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/QP3635SVThe Operator is:Mole Valley Feed Solutions LtdThe Installation is:Spry MillThis Variation Notice number is:EPR/QP3635SV/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 05/05/2021 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 01/08/2021.

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

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

2.2 <u>Review of our own information in respect to the capability of the Installation to meet revised</u> standards included in the BAT Conclusions document

Based on our records and previous experience in the regulation of the installation we 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 BATc 5, 13 & 17. The operator does not currently comply with the requirements of BATc 5, 13 & 17. In relation to these BAT Conclusions, the operator has committed compliance by 4 December 2023. We have therefore included Improvement Conditions 5, 6 and 9 in the Consolidated Variation Notice to ensure that the requirements of the BAT Conclusions are delivered before 4 December 2023.

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

Although we were able to consider the Regulation 61 Notice response generally satisfactory at receipt, we did in fact need more information in order to complete our permit review assessment, and issued a further information request on 11/01/2022, requesting further information on BATc 1, 2, 3, 6, 7, 8, 10 & 17. 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-AELs):

BAT Conclusions for Animal Feed
BAT Conclusions for Brewing
BAT Conclusions for Dairies
BAT Conclusions for Ethanol Production
BAT Conclusions for Fish and Shellfish Processing
BAT Conclusions for Fruit and Vegetable Processing
BAT Conclusions for Grain Milling
BAT Conclusions for Meat Processing
BAT Conclusions for Oilseed Processing and Vegetable Oil Refining
BAT Conclusions for Soft Drinks and Nectar/Fruit Juice Processed from
Fruit and Vegetables
BAT Conclusions for Starch Production
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 a EMS externally accredited to the ISO14001 standard.
2	EMS Inventory of inputs & outputs. Increase resource efficiency and reduce emissions. Establish, maintain and regularly review (including when a significant change occurs) an inventory of water, energy and raw materials consumption as well as of waste water and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all of the features as detailed within the BATCs.	CC	The operator has provided information to support compliance with BATc 2. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 2. The operator is externally accredited to ISO14001. The Site holds Inventories for Water, Energy, Raw Material Consumption, Waste Water & Waste Gas Streams which form part of the National & Site EMS system.
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).	NA	There is no process effluent is produced as the manufacturing of compound feed is a relatively dry process. Run off from the onsite vehicle wash and boiler blow down discharge to the sewer via an interceptor. Only

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
			uncontaminated rainwater is discharged from the site to the River Lyd via an interceptor.
			For the emissions to sewer; chloride is not a key parameter of concern for the animal feed sector.
			We are therefore satisfied that BATc 3 is not applicable for this site.
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	NA	No process effluent is produced and there are no direct emissions of effluent to surface water.
	not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.		We are therefore satisfied that BATc 4 is not applicable for this site.
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.	СС	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 monitoring of particulate emissions is currently undertaken to MCERTS standards at the product coolers - emission points A1 and A2 as per the previous permit requirements. The Operator has confirmed that the new BAT AELs are achievable for each of the coolers.
		FC	Currently the product grinder (A15) vents externally, however the Operator plans to move the emission point internally as part of

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
			ongoing improvement works to the site. The emission point for the product grinder isn't currently monitored as such.
			Improvement Condition (IC7) has been added to the variation in order for the site to monitor particulate matter to MCERT standard. Improvement Conditions (IC5 & 6) have been included to meet the BAT AELs by 4/12/2023, unless the emission point is moved within the process building prior to this date.
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.	СС	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 is a participant in a Climate Change Agreement (CCA). The site has an energy efficiency plan and implements the following energy saving techniques on site, the installation of lagging on pipes, LED/energy saving lighting replacement policy, Improved motor control on grinders and presses, Minimised energy usage during non- production hours and regular maintenance.
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 [for	NA	Animal feed milling is an essentially dry process, with little use of water.
	detail of each technique, refer BAT 7 table in BATc].		We are therefore satisfied that BATc 7 is not

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
			applicable for this 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 in BAT 8 [for detail of each technique, refer BAT 8 table in BATc]	СС	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.
			The Operator undertakes dry cleaning at the site by use of vacuum systems to remove residues from equipment.
			No priority Hazardous Substances / Specific Pollutants used at the site. All materials including disinfectants and cleaning materials are assessed for safety before use, only DEFRA approved disinfectants are used when required.
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	No refrigerants are used in the permitted process. We are therefore satisfied that BATc 9 is not applicable for this 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	CC	The operator has provided information to support compliance with BATc 10. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 10.

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	(e) Phosphorus recovery as struvite (f) Use of waste water for land spreading		The Operator has demonstrated that the minimal waste is produced from the production of compound feed. Residues are re-worked into the production of compound feed. Waste which can't be re-used from the manufacturing process is sent as feed waste for anaerobic digestion.
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.
			Uncontaminated surface water originating from roofs and yard areas are discharged via W1 to the River Lyd via an interceptor, roof water from the warehouse is discharged via W2 to the River Lyd.
			The Site has procedures in place for the detection of spills with tanks fitted with high level alarms and the prevention measures such as spill kits and mats in relevant areas across the site. All tanks are bunded and daily checks are undertaken on bund integrity.
			Run-off from the vehicle washing area, boiler blow down and compressor effluent is discharged to the foul sewer via a two stage

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
			interceptor.
12	Emissions to water – treatment In order to reduce emissions to water, BAT is to use an appropriate combination of the techniques given in BAT 12 [for detail of each technique, refer BAT 12 table 1]	NA	Due to the low volumes of effluent produced, effluent treatment is not required. We are therefore satisfied that BATc12 is not applicable for this site.
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. 	FC	The site has experienced substantiated noise complaints. A noise management plan hasn't been submitted to support compliance with BATc 13 in response to the Regulation 61 Notice dated 05/05/2021. Improvement condition (IC10) has been included in the permit for the Operator to submit a noise management plan for technical assessment and approval to demonstrate compliance against BATc 13.
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 undertakes the following techniques to reduce noise emissions from the site. • Daily walk around checks

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	
			 Maintenance inspections Replacement policy of chain conveyors where possible 	
			Auto Greasing fitting where required	
			 All general maintenance carried out during the day in normal situations. 	
			Limiting overnight tasks that create excessive noise impact in normal operation	
15	Odour Management	NA	An odour management plan is only required	
	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:		where odour nuisance at sensitive receptors is expected or has been substantiated. There have been no substantiated odour nuisance from the site therefore an OMP is not a	
	- a protocol containing actions and timelines;		requirement for this site.	
	- a protocol for conducting odour monitoring.		We are therefore satisfied that BATc 15 is not	
	- a protocol for response to identified odour incidents eg complaints;		applicable for this site.	
	- 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.			
	BAT 15 is only applicable to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated			
	ANIMAL FEED BAT CONCLUSIONS (BAT 16-17)			
16	Energy efficiency – Green fodder only	NA	The site does not process green fodder.	
	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.		We are therefore satisfied that BATc 16 is not applicable for this site.	

BATC No.	Summary of B Industries	AT Conclusion	requirement fo	or Food, Drink a	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) Use of pred	ried fodder					
	(b) Recycling of	waste gas from	the dryer				
	(c) Use of waste heat for pre-drying						
	Applicable in ad	dition to BAT6					
17	In order to redu	In order to reduce channelled dust emissions to air, BAT is to use one of the techniques given: a, bag filter, b, cyclone.		The operator has provided information to support compliance with BATc 17. We have assessed the information provided and we are			
	Parameter	Specific process	Unit	(average ov	T-AEL er the sampling eriod)		satisfied that the operator has demonstrated compliance with BATc 17, either now or before the compliance deadline.
				New plants	Existing plants		For cooler emission points A1 & A2; the
	Dust	Grinding	mg/Nm ³	<2-5	<2-10		operator has demonstrated that they can currently meet the BAT-AELs, so we have
		Pellet cooling		<2-20			included these emission limit values from dat
							of permit issue.
						FC for the grinder emission point A15	For the grinder emission point A15, the operator has stated in their Regulation 61 response that the emission point is currently vented externally, however the site plans to enclose the emission point prior to the compliance date, 4 December 2023.
							Improvement condition (IC6) has been included for the operator to achieve the BAT- AELs should the emission point remain vented

BATC No.	Summary of BAT Conclu Industries	sion requirement for Foo	od, Drink and Milk	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
					to atmosphere.
	Animal Feed Environmer	ntal Performance Levels			
	Environmental Performa	nce Level – Energy Cons	sumption for Animal Feed	СС	The operator has provided information to
	Product	Unit	Specific energy consumption (yearly average)		support compliance with BATc 17. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 17
	Compound food	MWh/tonne of products	0.01-0.10 (1)(2)(3)		
щ	Dry pet food		0.39-0.50		The operator reports that they can currently achieve 0.02 MWh/Tonne, which is well within the EPL range.
몬	Wet pet food		0.33-0.85		
	(2) The specific energy consum				
	Environmental performa	nce level – Waste water o	discharge for Animal Feed	NA	The site does not produce wet pet food.
EPL	Product	Unit	Specific waste water discharge (yearly average)		We are therefore satisfied this EPL is not
	Wet pet food	m3/tonne of products	1.3-2.4		applicable for this site.

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

Updating permit during permit review consolidation

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.

This included some other changes to the permit to ensure cross-sector consistency, including:

- An updated introductory note
- Site plan
- Table S1.1 overhaul
 - Activity Reference (AR) renumbering
 - Updated listed activities
 - Addition of production capacity
 - Directly associated activities (DAAs) standardisation
- Standardisation of reporting parameters.

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 (IC8) 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 have been added for the storage tanks of molasses, vegetable oil and soya oil in addition to a vent for the Ad Blue tank and the Intake 1 & 2. Emission point A15 for the grinder

has been added. This is a temporary measure whilst ongoing works are undertaken at the site which includes the enclosing of the grinder.

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(s) below:

<u>Boiler</u>

1. Rated thermal input (MW) of the medium combustion plant.	1.2 MWth
2. Type of the medium combustion plant (diesel engine, gas	Boiler
turbine, dual fuel engine, other engine or other medium	
combustion plant).	
3. Type and share of fuels used according to the fuel categories	Light Oil
laid down in Annex II.	
4. Date of the start of the operation of the medium combustion	October 2014
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.	

During the determination of the variation the operator advised that the onsite combustion plant had been replaced since the original permit was issued. And no subsequent variation was submitted to the Environment Agency for assessment. As a show of good faith the Environment Agency agreed the new combustion plant can be incorporated within this permit review. The Operator has confirmed that the replaced boiler is of the same design and thermal input as the previous boiler and fires on kerosene rather than heavy fuel oil, this is considered to be a betterment.

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 and A2 against BAT 17 for particulate emissions from the pellet coolers.

There is currently no monitoring undertake for the grinder (A15), the grinder is currently vented externally. We have incorporated an improvement condition (IC7) to ensure the monitoring is carried out as soon as reasonably practical for the emission from the grinder (A15) prior to December 2023. The site is due to undergo redesign works which will enclose the emission point, until such time the emission point is vented internally improvement conditions (IC5 & IC6) have been included for the site to meet the relevant BAT AEL.

We have added an improvement condition (IC8) 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.

We agree with the operators justification and proposed route as the best/ option for the installation.

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 [Southern Valley Feeds Limited, Lifton: PPC Application Site Report Dated January 2005] during the original application received on 06/04/2005. 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 flooding, which we consider to be a severe weather event.

We do not consider the operator to have submitted a suitable climate change adaptation plan for the installation. We have included an improvement condition into

the permit (IC11) to request a climate change adaptation plan is submitted by the operator for approval from the Environment Agency.

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).

If the consolidated permit contains existing improvement conditions that are not yet complete or the opportunity has been taken to delete completed improvement conditions then the numbering in the table below will not be consecutive as these are only the improvement conditions arising from this permit variation.

Previous improvement conditions marked as complete in the previous permit.

Reference	Reason for inclusion
IC1	The Operator shall provide the Agency with written proposals for a programme of both continuous indicative and non-continuous monitoring for particulate releases from emission points A1, A2, A3, A4, A7 and A8 in Table 2.2.1 in accordance with guidance note PGN 6/26. Monitoring shall be carried out to an appropriate recognised standard. The proposals shall include justification for the frequency and method of periodic assessment as well as justification for the exclusion from monitoring of any emission point.
IC2	The operator shall implement measures to improve the storage of diesel and bunding such that any spillage is contained and may be fully recovered. The Operator shall inform the Agency in writing of the measures to be undertaken.
IC3	The Operator shall carry out a waste minimisation audit of the installation. The assessment shall have regard to the Agency Guidance Note S6.10 August 2003. The audit report shall provide information on any lines or operations identified as causing a process loss, specifying for each the amount lost (tonnes/year) and the percentage recovered in process or recycled. A summary of the audit shall be sent to the Agency in writing together with a timetable to implement any necessary changes identified
IC4	The Operator shall develop a written Site Closure Plan with regard to the requirements set out in Section 2.11 of the Agency Guidance Note IPPC S6.10, August 2003. Upon completion of the plan a summary of the document shall be submitted to the Agency in writing.

Improvement programme requirements			
Reference	Reason for inclusion	Justification of deadline	
IC5	The operator shall submit, for approval by the Environment Agency, a report setting out progress to achieving the Best Available Techniques Conclusion Associated Emission Levels (BAT-AELs) where BAT is currently not achieved but will be achieved before 4 December 2023. The report shall include, but not be limited to, the following: 1) Current performance against the BAT-AELs. 2) Methodology for reaching the BAT-AELs. 3) Associated targets /timelines for reaching compliance by 4 December 2023. 4) Any alterations to the initial plan (in progress reports). The report shall address the BAT Conclusions for Food, Drink and Milk industries with respect to the following: • BAT 17 Table 4 (compliance with BAT-AELs for channelled dust emissions to air from grinding and pellet cooling in compound feed manufacture) Refer to BAT Conclusions for a full description of the BAT requirement.	12 months from permit issue: 10/05/2023	
IC6	The operator shall submit, for approval by the Environment Agency, a report demonstrating compliance against BAT17 Table 4 for channelled dust emissions to air from grinding for emission point A15.	04/12/2023 or other date as agreed in writing with the Environment Agency	
IC7	The Operator shall submit a report, for approval in writing by the Environment Agency, demonstrating the ability to comply with BAT 5 for monitoring of particulates from the grinder emissions point A15 in accordance with the MCERTS standard. The report shall include, but not be limited to, the installation of the sampling ports and platforms to enable particulate monitoring in accordance with table S3.1.	04/12/2023 or other date as agreed in writing with the Environment Agency	
IC8	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 and A15, unless they vent internally, identifying the fractions within the PM_{10} and $PM_{2.5}$ ranges. The monitoring shall be carried out under representative operating conditions and shall be in accordance with EN ISO 23210 unless otherwise agreed with the Environment Agency.	04/12/2023 or other date as agreed in writing with the Environment Agency	

IC9	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.	10/05/2023 or other date as agreed in writing with the Environment Agency
IC10	 The Operator shall submit a Noise Management Plan to the Environment Agency for technical assessment and approval, demonstrating compliance against BAT 13 for the FDM industries. Further guidance on NMPs can be found on our website Noise and vibration management: environmental permits - GOV.UK (www.gov.uk) The updated plan must include the following elements: a protocol containing actions and timelines; a protocol for conducting noise emissions monitoring; a protocol for response to identified noise events, e.g. complaints; a noise reduction programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures. The noise management plan should be reviewed at least annually to ensure continued compliance against BAT 13 as described above. You must implement the plan as agreed, and from the date stipulated by the Environment Agency. 	10/05/2023 or other date as agreed in writing with the Environment Agency
IC11	 The operator shall submit as climate change adaptation plan to the Environment Agency for approval. The plan shall include, but not be limited to: Details of how the installation has or could be affected by severe weather; The scale of the impact of severe weather on the operations within the installation; An action plan and timetable for any improvements to be made to minimise the impact of severe weather at the installation. The Operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency. 	10/05/2023 or other date as agreed in writing with the Environment Agency