# 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/SP3437PE
The Operator is: Nestle UK Limited

The Installation is:

Albion Mills Confectionary Plant

This Variation Notice number is: EPR/SP3437PE/V007

# 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 4<sup>th</sup> 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 and any changes to the operation of the installation.

We try to explain our decision as accurately, comprehensively and plainly as possible. Achieving all three objectives is not always easy, and we would welcome any feedback as to how we might improve our decision documents in future.

# How this document is structured

- 1. Our decision
- 2. How we reached our decision
- 3. The legal framework
- 4. Annex 1 Review of operating techniques within the Installation against BAT Conclusions.
- 5. Annex 2 Review and assessment of changes that are not part of the BAT Conclusions derived permit review
- 6. Annex 3 Improvement Conditions

## 1 Our decision

We have decided to issue the Variation Notice to the Operator. This will allow the Operator to continue to operate the Installation, subject to the conditions in the Consolidated Variation Notice that updates the whole permit.

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

The Consolidated Variation Notice contains many conditions taken from our standard Environmental Permit template including the relevant annexes. We developed these conditions in consultation with industry, having regard to the legal requirements of the Environmental Permitting Regulations and other relevant legislation. This document does not therefore include an explanation for these standard conditions. Where they are included in the Notice, we have considered the techniques identified by the operator for the operation of their installation, and have accepted that the details are sufficient and satisfactory to make those standard conditions appropriate. This document does, however, provide an explanation of our use of "tailor-made" or installation-specific conditions, or where our Permit template provides two or more options.

## 2 How we reached our decision

### 2.1 Requesting information to demonstrate compliance with BAT Conclusion techniques

We issued a Notice under Regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 04/10/2022 requiring the Operator to provide information to demonstrate where the operation of their installation currently meets, or how it will subsequently meet, the revised standards described in the relevant BAT Conclusions document.

The Notice required that where the revised standards are not currently met, the operator should provide information that:

- describes the techniques that will be implemented before 4 December 2023, which will then ensure that operations meet the revised standards, or
- justifies why standards will not be met by 4 December 2023, and confirmation of the date when the
  operation of those processes will cease within the Installation or an explanation of why the revised BAT
  standards are not applicable to those processes, or
- justifies why an alternative technique will achieve the same level of environmental protection equivalent to the revised BAT standards described in the BAT Conclusions.

Where the Operator proposed that they were not intending to meet a BAT standard that also included a BAT Associated Emission Level (BAT-AEL) described in the BAT Conclusions Document, the Regulation 61 Notice required that the Operator make a formal request for derogation from compliance with that BAT-AEL (as provisioned by Article 15(4) of IED). In this circumstance, the Notice identified that any such request for derogation must be supported and justified by sufficient technical and commercial information that would enable us to determine acceptability of the derogation request.

The Regulation 61 Notice response from the Operator was received on 28/02/2023.

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

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

# 2.2 Review of our own information in respect to the capability of the Installation to meet revised standards included in the BAT Conclusions document

Based on our records and previous experience in the regulation of the installation we 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 Requests for further information during determination

Although we were able to consider the Regulation 61 Notice response generally satisfactory at receipt, we did in fact need more information in order to complete our permit review assessment, and issued further information requests on 11/04/2024 and 01/05/2024, information was requested regarding BATc 6, 9 and 11 in addition to information on the raw materials utilized on site. A copy of each further information requests was placed on our public register.

# 3 The legal framework

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

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

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

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

# Annex 1: decision checklist regarding relevant BAT Conclusions

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

There are 37 BAT Conclusions.

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

BAT 16 – 37 are sector-specific BAT Conclusions, including Best Available Techniques Associated Emissions Levels (BAT-AELs) and Associated Environmental Performance Levels (BAT-AEPLs):

BAT 16 & 17	BAT Conclusions for Animal Feed
BAT 18 – 20	BAT Conclusions for Brewing
BAT 21 – 23	BAT Conclusions for Dairies
BAT 24	BAT Conclusions for Ethanol Production
BAT 25 & 26	BAT Conclusions for Fish and Shellfish Processing
BAT 27	BAT Conclusions for Fruit and Vegetable Processing
BAT 28	BAT Conclusions for Grain Milling
BAT 29	BAT Conclusions for Meat Processing
BAT 30 – 32	BAT Conclusions for Oilseed Processing and Vegetable Oil Refining
BAT 33	BAT Conclusions for Soft Drinks and Nectar/Fruit Juice Processed from
	Fruit and Vegetables
BAT 34	BAT Conclusions for Starch Production
BAT 35 – 37	BAT Conclusions for Sugar Manufacturing

This annex provides a record of decisions made in relation to each relevant BAT Conclusion applicable to the installation. This annex should be read in conjunction with the Consolidated Variation Notice.

The overall status of compliance with the BAT conclusion is indicated in the table as:

NA - Not Applicable

**CC – Currently Compliant** 

FC – Compliant in the future (within 4 years of publication of BAT Conclusions)

NC - Not Compliant

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
GENE	RAL BAT CONCLUSIONS (BAT 1-15)		
1	Environmental Management System - Improve overall environmental performance.  Implement an EMS that incorporates all the features as described within BATc 1.	cc	The operator has provided information to support compliance with BATc 1. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 1.  The operator has an EMS externally accredited to the ISO14001 standard. The EMS in place on site has all the measures required by the BAT conclusions.
2	EMS Inventory of inputs & outputs. Increase resource efficiency and reduce emissions.  Establish, maintain and regularly review (including when a significant change occurs) an inventory of water, energy and raw materials consumption as well as of waste water and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all of the features as detailed within the BATCs.	CC	The operator has provided information to support compliance with BATc 2. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 2.  The operator declared:  Raw material usage is monitored by identifying variances between the expected output and waste and loses. These are reviewed daily / weekly. Projects are undertaken to control these losses.  Water and energy is monitored via meters, data loggers or spreadsheets to identify excessive usage and relevant projects to reduce these resources are put in place when identified.  The site uses SCADA to monitor energy usage. SCADA shows the consumption of energy by area and in some case by line. This information can be used to identify trends in high usage.

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
			The operator has an EMS externally accredited to the ISO14001 standard. The EMS in place on site has all the measures required by the BAT conclusions.
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.  Monitoring is in place at key locations on the site, the wastewater is monitored for flow, temperature and pH continuously and COD is monitored daily.
4	Monitoring emissions to water to the required frequencies and standards.  BAT is to monitor emissions to water with at least the frequency given [refer to BAT 4 table in BATc] and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.	NA	We are satisfied that BATc 4 is not applicable to this Installation.  This BATc is concerned with discharges of process effluent to controlled waters and this installation does not have such discharges. All treated waste water is discharged directly to sewer under consent of Yorkshire Water. As such, BATc 4 is not applicable.
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.	NA	We are satisfied that BATc 5 is not applicable to this Installation.  This BATc is concerned with channelled dust emissions to air from processes such as grinding, cooling, or drying. This installation does not have any of this processes therefore, BATc 5 is not applicable.
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.

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
			The operator has an energy efficiency plan in place which sets out targets for reduction of gas and power consumption.
			The operator uses a variety of techniques as discussed in BATc 6, this includes:
			<ul> <li>heat recovery with heat exchangers and/or heat pumps</li> <li>Energy efficient lighting</li> <li>Reducing compressed air system leaks</li> <li>Heat recovery techniques.</li> <li>Furthermore, the site operates all equipment through process control systems, ensuring all equipment is used efficiently and thus saving energy, in addition to monitoring of the ammonia fridge plant. Projects are being</li> </ul>
7	Water and wastewater minimisation	CC	undertaken on site to further reduce carbon.  The operator has provided information to
	In order to reduce water consumption and the volume of waste water discharged, BAT is to use BAT 7a and one or a combination of the techniques b to k given below. [for detail of each technique, refer BAT 7 table in BATc]		support compliance with BATc 7. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 7.
	(a) water recycling and/or reuse		compliance with BATC 7.
	<ul><li>(b) Optimisation of water flow</li><li>(c) Optimisation of water nozzles and hoses</li></ul>		The site utilizes condensate run-off from the boiler house to be recovered and re-used.
	(d) Segregation of water streams  Techniques related to cleaning operations:		The operator also utilizes the following techniques on site:
	(e) Dry cleaning		(b) Optimisation of water flow
	(f) Pigging system for pipes		(c) Optimisation of water nozzles and hoses
	<ul><li>(g) High-pressure cleaning</li><li>(h) Optimisation of chemical dosing and water use in cleaning-in-place (CIP)</li><li>(i) Low-pressure foam and/or gel cleaning</li></ul>		d) Segregation of water streams – all waste water and surface water run-off are kept separate.
	(j) Optimised design and construction of equipment and process areas		(f) Pigging system for pipes
	(k) Cleaning of equipment as soon as possible		(h) Optimisation of chemical dosing and water use in cleaning-in-place (CIP)

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
			(i) Low-pressure foam and/or gel cleaning (j) Optimised design and construction of equipment and process areas – the site operates a management of change system, there is a source of contamination identification process which highlights any areas on site where waste material can build up, actions are then implemented to make these areas either easier to clean or are defined as a cleaning inspection and lubrication weekly activity, thus reducing cleaning and water usage. There are also Standard operating procedures for cleaning schedule which are enacted to eliminate any waste.  (k) Cleaning of equipment as soon as possible
8	Prevent or reduce the use of harmful substances In order to prevent or reduce the use of harmful substances, e.g. in cleaning and disinfection, BAT is to use one or a combination of the techniques given below.  (a) Proper selection of cleaning chemicals and/or disinfectants (b) Reuse of cleaning chemicals in cleaning-in-place (CIP) (c) Dry cleaning (d) Optimised design and construction of equipment and process areas	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 uses a technique as discussed in BATc 8, this includes:  (a) Proper selection of cleaning chemicals and/or disinfectants  Furthermore all staff are efficiently trained and minimisation of use of chemicals is practised across site.
9	Refrigerants In order to prevent emissions of ozone-depleting substances and of substances with a high global warming potential from cooling and freezing, BAT is to use refrigerants without ozone depletion potential and with a low global warming potential.	cc	The operator has provided information to support compliance with BATc 9. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 9.

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
			The operator provided details of all the refrigerants used on site and their plan on how to manage these and replace them when necessary. All replacement refrigerants are selected on their global warming potential (GWP) and the lower options selected. Redundant high GWP models will be replaced and all refrigerants are reviewed annually. Notably the site operates R-404 refrigerants, the operator has made a commitment to remove and replace these by the end of 2025.
10	Resource efficiency In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below: (a) Anaerobic digestion (b) Use of residues (c) Separation of residues (d) Recovery and reuse of residues from the pasteuriser (e) Phosphorus recovery as struvite (f) Use of waste water for land spreading	CC	The operator has provided information to support compliance with BATc 10. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 10.  The operator uses the below techniques to ensure resource efficiency on site:  (a) Anaerobic digestion (sent off site) (b) Use of residues (sent for use in animal feed) (c) Separation of residues (Residues separated to be sent to the correct location and for further use if possible)
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.  Bunding in place on site has sufficient capacity to ensure any leaks/failures are controlled, bunding provided on oil tanks and chemical
			storage has at least 110% capacity.  The effluent treatment plant is served by a drain which directs any wastewater directly to an underground storage tank should any leaks

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
			or failures occur. As this tank is underground it is imperative that an assessment is carried out to ensure the integrity of the tank, as such IC15 has been included to ensure the integrity of this storage tank.
			Furthermore, penstock valves are in place at key locations in addition to spill kits across the site for smaller spillages.
12	Emissions to water – treatment  In order to reduce emissions to water, BAT is to use an appropriate combination of the techniques given below.  Preliminary, primary and general treatment  (a) Equalisation  (b) Neutralisation  (c) Physical separate (eg screens, sieves, primary settlement tanks etc)  Aerobic and/or anaerobic treatment (secondary treatment)  (d) Aerobic and/or anaerobic treatment (eg activated sludge, aerobic lagoon etc)  (e) Nitification and/or denitrification  (f) Partial nitration - anaerobic ammonium oxidation  Phosphorus recovery and/or removal  (g) Phosphorus recovery as struvite  (h) Precipitation  (i) Enhanced biological phosphorus removal  Final solids removal  (j) Coagulation and flocculation  (k) Sedimentation  (l) Filtration (eg sand filtration, microfiltration, ultrafiltration)  (m) Flotation	CC	The operator has provided information to support compliance with BATc 12. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 12.  The site has a Dissolved Air Floatation plant in which the pH is neutralized and flocculant and coagulant is used to remove solids for waste effluent by dissolved air flotation.  Solids are then collected in a separate tank and sent off site for anaerobic digestion (AD). Waste effluent is discharged to Yorkshire Water within consent limits.
12	Emissions to water – treatment BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body	NA	We are satisfied that BATc 12-AELs are not applicable to this Installation. This BATc in concerned with direct discharges to water. All treated waste water is discharged

BATC No.	Summary of BAT Conclusion require Industries	ment for Food, 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
	Parameter  Chemical oxygen demand (COD) (³) (⁴)  Total suspended solids (TSS)  Total nitrogen (TN)  Total phosphorus (TP)	BAT-AEL (¹) (²) (daily average)  25-100 mg/l (⁵)  4-50 mg/l (°)  2-20 mg/l (°) (*)  0,2-2 mg/l (°)		directly to sewer under consent of United Utilities. As such, BATc 12-AELs is not applicable to this installation.
13	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, 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.  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		NA	We are satisfied that BATc 13 is not applicable to this Installation.  This BATc is concerned with sites that have previously received noise nuisance complaints, this site has received no such complaints and therefore BATc 13 is not applicable.
14			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 site implements operational measures to reduce noise emissions, such as restricted delivery times and keeping doors closed to operational areas.  The site has installed new noise efficient equipment across the site. Furthermore the site undergoes regular noise surveys to ensure no noise pollution is being produced.
15	Odour Management In order to prevent or, where that is not BAT is to set up, implement and regula		NA	We are satisfied that BATc 15 is not applicable to this Installation.

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	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		This BATc is concerned with sites that have previously received odour nuisance complaints, this site has received no such complaints and therefore BATc 15 is not applicable.

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

#### Updating permit during permit review consolidation

- Activity -
  - The previous activity was established before EPR was brough in in 2016, as such this has been updated to reflect the correct activity taking place on site. The site receives condensed milk under RGN2 this is classed as an animal raw material and therefore the activity can be classed as: Section 6.8 Part A(1)(d)(iii)(aa): Treating and processing animal and vegetable raw materials (other than milk only), both in combined and separate products, with a finished product production capacity in tonnes per day greater than 75 tonnes if A is equal to 10 or more.
- Introductory note has been updated
- Site plan has been updated
- Table S1.1 overhaul
  - Activity Reference (AR) renumbering
  - Updated listed activities
  - Addition of production capacity
  - o Directly associated activities (DAAs) standardisation

We have updated permit conditions to those in the current generic permit template as a part of permit consolidation. The conditions will provide the same level of protection as those in the previous permit.

#### **Production/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.

#### **Emissions to Air**

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

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

Implementing the requirements of the Medium Combustion Plant Directive

# Existing small combustion plant (<1MW)

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.

# Details of new and existing <1 MWth boilers:

Rated thermal input (MW) of the medium combustion plant.	HW boiler 1: 0.44 MWth	HW boiler 2: 0.44 MWth	HW boiler 3: 0.6 MWth	HW boiler 4: 0.44 MWth	HW boiler 5: 0.44 MWth	HW boiler 6: 0.44 MWth	HW boiler 7: 0.44 MWth	HW boiler 8: 0.031 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Hot	Hot	Hot	Hot	Hot	Hot	Hot	Hot
	water	water	water	water	water	water	water	water
	boiler	boiler	boiler	boiler	boiler	boiler	boiler	boiler
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural
	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas
4. Date of the start of the operation of the medium combustion plant or, where the exact date of the start of the operation is unknown, proof of the fact that the operation started before 20 December 2018.	2010	2010	2010	2010	2010	2010	2010	2019

#### Back-up generators:

1. Rated thermal input (MW) of the medium	0.145 MWth
combustion plant.	
2. Type of the medium combustion plant (diesel	Diesel generator
engine, gas turbine, dual fuel engine, other	
engine or other medium combustion plant).	
3. Type and share of fuels used according to	Diesel
the fuel categories laid down in Annex II.	
4. Date of the start of the operation of the	December 1997
medium combustion plant or, where the exact	
date of the start of the operation is unknown,	
proof of the fact that the operation started	
before 20 December 2018.	

In addition, a new boiler has been installed, the details are as follows:

#### **Boilers**

1. Rated thermal input (MW) of the medium	2.962 MWth
combustion plant.	

2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler
3. Type and share of fuels used according to	Natural Gas
the fuel categories laid down in Annex II.	
4. Date of the start of the operation of the	2024
medium combustion plant or, where the	
exact date of the start of the operation is	
unknown, proof of the fact that the operation	
started before 20 December 2018.	

This boiler is replacing the 2 boilers that were previously in the permit, these were at emission point 26a and 26b and were listed as boiler 1 (1.3 MWth) and boiler 2 (1.01 MWth) and both ran on natural gas. An H1 assessment was submitted to ensure the emissions from the new boiler screened out. The replacement boiler is of a similar, albeit of a slighter larger size with a rated thermal input of 2.962 MWth, whereas the existing boilers had a combined input of has a rated thermal input of 2.31 MWth. The new boiler offers increased efficiency. The new boiler meets the requirements of the medium combustion directive and the associated limits will be applicable from the date of permit issue.

We have included the appropriate emission limit values for new medium combustion plant as part of this permit review. See Table S3.1 in the permit.

# 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 [Halifax site condition report] during the original application received on 26/07/2004. 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 confirmed there has been no change in the hazardous substances used, their capability of causing pollution and/or the pollution prevention measures at the installation since the risk assessment was submitted on 26/07/2004. Consequently, we are satisfied there has been no change to the assessment of risk for hazardous substances.

#### **Climate Change Adaptation**

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

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

#### **Containment**

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

The Operator provided details of all tanks;

- Tank reference/name
- Contents
- Capacity (litres)
- Location
- Construction material(s) of each tank
- The bunding specification including
  - o Whether the tank is bunded
  - o If the bund is shared with other tanks

- The capacity of the bund
- The bund capacity as % of tank capacity
- o Construction material of the bund
- Whether the bund has a drain point
- Whether any pipes penetrate the bund wall
- Details of overfill prevention
- Drainage arrangements outside of bunded areas
- Tank filling/emptying mitigation measures (drips/splashes)
- Leak detection measures
- Details of when last bund integrity test was carried out
- Maintenance measures in place for tank and bund (inspections)
- How the bund is emptied
- Details of tertiary containment

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

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

We have set improvement conditions in the permit to address the deficiencies in the existing tanks and containment measures on site (IC15). See Improvement condition(s) 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).

We also consider that we need to set improvement conditions relating to changes in the permit not arising from the review of compliance with BAT conclusions. The justifications for these are provided in Annex 5 of this decision document.

Previous improvement conditions marked as complete in the previous permit.

Superseded "complete"	Improvement Conditions - Removed from permit as marked as	
Reference	Improvement Condition	
IC1	The Operator shall develop a written accident management plan having regard to the requirements set out in Section 2.8 of the Agency technical guidance note IPPC S6.10, August 2003, and shall submit the plan in writing to the Agency.	
IC2	The Operator shall undertake a detailed review of cleaning operations across the site, in order to ensure that water is used efficiently. The Operator shall provide the Agency with a report detailing where CIP including dry cleaning techniques is to be adopted.	
IC3	The Operator shall develop written procedures for handling investigations, communications and reporting actual or potential non-compliances and reporting environmental complaints having regard to the requirements set out in Section 2.3 of the Agency technical guidance note IPPC S6.10, August 2003, and shall submit the procedures in writing to the Agency.	
IC4	The Operator shall undertake an assessment of the surfacing and containment measures on site. The assessment will take into account the requirements of section 2.2.5 of the Agency Guidance Note IPPC S6.10, August 2003. This should include ensuring that procedures are in place to deploy spillage prevention techniques, - including protection of the River Hebble, in the event of a spillage. A written report summarising the findings shall be submitted to the Agency. A timescale for implementation of any improvements shall be agreed with the Agency.	
IC5	The Operator shall provide in writing, the monitoring methods which are to be used for the purpose of checking compliance with standard Agency emission limit values to air for the following parameters from release points A22;  Carbon Monoxide  Oxides of Nitrogen  Sulphur Dioxide Particulates	
IC6	The operator shall review the provisions of MCERTS accreditation for the monitoring equipment, personnel and organisations employed for the emissions monitoring programme in condition 2.10.1 and propose a timetable in a written report to the Agency for achieving this standard for any elements that are not MCERTS certified.	
IC7	The Operator shall provide short term monitoring results from the coal fired boiler for emissions of the following parameters using monitoring	

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	methods agreed with the Agency:
	Carbon Monoxide
	Oxides of Nitrogen
	Sulphur Dioxide
	Particulates
	The results from the short term monitoring will be used to provide the
	Agency with a revised H1 assessment for all emissions from the coal
	fired boiler.
IC8	The Operator shall carry out an exercise to establish what obscuration
	reading is equivalent to Ringlemann Shade 2 from release point A22
	such that the obscuration reading can be used as an emission limit
	value. The Operator shall provide a report, in writing to the Agency,
	summarising the results of this exercise and detailing the method used
	to carry out this exercise.
IC9	The Operator shall provide containment to prevent fugitive emissions in
	the surface water run-off from the coal and ash waste storage areas.
	The details of containment are to be approved by the EA prior to
	implementation.
IC10	The Operator shall investigate the feasibility of using alternative low
1010	sulphur fuels in the coal-fired boiler plant, and provide the Agency with a
	report detailing the options available.
IC11	The Operator shall carry out an environmental impact assessment of the
1011	boilers to examine whether there is a potential for a significant impact on
	the environment of emissions to air. If this is found to be the case, the
	Operator shall investigate techniques for reducing emissions of sulphur
	dioxide, particulates and nitrogen oxides from the coal fired boiler, via
	emission point A22 so that emissions no longer have the potential for a
	significant impact on the environment. The Operator shall provide a
	report, in writing to the Environment Agency, detailing the environmental
	impact assessment and, where relevant, techniques proposed with a
	justification for the option chosen and a timescale for implementation
IC12	and agreement with the Environment Agency.
1012	The Operator shall implement a procedure to carry out a program of
	drain surveys, such that all drains on site will be surveyed on at least a
	five yearly basis and all damaged drains shall be repaired as soon as
	practicable, as a result of the surveys. The Operator shall provide, in
1040	writing to the Environment Agency, the program of drain surveys.
IC13	The Operator shall produce a protocol for the monitoring of discharges of
	surface water to Hebble Brook, so that any contamination from site
	drainage is detected in Hebble Brook before the contamination becomes
	significant. The protocol should include details of what should be
	monitored, what location the sampling should take place, the methods
	used and when the monitoring should take place. Consideration shall be
	made of visual monitoring and also monitoring of biological oxygen
	demand, pH and solids content. The protocol shall be submitted, in
	writing, to the Environment Agency, for agreement with the Environment
	Agency.
IC14	The Operator shall review their monitoring protocol for discharges of
	surface and roof water to Hebble Brook to incorporate new discharges
	W2 and W3. This is to ensure any contamination from site drainage is
	detected in Hebble brook before the contamination become significant.
	The review shall include details of what should be monitored, what
	location the sampling should take place, the methods used and when the
	monitoring should take place. The protocol shall be submitted, in writing,
	to the Environment Agency, for agreement.

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

Improvement programme requirements			
Reference	Reason for inclusion	Justification of deadline	
IC15	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;  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.	12 months from date of permit issue	
	The plan shall be implemented in accordance with the Environment Agency's written approval.		