

Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2010

Grays Biogas Limited

Mona Anaerobic Digestion Plant
Mona Industrial Estate
Gwalchmai
Anglesey
LL65 4RJ

Variation application number
EPR/AP3033HY/V002

Permit number
EPR/AP3033HY

Mona Anaerobic Digestion Plant

Permit number EPR/AP3033HY

Introductory note

This introductory note does not form a part of the notice

The following notice gives notice of the variation of an environmental permit.

The variation results from the decision by the operator to change the proposed supplier of the biogas plant and associated equipment.

Releases from the installation and the environmental impact will remain unchanged.

There are changes to the operating techniques described in the original application EPR/AP3033HY/A001.

An administrative variation has been made to change the name of the operator.

There is no change to the legal entity of the operator or the management systems in use on the facility.

The schedules specify the changes made to the original 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/AP3033HY/A001	Duly made 13/10/10	
Additional Information Requested	15/12/2010	
Additional Information Received	06/01/2011	
Additional Information Received	15/02/2011	
Additional Information Received	01/03/2011	
Permit EPR/AP3033HY determined	27/06/2011	
Application For Variation EPR/AP3033HY/V002	Duly made 20/02/2012	Change of technical provider. Change of operator's name.
Additional Information Requested	06/03/2012	Requested by email
Additional Information Received	15/03/2012	Received by email, part only.
Additional Information Received	20/03/2012	Received by email, remainder.
Additional Information Requested	23/03/2012	Requested by email
Additional Information Received	31/03/2012	Received by email
Variation Notice EPR/AP3033HY/V002 Issued	09/05/2012	

End of introductory note

Notice of variation

Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies

Permit number
EPR/AP3033HY

issued to:
Grays Biogas Limited ("the operator")

whose registered office is

Berwyn
Porthdafarch Road
Holyhead
Anglesey
LL65 2SA


company registration number 06414275

to operate a regulated facility at

Mona Anaerobic Digestion Plant
Mona Industrial Estate
Gwalchmai
Anglesey
LL65 4RJ

to the extent set out in the schedules.

The notice shall take effect from 09/05/2012

Name	Date
	9 May 2012

Anne Nightingale
Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

None

Schedule 2 – conditions to be amended

The following conditions are amended as a result of the application made by the operator

Table S.1.1 as referenced by condition 2.1.1 is amended as follows

Table S1.1 Activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity and waste types
A1	S6.8 A1 (c) Disposing of or recycling animal carcasses or animal waste, other than by rendering or by incineration falling within section 5.1, at a plant with a treatment capacity exceeding ten tonnes per day of animal carcasses or animal waste or both in aggregate.	Receipt, storage and anaerobic digestion of animal tissue.	Anaerobic digestion of permitted waste including pasteurisation and chemical addition. Waste types as specified in Table S2.2
Directly Associated Activity			
A2	Processing of organic material by anaerobic digestion.	Anaerobic digestion of organic material. Including storage of liquid and solid digestate.	From receipt of vegetable matter to storage of liquid and solid digestate and integrated storage and supply of biogas to Activity A3 below. Waste types as specified in Table S2.2
A3	Burning fuel manufactured from or including waste (other than a fuel mentioned in paragraph (b)) in an appliance with a net rated thermal input of 0.4 or more megawatts but a rated thermal input of less than 3 megawatts.	The combustion of gas for the purpose of generation of electricity and heat for use within the installation and export to the National grid.	From receipt of biogas in the installation through to the combustion process and subsequent delivery of electricity and the generation of heat for use by the anaerobic digestion process.
A4	Gas storage	Storage of biogas in dual purpose tanks.	From storage of biogas produced from anaerobic digestion to despatch for combustion via engine.

Table S1.1 Activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity and waste types
A5	Chemicals and raw material storage	Storage of chemicals and raw materials including sulphuric acid, coagulant, cleaning fluids, lubrication oil and diesel	From receipt of chemicals and raw materials to their use within the installation.
A6	Digestate Storage	Storage of liquid digestate in bulk concentration tanks. Storage of solid digestate in a ventilated building.	From storage of liquid digestate to despatch for use off-site.
A7	Surface Water Storage	Storage of uncontaminated surface water run off from external areas of the site including roof water.	From containment in surface water balancing facility until discharge through emission point S1.
A8	Anaerobic Digestion of waste	R3: Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes). R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) D9: Physico-chemical treatment not specified elsewhere in Annex IIA to the Waste Framework Directive which results in compounds or mixtures which are discarded by means of any operations numbered D1 to D12	<p>Treatment of waste including shredding, sorting, screening, compaction, baling, mixing and maceration.</p> <p>Storage of waste from its receipt through to its digestion and recovery of by-products from the installation.</p> <p>The air extraction system that maintains negative pressure shall be fitted with a biofilter.</p> <p>Digestion of wastes including pasteurisation and chemical addition.</p> <p>Gas cleansing by biological or chemical scrubbing.</p> <p>Treatment of digestate including screening to remove plastic or other residues, centrifuge or pressing, addition of thickening agents (polymers) or drying.</p> <p>The use of combustible gases produced as a product of the anaerobic digestion process as fuel.</p> <p>Use of a back up boiler required only for periods or breakdown or maintenance.</p> <p>All waste solids, liquids and sludges shall be stored on an impermeable surface with a sealed drainage system.</p> <p>All storage and process tanks shall be fit for purpose and be constructed and maintained to a recognised standard.</p> <p>Liquid digestate should be stored within a covered tank and should be of a design and capacity fit for purpose.</p>

Table S1.1 Activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity and waste types
			<p>All biogas condensate shall be returned to the system.</p> <p>Fugitive emissions of unburned biogas and the operation of the auxiliary back up boiler shall be minimised. Any significant fugitive emissions of unburned biogas (including operation of the pressure relief valves associated with biogas storage) and the operation of the back up boiler shall be recorded.</p>
A9	Transfer and storage of recyclable materials	<p>R3: Recycling/reclamation of organic substances which are not used as solvents</p> <p>R5: Recycling/reclamation of other inorganic compounds</p> <p>R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)</p>	<p>With the exception of discharge of liquid waste from tankers to the storage tanks, all bulking, storage, treatment and transfer of waste prior to introduction to the AD process, shall be carried out within a building that is kept under negative pressure and provided with an impermeable surface and sealed drainage system.</p> <p>Storage of solid digestate in a ventilated building.</p> <p>Physical treatment consisting only of manual sorting, screening, crushing or compaction of non-hazardous waste into different compounds for recovery.</p>

Table S1.2 as referenced by condition 2.3.1 is amended as follows

Table S1.2 Operating techniques		
Description	Parts ^{Note 1}	Date Received
Application EPR/AP3033HY/A001	Section 3 subsection 3a, 3b, and 3d of the application document in response to section 3 – operating techniques, Part B3 of the application form. Management System 2033/819/MS Appendices F,G,H,I,J,L and M	13/10/10
Application for variation EPR/AP3033HY/V002	The response to Subsection 3 of Part B3 of the application form. Updated Management System 2033/819/MS version 2.2 Appendix A, odours and fugitive emissions Appendix B, noise and vibration Appendix C, emissions and monitoring Appendix D, raw materials Appendix E, energy efficiency Appendix k, Environmental risk assessments Appendix N, technical documents produced by the technical providers Appendix O, drainage design.	20/02/2012
Additional Information	Revised drainage drawings	06/03/2012
Additional Information	Supplied by e-mails	15/03/12, 20/03/12, 23/03/12, and 31/03/12.

Note 1 - Operating techniques shall be in accordance with the documents referenced in this table unless they are subject to revision in accordance with the requirements of tables S1.3 and S1.4 of this permit and agreed in writing with the Environment Agency.

Table S1.3 as referenced by condition 2.4.1 is amended as follows:

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC1	<p>The operator shall monitor emissions from the gas engines for the determinants listed in table S3.1. The results of the emissions monitoring shall be used to assess the environmental impact of the emissions from the gas engines on air quality standards. The assessment shall be carried out using Agency guidance note H1 and shall include air dispersion modelling if required by H1 criteria.</p> <p>A copy of the impact assessment shall be submitted to the Environment Agency.</p>	Within two months of completion of commissioning of the plant.
IC2	<p>The operator shall undertake a noise assessment in accordance with procedures given in BS4142:1997 (description and measurement of environmental noise) or other methodology as agreed in writing with the Agency. Any noise sources(s) identified as exhibiting tonal contributions shall be quantified by means of frequency analysis. Noise measurement shall be undertaken by an experienced and suitably qualified person.</p> <p>On completion of the assessment a copy of the survey shall be submitted to the Environment Agency in the form of a report, with interpretation of the results and conclusions and recommendations drawn.</p>	Within two months of completion of commissioning of the plant.
IC3	<p>The operator shall review the effectiveness of the Odour Management Plan in preventing and minimising odour emissions from all point and fugitive sources during the first two months of operation. This shall include a review of assumptions and conclusions drawn in the Odour Management Plan (document reference 2033/819/OMP/02-dated 01/02/2012). by sampling and measuring odour emissions from all point and fugitive sources.</p> <p>This review shall be undertaken in accordance with Environment Agency Guidance notes H1 and H4.</p> <p>A copy of the review shall be submitted to the Environment Agency detailing improvements required (where applicable) to prevent and minimise odour emissions and ensure the installation does not cause an odour nuisance.</p>	Within three months of completion of commissioning of the plant.
IC4	<p>The operator shall submit a Vermin Monitoring and Control Plan, which will ensure that all appropriate measures are taken to prevent the presence of vermin including gulls and corvids at the permitted installation. The plan should include:</p> <ul style="list-style-type: none"> • Coverage of the lagoon with a mesh that prevents access in and out of the lagoon by birds • specified vermin control techniques • operating hours of techniques proposed • monitoring regime to measure the effectiveness of the techniques employed. <p>The management plan shall be implemented from the date of approval by the Environment Agency.</p>	Within one month of completion of commissioning of the plant.

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC 5	The operator shall review the disposal route for the effluent from the biogas desulphurisation plant and determine the BAT. A copy of the review shall be submitted to the Environment Agency. After agreement with the Environment Agency the BAT shall be adopted.	Within six months of completion of commissioning of the plant.

Table S1.4 as referenced by condition 2.5.1 is amended as follows

Table S1.4 Pre-operational measures	
Reference	Pre-operational measures
PO1	<p>Prior to the commencement of commissioning, the operator shall send a summary of the site Environmental Management System (EMS) to the Environment Agency and make available for inspection all documents and procedures which form part of the EMS. The EMS shall be developed in line with the requirements set out in Part 1 of "How To Comply With Your Environmental Permit. (EPR 1.00)" The documents and procedures set out in the EMS shall form the written management system referenced in condition 1.1.1 (a) of the permit.</p> <p>No operations shall commence until compliance with this condition has been confirmed in writing by the Environment Agency.</p>
PO2	<p>Prior to the commencement of waste acceptance, the operator shall provide a written plan, including timescales for completion, for the commissioning of the Odour Control Unit (OCU) serving the waste reception building.</p> <p>The plan shall clearly set out how the odour destruction efficiency of the bio-bed will be established, monitored and maintained to prevent and minimise odour emissions during the commissioning period.</p> <p>The plan shall include details of the actions to be taken if odour emissions from the OCU cause, or have the potential to cause annoyance to local receptors during the commissioning period.</p> <p>No operations shall commence until compliance with this condition has been confirmed in writing by the Environment Agency.</p>
PO3	<p>Prior to commencement of operations at the site, appropriate measures shall be taken to establish background concentrations of bio aerosols at agreed monitoring locations. This should be undertaken in accordance with the methods prescribed in 'A standardised protocol for the monitoring of bio aerosols at open composting facilities.'</p> <p>The results of the sampling shall be submitted to the Environment Agency.</p> <p>No operations shall commence until compliance with this condition has been confirmed in writing by the Environment Agency.</p>
PO4	<p>Prior to commencement of operations at the site, the operator shall submit to the Environment Agency details of the 'as built' drainage system, tank/building bunding and lagoon and confirm such construction is in accordance with the details provided within the application documents.</p> <p>No operations shall commence until compliance with this condition has been confirmed in writing by the Environment Agency.</p>

Table S2.1 as referenced by condition 3.1.1 is amended as follows

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Non-waste biomass fuel	Supplementary feedstock material substantially free of non vegetable matter – maximum input restricted to 6,000 tonnes per annum. ^{Note 1}
Diesel	Sulphur content shall not exceed 0.1% by mass
Lubricating Oil	Operational requirement
Gear Oil	Operational requirement
Heating Oil	Operational requirement
Chemicals - Deutoclear	To remove H ₂ S and NH ₃ in the digestate
Antifreeze (Ethylene glycol)	Antifreeze for engine cooling systems
Note 1.	Maximum quantities permitted shall be as specified in section 3.2 of document reference 2033/819/MS – Management system (dated 16/02/2012 – version 2.2), subject to available storage capacity as specified in additional information provided by e-mail dated 15/03/2012. (subject to subsequent revisions to this document to be agreed in writing with the Environment Agency).

Table S2.2 as referenced by condition 3.1.1 is amended as follows

Table S2.2 Permitted waste types and quantities

Maximum quantity	Less than 25,000 tonnes per annum. The quantity of solid waste/feed stocks stored within the building shall not exceed the limits specified in additional information provided by e-mail dated 15/03/2012 . (subject to subsequent revisions to this document to be agreed in writing with the Environment Agency).
Waste code	Description
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPERATION AND PROCESSING
02 01	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 01	Sludge's from washing and cleansing – food processing waste, food washing waste
02 01 02	Animal tissue waste-category 3 animal by-products (ABP) including blood, animal flesh, fish processing waste, fish carcasses, poultry waste-category 2 ABP-paunch contents
02 01 03	Plant tissue waste – husks, cereal dust, waste animal feeds
02 01 06	Animal faeces, urine, manure including spoiled straw
02 01 07	Wastes from forestry
02 01 99	Residues from commercial mushroom cultivation
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 – category 3 ABP including blood, animal flesh, fish processing waste, fish carcasses, poultry waste
02 02 04	Materials unsuitable for consumption or processing – coffee, food processing waste, jam, kitchen waste, fruit, vegetable oil, tobacco, tea, vegetable waste – waste from fat processing of meat or fish
02 02 05	Sludges from on-site effluent treatment
02 02 99	Non specified* - sludges from gelatine production – animal gut contents
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 02	wastes from preserving agents
02 03 04	Biodegradable materials unsuitable for processing or consumption (other than those containing dangerous substances)
02 03 05	Sludges from on-site effluent treatment
02 03 99	Non specified* - sludges from the processes of edible fats and oils – seasoning residues, molasses residues, - residues from production of potato, corn or rice starch
02 04	Wastes from sugar processing
02 04 03	Sludges from on site effluent treatment – biological sludge
02 04 99	Other biodegradable wastes
02 05	Waste from the dairy produces industry
02 05 01	Biodegradable materials unsuitable for consumption or processing (other than those containing dangerous substances) – 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 confectionary industry
02 06 01	Biodegradable materials unsuitable for consumption or processing (other than those containing dangerous substances) – food condemned, food processing wastes, biscuits, chocolate, yeast, bread, bakery waste
02 06 02	wastes from preserving agents

Table S2.2 Permitted waste types and quantities

Maximum quantity	Less than 25,000 tonnes per annum. The quantity of solid waste/feed stocks stored within the building shall not exceed the limits specified in additional information provided by e-mail dated 15/03/2012 . (subject to subsequent revisions to this document to be agreed in writing with the Environment Agency).
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 – brewing waste, food processing waste, fermentation waste
02 07 02	Wastes from spirits distillation – spent grain, fruit and potato pulp – sludges from distilleries
02 07 03	wastes from chemical treatment
02 07 04	Biodegradable materials unsuitable for consumption or processing (other than those containing dangerous substances) – brewing waste, food processing waste, fermentation waste, beer, alcoholic drinks, fruit juice
02 07 05	sludges from on-site effluent treatment
02 07 99	Spent grain, hops and whisky filter sheets/cloths
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
03 01	wastes from wood processing and the production of panels and furniture
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
03 03	Wastes from pulp, paper and cardboard production and processing
03 03 01	waste bark and wood
03 03 02	Green liquor sludge – paper sludge- green liquor
03 03 05	de-inking sludges from paper recycling
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 08	Waste from sorting of paper and cardboard destined for recycling – cardboard, newspaper, tissues, paper
03 03 10	Fibre rejects and sludges – paper pulp (de-inked only), paper fibre
03 03 11	sludges from on-site effluent treatment other than those mentioned in 03 03 10
04	Wastes from the leather, fur and textile industries
04 01	Wastes from the leather and fur industries
04 01 01	Fleshing and lime split wastes
04 01 05	Tanning liquor free of chromium
04 01 07	Sludges not containing chromium
04 01 09	wastes from dressing and finishing
04 02	Waste from the textile industry
04 02 10	Organic matter from natural products e.g. grease, wax
07	Waste from organic chemical processes
07 01	wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals
07 01 12	sludges from on-site effluent treatment other than those mentioned in 07 01 11 (see note 1)
07 02	Waste from the manufacture, formulation, supply and use of plastics, synthetic rubber and man made fibres
07 02 13	Waste plastic – must conform to BS EN 13432

Table S2.2 Permitted waste types and quantities

Maximum quantity	Less than 25,000 tonnes per annum. The quantity of solid waste/feed stocks stored within the building shall not exceed the limits specified in additional information provided by e-mail dated 15/03/2012 . (subject to subsequent revisions to this document to be agreed in writing with the Environment Agency).
Waste code	Description
07 05	wastes from the MFSU of pharmaceuticals
07 05 12	sludges from on-site effluent treatment other than those mentioned in 07 05 11
07 05 14	solid wastes other than those mentioned in 07 05 13
07 06	sludges from on-site effluent treatment
07 06 12	sludges from on-site effluent treatment other than those mentioned in 07 06 11
15	Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	Waste packaging, absorbents, filter materials, wiping cloths and protective clothing
15 01 01	Paper and cardboard packaging – must conform to BS EN 13432 – no man made substances
15 01 02	Plastic packaging – must conform to BS EN 13432
15 01 03	Wood packaging
15 01 05	Composite packaging – must conform to BS EN 13432
16	Wastes not otherwise specified in the list
16 03	off-specification batches and unused products
16 03 06	organic wastes other than those mentioned in 16 03 05
16 10	aqueous liquid wastes destined for off-site treatment
16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01
16 10 04	aqueous concentrates other than those mentioned in 16 10 03
18	Wastes from Human and Animal Health Care and/or Related Research (except kitchen and restaurant wastes not arising from immediate health care)
18 02	wastes from research, diagnosis, treatment or prevention of disease involving animals
18 02 03	wastes whose collection and disposal is not subject to special requirements in order to prevent infection
19	Waste 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	Waste from physiochemical treatment of wastes
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05
19 02 10	Combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 05	Wastes from the aerobic treatment of solid wastes
19 05 01	Non composted fraction of municipal and similar waste
19 05 02	Non composted fraction of animal and vegetable wastes
19 05 03	Off-specification compost from source segregated biodegradable waste
19 06	Waste from anaerobic treatment of waste
19 06 03	Liquor from anaerobic treatment of municipal waste
19 06 04	Digestate from anaerobic of source segregated biodegradable waste
19 06 05	Liquor from anaerobic treatment of animal and vegetable waste
19 06 06	Digestate from anaerobic treatment of animal and vegetable waste
19 08	Waste from wastewater treatment works
19 08 09	Grease and oil mixture containing only edible oils and fat
19 08 12	Sludge from industrial biological treatment

Table S2.2 Permitted waste types and quantities

Maximum quantity	Less than 25,000 tonnes per annum. The quantity of solid waste/feed stocks stored within the building shall not exceed the limits specified in additional information provided by e-mail dated 15/03/2012 . (subject to subsequent revisions to this document to be agreed in writing with the Environment Agency).
Waste code	Description
19 08 14	sludges from other treatment of industrial waste other than those mentioned in 19 08 13
19 09	wastes from the preparation of water intended for human consumption or water for industrial use
19 09 01	solid waste from primary filtration and screenings
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 01	paper and cardboard
20	Municipal waste (household waste and similar commercial, industrial and institutional waste) including separately collected fractions
20 01	Municipal waste (household waste and similar commercial, industrial and institutional waste) including separately collected fractions
20 01 01	Paper and cardboard
20 01 08	Biodegradable kitchen and canteen waste
20 01 25	Edible oil and fat
20 01 38	Wood (where no none-biodegradable coating or preserving substance present)
20 02	Garden and park waste (including cemetery waste)
20 02 01	Biodegradable waste – animal faeces, manure, garden waste, green waste, horticultural waste, plant tissue, parks and garden waste, hedge and tree trimmings, grass cutting and leafy materials
20 03	Other municipal waste
20 03 01	Mixed municipal waste – separately collected biowaste
20 03 02	Wastes from markets – allowed only if source segregated biodegradable fractions e.g. plant material, fruit and vegetables
20 03 03	street-cleaning residues
Note 1	Includes only those materials that can be demonstrated to be of benefit to optimise the production of biogas by buffering pH or offering micronutrients, or are capable of being broken down within the process and in any case will not give rise to compounds or mixtures which could affect the status of the digestate.

Table S3.1 as referenced by condition 3.1.1 is amended as follows:

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source Limit (including unit) [1]	Reference period	Monitoring frequency	Monitoring standard or method
A1 – Exhaust stack on gas engine	Oxides of nitrogen	500mg/m ³	Hourly Average	Annual monitoring	BS EN 14792
	Carbon monoxide	1400mg/m ³	Hourly Average	Annual monitoring	BS EN 15058
	Sulphur dioxide	350mg/m ³	Hourly Average	Annual monitoring	BS EN 14791
	Total volatile organic compounds including methane	1000mg/m ³	Hourly Average	Annual monitoring	BS EN 12619:1999 or BS EN 13526:2002 depending on concentration
A2-Boiler Exhaust	No parameters set	Boiler	N/A	–	–
A3-Biofilter	No parameters set	Biofilter	N/A	–	–
Pressure relief valves/vents	No parameters set	Over pressure and under pressure vents on hydrolysis tank digester tanks and digestate storage tanks	N/A	–	–

Table S3.2 as referenced by condition 3.1.1 is amended as follows**Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements**

Emission point ref. & location	Parameter	Source	Limit (incl. unit)	Monitoring frequency	Monitoring standard or method
Surface Water balancing facility. Discharge point reference S12.	Visible oil or grease Visual contamination	Surface water	No visible trace	Weekly (rainfall dependent)	N/A

Table S3.3 as referenced by condition 3.1.1 is amended as follows

Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Biogas from digesting tanks; waste reception building	Methane Hydrogen sulphide	Continuous	-	Gas monitors calibrated every 6 months to manufacturers requirements
Biogas from digesting tanks.	Flow	Continuous	In accordance with EU weights and measures	
AD plant waste reception building and external storage areas.	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary.
Biofilter	In accordance with manufacturers specifications.	Daily or as otherwise recommended by the manufacturer.	N/A	
Rainwater contained in the bunded area.	Ammonia	Monthly and immediately prior to discharge to lagoon.	N/A	Not to be discharged to lagoon if ammonia concentration is greater than 1 mg/l

Table S4.1 as referenced by condition 4.2.3 is amended as follows

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by Table S3.1	A1	Every 12 months	1 January
Emissions to water other than sewer Parameters as required by Table S3.2	S12	Every 4 months	1 January
Bio aerosol monitoring Parameters as required by Table S3.4	As specified in table S3.4	28 days after the monitoring is undertaken	at plant commissioning

Table S4.4 as referenced by condition 4.2.2 is amended as follows

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	27/04/2012
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	27/04/2012
Water	Form water usage 1 or other form as agreed in writing by the Environment Agency	27/04/2012
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	27/04/2012
Quarterly waste returns	Form WMS1	01/06/2011

Schedule 3 – conditions to be added

None

Schedule 4-Site Plan



End of Permit