

# Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Agrivert Limited

Wallingford Anaerobic Digestion Facility Benson Lane Preston Crowmarsh Wallingford Oxfordshire OX10 6SQ

Variation application number EPR/GB3530AD/V003

Permit number

EPR/GB3530AD

# Wallingford Anaerobic Digestion Permit number EPR/GB3530AD

#### Introductory note

This introductory note does not form a part of the notice.

Under the Environmental Permitting (England & Wales) Regulations 2010 (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.

The Industrial Emissions Directive (IED) was transposed in England and Wales by the Environmental Permitting (England and Wales)(Amendment) Regulations 2013 on 27 February 2013. This variation implements the changes brought about by the IED for "existing facilities operating newly prescribed activities" and completes the transition of this facility from a waste operation to an IED Installation.

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
EPR/GB3530AD Permit	18/07/2012	Application for anaerobic digestion
determined		facility.
(EAWML 104132)		
EPR/GB3530AD/V002	25/06/2013	Environment Agency initiated variation.
Variation		
EPR/GB3530AD/V003	Duly made	Application to implement changes due to"
Variation application	05/09/2014	newly prescribed activities" as a result of
		IED.
EPR/GB3530AD/V003	09/10/2015	Implement changes due to" newly
Variation issued		prescribed activities" as a result of IED.
(Billing ref:MP3932WV)		

End of introductory note

#### Notice of variation and consolidation

#### The 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 and consolidates

Permit number EPR/GB3530AD

Issued to

**Agrivert Limited** ("the operator")

whose registered office is

The Stables
Radford
Chipping Norton
Oxfordshire
OX7 4EB

company registration number **02885265** 

to operate a regulated facility at

Wallingford Anaerobic Digestion Facility Benson Lane Preston Crowmarsh Wallingford Oxfordshire OX10 6SQ

to the extent set out in the schedules.

The notice shall take effect from 09/10/2015

Name	Date
Rebecca Warren	09/10/2015

Authorised on behalf of the Environment Agency

#### Schedule 1

All conditions have been varied by the consolidated permit as a result of the application made by the operator.

#### Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

#### **Permit**

#### The Environmental Permitting (England and Wales) Regulations 2010

## Permit number EPR/GB3530AD

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/GB3530AD/V003 authorising,

Agrivert Limited ("the operator"),

whose registered office is

The Stables Radford Chipping Norton Oxfordshire OX7 4EB

company registration number 02885265

to operate an installation at

Wallingford Anaerobic Digestion Facility Benson Lane Preston Crowmarsh Wallingford Oxfordshire OX10 6SQ

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

Name	Date
Rebecca Warren	09/10/2015

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:
  - 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 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 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(s) S2.2; and
  - 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.

#### 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 tables 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.
- 3.3.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
  - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

#### 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 Monitoring

- 3.5.1 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;
- 3.5.2 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.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 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 tables S3.1, unless otherwise agreed in writing by the Environment Agency.

#### 3.6 Pests

3.6.1 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.

#### 3.7 Fire prevention

- 3.7.1 The operator shall take all appropriate measures to prevent fires on site and minimise the risk of pollution from them including, but not limited to, those specified in any approved fire prevention plan.
- 3.7.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;
  - (b) implement the fire prevention plan, from the date of approval, 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 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:

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

In any other case:

- (e) the death of any of the named operators (where the operator consists of more than one named individual);
- (f) any change in the operator's name(s) or address(es); and
- (g) 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 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
A1	S5.4 A(1) (b) (i) Recovery or a mix of recovery and disposal of non hazardous waste with a capacity exceeding 100 tonnes per day involving biological treatment	Anaerobic Digestion of Waste  R3: Recycling/reclamation of organic substances which are not used as solvents.	From receipt of permitted waste through to digestion and recovery of by-products (digestate).  Anaerobic digestion of permitted waste in 4 tanks followed by burning of biogas produced from the process  Waste types suitable for acceptance are limited to those specified in Table S2.2.
	Directly Associated Activity	/	
A2	Storage of waste pending recovery or disposal	R13: Storage of waste pending the operations numbered R1 and R3 (excluding temporary storage, pending collection, on the site where it is produced)	From the receipt of waste to despatch for anaerobic digestion or despatch off site for recovery and/or disposal.  Storage of waste in an enclosed building 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 S1.1 ac		Description of specified	Limite of annuality !
Activity reference	Activity listed in Schedule 1 of the EP Regulations	activity and WFD Annex I and II operations	Limits of specified activity and waste types
A3	Steam and electrical power supply	R1: Use principally as a fuel or other means to generate energy.  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).	From the receipt of biogas produced at the on-site anaerobic digestion process to combustion via CHP engine(s) and/or auxiliary boiler(s) with the release of combustion gases  Burning of biogas manufactured from, or comprising waste, from receipt in the installation through the combustion process to the delivery of electricity and the generation of heat for use in site activities.  Storage of biogas at the location identified on drawing in Schedule 7.  Combustion of biogas in 2 combined heat and power (CHP) engine(s) with an aggregated thermal input of 3 MWth
A4	Raw material storage	Storage of raw materials	From the receipt of raw materials to despatch for use within the facility
A5	Gas storage	Storage of biogas produced from on-site anaerobic digestion of permitted waste	From the receipt of biogas to despatch for use within the facility
A6	Digestate storage	Storage of liquid digestate in 4 storage tank(s)  Storage of solid digestate in covered bay(s) or building(s)	From the receipt of digestate produced from the on-site anaerobic digestion process to despatch for use off-site
A7	Emergency flare operation	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 auxiliary flare(s) required only during periods of breakdown or maintenance of the CHP engine(s) and/or auxiliary boiler(s).

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
A8	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.
			Post-treatment of digestate in an enclosed building and on an impermeable surface with sealed drainage system, including screening to remove contraries, centrifuge or pressing and addition of thickening agents (polymers) or drying.
			Heat treatment (pasteurisation) of waste in tank(s) 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.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application EPR/GB3530AD	As per table S1.2 permit EPR/GB3530AD	06/03/2012
Application EPR/GB3530AD	Application form B3 Revisions to: Appendix 5 Appendix 16 Appendix 17	20/04/2012
Additional information	Appendix 4 Non Technical Summary	03/07/2012

## Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description Specification	
Maize, grass or wheat silage	Substantially free of non vegetable matter
Sodium Hydroxide and Sodium Hypochlorite Alkaline scrubber	
Ferrous Chloride Sulphur Controller	

Table S2.2 Permitte	d waste types and quantities for anaerobic digestion	
Maximum quantity	Annual throughput shall not exceed 75,000 tonnes	
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	
02 01 02	animal-tissue waste	
02 01 03	plant-tissue waste	
02 01 06	animal faeces, urine and manure including spoiled straw	
02 01 07	wastes from forestry (comprising wood and plant tissue)	
02 01 99	Residues from commercial mushroom cultivation only	
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 and food washing waste only	
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 - coffee, food processing waste, jam, kitchen waste, fruit, vegetable oil, tobacco, tea, vegetable waste – waste fat from processing of meat or fish	
02 02 04	sludges from on-site effluent treatment	
02 02 99	sludges from gelatine production and animal gut contents only	
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	Biodegradable materials unsuitable for consumption or processing (other than those containing dangerous substances)	
02 03 05	Effluent from the process referred to in sources of waste	
02 03 99	Non specified* - sludge from production of edible fats and oils, seasoning residues, molasses residues, residues from production of potato, corn or rice starch only	
02 04	wastes from sugar processing	
02 04 03	sludges from on-site effluent treatment - biological sludge	

Maximum quantity	Annual throughput shall not exceed 75,000 tonnes	
Waste code	Description	
	Restriction: Biological sludge only	
02 04 99	other biodegradable wastes	
02 05	wastes from the dairy products 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 confectionery industry	
02 06 01	Biodegradable materials unsuitable for consumption or processing (other than those containing dangerous substances) - food, food processing wastes, biscuits, chocolate, yeast, bread, bakery wastes	
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	Biodegradable materials unsuitable for consumption or processing including 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 grains, hops and whisky filter sheets/cloths	
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 - paper sludge, green liquor	
03 03 08	Wastes 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	
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 manufacture, formulation, supply and use of plastics, synthetic rubber and man-made fibres	
07 02 13	Waste plastic – must conform to BS EN 13432	
15	Waste packaging, absorbents, wiping cloths, filter materials and protective	

Table S2.2 Permitte	d waste types and quantities for anaerobic digestion	
Maximum quantity	Annual throughput shall not exceed 75,000 tonnes	
Waste code	Description	
	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 manmade substances	
15 01 02	Plastic packaging – must conform to BS EN 13432	
15 01 03	wooden packaging	
15 01 05	composite packaging – must conform to BS EN 13432	
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)	
19 02 10	combustible wastes	
19 05	wastes from aerobic treatment of solid wastes	
19 05 01	non-composted fraction of municipal and similar wastes	
19 05 02	non-composted fraction of animal and vegetable waste	
19 05 03	off-specification compost	
19 06	wastes from anaerobic treatment of waste	
19 06 03	liquor from anaerobic treatment of municipal waste	
19 06 04	digestate from anaerobic treatment 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	wastes from waste water treatment plants not otherwise specified	
19 08 09	grease and oil mixture from oil/water separation containing edible oils and fats	
19 08 12	sludges from industrial biological treatment	

Table S2.2 Permitted waste types and quantities for anaerobic digestion		
Maximum quantity	Annual throughput shall not exceed 75,000 tonnes	
Waste code	Description	
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	
20 01 08	biodegradable kitchen and canteen waste	
20 01 25	edible oil and fat	
20 01 38	wood other than that mentioned in 20 01 37	
20 02	garden and park wastes (including cemetery waste)	
20 02 01	biodegradable waste including animal faeces, manure, garden waste, horticultural waste, plant tissue, parks and garden waste, hedge and tree trimmings, grass cuttings and leafy materials only	
20 03	other municipal wastes	
20 03 01	mixed municipal waste – separately colected biowastes	
20 03 02	waste from markets - market waste allowed only if source segregated biodegradable fraction, 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
A1 Exhaust Stacks on gas engines (shown on site plan in Schedule 7)	CHP engine 1 [note 1]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	500 mg/m <sup>3</sup>	Hourly mean	Annual	BS EN 14792
		Sulphur dioxide	350 mg/m <sup>3</sup>			BS EN 14791
		Carbon monoxide	1400 mg/m <sup>3</sup>			BS EN 15058
		Total VOCs	1000 mg/m <sup>3</sup>			BS EN 12619:2013
		Non methane volatile organic compounds (NMVOCs)	75 mg/m <sup>3</sup>			
A2 Exhaust Stacks on gas engines (shown on site plan in Schedule 7)	CHP engine 2 [note 1]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	500 mg/m <sup>3</sup>	Hourly mean	Annual	BS EN 14792
		Sulphur dioxide	350 mg/m <sup>3</sup>			BS EN 14791
		Carbon monoxide	1400 mg/m <sup>3</sup>			BS EN 15058
		Total VOCs	1000 mg/m <sup>3</sup>			BS EN 12619:2013
		Non methane volatile organic cmpounds (NMVOCs)	75 mg/m <sup>3</sup>			
A3 Auxiliary Flare (shown on site plan in schedule 7]	Emergency flare [note 2]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	150 mg/m <sup>3</sup>	Hourly mean	Annually [note 3]	BS EN 14792
		Carbon monoxide	50 mg/m <sup>3</sup>			BS EN 15058
		Total VOCs	10 mg/m <sup>3</sup>			BS EN 12619:2013

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	
		Non methane volatile organic compounds (NMVOCs)	5 mg/m <sup>3</sup>				
		Operational Temperature	>1000°C		Weekly while flare operational		
A4 Biofilter (shown on site plan in schedule 7)	Biofilter stack or vent(s)	No parameter set	No limit set		Biofilter should be checked on a daily basis and maintained to ensure appropriate temperature and moisture content.		

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  $0^{\circ}$ 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 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.

# 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	A1, A2, A3	Every 12 months or as agreed in writing by the Environment Agency	1 January, 1 April, 1 July, 1 October			

Table S4.2 Annual production/treatment				
Parameter	Units			
Electrical energy generated	MWh			
Whole digestate	tonnes			
Liquid digestate	tonnes or m3			
Solid digestate	tonnes			

Table S4.3 Performance parameters					
Parameter	Frequency of assessment	Units			
Water usage	Annually	tonnes or m3			
Energy usage	Annually	MWh			
Raw material usage	Annually	tonnes or m3			
Emergency flare operation	Annually	hours			
CHP engine usage	Annually	hours			
CHP engine efficiency	Annually	%			

Table S4.4 Reporting forms					
Media/parameter	Reporting format	Date of form			
Water	Form water 1 or other form as agreed in writing by the Environment Agency	04/08/10			
Air	Form air 1 or other form as agreed in writing by the Environment Agency	04/08/10			
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	04/08/10			
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	04/08/10			
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		
	iny malfunction, breakdown or failure of once not controlled by an emission limit with pollution	
To be notified within 24 hours of o	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 t	he breach of a limit	
To be notified within 24 hours of	detection unless otherwise specified belo	ow .
Emission point reference/ source		
Parameter(s)		
Limit		
Measured value and uncertainty		
Date and time of monitoring		
Measures taken, or intended to be taken, to stop the emission		
Time periods for notification follo	wing detection of a breach of a limit	
Parameter		Notification period
		-

Time periods for notification follo	owing detection of a b	reach of a limit	
Parameter			Notification period
(c) Notification requirements for	the detection of any s	ignificant adverse	environmental effect
To be notified within 24 hours of		igiiiicant auverse	environmental enect
Description of where the effect on the environment was detected			
Substances(s) detected			
Concentrations of substances detected			
Date of monitoring/sampling			
Any more accurate information on t notification under Part A.	he matters for		
Measures taken, or intended to be to a recurrence of the incident	aken, to prevent		
Measures taken, or intended to be to limit or prevent any pollution of the which has been or may be caused l	environment		
The dates of any unauthorised emis facility in the preceding 24 months.	ssions from the		
Name*	l l		
Dest			
Post			

Date

<sup>\*</sup> 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.

"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 2010 No.675 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

"Industry Standard Protocol" means "A standardised protocol for the monitoring of bioaerosols at open composting facilities" published by the Association for Organics Recycling and developed in conjunction with the Environment Agency.

"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.

"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 venner).

"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.

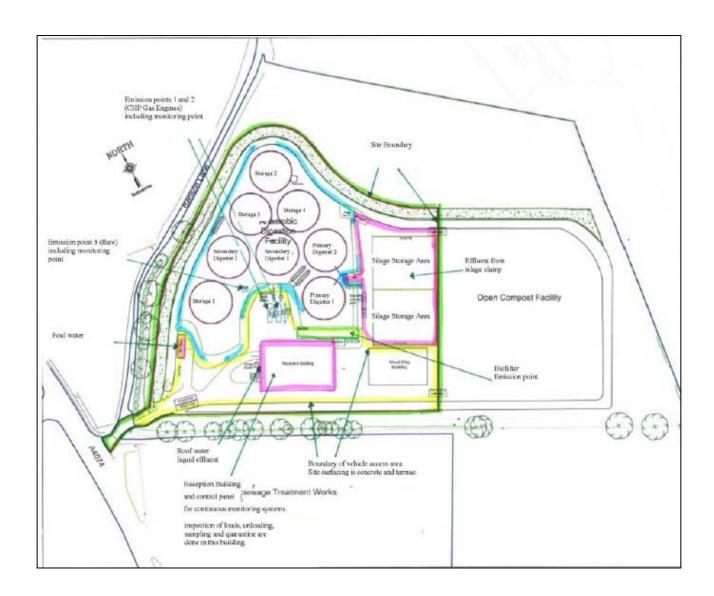
"year" means calendar year ending 31 December.

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.

## Schedule 7 – Site plan



**END OF PERMIT** 

Permit Number:	EPR/G	B3530AD	Operator:	Agrivert Limited
Facility: Wallingford Digestion		d Anaerobic Form Number:		Water1 / 04/08/10
Reporting of Water Usage fo	r the year			
Water Source		Usage (m3/year)		Specific Usage (m3/unit output)
Mains water				
TOTAL WATER USAGE				
Operator's comments:				
Signed (authorised to sign as representative		I	Date	

Permit Number: EPR/GB3530AD Operator: Agrivert Limited

Facility: Wallingford Anaerobic Form Number: Air1 / 04/08/10

Digestion

Reporting of emissions to air for the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	500 mg/m <sup>3</sup>	1 hour period				
	Sulphur dioxide	350 mg/m <sup>3</sup>	1 hour period				
	Carbon monoxide	1400 mg/m <sup>3</sup>	1 hour period		In accordance with that		
	Total VOCs including methane	1000 mg/m <sup>3</sup>	1 hour period		described in the Agency's		
	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	500 mg/m <sup>3</sup>	1 hour period		Technical Guidance Note M2 "Monitoring of stack emissions		
	Carbon monoxide	1400 mg/m <sup>3</sup>	1 hour period		to air"		
	Total VOCs	1000 mg/m <sup>3</sup>	1 hour period				
	Non Methane volatile organic compounds (NVOC's)	75 mg/m <sup>3</sup>	1 hour period				

- [1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum maximum' measured values.
- [2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
- [3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
- [4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed	Date
(Authorised to sign as representative of Operator)	

Permit Number:	EPR/GB3530AD	Operator:	Agrivert Limited	
Facility:	ity: Wallingford Anaerobic Digestion		Energy1 / 04/08/10	
Reporting of Energy Usage for the	year			
Energy Source	Energy Usage		Specific Usage (MWh/unit output)	
	Quantity	Primary Energy (MWh)		
Electricity *	MWh			
Natural Gas	MWh			
Gas Oil	tonnes			
Recovered Fuel Oil	tonnes			
TOTAL	-			
* Conversion factor for delivered e	lectricity to primary energy = 2.4			
Operator's comments:				
Signed(Authorised to sign as representat		Date		

Facility:	Wallingford Anaerobic Digestion	Form Number:	Performance1 / 04/08/10
Reporting of other performance indica	ators for the period DD/MM/YYYY to	DD/MM/YYYY	
Parameter			Units
Total raw material used as AD feed			tonnes
Electrical power generated			MWh
Liquid digestate produced			Cubic metres
Solid digesate produced			tonnes
Flare operating hours			hours
Gas engine operating hours			hours
Operator's comments:			
Signed(Authorised to sign as representative		Date	

**Operator:** 

**Agrivert Limited** 

EPR/GB3530AD

**Permit Number:**