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/FP3038SQ
The Operator is:	AB Agri Limited
The Installation is:	Fridaythorpe Animal Feed Mill
This Variation Notice number is:	EPR/FP3038SQ/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 04/05/2021 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 28/07/2021.

We considered it was in the correct form and contained sufficient information for us to begin our determination of the permit review.

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

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 has an environmental management system (EMS) which is externally accredited to ISO 14001 and ISO 50001.
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 is externally accredited to ISO14001 and ISO50001. The Site holds Performance Indicator Monitoring Procedures for Water, Energy, Air Pollution; Waste Control and Disposal Procedures which form part of the National and Site EMS system. The EMS is under regular review.
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	**NA**	There are no discharges of process effluent arising from this installation. The only trade effluent produced at the site is boiler blowdown and vehicle wash effluent which is discharged via a 3 stage interceptor to

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
	pre-treatment, at the inlet to the final treatment, at the point where the emission leaves the installation).		land by soakaway. The discharge volumes are very low and monitoring is not required.
4	**Monitoring emissions to water to the required frequencies and standards.** BAT is to monitor emissions to water with at least the frequency given [refer to BAT 4 table in BATc] and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.	**NA**	There are no discharges of process effluent arising from this installation. The only trade effluent produced at the site is boiler blowdown and vehicle wash effluent which is discharged via a 3 stage interceptor to land by soakaway. The discharge volumes are very low and monitoring is not required.
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.	**CC**	The operator has provided information to support compliance with BATc 5. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 5. The site undertakes annual MCERTS testing of air emissions for total particulates from coolers and grinders using an approved contractor following EN 13284-1 standard. The requirement for annual monitoring of particulates has been included in the permit in order to ensure compliance with BATc 5.
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.

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
			The operator has an energy efficiency plan as part of their EMS and is externally accredited to ISO50001.
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. Animal Feed Manufacture is essentially a dry process, with low water usage and limited potential for water saving and application of BAT techniques. The site recycles and reuses water at the vehicle wash and dry cleaning is used throughout the site.
8	**Prevent or reduce the use of harmful substances** In order to prevent or reduce the use of harmful substances, e.g. in cleaning and disinfection, BAT is to use one or a combination of the techniques given below. (a) Proper selection of cleaning chemicals and/or disinfectants (b) Reuse of cleaning chemicals in cleaning-in-place (CIP)	**CC**	The operator has provided information to support compliance with BATc 8. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 8.

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
	(c) Dry cleaning (d) Optimised design and construction of equipment and process areas		Vehicle mats are used as a method to disinfect wheels at the site, when required for biosecurity reasons. The disinfectants used in this process are DEFRA approved. The Operator uses limited volumes of disinfectant; ensures the disinfectant is either absorbed or evaporated; and that no leaks or spills outside of the vehicle mat boundary occurs. Disinfectant Virkon S is stored as a concentrated powder and diluted on site. The dilution ratio is 1:100 which provides Virkon S at 1%, the powder is dissolved in an IBC with secondary containment/ bunded (110% capacity) and spill kit are made available in the vicinity. The Operator has a quality assurance document and risk assessments which include these control measures.
9	**Refrigerants** In order to prevent emissions of ozone-depleting substances and of substances with a high global warming potential from cooling and freezing, BAT is to use refrigerants without ozone depletion potential and with a low global warming potential.	**NA**	There is no refrigerants used on site.
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. Suitable waste streams are subject to anaerobic digestion; residues and by products from process manufacture are reworked into the process subject to quality assurance procedures for feed safety.

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
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.	**NA**	The discharge volumes from this installation are low, the minimal process effluent produced is discharged to sewer, additional buffer storage capacity is not applicable. However, the site has a 3 stage interceptor for the sites effluent which routes to the soakaway for discharge.
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	**NA**	There are no direct discharges of process effluent arising from this site. Effluent volumes produced are low and do not warrant additional treatment.

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
	(k) Sedimentation (l) Filtration (eg sand filtration, microfiltration, ultrafiltration) (m) Flotation		
13	**Noise management plan** In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to set up, implement and regularly review a noise management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements: - a protocol containing actions and timelines; - a protocol for conducting noise emissions monitoring; - a protocol for response to identified noise events, eg complaints; - a noise reduction programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures.	**NA**	BAT 13 is only applicable to cases where a noise nuisance at sensitive receptors is expected and/or has been substantiated, or if forms part of an existing permit requirement. There is no existing permit requirement and the site has no recent history of noise complaints therefore a noise management plan is not required.
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. Operator uses a combination of relevant procedures: - Using inherently quieter machinery and processes; - Enclosing noisy machinery and processes in buildings or acoustic enclosures; - Cladding with acoustic panelling and impact deadening; - Fitting attenuators on noisy airflows; - Diffusing and slowing high speed and high pressure discharges, e.g. silencers on boiler pressure relief valves; - Fitting vibration isolation mounts;

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
			- Regularly maintaining the plant and machinery; - Moving noisy plant further away from site boundaries and sensitive receptors; - Restricting noisy activities to daytime hours; and - Use of mounds or barriers to contain or deflect the noise.
15	**Odour Management** In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to set up, implement and regularly review an odour management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements: - a protocol containing actions and timelines; - a protocol for conducting odour monitoring. - a protocol for response to identified odour incidents eg complaints; - an odour prevention and reduction programme designed to identify the source(s); to measure/estimate odour exposure: to characterise the contributions of the sources; and to implement prevention and/or reduction measures.	**NA**	BAT 15 is only applicable to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated, or if forms part of an existing permit requirement. There is no existing permit requirement and the site has no recent history of odour complaints therefore an odour management plan is not required.
	ANIMAL FEED BAT CONCLUSIONS (BAT 16-17)		
16	**Energy efficiency – Green fodder only** In order to increase energy efficiency in green fodder processing, BAT is to use an appropriate combination of the techniques specified in BAT 6 and of the techniques given below. (a) Use of predried fodder (b) Recycling of waste gas from the dryer	**NA**	Not applicable for this site.

<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>(c) Use of waste heat for pre-drying

Applicable in addition to BAT6</td><td></td><td></td></tr>
<tr><td>17</td><td>Emissions to air – particulates
In order to reduce channelled dust emissions to air, BAT is to use one of the techniques given; a. bag filter, b. cyclone.
<table>
<tr><th rowspan="2">Parameter</th><th rowspan="2">Specific process</th><th rowspan="2">Unit</th><th colspan="2">BAT-AEL
(average over the sampling period)</th></tr>
<tr><th>New plants</th><th>Existing plants</th></tr>
<tr><td rowspan="2">Dust</td><td>Grinding</td><td rowspan="2">mg/Nm^3</td><td><2-5</td><td><2-10</td></tr>
<tr><td>Pellet cooling</td><td colspan="2"><2-20</td></tr>
</table></td><td>CC</td><td>The operator has provided information to support compliance with BATc 17. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 17.

<u>Cooler</u>
The existing emission limit values (ELV) for the pellet coolers were 50mg/Nm^3 for particulate emissions. As these are existing plants we believe it is appropriate to set the new ELV at the top of the range. A new ELV of 20mg/Nm^3 will be included in the varied permit to ensure compliance with the BAT-AEL.

Monitoring data suggests the operator can comply with a tighter ELV of 20 mg/Nm^3 now, therefore we are including this limit within the permit from date of issue and we are choosing to not future date this BAT AEL.

<u>Grinder</u>
There was no ELV specified in the previous permit for the grinder. As this is existing plant we believe it is appropriate to set a new ELV at the top range of the BAT-AEL. A new ELV of 10mg/Nm^3 will be included in the varied permit to ensure compliance with the BAT-AEL.

Monitoring data suggests the operator can comply with a tighter ELV of 10 mg/Nm^3 now, therefore we are including this limit within the</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></td><td></td><td>permit from date of issue and we are choosing to not future date this BAT AEL.</td></tr>
<tr><td></td><td>Animal Feed Environmental Performance Levels</td><td></td><td></td></tr>
<tr><td>EPL</td><td>Environmental Performance Level – Energy Consumption for Animal Feed
<table>
<tr><th>Product</th><th>Unit</th><th>Specific energy consumption (yearly average)</th></tr>
<tr><td>Compound food</td><td rowspan="3">MWh/tonne of products</td><td>0.01-0.10 (1)(2)(3)</td></tr>
<tr><td>Dry pet food</td><td>0.39-0.50</td></tr>
<tr><td>Wet pet food</td><td>0.33-0.85</td></tr>
<tr><td colspan="3">(1) The lower end of the range can be achieved when pelleting is not applied.
(2) The specific energy consumption level may not apply when fish and other aquatic animals are used as raw material.
(3) The upper end of the range is 0.12 MWh/tonne of products for installations located in cold climates and/or when teat treatment is used for Salmonella decontamination.</td></tr>
</table></td><td>CC</td><td>The operator has provided information to support compliance with the energy EPL. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with the energy consumption for Animal Feed.

The compound food figure of 0.01-0.10 is appropriate for this installation.
The operators specific energy consumption average for 2020 – 2021 was 0.08 MWh/t, which is within the target, reflecting good energy management in place at this installation.</td></tr>
<tr><td>EPL</td><td>Environmental performance level – Waste water discharge for Animal Feed
<table>
<tr><th>Product</th><th>Unit</th><th>Specific waste water discharge (yearly average)</th></tr>
<tr><td>Wet pet food</td><td>m3/tonne of products</td><td>1.3-2.4</td></tr>
</table></td><td>NA</td><td>Not applicable – dry process only.</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

- Activity name
- 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.

Capacity Threshold

The Environment Agency is looking to draw a “line in the sand” for permitted production capacity; a common understanding between the Operator and regulator for the emissions associated with a (maximum) level of production, whereby the maximum emissions have been demonstrated as causing no significant environmental impact.

We have included a permitted production level (capacity) within table S1.1 of the permit for the section 6.8 listed activity and we need to be confident that the level of emissions associated with this production level have been demonstrated to be acceptable.

The Operator has completed a H1 assessment of emissions for typical figures of production at the time of permitting.

The H1 assessment is not valid for the maximum capacity stated within the permit or if production is now higher. We have included an improvement condition within the permit (IC6) which requires the operator to revisit their H1 risk assessment for particulate emissions to air at the capacity limit figure that is now stated within table S1.1 of the permit.

Emissions to Air

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

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

Emission points A6 – A10 and A12 – A17 have been merged in table S3.1 as these are all raw material or fuel storage vent.

Implementing the requirements of the Medium Combustion Plant Directive

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

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

The Operator provided the information in the table below:

Boilers

1. Rated thermal input (MW) of the medium combustion plant.	4.5
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Gas Oil (LPG)
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.	June 2005

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

For existing MCP with a rated thermal input of less than or equal to 5 MW, the emission limit values set out in tables 1 and 3 of Part 1 of Annex II MCPD shall apply from 1 January 2030.

We have included the appropriate emission limit values for existing medium combustion plant as part of this permit review. See Table S3.1 in the permit. We have also included a new condition 3.1.4 within the permit which specifies the monitoring requirements for the combustion plant in accordance with the MCPD.

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, A3, and A4 against BAT 17 for particulate emissions from the grinder and coolers.

We have added an improvement condition (IC5) 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 (PM_{10} 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.

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 ABN, Fridaythorpe: PPC Application Site Report dated January 2005 during the original application received on 14/03/2005. The site condition report included a report on the baseline conditions as required by Article 22. We reviewed that report and considered that it adequately described the condition of the soil and groundwater at that time.

The Operator submitted a summary report which referenced the site condition report and baseline report. We have reviewed the information and we consider that it adequately describes the current condition of the soil and groundwater. Consequently, we are satisfied that the baseline conditions have not changed.

Hazardous Substances

Hazardous substances are those defined in Article 3 of Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures

The operator has provided a short risk assessment on the hazardous substances stored and used at the installation. The risk assessment was a stage 1-3 assessment as detailed within EC Commission Guidance 2014/C 136/03.

The stage 1 assessment identified the hazardous substances used / stored on site.

The stage 2 assessment identified if hazardous substances are capable of causing pollution. If they are capable of causing pollution they are then termed Relevant Hazardous Substances (RHS). The Stage 3 assessment identified if pollution prevention measures are fit for purpose in areas where hazardous substances are used / stored. This includes drains as well.

The outcomes of the three stage assessment identified that pollution of soil and/or ground water to be unlikely.

Climate Change Adaptation

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

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

The operator has submitted a climate change risk assessment, which considers, as a minimum the impact of severe weather on the operations within the installation.

We consider the climate change risk assessment to be appropriate for the installation.

Underground Structures

The operator has confirmed there are no underground structures at the installation.

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).

The following improvement conditions have been marked as complete and removed from the permit.

Superseded Improvement Conditions	
Reference	**Improvement condition**
IC1	The operator shall provide a secondary containment bund to the diesel storage tank. The bunding shall be constructed to the following minimum standards: • The bund shall be impermeable and resistant to diesel; • The bund shall have no outlet (drain or valve) and drain to a blind collection point; • The tank shall have pipework routed within the bunded area with no penetration of the contained surface; • The bund shall be designed to catch leak from the tanks and fittings; • The tank shall have a capacity greater than 110% of the diesel tank; and • The tank shall have fill pints within the bund where possible or otherwise additional secondary containment for filling facilities shall be provided. A written report detailing the construction of the bund together with as built drawings shall be provided to the Agency for approval.
IC2	The operator shall undertake an assessment of the suitability of the bunding arrangements of the bulk liquid storage area. The assessment shall highlight any deficiencies in the current bunding arrangements have with meeting the following standards: • The bund shall be impermeable and resistant to the range of substances stored within the area; • The bund shall have no outlet (drain or valve) and drain to a blind collection point; • The tanks within the area shall have pipework routed within the bunded area with no penetration of the contained surface; • The bund shall be designed to catch leak from the tanks and fittings; • The tank shall have a capacity greater than 110% of the largest tank/container or 25% of the total tankerage; and • The tank/containers shall have fill pints within the bund where possible or otherwise additional secondary containment for filling facilities shall be provided. A written report summarising the findings of the assessment and any recommendations of improvements required to enable the bunding to meet the above standards, together with an implementation timetable shall be submitted to the Agency for approval.
IC3	The operator shall carry out a dull inspection of the condition of the hardstanding surrounding the diesel tank. Any damage identified within the inspection shall be repaired. A written report detailing the findings of the inspections (including photographic evidence of all identified damage) and the details of the repairs carried out shall be submitted to the Agency.

IC4	The operator shall carry out an assessment of the measures in place within the installation to ensure that the soakaway WL1 can only receive uncontaminated surface water and cannot be impacted by contaminated firewater, cleaning chemicals and minor spills of pollution liquid from the process. A report detailing the findings of the assessment, recommendations for improvements to the surfacing, kerbing and bunding together with an implementation timetable shall be submitted to the Agency for approval.

The following improvement conditions have added to the permit as a result of the variation.

Improvement programme requirements V004		
Reference	**Reason for inclusion**	**Justification of deadline**
IC5	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 A1, A2, A3 and A4 identifying the fractions within the PM10 and PM2.5 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.	25/04/2023 or other date as agreed in writing with the Environment Agency
IC6	The operator shall review and update the H1 risk assessment for particulate emissions to air at the capacity levels stated within table S1.1 of this permit. The H1 shall be submitted to the Environment Agency for review.	25/04/2023 or other date as agreed in writing with the Environment Agency