Natural Resources Wales permitting decisions

Variation and Consolidation of a bespoke Permit – 2 Agriculture Limited

We have decided to issue a Natural Resources Wales initiated variation and consolidated permit for Llay Feed Mill in Wrexham operated by 2 Agriculture Limited.

The permit number is EPR/AP3337HF.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

The permit has been varied following the publication of the revised Best Available Techniques (BAT) Reference Documents (BREF) for Food, Drink and Milk Industries. The associated BAT conclusions to this document were published on 4 December 2019 in the Official Journal of the European Union.

This variation incorporates the changes required by the Industrial Emissions Directive following a statutory review of permits in the Food, Drink and Milk sector. These include the amendment of the wording of several permit conditions relating to notifications, changes to emissions limits and monitoring requirements.

We are satisfied that the operator will be compliant with the published BAT conclusions which will apply from 4 December 2023.

Purpose of this document

This decision document:

- explains how we have carried out our statutory review of the Operator's Permit;
- why we have decided to vary the Permit as a result of that review; and
- why we have included the specific conditions in the revised Permit through the variation notice we are issuing.

It is our record of our decision-making process, to show how we have taken into account all relevant factors in reaching our position.

Structure of this document

- Assessment of Llay Feed Mill against the published BAT conclusions for Food, Drink and Milk Industries.
- Annex 1 – Decision Checklist regarding relevant BAT Conclusions for Food, Drink and Milk Industries

Assessment of Llay Feed Mill against the published BAT conclusions for Food, Drink and Milk Industries

1. Our decision

We have issued a variation, which will allow the Operator to operate the installation, subject to the conditions in the varied permit.

The variation does three things:

- it consolidates the original permit to reflect changes made through earlier variations;
- it brings the permit into line with our modern regulatory template; and
- it varies the permit where appropriate to reflect the outcome of our statutory review and incorporate Best Available Techniques (BAT) and Associated Emission Limit Values (BAT-AELs).

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

The original permit, issued on 13/04/2006 ensured that the installation, employed BAT and ensured a high level of protection for human health and the environment. We have altered the permit as a result of the statutory review, and we are confident that the new requirements will deliver a superior level of protection to that which was previously achieved. Where a site is not currently compliant with BAT, Improvement Conditions have been included to bring the site up standard by 4 December 2023.

2. The legal framework

The variation and consolidation Notice (which includes the consolidated permit as Schedule 2) will be issued under Regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 (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 Industrial Emissions Directive (IED);
- subject to aspects of other relevant legislation which also have to be addressed.

We consider that, in issuing the Variation and Consolidated Permit, 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.

3. How we reached our decision

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 on 24/04/2020 requiring the operator to provide information to demonstrate how the operation of their installation currently meets, or will subsequently meet, the revised standards described in the relevant BAT Conclusions document.

The Regulation 61(1) Notice required the operator to:

- Describe the techniques that will be implemented before 4 December 2023, which will then ensure that operations meet the revised standard, or
- Justify 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 standard is not applicable to those processes, or
- Justify why an alternative technique will achieve the same level of environmental protection equivalent to the revised standard described in the BAT Conclusions.

- Where their permitted activity involves the use, production or release of a hazardous substance, as defined in Article 3(18) of the Industrial Emissions Directive, the Operator was required to carry out a risk assessment considering the possibility of soil and groundwater contamination at the permitted installation with such substances. Where risk of such contamination is established prepare a baseline report containing information necessary to determine the state of soil and groundwater contamination so as to make a quantified comparison with the state upon definite cessation of the activity.
- Where their permitted activity involves the use, production, storage or release of priority hazardous substances and any other relevant substances., as defined by the Water Framework Directive, the Operator was required to carry out a risk screening assessment considering the presence of priority hazardous substances at the permitted installation. Where a risk of these substances is established the operator is to sample the effluent and screen for the priority hazardous substances. If these substances are found to be present in the effluent stream, then assessment using the H1 tool and potential detailed modelling will be required to demonstrate that the effluent discharge will not have a significant impact to the receiving water.

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 Food, Drink and Milk BAT Conclusions Document, the Regulation 61(1) Notice requested that the operator make a formal request for derogation from compliance with that 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(1) Notice response from the operator was received on 13/11/2020, 24/09/2021 and 04/10/2021.

We considered that the response contained sufficient information for us to commence determination of the permit review. The operator made no claim for commercial confidentiality. We have not received any information in relation to the Regulation 61(1) Notice response that appears to be confidential in relation to any part.

4. Key issues/Regulation 61 response

BAT Conclusions for the Food, Drink and Milk Industries were published as Commission Implementing Decision EU 2019/2031 in the Official Journal of the EU on 4 December 2019. There are 37 BAT Conclusions. Annex 1 provides a record of decisions made in relation to each relevant BAT Conclusion applicable to the installation. This should be read in conjunction with the permit/variation notice issued.

A detailed response was received from the Operator. Where the operator has concluded that they have achieved BAT, and we are in agreement, no further information or justification has been sought by Natural Resources Wales.

Baseline site condition report

Where their permitted activity involves the use, production or release of a hazardous substance, as defined in Article 3(18) of the Industrial Emissions Directive, the Operator was required to carry out a risk assessment considering the possibility of soil and groundwater contamination at the permitted installation with such substances. Where risk of such contamination is established prepare a baseline report containing information necessary to determine the state of soil and groundwater contamination so as to make a quantified comparison with the state upon definite cessation of the activity.

The Operator provided no response in relation to the above request contained within the Regulation 61(1) Notice; therefore an improvement condition has been set in the permit.

5. Changes we have made

Improvement Conditions

Based on the information provided in the Regulation 61(1) response, we consider that we need to set improvement conditions. These conditions are set out below. We are using these conditions to require the operator to provide Natural Resources Wales with details that need to be established or confirmed during operations. The improvement conditions ensure compliance by 2023.

IC6	The Operator shall complete and submit for approval in writing by Natural Resources Wales: • A baseline report containing information necessary to determine the current state of soil and groundwater contamination; or • Provide a summary report referring to information previously submitted where you are satisfied that such information represents the current state of soil and groundwater contamination; so as to enable a quantified comparison to be made with the state of soil and groundwater contamination upon definitive cessation of activity.	4 June 2023 or otherwise agreed in writing with Natural Resources Wales
IC7	The Operator shall submit to Natural Resources Wales an updated written procedure(s) describing how they intend to meet the following BAT requirements in accordance with requirements specified within: • BAT Conclusions for Animal Feed within the Food, Drink and Milk Industries BRef Document (EU 2019) – Table 2 - Indicative Environmental Performance Levels for Specific Energy Consumption	4 June 2023 or otherwise agreed in writing with Natural Resources Wales
IC8	The Operator shall submit to Natural Resources Wales an updated written procedure(s) describing how they intend to meet the following BAT requirements in accordance with requirements specified within: • BAT Conclusion 2 of the Food, Drink and Milk Industries BRef Document (EU 2019) – In order to increase the resource efficiency and to reduce emissions, BAT is to establish, maintain and regularly review an inventory of water, energy and raw materials consumption as well as of waste water and waste gas inventory as part of the environmental management system that incorporates all of the specified features	4 June 2023 or otherwise agreed in writing with Natural Resources Wales
IC9	As part of the ongoing investigative work regarding noise impact and noise reduction measures. The Operator shall review the agreed noise reduction measures in line with the BAT requirements. The Operator shall submit to Natural Resources Wales an updated written procedure(s) describing how they intend to meet the following BAT requirements in accordance with requirements specified within: • BAT Conclusion 14 of the Food, Drink and Milk Industries BRef Document (EU 2019) – 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.	4 June 2023 or otherwise agreed in writing with Natural Resources Wales
IC10	(a) The Operator shall submit to NRW the maximum capacity of the installation that was used in the most recent risk assessment submitted to NRW. (b) The Operator shall submit to NRW for approval the maximum capacity of the installation at the current time. (c) If the maximum capacity of the installation has increased from the time of the last submitted risk assessment and the current time, the Operator shall review and update the risk assessment to account for the current maximum capacity. The risk assessment shall be submitted to NRW for review. Notes: The capacity is to be taken and presented using the same units from the relevant sub-section of Section 6.8, Part 2, Schedule 1 of the Environmental Permitting Regulations 2016 (as from time to time amended). Capacity is to be taken as the maximum possible capacity of the installation, not the maximum actual production. The risk assessment should follow the methodology set out in The Environmental Risk Assessment (EPR-H1). You may use a methodology other than EPR-H1 however the methodology must address the same issues as in EPR-H1 to an equivalent level of detail.	(a) and (b) Within 6 months of permit variation issue (c) Within 9 months of permit variation issue (if applicable)

IC6 has been included as the Operator provided no response regarding that specific request within the Regulation 61(1) Notice. IC7 has been included as the Operator did not provide a response to how they are compliant with this BAT conclusion, relating to Indicative Environmental Performance Level. IC8 has been included as the Operator did not provide sufficient information for us to be satisfied they are compliant or will be compliant with the BAT conclusion with regards to the waste gas streams only. IC9 has been included as we are not satisfied that the measures specified are considered BAT, the Operator is currently carrying out further work regarding noise reduction measures at the site following recent noise complaints. See Annex 1 for more details.

Capacity creep

We have included an improvement condition (IC10) in order to establish the current maximum capacity at the installation and to determine if there has been a change since the last risk assessment submitted to NRW. If there has been an increase in the maximum capacity, what we call capacity creep, we have asked the Operator to review and update their risk assessment and submit to us for review. We have also implemented a maximum capacity limit into Table S1.1 of the permit in line with the IC response to prevent any further capacity creep at the installation.

Other changes

We have updated the operating techniques table in the permit and the status of any existing improvement conditions. No other changes have been made to the permit. The permit has been consolidated into the newest EPR template therefore there may have been slight amendments to certain permit conditions.

Operational Changes

No operational changes have occurred as part of this variation.

Medium Combustion Plant (MCP) / Specified Generator (SG)

The installation has one existing MCP already listed in Table S1.1 as a Directly Associated Activity and with emission point (A1) in Table S3.1. The existing MCP is a natural gas boiler, 3.5 MWth input. Emission Limit Values (ELVs) and monitoring for existing MCPs is not required until 1st January 2025 at the earliest. As this is some way off, we decided to maintain any existing ELVs and monitoring requirements in the permit and not to impose new stricter ELVs ahead of time.

Emissions to Water

As part of our delivery of the Water Framework Directive requirements, we need to identify and assess the impact for all discharges to surface waters and/or sewer from the site for priority hazardous substances and any other relevant substances. The emissions monitoring for these substances should be carried out using the methods and standards described in the M18 guidance on "Monitoring of discharges to water and sewer".

With reference to the risk assessment guidance on the gov.uk website entitled "Surface water pollution risk assessment for your environmental permit" (accessible via: https://www.gov.uk/guidance/surface-water-pollution-risk-assessment-for-your-environmental-permit) the company carried out the following assessments:

- Screening tests for priority hazardous pollutants and any other relevant priority hazardous substances.
- For any substance which is not screened out by the screening tests further modelling, as described in the risk assessment guidance "Surface water pollution risk assessment for your environmental permit".

The installation discharges uncontaminated surface water run-off and roof water to Singret Brook. The installation also discharges Scrubber effluent, boiler blowdown, surface water and vehicle washings to foul sewer for further treatment. There are currently no ELVs or monitoring requirements on either of these discharges, therefore we consider there are no priority hazardous substances within each of these discharges. There are no emissions of process effluent to surface water associated with the primary listed activity.

Emissions to Water – Article 15(4) Derogations

No derogations.

Emissions to Air

There were changes to the Emission Limit Values (ELVs) for emissions to air taking into account BAT conclusions from the Food, Drink and Milk BREF. The Operator has confirmed emission points A12, A15 and A16 relate to pellet cooling and emission point A14 relates to grinding. As confirmed with the Operator and further review of the BREF document, we consider the BAT conclusions for grain milling do not apply.

The tables below outline the parameters and limits set to implement the BAT-AELs:

Effective until 3 December 2023

Release point	Parameter	Limit / BAT-AEL	Effective until
A12	Total particulates	20 mg/m^3	3 December 2023
A14	Total particulates	20 mg/m^3	
A15	Total particulates	20 mg/m^3	
A16	Total particulates	20 mg/m^3	

Effective from 4 December 2023:

Release point	Parameter	Limit / BAT-AEL	Effective from
A12	Particulate matter	20 mg/Nm^3	4 December 2023
A14	Particulate matter	10 mg/Nm^3	
A15	Particulate matter	20 mg/Nm^3	
A16	Particulate matter	20 mg/Nm^3	

Where BAT associated emission levels are identified (BAT-AELs), limits may be prescribed at the top end of the range unless the proximity of sensitive receptors requires a tighter limit or if tighter limits are previously on the permit, this ensures no backsliding of emission limits.

Emissions to Air – Article 15(4) Derogations

No derogations.

Other IED BREFs relevant to the permit review

There are no other listed activities within Table S1.1 of the permit.

6. Conclusion

We consider that the installation already employed what used to be BAT, and that the operator has achieved significant improvements in performance since the permit was originally granted. The revised BREF and its BAT-AELs provide the opportunity to consider further environmental improvements.

Coupled with the consolidation and modernisation of the permit, we believe this variation provides a sound basis for ongoing regulation of the installation and we are satisfied that the operator is currently achieving or will be achieving all relevant BAT by 4 December 2023.

We believe that we have ensured compliance with all relevant legal requirements in carrying out this review and making our determination on the variation.

Annex 1: Decision checklist regarding relevant BAT Conclusions for Food, Drink and Milk Industries

BAT Conclusions for the Food, Drink and Milk Industries were published as Commission Implementing Decision EU 2019/2031 in the Official Journal of the EU on 4 December 2019. There are 37 BAT Conclusions. This checklist 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 permit.

All BAT Conclusions arising are listed by number in order below;

BATc number		Summary of BAT Conclusion requirement	**Status/comment** **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
OVERALL ENVIRONMENTAL PERFORMANCE			
1	**Environment Management System (EMS) – <u>ALL</u> of the following:**		
	I.	Commitment, leadership and accountability of the management, including senior management for the implementation of an effective EMS	Currently Compliant The Operator has stated their newly improved EMS meets all the requirements as specified in BAT 1.
	II.	An analysis that includes the determination of the organisation's context, the identification of the needs and expectations of interested parties, the identification of characteristics of the installation that are associated with possible risks for the environment (or human health) as well as of the applicable legal requirements relating to the environment.	

BATc number		Summary of BAT Conclusion requirement	**Status/comment** **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	III.	Development of an environmental policy that includes the continuous improvement of the environmental performance of the installation	
	IV.	establishing objectives and performance indicators in relation to significant environmental aspects, including safeguarding compliance with applicable legal requirements;	
	V.	Planning and implementing the necessary procedures and actions (including corrective and preventive actions where needed), to achieve the environmental objectives and avoid environmental risks;	
	VI.	Determination of structures, roles and responsibilities in relation to environmental aspects and objectives and provision of the financial and human resources needed;	
	VII.	Ensuring the necessary competence and awareness of staff whose work may affect the environmental performance of the installation (e.g. by providing information and training);	
	VIII.	Internal and external communication	
	IX.	Fostering employee involvement in good environmental management practices;	
	X.	Establishing and maintaining a management manual and written procedures to control activities with significant environmental impact as well as relevant records;	
	XI.	Effective operational planning and process control;	
	XII.	Implementation of appropriate maintenance programmes;	

BATc number		Summary of BAT Conclusion requirement	**Status/comment** **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	XIII.	Emergency preparedness and response protocols, including the prevention and/or mitigation of the adverse (environmental) impacts of emergency situations;	
	XIV.	When (re)designing a (new) installation or a part thereof, consideration of its environmental impacts throughout its life, which includes construction, maintenance, operation and decommissioning;	
	XV.	Implementation of a monitoring and measurement programme, if necessary, information can be found in the Reference Report on Monitoring of Emissions to Air and Water from IED Installations;	
	XVI.	Application of sectoral benchmarking on a regular basis;	
	XVII.	Periodic independent (as far as practicable) internal auditing and periodic independent external auditing in order to assess the environmental performance and to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;	
	XVIII.	Evaluation of causes of nonconformities, implementation of corrective actions in response to nonconformities, review of the effectiveness of corrective actions, and determination of whether similar nonconformities exist or could potentially occur;	
	XIX.	Periodic review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness;	
	XX.	Following and taking into account the development of cleaner techniques.	

BATc number		Summary of BAT Conclusion requirement	**Status/comment** **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	(i)	Noise Management Plan (BAT 13)	See BAT 13
	(ii)	Odour Management Plan (BAT 15)	See BAT 15
	(iii)	Inventory of water, energy and raw materials consumption as well as of waste water and waste gas streams (BAT 2)	See BAT 2
	(iv)	Energy Efficiency Plan (BAT 6a)	See BAT 6a
2	**Establish and maintain a waste water and waste gas inventory as part of the EMS - <u>ALL</u> of the following:**		
	Information about the food, drink and milk production processes, including;		
	I.(a)	simplified process flow sheets that show the origin of the emissions	Compliant in the future The Operator has not provided sufficient information to determine whether compliant with this BAT conclusion. Therefore, an improvement condition has been set.
	I.(b)	descriptions of process-integrated techniques and waste water/waste gas treatment techniques to prevent or reduce emissions, including their performance	
	II.	Information about water consumption and usage and identification of actions to reduce water consumption and waste water volume (BAT 7)	
	Information on quantity and characteristics of the waste water streams, such as:		
	III.(a)	Average values and variability of flow, pH and temperature	Not Applicable There is no process effluent waste water stream related to the feed manufacturing process. There is no ETP on site or no treatment of any process effluent.
	III.(b)	Average concentration and load values of relevant pollutants/parameters (e.g. TOC/COD, nitrogen species, phosphorus, chloride, conductivity) and their variability	
	Information on characteristics of waste gas streams, such as:		

BATc number		Summary of BAT Conclusion requirement	**Status/comment** **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	IV.(a)	*Mean and variability of:*	Compliant in the future The Operator has not provided sufficient information to determine whether compliant with this BAT conclusion. Therefore, an improvement condition has been set.
		Flow	
		temperature	
	IV.(b)	*Mean concentration, load and variability of relevant substances:*	
		Dust	
		TVOC	
		CO	
		NOx	
		SOx	
	IV.(c)	*Presence of other substances that may affect the waste gas treatment system or plant safety:*	
		O2	
		Water vapour	
		Dust	
	V.	Information about energy consumption and usage, the quantity of raw materials used, as well as the quantity and characteristics of residues generated, and identification of actions for continuous improvement of resource efficiency (BAT 6 and BAT 10)	
	VI.	Identification and implementation of an appropriate monitoring strategy with the aim of increasing	

BATc number	Summary of BAT Conclusion requirement	Status/comment **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	resource efficiency, taking into account energy, water and raw materials consumption. Monitoring can include direct measurements, calculations or recording with an appropriate frequency. The monitoring is broken down at the most appropriate level (e.g. at process or plant/installation level).	
MONITORING		
3	**For relevant emissions to water as identified by the inventory of waste water streams (BAT 2): monitor key process parameters at key locations**	
	Key process parameters	
	Waste water flow	Compliant in the future The installation currently has two waste water streams: (i) Uncontaminated surface water run-off and roof water direct to a receiving water body (ii) Vehicle washing, scrubber effluent, boiler blow down and surface water discharged to foul sewer The Operator has stated that the following are monitoring weekly on the scrubber effluent prior to the discharge point: • Temperature, pH, conductivity and flow
	pH	
	Temperature	
	Key monitoring locations	
	Pre-treatment inlet and/or outlet	
	Final treatment inlet	
	Discharge point (to the environment)	
	Other location	

BATc number	Summary of BAT Conclusion requirement	**Status/comment** **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
		With improvements planned to the flow measurements to ensure better accuracy. As per the interpretation document this BAT conclusion relates to on-site ETPs and direct discharges of effluent to water, which does not occur on the site, therefore is no process effluent produced in the process.
4	*Monitoring of water emissions: monitor emissions to water with at least the frequency given below and in accordance with EN standards:*	
	Refer to monitoring emissions to water table in BRef document	Not Applicable As per Note 2, monitoring is only required for direct discharge to receiving water body. Chloride monitoring is not required as per the interpretation document and not expected to be present within waste water. The site is permitted to discharge only uncontaminated surface water run-off and roof water direct to a receiving water body. All other discharges (vehicle washing, boiler blow down, scrubber effluent) is discharged to sewer (indirect). No discharges of process effluent relating to compound feed manufacture process.
5	Refer to monitoring emissions to air table in BRef document Monitoring parameters depend on sector	Currently Compliant

BATc number		Summary of BAT Conclusion requirement	**Status/comment** **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			The Operator already monitors the emissions to air yearly as specified in the current permit.
6	**Energy Efficiency: BAT is to use 6a and appropriate combination of common techniques**		
	a.	Energy Efficiency Plan	Currently Compliant The Operator has stated the energy use is monitored as part of the EMS. Key Performance Indicators are used to provide energy reduction targets.
	b.	Use of common techniques	Currently Compliant The Operator has stated there are plans in place to reduce energy consumption, techniques include: • Replacement of electric motors with newer more efficient ones • Replacement of lights with LED lighting • Replacement of old transformer for a new more efficient one
7	**Water consumption and waste water discharge** **BAT is to use 7a and one or a combination of techniques in b to k**		
	a.	Water recycling and/or reuse	Currently Compliant The Operator has stated that water consumption through the dust suppression

BATc number		Summary of BAT Conclusion requirement	**Status/comment** **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			wet scrubber system is recycled as much as possible until no longer useable.
	b.	Optimisation of water flow	Currently Compliant The Operator has stated the following techniques are in place: • Recycling via scrubber system • Demister pad recycles water through the main stack • Segregation of water streams – foul sewer of boiler blow down, vehicle washing and scrubber effluent and a separate drainage system for uncontaminated surface water drainage • Vehicle wash uses high pressure water sprays • Trailing a mobile scrubber systems to recycle the wash water from vehicle washing
	c.	Optimisation of water nozzles and hoses	
	d.	Segregation of water streams	
	e.	Dry cleaning	
	f.	Pigging system for pipes	
	g.	High-pressure cleaning	
	h.	Optimisation of chemical dosing and water use in cleaning-in-place (CIP)	
	i.	Low-pressure foam and/or gel cleaning	
	j.	Optimised design and construction of equipment and process areas	
	k.	Cleaning of equipment as soon as possible	
8	**Harmful substances. BAT is to use one or a combination of the techniques given below:**		
	a.	Proper selection of cleaning chemicals and/or disinfectants	Currently Compliant The Operator has stated the following technique is in place:
	b.	Reuse of cleaning chemicals in cleaning-in-place CIP	
	c.	Dry cleaning	

BATc number		Summary of BAT Conclusion requirement	**Status/comment** **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	d.	Optimised design and construction of equipment and process areas	• COSHH database pre-screening protocol to ensure that all cleaning materials are suitable and safe • Where possible deselection of any material that poses a risk to the environment and aquatic life as defined in the Water Framework Directive
9	**BAT is to use refrigerants without ozone depletion potential and with a low global warming potential**		Not Applicable No refrigeration on site as part of permitted activity.
10	**Increase resource efficiency, use one or a combination of the techniques given below**		
	a.	Anaerobic digestion	Currently Compliant The site sends waste feed to anaerobic digestion.
	b.	Use of residues	
	c.	Separation of residues	
	d.	Recovery and reuse of residues from pasteuriser	
	e.	Phosphorus recovery as struvite	
	f.	Use of waste water for land spreading	
EMISSIONS TO WATER			
11	**Prevent uncontrolled emissions to water, provide an appropriate buffer storage capacity for waste water**		Currently Compliant There is scrubber water waste water which is provided with a buffer tank of 10,000 , if the water is contaminated it can be held

BATc number		Summary of BAT Conclusion requirement	**Status/comment** **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			within this tank before discharge. No process effluent discharges.
12	**Reduce emissions to water, use an appropriate combination of the techniques given below**		
	a.	Equalisation	Currently Compliant The Operator treats surface water, boiler blow down and scrubber effluent via settlement tanks and interceptors before disposal to water or foul sewer. No discharges of process effluent.
	b.	Neutralisation	
	c.	Physical separation	
	d.	Aerobic and/or anaerobic treatment	
	e.	Nitrification and/or denitrification	
	f.	Partial nitrification	
	g.	Phosphorus recovery as struvite	
	h.	Precipitation	
	i.	Enhanced biological phosphorus removal	
	j.	Coagulation and flocculation	
	k.	Sedimentation	
	l.	Filtration	
	m.	Flotation	
	BAT-AELs for direct emissions to a receiving water body. Table 1 and associated notes. Associated monitoring given in BAT 4.		
	Chemical oxygen demand COD	25–100 mg/L	Not Applicable No direct emissions of process effluent to a receiving water body.
	Total suspended solids TSS	4–50 mg/L	

BATc number	Summary of BAT Conclusion requirement		**Status/comment** **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	Total nitrogen	2–20 mg/L	
	Total phosphorus	0.2–2.0 mg/L	
NOISE			
13	**Set up, implement, and regularly review a Noise Management Plan (as part of the EMS) where nuisance is expected and/or has been substantiated. Include ALL of the following:**		
	I.	A protocol containing actions and timelines	Compliant in the future The Operator has stated that an noise management plan incorporating all the requirements specified within the BAT conclusion will be implemented as part of the newly developed EMS.
	II.	A protocol for conducting noise emissions monitoring	
	III.	A protocol for response to identified noise events, e.g. complaints	
	IV.	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.	
14	**Techniques to prevent, or where not practicable reduce noise and vibration emissions. Use one or a combination of the following:**		
	a.	Appropriate location of equipment and buildings	Compliant in the future The Operator has stated the following operational measures are in place: • Planned preventative maintenance programme in place • All doors and windows kept closed when not in use
	b.	Operational measures – see examples	
	c.	Low-noise equipment – see examples	
	d.	Noise control equipment – see examples	
	e.	Noise abatement – see examples	

BATc number	Summary of BAT Conclusion requirement		**Status/comment** **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			• Training and continue competence of staff However, we are not satisfied these measures indicate BAT for this site, due to the recent noise complaints. The Operator is currently carrying out investigative work regarding noise impact and noise reduction measures, therefore we have set an improvement condition in order for the Operator to review the noise reduction techniques amidst this ongoing work.
ODOUR			
15	**Set up, implement, and regularly review an Odour Management Plan (as part of the EMS) where nuisance is expected and/or has been substantiated. Include ALL of the following:**		
	I.	Protocol with actions and timelines	Compliant in the future The Operator has stated that an odour management plan incorporating all the requirements specified within the BAT conclusion will be implemented as part of the newly developed EMS.
	II.	Odour monitoring protocol	
	III.	Odour complaint response plan/protocol	
	IV.	Odour prevention and reduction programme	
BAT CONCLUSIONS FOR ANIMAL FEED			
Indicative	***Indicative environmental performance levels for specific energy consumption*** *Table 2 and footnotes*		
	Compound feed	0.01 – 0.10 MWh/tonne of products	Compliant in the future

BATc number	Summary of BAT Conclusion requirement			Status/comment **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	Dry pet food	0.39 – 0.50 MWh/tonne of products		The Operator has not provided any justification as to how they comply with the BAT conclusion. Therefore improvement condition set.
	Wet pet food	0.33 – 0.85 MWh/tonne of products		
16 **(Green fodder only)**	**Increase energy efficiency in green fodder processing use an appropriate combination of the techniques specified in BAT 6 and of the techniques given below:**			
	a.	Use of predried fodder		Not Applicable No green fodder processing.
	b.	Recycling of waste gas from the dryer		
	c.	Use of waste heat for predrying		
Indicative	***Indicative environmental performance levels for specific waste water discharge*** *Table 3*			
	Wet pet food	1.3 – 2.4 m^3/tonne of products		Not Applicable
17	**Reduce channelled dust emissions to air, use one of the techniques given below:**			
	a.	Bag filter		Currently Compliant There are cyclone abatement systems in place on Emission Points: A12 – Process Building Exhaust A14 – Extruder plant Grinder A15 – Extruder plant Cooler A16 – Extruder Plant Cooler
	b.	Cyclone		
	BAT-AELs for channelled dust emissions to air from grinding and pellet cooling in compound feed manufacture *Table 4 and its supporting notes. Monitoring requirements are outlined in BAT 5*			
	Dust – grinding	New plant: < 2–5 mg/N^3	Existing plant: <2–10 mg/Nm^3	Compliant in the future

BATc number		Summary of BAT Conclusion requirement		**Status/comment** **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
				Emission point A14 is subject to the BAT-AEL. The lower BAT-AEL of 10 mg/m^3 will be implemented in the permit from the compliance date.
	Dust – Pellet cooling	< 2–20 mg/Nm^3		Emission points A12, A15 and A16 are subject to the BAT-AEL. The current ELV is 20 mg/m^3 therefore currently compliant with BAT-AEL.

Annex 2: Consultation on the draft decision where an Article 15(4) derogation has been applied

Not Applicable