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/CP3030JR
The Operator is:	Yelo Enterprises Ltd
The Installation is:	Atherstone Oilseed Processing
This Variation Notice number is:	EPR/CP3030JR/V004

What this document is about

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

We have reviewed the permit for this installation against the BAT Conclusions for the Food, Drink and Milk Industries published on 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 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 07/10/2022.

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 6(a). The operator does not currently comply with the requirements of BATc 6(a). In relation to this/these BAT Conclusion, the operator has committed compliance by 4 December 2023. We have therefore included Improvement Condition IC2 in the Consolidated Variation Notice to ensure that the requirements of the BAT Conclusion was achieved on or before 4 December 2023.

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 30/05/2023. A copy of the further information request was placed on our public register.

3 The legal framework

The Consolidated Variation Notice will be issued under Regulations 18 and 20 of the EPR. The Environmental Permitting regime is a legal vehicle which delivers most of the relevant legal requirements for activities falling within its scope. In particular, the regulated facility is:

- an *installation* as described by the IED;
- subject to aspects of other relevant legislation which also have to be addressed.

We consider that, in issuing the Consolidated Variation Notice, it will ensure that the operation of the Installation complies with all relevant legal requirements and that a high level of protection will be delivered for the environment and human health.

We explain how we have addressed specific statutory requirements more fully in the rest of this document.

Annex 1: decision checklist regarding relevant BAT Conclusions

BAT Conclusions for the Food, Drink and Milk Industries, were published by the European Commission on 4 December 2019.

There are 37 BAT Conclusions.

BAT 1 – 15 are General BAT Conclusions (Narrative BAT) applicable to all relevant Food, Drink and Milk Installations in scope.

BAT 16 – 37 are sector-specific BAT Conclusions, including Best Available Techniques Associated Emissions Levels (BAT-AELs) and Associated Environmental Performance Levels (BAT-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	**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 provided a copy of the EMS document containing the following sections: • EMS framework, leadership and environmental policy • Risks assessment, compliance and objectives • Competence, communication and documentation • Operational planning, control, emergency preparedness and response • Environmental performance, monitoring, audit and review • Incident management.
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 declared it is using: • An iterative planning and review approach for raw materials usage and waste generation. • A simplified flow sheet identifying waste gas emissions and waste treatment techniques • Water mass-balance • Information about waste gas characteristics

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
			• Information about energy usage, raw materials usage monitoring, and residues generated.
3	**Monitoring key process parameters at key locations for emissions to water.** For relevant emissions to water as identified by the inventory of waste water streams (see BAT 2), BAT is to monitor key process parameters (e.g. continuous monitoring of waste water flow, pH and temperature) at key locations (e.g. at the inlet and/or outlet of the pre-treatment, at the inlet to the final treatment, at the point where the emission leaves the installation).	**CC**	The operator has provided information to support compliance with BATc 3. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 3. The Operator declared that, although it does not discharge process effluent but only uncontaminated surface water, it does take weekly monitoring of water samples and conducts visual checks at the point of discharge to an unnamed tributary to the River Stour.
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 BATc 4 is not applicable to this installation. This BATc refers to process waters directly discharged to water bodies. The Operator declared that no process water discharges to surface water take place at this installation.
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. The Operator declared that all dust leaden gas is filtered through cyclones prior to reintroducing the gas back into the production process. Cleaned gas is then filtered through an odour carbon bed system to reduce odorous emissions.
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.	**CC**	The operator has provided information to support compliance with BATc 6. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 6. The Operator declared that it is using the following energy efficiency 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
			• Preheating of feedwater • Energy efficient motors • Use of variable speed drives • Reducing compressed air system leaks **However, the Operator does not have, as per this BATc requirement, a stand-alone energy efficiency plan. The Operator has submitted an energy policy outline contained in the EMS.** Improvement condition IC2 has been included in the permit to ensure compliance was achieved on or before 04/12/2023 (see Annex 3).
7	**Water and wastewater minimisation** In order to reduce water consumption and the volume of waste water discharged, BAT is to use BAT 7a and one or a combination of the techniques b to k given below. (a) water recycling and/or reuse (b) Optimisation of water flow (c) Optimisation of water nozzles and hoses (d) Segregation of water streams Techniques related to cleaning operations: (e) Dry cleaning (f) Pigging system for pipes (g) High-pressure cleaning (h) Optimisation of chemical dosing and water use in cleaning-in-place (CIP) (i) Low-pressure foam and/or gel cleaning (j) Optimised design and construction of equipment and process areas (k) Cleaning of equipment as soon as possible	**CC**	The operator has provided information to support compliance with BATc 7. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 7. The Operator declared that it is using the following water minimisation techniques: • Water recycling and reuse • Optimisation of water flow • Segregation of wastewater streams • High pressure cleaning The Operator is reusing wastewater, , either in the production process or as part of the animal feeds the installation produces.
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.	**CC**	The operator has provided information to support compliance with BATc 8. We have assessed the information provided and we are

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	(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		satisfied that the operator has demonstrated compliance with BATc 8. The Operator declared using the following techniques: • Proper selection of chemicals by using a third party consultant • Reuse of chemicals in CIP prior to disposal via third party • Dry cleaning without the addition of chemicals • Optimised design and construction of equipment.
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.	**CC**	The operator has provided information to support compliance with BATc 9. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 9. The Operator declared that only compressed ammonia gas is used as a refrigerant at this installation in a purposefully designed refrigeration plant for the scope of removing sparge steam and residual volatile compounds from the vacuum stream.
10	**Resource efficiency** In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below: (a) Anaerobic digestion (b) Use of residues (c) Separation of residues (d) Recovery and reuse of residues from the pasteuriser (e) Phosphorus recovery as struvite (f) Use of waste water for land spreading	**CC**	The operator has provided information to support compliance with BATc 10. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 10. The Operator declared that it is using separation of residues as a resource efficiency method.
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.

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
			The Installation does not produce large quantities of wastewater, a small amount of wastewater is kept on site. The site uses mostly dry cleaning and recycles process water. A small volume of wastewater remains on site prior to collection by a third-party contractor. In addition, any spillages entering the drainage system will be contained within interceptors and prevented from entering the environment.
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	**NA**	We are satisfied that BATc 12 is not applicable to this installation. This BATc is applicable to installations where wastewater is produced and discharged or tankered off-site for further treatment. This site has no discharges of wastewater nor is transferring effluent off-site therefore, this BATc is not applicable. However, the Installation uses a Water Softening Plant where water from the grid is treated prior to demineralisation process is carried out through one of the two RO units whose membranes, once spent, are disposed of off-site.
12	**Emissions to water – treatment**	**NA**	We are satisfied the BAT-AELs to water is not applicable to this installation.

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body 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)		The site produces only small volumes of wastewater which are reused on site. The Operator declared that they do not have any wastewater discharges.
13	**Noise management plan** In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to set up, implement and regularly review a noise management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements: - a protocol containing actions and timelines; - a protocol for conducting noise emissions monitoring; - a protocol for response to identified noise events, eg complaints; - a noise reduction programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures.	**NA**	We are satisfied this BATc is not applicable to this installation. A noise management plan is only required where noise nuisance at sensitive receptors is expected or has been substantiated. There have been no substantiated noise nuisance from the site therefore an NMP is not a requirement for this site.
14	**Noise management** In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to use one or a combination of the techniques given below. (a) Appropriate location of equipment and buildings (b) Operational measures (c) Low-noise equipment (d) Noise control equipment (e) Noise abatement	**CC**	The operator has provided information to support compliance with BATc 14. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 14. The Operator declared using the following techniques: • Appropriate location of equipment • Operational measures • Low noise equipment • Noise abatement
15	**Odour Management**	**CC**	The operator has provided information to support compliance with BATc 15. We have assessed the information provided and we are

<table>
<tr><th>BATC No.</th><th>Summary of BAT Conclusion requirement for Food, Drink and Milk Industries</th><th>Status
NA/ CC / FC / NC</th><th>Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement</th></tr>
<tr><td></td><td>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.</td><td></td><td>satisfied that the operator has demonstrated compliance with BATc 15.
The installation does have an odour management plan approved by the Agency and is included in the Operating Techniques table of the permit variation V003.</td></tr>
<tr><td></td><td>OILSEED PROCESSING & VEGETABLE OIL REFINING SECTOR
BAT CONCLUSIONS (BAT 30-32)</td><td></td><td></td></tr>
<tr><td>30</td><td>Energy efficiency – Oilseed refining
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.</td><td>CC</td><td>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.
The Operator declared that a vacuum is created by using steam injectors that pass the steam through a surface condenser that cools where the water vapour condensates prior to reaching the Liquid Ring Vacuum Pump that creates the final vacuum used in the refining process.</td></tr>
<tr><td>31</td><td>In order to reduce channelled dust emissions to air, BAT is to use one or a combination of the techniques given below.
<table>
<tr><th colspan="2">Technique</th><th>Description</th><th>Applicability</th></tr>
<tr><td>(a)</td><td>Bag filter</td><td rowspan="2">See Section 14.2</td><td>May not be applicable to the abatement of sticky dust.</td></tr>
<tr><td>(b)</td><td>Cyclone</td><td>Generally applicable.</td></tr>
</table></td><td>CC</td><td>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.
The Operator declared that it is using cyclones as air emissions abatement. In addition, the filtered gas is further filtered via carbon absorption prior to release via air discharge point A2.</td></tr>
</table>

<table>
<tr><th>BATC No.</th><th>Summary of BAT Conclusion requirement for Food, Drink and Milk Industries</th><th>Status
NA/ CC / FC / NC</th><th>Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement</th></tr>
<tr><td></td><td><table><tr><td>(c)</td><td>Wet scrubber</td><td></td><td></td></tr></table></td><td></td><td></td></tr>
<tr><td>31</td><td>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.<table><tr><td>Parameter</td><td>Unit</td><td colspan="2">BAT-AEL (average over the sampling period)</td></tr><tr><td>Dust</td><td>mg/Nm^3</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><tr><td colspan="4">(1) The upper end of the range is 20 mg/Nm^3 for drying and cooling of meal.</td></tr></table></td><td>NA</td><td>We are satisfied that BAT-AELs are not applicable to this installation.
The Operator declared that flue gases are passed through cyclones to remove particulates prior to filtering the gas through an odour abatement system. Any remaining dust laden gas is re-introduced in the production process. Therefore, no ELVs are applicable to this installation.</td></tr>
<tr><td>32</td><td>In order to reduce the hexane losses from oilseed processing and refining, BAT is to use all of the techniques given below:<table><tr><th colspan="2">Technique</th><th>Description</th></tr><tr><td>(a)</td><td>Countercurrent flow of meal and steam in the desolventiser-toaster</td><td>Hexane is removed from the hexane-laden meal in a desolventiser-toaster, involving a countercurrent flow of steam and meal.</td></tr><tr><td>(b)</td><td>Evaporation from the oil/ hexane mixture</td><td>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>(c)</td><td>Condensation in combi-nation with a mineral oil wet scrubber</td><td>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>(d)</td><td>Gravitational phase se-paration in combination with distillation</td><td>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></table></td><td>NA</td><td>We are satisfied this BATc is not applicable to this installation.
The Operator declared that hexane is not used in the production process.</td></tr>
</table>

<table>
<tr><th>BATC No.</th><th>Summary of BAT Conclusion requirement for Food, Drink and Milk Industries</th><th>Status
NA/ CC / FC / NC</th><th>Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement</th></tr>
<tr><td>AELs</td><td>BAT-associated emission levels (BAT-AELs) for hexane losses from oilseed processing and refining:
<table>
<tr><th>Parameter</th><th>Type of seeds or beans processed</th><th>Unit</th><th>BAT-AEL (yearly average)</th></tr>
<tr><td rowspan="2">Hexane losses</td><td>Soybeans</td><td rowspan="2">kg/tonne of seeds or beans processed</td><td>0,3-0,55</td></tr>
<tr><td>Rapeseeds and sunflower seeds</td><td>0,2-0,7</td></tr>
</table></td><td>NA</td><td>We are satisfied this BAT-AEL is not applicable to this installation.
As hexane is not used in the production process, there are no associated emission limits.</td></tr>
<tr><td colspan="2">Oilseed processing & vegetable oil refining sector Environmental Performance Levels</td><td></td><td></td></tr>
<tr><td>EPL</td><td>Environmental Performance Level – Energy consumption
<table>
<tr><th>Specific process</th><th>Unit</th><th>Specific energy consumption (yearly average)</th></tr>
<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>
</table></td><td>CC</td><td>The operator has provided information to support compliance with BAT-EPL. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BAT-EPL.
The operator reports the site achieved a specific energy consumption of 0.183 MWh/tonne, which is within the EPL range of 0.45 – 1.05 MWh/t for integrated crushing and refining of rapeseeds.</td></tr>
</table>

<table>
<tr><th>BATC No.</th><th>Summary of BAT Conclusion requirement for Food, Drink and Milk Industries</th><th>Status
NA/ CC / FC / NC</th><th>Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement</th></tr>
<tr><td>EPL</td><td>Environmental Performance Level – Specific waste water discharge
<table>
<tr><th>Specific process</th><th>Unit</th><th>Specific waste water discharge (yearly average)</th></tr>
<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>
</table></td><td>NA</td><td>We are satisfied this BAT-EPL for wastewater is not applicable to this installation.
The Operator declared that the site has no wastewater discharges and that all process water is used in the production of animal feed.</td></tr>
</table>

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

Updating permit during permit review consolidation

- Introductory note updated
- Site plan
- Table S1.1 overhaul
    - Activity Reference (AR) renumbering
    - Updated listed activities
    - Addition of production capacity
    - 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 materials permitted at the site has increased since the previous variation.

However, considering the Installation does not discharge process effluent to water or sewer, and process gases are recycled through the process prior to discharge to air we do not consider further H1 assessment necessary. Furthermore, the increased capacity and associated environmental implications have been considered during the determination of variation V003

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 Medium Combustion Plant (1MW-50MW)

We asked the Operator to provide information on all combustion plant on site in the Regulation 61 Notice as follows:

- Number of combustion plant (CHP engines, back-up generators, boilers);
- Size of combustion plant – rated thermal input (MWth)
- Date each combustion plant came into operation

The Operator provided the information in the table(s) below: courteous

Combined heat and power (CHP)

1. Rated thermal input (MW) of the medium combustion plant.	15.0 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	CHP – 15 MWth
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Biomass – waste wood
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.	September 2017

Boilers

1. Rated thermal input (MW) of the medium combustion plant.	4.0 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler – 4.0 MWth
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Natural gas 100%
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.	September 2017

We have reviewed the information provided and we consider that the declared combustion plants, Biomass Boiler and Gas Boiler, qualify as “existing” medium combustion plants.

However, the Gas Boiler is a back-up MCP that is operated when the main MCP, Biomass CHP, is out of operation. The Operator declared that its operation is limited to under 500 hours per year, thus the ELVs associated with this MCP and included in the consolidated permit are applicable only if the Gas Boiler is operated for a minimum of 500 hours annually. We have retained the emission limits for the CHP and Backup Boiler shown in variation V003.

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.

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 [Referenced SOL1709RCMA01, dated November 2017], at the time of permitting [application received 05/12/2017]. 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 confirmed there has been no change in the hazardous substances used, their capability of causing pollution and/or the pollution prevention measures at the installation since the risk assessment was submitted on March 2017. Consequently, we are satisfied there has been no change to the assessment of risk for hazardous substances.

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.

However, the Operator has voluntarily produced a CCA plan that now forms part of the EMS.

Containment

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

The Operator provided details of all tanks;

- Tank reference/name
- Contents
- Capacity (litres)
- Location
- Construction material(s) of each tank
- The bunding specification including
    - Whether the tank is bunded
    - If the bund is shared with other tanks
    - The capacity of the bund
    - The bund capacity as % of tank capacity
    - Construction material of the bund
    - Whether the bund has a drain point
    - Whether any pipes penetrate the bund wall
- Details of overfill prevention
- Drainage arrangements outside of bunded areas
- Tank filling/emptying mitigation measures (drips/splashes)
- Leak detection measures
- Details of when last bund integrity test was carried out
- Maintenance measures in place for tank and bund (inspections)
- How the bund is emptied
- Details of tertiary containment

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

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 and pre-opertional 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 submit a written report to the Environment Agency on the commissioning of the installation. The report shall summarise the environmental performance of the plant as installed against the design parameters set out in the Application. The report shall also include a review of the performance of the facility against the conditions of this permit and details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions and confirm that the Environmental Management System (EMS) and Odour Management Plan (OMP) have been updated accordingly. The improvement condition completion will be confirmed in writing by the Environment Agency.
PO1	Prior to the commencement of commissioning of the odour abatement system, the Operator shall submit in writing a monitoring procedure for agreement in writing by the Environment Agency. The procedure shall outline how the following parameters will be monitored during the commissioning, as agreed in writing with the Environment Agency and in line with manufacturer's recommendations: • inlet and outlet VOC concentration • inlet and outlet odour units (OUe/m3) • bed operating temperature • inlet gas temperature • gas flow rate • pressure differential • gas moisture content The procedure shall detail the VOC and odour unit monitoring techniques to ensure compliance with our M2 MCERTS guidance. In addition the procedure shall include the monitoring frequencies. The procedure will include ongoing operations of the abatement system to ensure the outlet odour concentrations from the abatement system will ensure the facility meets its boundary odour emissions limits. The procedure shall identify trigger levels to initiate remedial actions and determine when the carbon filter media requires replacement. At least 2 weeks before full operation the operator shall submit a report demonstrating that the necessary procedures are in place for the operation of the carbon filter and that staff have received the necessary

	training. The operator shall confirm completion of the works in writing to the Environment Agency and update the site EMS accordingly.

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**
IC2	The Operator shall confirm in writing to the Environment Agency that the Narrative BAT requirements for the BAT Conclusions for Food, Drink and Milk Industries with respect to BAT 6 were in place on or before 4 December 2023. Refer to BAT Conclusions for a full description of the BAT requirement.	One month from permit issue