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Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Hemswell Biogas Limited

Hemswell Cliff Anaerobic Digestion Facility Hemswell Cliff Industrial Estate Hemswell Cliff Lincolnshire DN21 5TL

Variation application number

EPR/AP3338AX/V006

Permit number

EPR/AP3338AX

Hemswell Cliff Anaerobic Digestion Facility Permit number EPR/AP3338AX

Introductory note

This introductory note does not form a part of the notice

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

Variation EPR/AP3338AX/V006

This variation permits the following changes to the permit:

- The increase in annual tonnage from 90,000 tonnes to 145,000 tonnes per annum.
- The addition of a third 4000m³ digester to facilitate the processing of the proposed additional waste. The
 digester will be located within a dedicated bund and will have a pressure release valve which will
 constitute an additional emission point to air.
- The ability to transfer pre-treated waste off-site to other permitted biowaste facilities.

There are no additional releases to water, sewer or land as a result of this variation.

The operator has provided a revised odour management plan that provides appropriate measures to mitigate additional impacts arising from this variation.

The rest of the installation remains the same and is described as follows:

The primary activity covered in this permit is anaerobic digestion (AD) of biodegradable food wastes with the use of resultant biogas in three combined heat and power (CHP) engines rated at 1.2MWe each for export of electricity to the local electrical distribution network. Surplus gas will be burned via a single enclosed flare during commissioning and periods of maintenance of the CHP engines where necessary to prevent pressure build up in the digesters. The Hemswell Cliff AD Facility will process up to 145,000 tonnes per annum of waste. Packaging and other wastes not suitable for the AD process will be removed prior to processing.

The permit also authorises the operation of a biogas upgrading unit and gas network entry facility. The upgrading unit removes contaminants (predominantly carbon dioxide, water vapour and hydrogen sulphide over several sequential stages) from biogas generated in the existing anaerobic digestion (AD) plant so it conforms to Gas Safety Management Regulations. The resulting biomethane is mixed with propane gas (to adjust the calorific value to an acceptable level), odorised (so leaks can be easily detected) and the pressure adjusted prior to injection into the national gas transmission grid. This plant runs concurrently with the three CHP engines.

The site is centred at National Grid Reference SK 94590 90186 approximately 0.7km North West of the centre of the village of Hemswell cliff. The site is surrounded to the west and south by agricultural land. Adjacent to the northern boundary is the Hemswell Cliff Industrial Estate and to the east there are residential properties, the closest of which is approximately 250 metres from the installation boundary. There are no sites of scientific interest, special areas of conservation or special protection areas within relevant screening distances.

The schedules specify the changes made to the permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit			
Description	Date	Comments	
Application EPR/AP3338AX/A001	Duly made 11/05/2015	Application for an anaerobic digestion facility with combustion of biogas.	
Schedule 5 notice served	30/06/2015	Response complete 27/07/15 and comprised building design specifications, clarification of BAT, operating techniques and odour management plan details.	
Permit determined	01/09/2015	Permit issued to Hemswell Biogas Limited.	
Application EPR/AP3338AX/V002	Duly Made 17/02/2016	Admin application to add waste code 19 02 03.	
Variation determined EPR/AP3338AX/V002	03/03/2016		
Application EPR/AP3338AX/V003	Received 10/11/2016	Application to add waste code 16 10 02.	
Variation application EPR/AP3338AX/V003	Returned 26/01/2017		
Variation application EPR/AP3338AX/V004	Duly Made 03/08/2018	Application to extend installation boundary, add biogas upgrading and grid entry plant and add waste code 02 02 04.	
Schedule 5 notice served	11/09/2018	Responses received 24/09/2018, 04/10/2018: revised application documents.	
Schedule 5 notice served	06/11/2018	Responses received 19/11/2018, 20/11/2018 and 21/11/2018: revised application documents and odour management plan.	
Variation determined EPR/AP3338AX/V004	21/12/2018	Varied and consolidated permit issued.	
Notified of change of Registered office	20/12/19	Registered office changed to Control Tower, Hemswell Cliff Industrial Estate, Hemswell Cliff, Gainsborough, DN21 5TU	
Variation issued EPR/AP3338AX	09/01/2020	Varied permit issued to Hemswell Biogas Limited	
Variation application EPR/AP3338AX/V006	Duly Made 17/11/2020	Application to increase annual throughput, add a third digester and allow the transfer of pre-treated waste off-site.	
Variation determined EPR/AP3338AX/V006 Billing references: Installations – GP3702BX Waste – EAWML 407519	19/04/2021	Varied and consolidated permit issued.	

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

Permit number

EPR/AP3338AX

Issued to

Hemswell Biogas Limited ("the operator")

whose registered office is

Control Tower
Hemswell Cliff Industrial Estate
Hemswell Cliff
Gainsborough
DN21 5TU

company registration number 08935699

to operate a regulated facility at

Hemswell Cliff Anaerobic Digestion Facility Hemswell Cliff Industrial Estate Hemswell Cliff Lincolnshire DN21 5TL

to the extent set out in the schedules.

The notice shall take effect from 19/04/2021.

Name	Date
David Griffiths	19/04/2021

Authorised on behalf of the Environment Agency

Schedule 1

Only the following conditions have been varied by the consolidated permit EPR/AP3338AX/V006:

The following conditions were varied as a result of the application made by the operator:

- Conditions 1.2.1, 1.3.1 and 4.2.2 have been amended to make them applicable only to installation activities.
- Table S1.1, as referenced in condition 2.1.1, has been amended to add reference to the third digester, increase daily capacity and add a waste transfer and treatment activity.
- Table S1.2, as referenced in conditions 2.3.1 and 2.3.2, has been amended to reference operating techniques relevant to this variation and delete superseded techniques.
- Table S1.4 and associated condition 2.5.1 have been added to include pre-operational conditions for a commissioning plan and a review of the constructed secondary containment for the third digester.
- Table S2.2, as referenced in condition 2.3.4, has been amended to increase the total site annual throughput and add a throughput for the new waste operation.
- Table S3.1, as referenced in conditions 3.1.1, 3.6.1 and 3.6.4, has been amended to add an additional pressure release valve and update the plan reference.
- Schedule 7, as referenced in condition 2.2.1, has been amended to include an update site plan.

The following conditions were varied as a result of an Environment Agency initiated variation:

• Schedule 6, as referenced in condition 4.4.1, has been amended to update all references to European Directives following the EU exit.

Schedule 2 - consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/AP3338AX

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/AP3338AX/V006 authorising,

Hemswell Biogas Limited ("the operator"),

whose registered office is

Control Tower
Hemswell Cliff Industrial Estate
Hemswell Cliff
Gainsborough
DN21 5TU

company registration number 08935699

to operate an installation and waste operations at

Hemswell Cliff Anaerobic Digestion Facility
Hemswell Cliff Industrial Estate
Hemswell Cliff
Lincolnshire
DN21 5TL

to the extent authorised by and subject to the conditions of this permit.

Name	Date
David Griffiths	19/04/2021

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
 - (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
 - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.
- 1.1.4 The operator shall comply with the requirements of an approved competence scheme.

1.2 Energy efficiency

- 1.2.1 For the following activities referenced in schedule 1, table S1.1, AR1 to AR10, the operator shall:
 - (a) take appropriate measures to ensure that energy is used efficiently in the activities;
 - (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
 - (c) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

- 1.3.1 For the following activities referenced in schedule 1, table S1.1, AR1 to AR10, the operator shall:
 - (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
 - (b) maintain records of raw materials and water used in the activities;
 - (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
 - (d) take any further appropriate measures identified by a review.

1.4 Avoidance, recovery and disposal of wastes produced by the activities

- 1.4.1 The operator shall take appropriate measures to ensure that:
 - (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
 - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
 - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

2.1.1 The operator is only authorised to carry out the activities specified in schedule 1, table S1.1 (the "activities").

2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 Any raw materials or fuels listed in schedule 2, table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
 - (a) it is of a type and quantity listed in schedule 2, table S2.2; and
 - (b) it conforms to the description in the documentation supplied by the producer and holder.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
 - (a) the nature of the process producing the waste;
 - (b) the composition of the waste;
 - (c) the handling requirements of the waste;
 - (d) the hazardous property associated with the waste, if applicable; and
 - (e) the waste code of the waste.
- 2.3.6 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1, table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

2.5 Pre-operational conditions

2.5.1 The operations specified in schedule 1 table, S1.4 shall not commence until the measures specified in that table have been completed.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3, table S3.1.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
 - (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
 - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Odour

3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

3.4 Noise and vibration

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 The operator shall:
 - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period

- specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.5 Pests

- 3.5.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.
- 3.5.2 The operator shall:
 - (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;
 - (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.6 Monitoring

- 3.6.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
 - (a) point source emissions specified in tables S3.1; and
 - (b) process monitoring specified in table S3.2.
- 3.6.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.6.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.6.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.6.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3, table S3.1 unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

- 4.1.1 All records required to be made by this permit shall:
 - (a) be legible;
 - (b) be made as soon as reasonably practicable;
 - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
 - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:

- (i) off-site environmental effects; and
- (ii) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 For the following activities referenced in schedule 1, table S1.1, AR1 to AR10, a report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:
 - (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
 - (b) the annual production/treatment data set out in schedule 4, table S4.2; and
 - (c) the performance parameters set out in schedule 4, table S4.3 using the forms specified in table S4.4 of that schedule.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
 - (a) in respect of the parameters and emission points specified in schedule 4, table S4.1;
 - (b) for the reporting periods specified in schedule 4, table S4.1 and using the forms specified in schedule 4, table S4.4; and
 - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.
- 4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

4.3 Notifications

- 4.3.1 In the event:
 - (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
 - (i) inform the Environment Agency,
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (iii) take the measures necessary to prevent further possible incidents or accidents;
 - (b) of a breach of any permit condition the operator must immediately—
 - (i) inform the Environment Agency, and

- (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time:
- (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.
- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
 - (a) the Environment Agency shall be notified at least 14 days before making the change; and
 - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately", in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1	Table S1.1 activities				
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types		
AR1	S5.4 A(1)(b)(i)	Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes	From receipt of permitted waste through to digestion and recovery of by-products (digestate).		
	per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological		Anaerobic digestion of waste in three tanks followed by burning of biogas produced from the process or injection into national gas grid.		
		R3: Recycling/ reclamation of organic substances which are not used as solvents.	Daily treatment capacity of 490 tonnes per day.		
			Waste types as specified in Table S2.2.		
Directly As	sociated Activity	<u> </u>			
AR2	Storage of waste pending recovery	R13: Storage of waste pending the operations numbered R1 and R3 (excluding temporary storage,	From the receipt of waste to despatch for anaerobic digestion and/or despatch off site for recovery.		
		pending collection, on the site where it is produced).	Storage of waste in an enclosed building only, fitted with appropriate odour abatement and on an impermeable surface with sealed drainage.		
			Waste types suitable for acceptance are limited to those specified in Table S2.2.		
AR3	Physical treatment for the purpose of recycling	R3: Recycling/ reclamation of organic substances which are not used as solvents	From the receipt of waste to despatch for anaerobic digestion or despatch off site for recovery.		
			Pre-treatment of waste in enclosed building and on impermeable surface with sealed drainage system including shredding, sorting, screening, compaction, baling, mixing and maceration.		
			Heat treatment (pasteurisation) of waste in three tanks for the purpose of recovery.		
			Gas cleaning by biological or chemical scrubbing.		
			Waste types suitable for acceptance are limited to those specified in Table S2.2.		

Activity	Activity listed in	Description of specified	Limits of specified activity and waste
reference	Schedule 1 of the EP Regulations	activity and WFD Annex I and II operations	types
AR4	Heat and electrical power supply	R1:Use principally as a fuel to generate energy	From the receipt of biogas produced at the on-site anaerobic digestion process to combustion with the release of combustion gases
			Combustion of biogas in three combined heat and power (CHP) engines with an aggregated thermal input of ~11MWth.
AR5	Emergency flare	D10: Incineration on land	From the receipt of biogas produced at the on-site anaerobic digestion process to incineration with the release of combustion gases
			Use of one auxiliary flare required only during periods of breakdown or maintenance of the CHP engines, or failure of the biogas upgrading/grid entry plant.
AR6	Gas storage	Storage of biogas produced from on-site anaerobic digestion of permitted waste in one stand-alone 2000m ³ synthetic membrane gas holder.	From the receipt of biogas to despatch for use within the facility.
AR7	Raw material storage	Storage of raw materials including lubrication oil, antifreeze, ferric chloride, activated carbon.	From the receipt of raw materials to despatch for use within the facility.
AR8	Digestate storage	Storage of whole digestate in one 800m³ tank	From the receipt of digestate produced from the on-site anaerobic digestion process to despatch for use off-site.
AR9	Surface water collection and storage	Collection and storage of uncontaminated roof and site surface water in one attenuation pond.	From the collection of uncontaminated roof and site surface water from non-operational areas only to re-use within the facility.
AR10	Biogas upgrading/grid entry	Upgrading of biogas to biomethane (including the removal of moisture and other substances such as carbon dioxide, hydrogen sulphide, and volatile organic compounds) for injection into the National Grid.	From the receipt of biogas produced at the on-site anaerobic digestion process to injection into the National Grid. This includes return of off-specification biogas to the AD process. In the event of failure of the biogas upgrading/grid entry plant biogas will be directed to the CHP engines and/or emergency flare for combustion.

Table S1.1 activities				
Activity reference	Description of activities for waste operations	Limits of activities		
AR11 – Transfer of pre- treated waste	R3: Recycling/ reclamation of organic substances which are not used as solvents R13: Storage of waste pending the operations numbered R1 and R3 (excluding temporary storage, pending collection, on the site where it is produced).	Treatment of waste in enclosed building and on impermeable surface with sealed drainage system including shredding, sorting, screening, compaction, baling, mixing and maceration prior to export off site. Storage of waste in an enclosed building only, fitted with appropriate odour abatement and on an impermeable surface with sealed drainage. Waste types suitable for acceptance are limited to those specified in Table S2.2.		

Table S1.2 Operating techniques			
Description	Parts	Date Received	
Application	Document CRM 315 002 PE R 003 A (Non-technical summary), CRM 315 002 PE R 005 B (Environmental risk assessment, CRM 315 002 PE R 006 B (Operational techniques and monitoring plan) of the application document in response to section 3a – technical standards, application form B3.	11/05/2015	
Response to Schedule 5 notice dated 30/06/2015	Responses to questions 1, 2, 3, 4, 5, 6, 8, 9 and 10 detailing building design, operating specifications, BAT techniques, clarification on time periods for waste storage, water metering, flare specification and BAT relating to biogas storage facilities, digesters and digestate storage tanks.	27/07/2015	
Response to Schedule 5 notice dated 11/09/2018	Operating techniques specified in application document reference CRM.337.001.PE.R.001.D.	24/09/2018	
Application EPR/AP33338AX/V006	Operating techniques specified in application document reference CRM 337 003 PE R 003 A	30/11/2020	
	Odour management plan reference CRM 337 001 PE R 008 A OMP V4 FINAL	30/11/2020	

Reference	Requirement	Date
IC1	The operator shall submit a written report to the Environment Agency for approval. The report must contain a written review of the effectiveness of the installation's odour management plan.	Completed
	The report shall include the dates for the implementation of individual measures identified in order to ensure compliance with indicative BAT as provided in Sector Guidance Note IPPC S5.06 and Horizontal Guidance Note H4.	
	The notification requirements of condition 2.4.1 will be deemed to have been complied with on submission of the report.	
	You must implement the actions and outcomes of the report as approved, and from the date stipulated by the Environment Agency.	
IC2	The operator shall submit a written report to the Environment Agency for approval detailing the performance and optimisation of the odour abatement system to minimise emissions of odour.	Completed
	The operator shall carry out an assessment of the impact of odour emissions to air from the odour abatement system (Emission point A3, Table S3.1), including quantitative emissions sampling in accordance with Agency Guidance M2 'Monitoring of stack emissions to air' when the plant is operating under full load conditions.	
	Emissions monitoring data shall be used to compare the actual emissions with those modelled in the impact assessment submitted with the application, together with an assessment of the level of odour reduction that can be achieved under optimum operating conditions. In the event that the assessment shows that the system does not meet expected abatement levels, the report must contain the dates for implementation of individual measures identified.	
	The notification requirements of condition 2.4.1 will be deemed to have been complied with on submission of the plan.	
	You must implement the findings of the report as approved, and from the date stipulated by the Environment Agency.	
IC3	The operator shall carry out a monitoring study to verify the assumptions made in application EPR/AP3338AX/V004 in relation to the releases of pollutants to air. The study shall include the monitoring of point source releases to air from the biogas upgrading plant emission point A4 during normal operation, having regard to the Environment Agency Technical Guidance Note (Monitoring) M2 Monitoring of Stack Emissions to Air, version 12, August 2017 (link) and to the Environment Agency's Monitoring Certification Scheme, MCERTS. As a minimum, two separate monitoring campaigns in a year shall be completed (one monitoring survey six months following commissioning of the biogas upgrading plant).	Within 12 months of effective date of notice V004, or otherwise agreed in writing by the Environment Agency.
	The pollutants to be monitored shall include: total volatile organic compounds; and	
	hydrogen sulphide.	

Reference	Requirement	Date
IC4	Following the completion of IC3, the operator shall undertake an environmental impact risk assessment of all point source releases to air to demonstrate that the emissions will not result in a significant impact. The assessment shall use the information obtained through the emissions monitoring undertaken for IC3.	Within 15 months of effective date of notice V004, or otherwise agreed in writing by the
	The environmental impact risk assessment shall, as a minimum, include:	Environment Agency.
	 reports showing details of the monitoring undertaken and the results obtained; 	
	 results of the assessment of long and short term impacts from the emissions in accordance with Environment Agency guidance – Air emissions risk assessment for your environmental permit, published 01 February 2016, last updated 02 August 2016 (link); and 	
	a completed H1 assessment software tool, or equivalent.	
	In the event emissions cannot be screened out as insignificant using the H1 assessment criteria, the operator shall undertake detailed modelling in accordance with Environment Agency guidance - Environmental permitting: air dispersion modelling reports, published 01 November 2014 (link).	
	The environmental impact risk assessment report and all associated monitoring reports and assessments shall be submitted in writing to the Environment Agency for review.	
	If the environmental impact risk assessment shows potential long or short term impacts from the emissions, the operator shall submit an action plan to the Environment Agency for review. The action plan shall include, but not be limited to, the following:	
	 proposals for amendments to existing procedures and/or for the implementation of additional measures to reduce the impacts of the substances identified; and 	
	a proposed timetable for completion of any changes or works	
	The operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency.	

Table S1.4 Pre-operational measures for future development			
Reference	Operation	Pre-operational measures	
1	Third digester	At least 8 weeks (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the third digester, the operator shall provide a written commissioning plan (including timescales for completion) for approval by the Environment Agency. The commissioning plan shall include the expected emissions to the environment during the different stages of commissioning, the expected durations of commissioning activities and the measures to be taken to protect the environment and report to the Environment Agency in the event that actual emissions exceed expected emissions. Commissioning shall be carried out in accordance with the commissioning plan as approved by the Environment Agency.	
2	Third digester	At least 8 weeks (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the installation, the operator shall ensure that a review of the design, method of construction and integrity of the proposed site secondary containment is carried out by a competent person (qualified civil or structural engineer). The review shall be undertaken in accordance with the methodology detailed in CIRIA C736 - Containment Systems for the Prevention of Pollution - secondary, tertiary and other measures for industrial and commercial premises or other	

Table S1.4 Pre-operational measures for future development			
Reference	Operation	Pre-operational measures	
		relevant industry standard and shall compare the constructed secondary containment against the standards stated above.	
		The review shall include:	
		physical condition of the constructed secondary containment	
		the suitability for providing containment when subjected to the dynamic and static loads caused by catastrophic tank failure;	
		any work required to ensure compliance with the standards detailed in CIRIA C736 or other relevant industry standard; and	
		a maintenance and inspection regime	
		A written report of the review shall be submitted to the Environment Agency detailing the review's findings and recommendations. Remedial action shall be taken to ensure that the secondary containment meets the CIRIA C736 standards and the operator must implement the maintenance and inspection regime.	
		The operation of the third digester shall not commence unless the Environment Agency has given prior written permission under this condition.	

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels		
Raw materials and fuel description Specification		
Chemicals	Operational requirement only	

Table S2.2 Pe	ermitted waste types and quantities
Maximum quantity	The total site annual throughput shall not exceed 145,000 tonnes. The annual throughput for activity AR11 (waste treatment and transfer) shall not exceed 25,000 tonnes per year.
Waste code	Description
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 01	sludges from washing and cleaning – food processing waste, food washing waste
02 01 02	animal-tissue waste including blood, animal flesh, fish processing waste, fish carcasses, poultry waste
02 01 03	plant-tissue waste including husks, cereal dust, waste animal feeds, off-cuts from vegetable and fruit and other vegetation waste
02 01 06	animal faeces, urine and manure including spoiled straw
02 01 07	wastes from forestry
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin
02 02 01	sludges from washing and cleaning, process water, food washing waste
02 02 02	animal-tissue waste including blood, animal flesh, fish processing waste, fish carcasses, poultry waste
02 02 03	materials unsuitable for consumption or processing
02 02 04	sludges from on-site effluent treatment
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation
02 03 04	materials unsuitable for consumption or processing
02 03 05	sludges from on-site effluent treatment
02 04	wastes from sugar processing
02 04 03	sludges from on-site effluent treatment
02 05	wastes from the dairy products industry
02 05 01	materials unsuitable for consumption or processing including solid and liquid dairy products, milk, food processing wastes, yoghurt, whey
02 05 02	sludges from on-site effluent treatment
02 06	wastes from the baking and confectionery industry
02 06 01	materials unsuitable for consumption or processing including condemned food, food processing wastes, biscuits, chocolate, yeast, bread, bakery wastes

Table S2.2 Pe	ermitted waste types and quantities
Maximum quantity	The total site annual throughput shall not exceed 145,000 tonnes. The annual throughput for activity AR11 (waste treatment and transfer) shall not exceed 25,000 tonnes per year.
Waste code	Description
02 06 03	sludges from on-site effluent treatment
02 07	wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials including brewing waste, food processing waste, fermentation waste
02 07 02	wastes from spirits distillation including spent grains, fruit and potato pulp, sludge from distilleries
02 07 04	materials unsuitable for consumption or processing including brewing waste, food processing waste, fermentation waste, beer, alcoholic drinks, fruit juice
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
03 03	wastes from pulp, paper and cardboard production and processing
03 03 02	green liquor sludge
03 03 08	paper and cardboard – not allowed if any non-biodegradable coating or preserving substance is present
03 03 10	fibre rejects and sludges i.e. paper pulp (de-inked only), paper fibre
04	Wastes from the leather, fur and textile industries
04 01	wastes from the leather and fur industry
04 01 01	fleshings and lime split wastes
04 01 05	tanning liquor free of chromium
04 01 07	sludges not containing chromium
04 02	wastes from the textile industry
04 02 10	organic matter from natural products, e.g. grease, wax
07	Wastes from organic chemical processes
07 02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres
07 02 13	waste plastic – discarded compostable packaging made of biodegradable material – must be independently certified to BS EN 13432
15	Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 01	paper and cardboard packaging - not allowed if any non-biodegradable coating or preserving substance is present.
15 01 02	biodegradable plastic packaging – must be independently certified to BS EN 13432
15 01 03	untreated wooden packaging – not allowed if any non-biodegradable coating or preserving substance is present
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
19 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)

Table S2.2 Pe	rmitted waste types and quantities
Maximum quantity	The total site annual throughput shall not exceed 145,000 tonnes. The annual throughput for activity AR11 (waste treatment and transfer) shall not exceed 25,000 tonnes per year.
Waste code	Description
19 02 10	glycerol not designated as hazardous i.e. excludes EWC code 19 02 08
19 05	wastes from aerobic treatment of solid wastes
19 05 01	non-composted fraction of municipal or similar wastes – acceptable only if derived solely from input types allowed by the Anaerobic Digestate Quality Protocol and remains segregated from, and uncontaminated by, any other waste type.
19 05 02	non-composted fraction of animal and vegetable waste – acceptable only if derived solely from input types allowed by the Anaerobic Digestate Quality Protocol and remains segregated from, and uncontaminated by, any other waste type.
19 05 03	off-specification compost (from a composting process that accepts waste input types listed in this table only)
19 06	wastes from anaerobic treatment of waste
19 06 03	liquor from anaerobic treatment of municipal waste (from a process that treats wastes which are listed in this table only)
19 06 04	digestate from anaerobic treatment of source segregated biodegradable waste (from a process that treats wastes which are listed in this table only)
19 06 05	liquor from anaerobic treatment of animal and vegetable waste (from a process that treats wastes which are listed in this table only)
19 06 06	digestate from anaerobic treatment of animal and vegetable waste (from a process that treats wastes which are listed in this table only)
19 08	wastes from waste water treatment plants not otherwise specified
19 08 09	grease and oil mixture containing edible oils and fats
19 08 12	sludges from industrial biological treatment
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 12	waste types listed in this table, Table S2.2, that have been subjected to mechanical treatment only
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)
20 01 01	paper and cardboard – not allowed if any non-biodegradable coating or preserving substance is present. Excludes laminates such as Tetrapak.
20 01 08	kitchen and canteen waste
20 01 25	edible oil and fat
20 01 38	untreated wood where no non-biodegradable coating or preserving substance is present
20 02	garden and park wastes (including cemetery waste)
20 02 01	biodegradable waste
20 03	other municipal wastes
20 03 01	mixed municipal waste – separately collected biowastes
20 03 02	waste from markets – allowed only if source segregated biodegradable fractions e.g. plant material, fruit and vegetables

Schedule 3 – Emissions and monitoring

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1a [Point A1a on site plan in Schedule 7 and drawing reference CRM.337.003.PE.D .002]	CHP engine 1 [note 1]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	500 mg/m ³	Hourly average	Annual [note 4]	BS EN 14792
		Sulphur dioxide	350 mg/m ³			BS EN 14791
		Carbon monoxide	1400 mg/m ³			BS EN 15058
		Total VOCs	1000 mg/m ³			BS EN 12619:2013
A1b [Point A1b on site plan in schedule 7 and drawing reference CRM.337.003.PE.D .002]	CHP engine 2 [note 1]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	500 mg/m ³	Hourly average	Annual [note 4]	BS EN 14792
		Sulphur dioxide	350 mg/m ³			BS EN 14791
		Carbon monoxide	1400 mg/m ³			BS EN 15058
		Total VOCs	1000 mg/m ³			BS EN 12619:2013
A1c [Point A1c on site plan in schedule 7 and drawing reference CRM.337.003.PE.D .002]	CHP engine 3 [note 1]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	500 mg/m ³	Hourly average	Annual [note 4]	BS EN 14792
		Sulphur dioxide	350 mg/m ³			BS EN 14791
		Carbon monoxide	1400 mg/m ³			BS EN 15058
		Total VOCs	1000 mg/m ³			BS EN 12619:2013
A2 [Point A2 on site plan in schedule 7 and drawing reference CRM.337.003.PE.D .002]	Emergency flare [note 2]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	150 mg/m ³	Hourly average	[note 3]	BS EN 14792
		Carbon monoxide	50 mg/m ³			BS EN 15058

Table S3.1 Point so	Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method	
		Total VOCs	10 mg/m ³			BS EN 12619:2013	
A3 [Point A3 on site plan in schedule 7 and drawing reference CRM.337.003.PE.D .002]	Biofilter stack or vent(s)	No parameter set	No limit set				
A4 [Point A4 on site plan in schedule 7, drawing reference CRM.337.003.PE.D .002	Biogas upgrading stack	No parameter set [note 5]	No limit set [note 5]	 [note 5]	 [note 5]	 [note 5]	
1 vent [location indicated on site plan in schedule 7, drawing reference CRM.337.003.PE.D .002]	Liquid waste tank	No parameter set	No limit set		Record of operating hours		
7 pressure relief valves [locations indicated on site plan in schedule 7, drawing reference CRM.337.003.PE.D .002]	Digesters, Hydrolysis Tank, Buffer Tank, Digestate storage tank and Gas Holder.	No parameter set	No limit set		Record of operating hours		
3 pressure relief valves and 1 vent [locations indicated on site plan in schedule 7, drawing reference CRM.337.003.PE.D .002]	Biogas upgrading system	No parameter set	No limit set		Record of operating hours		
14 pressure relief valves and 3 vents [locations indicated on site plan in schedule 7, drawing reference CRM.337.003.PE.D .002]	Grid entry unit	No parameter set	No limit set		Record of operating hours		

Note 1 - These limits are based on normal operating conditions and load - temperature 0°C (273K); pressure: 101.3 kPa and oxygen: 5 per cent (dry gas). The measurement uncertainty specified in LFTGN08 v2 2010 shall apply.

Note 2 - These limits are based on normal operating conditions and load - temperature 0°C (273K); pressure: 101.3 kPa and oxygen: 3 per cent (dry gas). The measurement uncertainty specified in LFTGN05 v2 2010 shall apply.

Note 3 - Monitoring to be undertaken 12 months after commissioning of the emergency flare. Following commissioning, monitoring to be undertaken in the event the emergency flare has been operational for more than 10 per cent of a year (876 hours). Record of operating hours to be submitted annually to the Environment Agency.

Note 4 - Monitoring to be undertaken within the first 3 months of commissioning new engines.

Note 5 - On completion of improvement condition IC4, the Environment Agency shall consider whether the setting of emissions limits or surrogate monitoring is appropriate for this installation.

Table S3.2 Process monitor	oring requirements			
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Biogas from Digesters	Flow	Continuous	In accordance with EU weights and measures Regulations	
Biogas from Digesters	Methane	Continuous		Gas monitors to be calibrated in accordance with manufacturer's recommendations
	Hydrogen sulphide	Continuous	Not applicable	
Gas storage Tank	Pressure	Continuous	Pressure monitoring	
Waste reception building; Digesters and storage tanks	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary
Biofilter and/or equivalent abatement system	Temperature	As required	Temperature probe	Biofilter shall be checked and
	Moisture	As required	Non specified	maintained to ensure appropriate temperature and
	Thatching/compaction	As required	Non specified	moisture content.
Digester and storage tanks	Integrity checks	Weekly	Visual assessment	

Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Table S4.1 Reporting of monitoring data					
Parameter	Emission or monitoring point/reference	Reporting period	Period begins		
Emissions to air Parameters as required by condition 3.5.1.	A1a, A1b, A1c and A2	Every 12 months	01 January		

Table S4.2 Annual production/treatment			
Parameter	Units		
Electricity generated	MWh		
Biomethane generated	tonnes or m ³		
Whole digestate	tonnes		

Table S4.3 Performance parameters				
Parameter	Frequency of assessment	Units		
Water usage	Annually	tonnes or m ³		
Energy usage	Annually	MWh		
Raw material usage	Annually	tonnes or m ³		
Emergency flare operation	Annually	hours		
Electricity exported	Annually	MWh		
CHP engine usage	Annually	hours		
CHP engine efficiency	Annually	%		
Biomethane exported	Annually	tonnes or m ³		

Table S4.4 Reporting forms				
Media/parameter	Reporting format	Date of form		
Air	Form air 1 or other form as agreed in writing by the Environment Agency	01/09/2015		
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	01/09/2015		
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	01/09/2015		
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	21/12/2018		
Waste returns	E-waste Return Form	-		

Schedule 5 - Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

Permit Number

Name of operator	
Location of Facility	
Time and date of the detection	
	any malfunction, breakdown or failure of equipment or techniques, ance not controlled by an emission limit which has caused, is a pollution
To be notified within 24 hours of	detection
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	
(b) Notification requirements for	the breach of a limit
To be notified within 24 hours of	detection unless otherwise specified below
Emission point reference/ source	
Parameter(s)	

Measured value and uncertainty

Date and time of monitoring

(b) Notification requirements for	the breach of a li	imit	
To be notified within 24 hours of	detection unless	s otherwise specified b	pelow
Measures taken, or intended to be taken, to stop the emission			
Time periods for notification follo	wing detection of	of a breach of a limit	
Parameter			Notification period
(c) Notification requirements for	the detection of	any significant advers	e environmental effect
To be notified within 24 hours of	detection		
Description of where the effect on the environment was detected			
Substances(s) detected			
Concentrations of substances detected			
Date of monitoring/sampling			
Part B – to be submit Any more accurate information on t		n as practicat	ole
notification under Part A.	ne matters for		
Measures taken, or intended to be ta recurrence of the incident	taken, to prevent		
Measures taken, or intended to be the limit or prevent any pollution of the which has been or may be caused by	environment		
The dates of any unauthorised emis facility in the preceding 24 months.	ssions from the		
Name*			
Post			
Signature			
Date			

^{*} authorised to sign on behalf of the operator

Schedule 6 – Interpretation

"accident" means an accident that may result in pollution.

"ADQP" means Anaerobic Digestion Quality Protocol.

"anaerobic digestion" means a process of controlled decomposition of biodegradable materials under managed conditions where free oxygen is absent, at temperatures suitable for naturally occurring mesophilic or thermophilic anaerobes and facultative anaerobe bacteria species, which convert the inputs to a methanerich biogas and whole digestate.

"animal waste" means any waste consisting of animal matter that has not been processed into food for human consumption.

"application" means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

"authorised officer" means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

"building" means a construction that has the objective of providing sheltering cover and minimising emissions of noise, particulate matter, odour and litter.

"digestate" means material resulting from an anaerobic digestion process.

"disposal" means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

"emissions of substances not controlled by emission limits" means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

"emissions to land" includes emissions to groundwater.

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

"groundwater" means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"impermeable surface" means a surface or pavement constructed and maintained to a standard sufficient to prevent the transmission of liquids beyond the pavement surface.

"Industrial Emissions Directive" means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"pests" means birds, vermin and insects.

"quarter" means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

"recovery" means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

"sealed drainage system" in relation to an impermeable surface, means a drainage system with impermeable components which does not leak and which will ensure that:

no liquids will run off the surface otherwise than via the system

• all liquids entering the system are collected in a sealed sump, except where liquids may be lawfully discharged to foul sewer.

"treated wood" means any wood that has been chemically treated (e.g. to enhance or alter the performance of the original wood). Treatments may include penetrating oils, tar oil preservatives, water-borne preservatives, organic-based preservatives, boron and organo-metallic based preservatives, boron and halogenated flame retardants and surface treatments (including paint and veneer).

"waste code" means the six digit code referable to a type of waste in accordance with the List of Wastes (England) Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

"Waste Framework Directive" or "WFD" means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

"year" means calendar year ending 31 December.

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid fuels, 3% or 5% for gaseous fuels, 6% dry for solid fuels; and/or
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

When the following terms appear in the waste code list in Schedule 2, table S2.2, for that table, they have the meaning given below:

"hazardous substance" means a substance classified as hazardous as a consequence of fulfilling the criteria laid down in parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

"heavy metal" means any compound of antimony, arsenic, cadmium, chromium (VI), copper, lead, mercury, nickel, selenium, tellurium, thallium and tin, as well as these materials in metallic form, as far as these are classified as hazardous substances.

"PCBs" means

- polychlorinated biphenyls.
- polychlorinated terphenyls.
- monomethyl-tetrachlorodiphenyl methane, Monomethyl-dichloro-diphenyl methane, Monomethyldibromo-diphenyl methane.
- any mixture containing any of the above mentioned substances in a total of more than 0,005 %by weight.

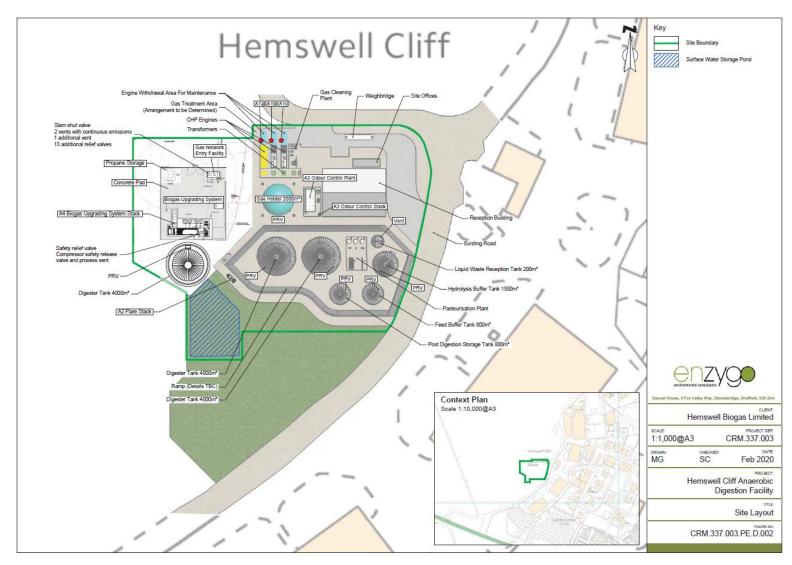
"transition metals" means any of the following metals: any compound of scandium, vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum and tantalum, as well as these materials in metallic form, as far as these are classified as hazardous substances.

"stabilisation" means processes which change the hazardousness of the constituents in the waste and transform hazardous waste into non-hazardous waste.

"solidification" means processes which only change the physical state of the waste by using additives without changing the chemical properties of the waste.

"partly stabilised wastes" means wastes containing, after the stabilisation process, hazardous constituents which have not been changed completely into non-hazardous constituents and could be released into the environment in the short, middle or long term.

Schedule 7 – Site plan



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END OF PERMIT