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/CP3137RR
The Operator is:	Noble Foods Co
The Installation is:	Seamer Animal Feed Mill
This Variation Notice number is:	EPR/CP3137RR/V002

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 30/07/2021.

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

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 04/03/2021 requesting further information on the following BATc; 1, 2, 3, 5, 6, 7, 8 10 & 11 in addition to completing of the Baseline Report Response Tool. A response to the information request was received on 05/05/2022. 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 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 GENERAL BAT CONCLUSIONS (BAT 1-15)	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
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, and Raw Material Consumption. KPIs are in place for tracking energy and water usage against production output.
3	Monitoring key process parameters at key locations for emissions to water. For relevant emissions to water as identified by the inventory of waste water streams (see BAT 2), BAT is to monitor key process parameters (e.g. continuous monitoring of waste water flow, pH and temperature) at key locations (e.g. at the inlet and/or outlet of the pre-treatment, at the inlet to the final treatment, at the point where the emission leaves the installation).	CC	The operator has provided information to support compliance with BATc 3. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 3.

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 site doesn't operate a effluent treatment plant. Uncontaminated surface water comprising of run off from roofs and yard areas is discharged to a Tributary of the River Tame via a land drain on adjacent land. Emissions are made via a three stage interceptor via emission points W1 & W2.
			Boiler blowdown is currently discharged to a tributary of the River Tame via a land drain on adjacent land. Emissions are made via a three stage interceptor via emission points W1 & W2. Improvement condition (IC10) has been included in the variation for the site to install an acid treatment plant to treat effluent from the boiler blown down before it leaves the site. condensate is collected on site and disposed off site for treatment and disposal.
			site with effluent collected in a tank above ground. However, currently vehicles are washed off 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 not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.	NA	Very little process water is used in the production of animal feed. There are no direct emissions of effluent to surface water. We are therefore satisfied that BATc 4 is not applicable for this site

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
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 refer to BAT5 table in BATc 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. Product cooler (A2): The monitoring of particulate emissions is currently undertaken to MCERTS standards at the product coolers - emission points A1 as per the previous permit requirements. The Operator has confirmed that the new BAT AELs are achievable for the cooler. Raw material grinder (A1): The monitoring of particulates is undertaken to MCERTS standards for the raw material
			grinder emission point A1. The Operator has confirmed that the new BAT AELs are achievable for the grinder.
6	Energy Efficiency In order to increase energy efficiency, BAT is to use an energy efficiency plan (BAT 6a) and an appropriate combination of the common techniques listed in technique 6b within the table in the BATc.	CC	The operator has provided information to support compliance with BATc 6. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 6.
			The operator is a participant in a Climate Change Agreement. The site has an energy

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
			efficiency plan and implements the following energy saving techniques on site, the use of motion sensor LED lighting, the use of variable speed drives, use of higher energy efficiency motors 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 detail of each technique, refer BAT 7 table in BATc].	NA	Animal feed milling is an essentially dry process, with little use of water. We are therefore satisfied that BATc 7 is not 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]	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. The Operator undertakes dry cleaning at the site by use of vacuum systems to remove residues from equipment. Effluent and run off from the vehicle wash is collected in a tank prior to off-site disposal. During outbreaks of Avian influenza, the vehicle wheel wash is operational. The chemical used is Virocid and is diluted at a ratio of 1:400 with water. The over-spray from the vehicle wheel wash is then captured and sent to the vehicle wash tank.

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
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 (e) Phosphorus recovery as struvite (f) Use of waste water for land spreading	СС	The operator has provided information to support compliance with BATc 10. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 10. The Operator 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. The site segregates non-hazardous waste into mixed recyclable waste, general waste, feed waste, wood and metal. General non-recyclable waste is sent for energy from waste incineration.
11	Waste water buffer storage In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.	cc	The operator has provided information to support compliance with BATc 11. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 11.

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
			Uncontaminated surface water arising from roofs and yards areas are discharged to a tributary of the River Tame via a land drain on adjacent land. Emissions are made via a three stage interceptor via emission points W1 & W2.
			The Site has procedures in place for the detection of spills including the supervising of loading and unloading of materials and prevention measures such as spill kits and mats in relevant areas across the site. Regular audits are completed including the detection of spillages and storage of chemicals. Daily inspections of the external areas take place and any issues are raised with the site management team.
			The vehicle wash area has its own aco- drainage system with effluent collected in an above ground tank.
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	NA	Due to the low volumes of effluent produced, effluent treatment is not required.
	table 1]		We are therefore satisfied that BATc12 is not applicable for this site.
13	Noise management plan	NA	A noise management plan is only required where noise nuisance at sensitive receptors is expected or has been substantiated. There

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
	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. Note: BAT13 is only applicable where a noise nuisance at sensitive receptors is expected and/or has been substantiated.		 have been no substantiated noise complaints from the site therefore an NMP is not a requirement for this site. Despite this the Operator provided a NMP in response to the Regulation 61 Notice. However, based on the above, we have not reviewed or approved this plan. We deem it to form part of the EMS. We are therefore satisfied that BATc 13 is not applicable for this site.
14	Noise management In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to use one or a combination of the techniques given below. (a) Appropriate location of equipment and buildings (b) Operational measures (c) Low-noise equipment (d) Noise control equipment (e) Noise abatement	CC	 The operator has provided information to support compliance with BATc 14. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 14. The operator has implemented several procedures to reduce noise emissions from the site including; Non deliveries between the hours of 6pm and 6am Vehicle maintenance Onsite speed limit Planned Maintenance routines Daily EMS checks Training & Work Instructions

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
			Enclosed loading areas
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. BAT 15 is only applicable to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated.	NA	An odour management plan is only required 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 requirement for this site. Despite this the Operator provided an OMP in response to the Regulation 61 Notice. However, based on the above, we have not reviewed or approved this plan. We deem it to form part of the EMS. We are therefore satisfied that BATc 15 is not applicable for this site.
	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 (c) Use of waste heat for pre-drying Applicable in addition to BAT6 	N/A	The site does not process green fodder. We are therefore satisfied that BATc 16 is not applicable for this site.

BATC No.	Summary of B Industries	AT Conclusion	n 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	
17	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.						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	AT-AEL over the sampling period) CC for cooler		satisfied that the operator has demonstrated compliance with BATc 17.
				New plants	Existing plants	emission point A2	The existing emission limit value (ELV) for the pellet cooler A2 is 20mg/Nm ³ for particulate
	Dust	Grinding	mg/Nm ³	<2-5	<2-10		emissions. As this is an existing plant we believe it is appropriate to set the new ELV at the top of the range. The ELV of
		Pellet cooling		<2-20			
						CC for grinder emission point A1	20mg/Nm ³ will remain in the varied permit to ensure compliance with the BAT-AEL. Monitoring data suggests the Operator can comply with the existing ELV of 20mg/Nm ³ . Therefore we are retaining this limit within the permit from date of issue and are choosing to not future date this BAT AEL. The existing ELV for the raw material grinder is 20mg/Nm ³ for particulate emissions. As this
							is existing plant we believe it is appropriate to set the new ELV at the top of the range. The operator has demonstrated through the submission of monitoring data that the grinder can currently meet the upper range of the BAT-AELs, as such we have included the BAT AEL of 10mg/Nm ³ from date of permit issue.

BATC No.	Summary of BAT Conclu Industries	ision 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
	Animal Feed Environmer	ntal Performance Levels			
	Environmental Performa	nce Level – Energy Cons	sumption for Animal Feed	CC	The operator has provided information to support compliance with BATc 17. We have
	Product	Unit	Specific energy consumption (yearly average)		assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 17
m	Compound food	MWh/tonne of products 0.01-0.10 ⁽¹⁾⁽²⁾⁽³⁾	0.01-0.10 (1)(2)(3)	The operator re specific energy	
PL	Dry pet food		0.39-0.50		The operator reports the site achieves an specific energy consumption between of 0.092 MWh/Tonne, which is within the EPL range.
	Wet pet food		0.33-0.85		
	(2) The specific energy consumption				
	Environmental performat	Environmental performance level – Waste water discharge for Animal Feed			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 administrative 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 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 (IC11) 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.

Implementing the requirements of the Medium Combustion Plant Directive

For the existing combustion plant with a rated thermal input less than 1 MW we will not be including any emission limit values or monitoring requirements within the permit, unless any site specific conditions require us to do this.

Particulate Emissions

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

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

We have added an improvement condition (IC9) 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 eg drying, milling and grinding. Overall there is little available information on how much fine particulates are released. This IC is a one-off exercise requiring operators to monitor and report on the fractions of fine particulate (PM₁₀ and PM_{2.5}) emissions and increase our understanding of potential health effects. Where BAT-AELS may apply to multiple emission points eg 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 [Site Condition Report – Seamer Mill dated September 2017] during the original application received on 22/02/2016. The site condition report included a report on the baseline conditions as required by Article 22. We reviewed that report and considered that it adequately described the condition of the soil and groundwater at that time.

Hazardous Substances

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

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

The stage 1 assessment identified the hazardous substances used / stored on site. The stage 2 assessment identified if hazardous substances are capable of causing pollution. If they are capable of causing pollution they are then termed Relevant Hazardous Substances (RHS). The Stage 3 assessment identified if pollution prevention measures are fit for purpose in areas where hazardous substances are used / stored. This includes drains as well.

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

Climate Change Adaptation

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

The operator has stated that the installation is not likely to be or has previously not been affected by climate change.

Underground Structures

We asked the Operator via the Regulation 61 Notice to:

- Provide details of any underground structures including;
 - Contents;
 - Capacity;
 - Construction material(s);
 - Preventative maintenance measures;
 - Leak detection;
 - Additional containment;
 - o and if it is currently operational or redundant.
- and whether it currently meets the relevant standard in the Ciria "Containment systems for the prevention of pollution (C736)" report.

We reviewed the information provided by the operator and their findings. We are not satisfied that the existing site underground structures meet the standards set out in CIRIA C736.

We have set improvement conditions in the permit to address the deficiencies in the existing site underground structures (IC12). See Improvement conditions in Annex 3 of this decision document.

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.

Reference	Reason for inclusion
IC3	The Operator shall submit a written report to the Agency identifying potential improvements to their drainage system to:
	 isolate the drainage system in the event of a spill or fire and;
	 prevent suspended solids being discharged off site.
	The Operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency.
	The Operator shall confirm in writing to the Agency when these improvements are in place.
IC5	The Operator shall submit a pre-monitoring report to the Environment Agency for approval, detailing how they will undertake monitoring of particulate emissions to air at emission points A1 and A2. The report shall include but not be limited to the following:
	 The sampling methods proposed in line with the Environment Agency's technical guidance M2 – Monitoring of Stack Emissions to Air;
	 Details of how the monitoring will be carried out to demonstrate the proportions of PM₁₀ and PM_{2.5} particulates present;
	 How the monitoring will be conducted at a time representative of a worst case scenario when emissions are likely to be at their highest;
	 Proposed timescales for monitoring and completion of IC6.
IC6	The Operator shall undertake air emission monitoring of total particulates from emission points A1 and A2. The monitoring will be in accordance with the methods proposed in the approved pre-monitoring report submitted to the Environment Agency under IC5.
	Following monitoring the Operator shall undertake an environmental impact assessment of releases to air of PM_{10} and $PM_{2.5}$ from emission points A1 and A2. The impact assessment shall consider potential impacts on ecological and human receptors. The impact assessment should include proposed emission limit values for these emission points and shall be submitted to the Environment Agency for approval.
	Where the results of the assessment indicate improvements are necessary the Operator should submit a written Action Plan to the Environment Agency for approval justifying these conclusions and identifying timescales for these improvements to be agreed in writing with the Environment Agency.

IC7	The Operator shall implement the improvements identified within any Action
	Plan submitted under IC6 approved by the Environment Agency and provide
	written confirmation to the Environment Agency that the improvements have
	been made.

The following improvement conditions have not been completed and have been retained as part of this variation.

Reference	Reason for inclusion	
IC1	The Operator shall undertake an assessment of the containment measures on site. The assessment will take into account the requirements of guidance CIRIA 736 'Containment systems for the prevention of pollution: Secondary, tertiary and other measures for industrial and commercial premises'. A written report summarising the findings shall be submitted to the Environment Agency for approval.	14/07/2023 or other date as agreed in writing with the Environment Agency
	The Operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency.	
	The Operator shall confirm in writing to the Environment Agency when these improvements are in place.	
IC2	The Operator shall submit a written report to the Environment Agency identifying potential improvements to improve the infrastructure around bulk liquid unloading such that any spillage is contained and may be fully recovered. The Operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency. The Operator shall confirm in writing to the Environment Agency when these improvements are in place.	14/07/2023 or other date as agreed in writing with the Environment Agency
IC4	The Operator shall review of the disposal of boiler blowdown, and washwaters from the installation and sample these to confirm the composition. Following the assessment the operator shall submit the report to the Environment Agency for approval. The report shall include (but not be limited to) the following:	14/07/2023 or other date as agreed in writing with the
	 An assessment of the impact for the proposed route using the Environment Agency's H1 methodology taking into consideration the characteristics of the boiler blowdown, and washwaters (temperature, pH, suspended solids, metals and any other potentially polluting substances Detail the specific arrangements for disposal of the 	Environment Agency
	blowdown associated with annual inspection and servicing.	
	 List the options for disposal, justifying the proposed route (disposals not being treated in an onsite or offsite waste water treatment plant should be fully justified). 	
	 A proposed timetable for completion of any improvement works required. 	
	The Operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency.	
IC8	The Operator shall carry out an assessment of the options available for preventing detergents entering the site interceptors from the vehicle wash. Following the assessment the operator shall submit the report to the Environment Agency for approval.	14/07/2023 or other date as agreed in writing with

	The Operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency.	the Environment Agency
ti	limetable agreed in writing with the Environment Agency.	Ageney

The following improvement conditions have been added as part of this variation.

Reference	Reason for inclusion	Date
IC9	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 and A2, 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.	14/07/2023 or other date as agreed in writing with the Environment Agency
IC10	The Operator shall install an acid treatment plant to treat the boiler blowdown effluent before it leaves the site. The Operator shall confirm to the Agency in writing that the treatment plant has been installed.	14/01/2024 or other date as agreed in writing with the Environment Agency
IC11	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.	14/07/2023 or other date as agreed in writing with the Environment Agency
IC12	The operator shall submit a written 'underground structures plan' and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of a review conducted, by a competent person, in accordance with the risk assessment methodology detailed within CIRIA C736 (2014) guidance, of the condition and extent of secondary and tertiary containment systems where all polluting liquids and solids are being stored. The review shall include, but not be limited to, the following for all underground structures at the installation;	14/07/2023 or other date as agreed in writing with the Environment Agency
	 The physical condition of all underground structures; The suitability of providing containment when subjected to the dynamic and static loads caused by the vessels' contents; 	
	• A preventative maintenance inspection regime. The plan must contain dates for the implementation of individual improvement measures necessary for the underground structures to adhere to the standards detailed/referenced within CIRIA C736 (2014) guidance, or equivalent.	

The plan shall be implemented in accordance with the	
Environment Agency's written approval.	