discharged back into the dock. The outcome of the investigation shall be submitted to the Agency in writing.

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
IC8	<p>The operator shall submit, for approval by the Environment Agency, rolling monitoring plan for total volatile organic carbon (TVOCs) emissions from principal emission points on site. The procedure must describe how the operator will implement a rolling monitoring programme which shall include, but not be limited to the following:</p> <ol style="list-style-type: none"> 1. Methodology for how representative monitoring will be carried out annually, with a minimum of 3-point sources on a rolling-basis. 2. Ensuring the key process stages inclusive of preparation, conditioning, cooling, and drying are prioritised. 3. Identify any principal emission points excluded from the rolling monitoring programme and provide a justification for this. 4. Provide a commencement date for the programme which will demonstrate compliance with the permit requirements. <p>The monitoring procedure shall address the requirements of BAT Conclusions for Food, Drink and Milk Industries with respect to BATc.</p>	21/02/2025 or other date agreed in writing with the Environment Agency
IC9	<p>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:</p> <ul style="list-style-type: none"> • Methodology applied for achieving BAT • Demonstrating that BAT has been achieved. <p>The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BATc 6.</p> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	21/11/2024 or other date agreed in writing with the Environment Agency
IC10	<p>The Operator shall submit an updated Solvent Management Plan (SMP) to the Environment Agency for technical assessment and approval, demonstrating compliance against BAT 32 for the FDM industries. Further guidance on SMPs can be found on our website Solvent Management Plans: environmental permits - GOV.UK (www.gov.uk)</p> <p>The updated plan must include the following elements:</p>	21/08/2025 or other date agreed in writing with the Environment Agency

	<ul style="list-style-type: none"> • a protocol containing remediation actions and timelines; • a protocol for conducting solvent emissions monitoring; • a protocol for response to identified solvent loss events, e.g. fugitive emissions; • a protocol to reduce solvent mass-balance uncertainties; • a solvent reduction programme designed to identify the source(s), to measure/estimate solvent loss, to characterise the contributions of the sources and to implement prevention and/or reduction measures. <p>The solvent management plan should be reviewed at least annually to ensure continued compliance against BAT 32 as described above.</p>	
IC11	<p>The Operator shall submit a written report to the Environment Agency of monitoring carried out to determine the size distribution of particulate matter in the exhaust gas emissions to air from emission points A3, A4, A5, A7, A8, A10, A11, A12, A13, A15, A16, A17, A18, identifying the fractions within the PM₁₀ and PM_{2.5} ranges. The monitoring shall be carried out under representative operating conditions and shall be in accordance with EN ISO 23210 unless otherwise agreed with the Environment Agency.</p>	<p>21/08/2025 or other date as agreed in writing with the Environment Agency</p>

Annex 4: Pre-operational Conditions.

The following pre-operational conditions for future development have been removed from the previous permit variation, V008 as they are deemed to have been completed.

Pre-operational measures for future development		
Reference	Operation	Pre-operational measures
1	Treatment at the new capacity of 1,000,000 tonnes per annum and operation of all new equipment within the new Bean and Hull Building as well as the Meal Sifting and Grinding Building, including the new grinders and hulls pellet cooler exhaust fan	Prior to the commencement of treatment at the new capacity of 1,000,000 tonnes per annum and operation of all new equipment within the new buildings, the operator shall demonstrate that the impact of noise emissions from the installation are insignificant by submitting a report to the Environment Agency for approval. This report shall include but not be limited to: <ul style="list-style-type: none"> · Details of the improvements that have been made to operations, plant and equipment in line with the recommendations under section 9 of the submitted Environmental Noise Assessment, with Report Number – R9889, dated 3 June 2021. · A comprehensive noise impact assessment for the whole site undertaken by an experienced and suitably qualified person (i.e. a noise consultant with an appropriate qualification accredited by the Institute of Acoustics), in accordance with BS4142:2014 (Rating industrial noise affecting mixed residential and industrial areas). The report must demonstrate that no significant noise pollution is caused by the operation of the site (all site operations) at local sensitive receptors. · Details demonstrating that noise attenuation measures and procedures are in compliance with the requirements of BAT for this type of installation. These measures and procedures will be implemented in accordance with Environment Agency's written approval. · The operator shall submit the report to the Environment Agency with at least fourteen days' notice before the planned operation of the new plants and the proposed increase in processing capacity. · No increase in processing capacity or operation of new plant will be carried out at the facility unless the Environment Agency has given prior written permission under this condition.
2	Treatment at the new capacity of 1000000 tonnes per annum and operation of	Prior to the commencement of treatment at the new capacity of 1,000,000 tonnes per annum and operation of all new equipment within the new buildings, the operator shall produce a comprehensive Noise Management Plan (NMP) in accordance with our Noise and vibration management: environmental permits guidance,

Pre-operational measures for future development		
Reference	Operation	Pre-operational measures
	all new equipment within the new Bean and Hull Building as well as the Meal Sifting and Grinding Building, including the new grinders and hulls pellet cooler exhaust fan	for approval in writing by the Environment Agency. The operator shall implement the approved NMP and regularly review the plan in accordance with our guidance. Our Noise and Vibration guidance can be found via the link: https://www.gov.uk/government/publications/noise-and-vibration-management-environmental-permits The operator shall submit the Noise Management Plan to the Environment Agency with at least fourteen days' notice before the planned operation of the new plants and the proposed increase in processing capacity. No increase in processing capacity or operation of new plant will be carried out at the facility unless the Environment Agency has given prior written permission under this condition.