Standard rules

Chapter 4, The Environmental Permitting (England and Wales) Regulations 2012



Standard rules SR2012 No11

Anaerobic digestion facility including use of the resultant biogas

Part A installation – capacity over 100 tonnes of waste per day and/or over 10 tonnes of animal carcasses and animal wastes per day

Introductory note

This introductory note does not form part of these standard rules.

These rules are available to operators with an anaerobic digestion capacity of over 100 tonnes of waste or a combination of waste and non-waste – both liquid and solids - on any one day. These rules are also available to operators taking in over 10 tonnes of animal waste, including carcasses, on any one day. For anaerobic digesters operating below this threshold, standard rules for waste recovery operations are available.

When referred to in an environmental permit, these rules will allow the operator to carry out anaerobic digestion of wastes and also combustion of the resultant biogas in gas engines with an aggregate rated thermal input of up to 5 megawatts. The rules also cover the use of gas turbines, boilers, fuel cells and treatment and/or upgrading the biogas to biomethane.

Permitted wastes do not include hazardous wastes. The total quantity of waste that can be accepted at any site under these rules must not exceed 100,000 tonnes per year.

Any wastes controlled by the Animal By-Products Regulations must be treated and handled in accordance with any requirements imposed by those Regulations.

These standard rules do not allow any emission into surface waters or groundwater except clean water from roofs and parts of the site not used for waste activity including storage of wastes. However, under the emissions of substances not controlled by emission limits rule, biogas condensate, treated digestate and waste waters may be discharged to a sewer subject to a consent issued by the local water company.

These rules do not apply to installations with more than one operator.

End of Introductory Note

Rules

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, nonconformances 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 these standard rules shall have convenient access to a copy of them 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 4 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 4 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 table 2.1 below ("the activities").

Table 2.1 Activities				
Description of activities	Limits of activities			
Section 5.4 Part A(1) (b) and Section 6.8 Part A(1)(c) of the Environmental Permitting Regulations – Recovery of Waste	Treatment of waste including shredding, sorting, screening, compaction, baling, mixing and maceration.			
R13: Storage of wastes pending the operations numbered R1, R3 and D10	Digestion of wastes including pasteurisation and chemical addition.			
R3: Recycling or reclamation of organic	Gas cleaning and upgrading to biomethane.			
substances that are not used as solvents	Gas storage and drying.			
R1: Use principally as a fuel or other means to generate energy.	Treatment of digestate including screening to remove plastic residues, centrifuge or pressing, addition of thickening agents (polymers) or drying.			
	Composting and maturation of digestate.			
	The total quantity of waste or a combination of waste and non-waste including solids and liquids accepted at the site shall not exceed 100,000 tonnes a year.			
	Burning of biogas in gas engines, gas turbines, boilers and use in fuel cells.			
	Except for the auxiliary flare, the aggregate rated thermal input of all appliances used to burn biogas shall be less than 5 megawatts.			
	Use of an auxiliary flare required only for short periods of breakdown or maintenance of facility.			
	Use of pressure release valves to protect the integrity of the plant. Such systems should not be used routinely to vent unburnt biogas.			

2.1.2 All process plant and equipment shall be commissioned, operated and maintained, and shall be fully documented and recorded, in accordance with the manufacturers recommendations.

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 attached to the permit.
- 2.2.2 The permitted activities must not be carried out within:
 - (a) 10 metres of any watercourse;

- (b) a groundwater source protection zone 1, or if a source protection zone has not been defined then within 50 metres of any well, spring or borehole used for the supply of water for human consumption. This must include private water supplies;
- (c) a specified Air Quality Management Area;
- (d) 200m from the nearest sensitive receptor.
- 2.2.3 The gas engine stack must be a minimum of 3 metres in height and must not be located within:
 - (a) 500 metres of a European Site or a Site of Special Scientific Interest (excluding any site designated solely for geological features).

2.3 Waste acceptance

- 2.3.1 Waste shall only be accepted if:
 - (a) it is of a type and quantity listed in tables 2.1 and 2.3 of these rules;
 - (b) it conforms to the description in the documentation supplied by the producer and holder;
 - (c) the waste is biodegradable; and
 - (d) wastes that are animal by-products or contain animal by-products must be handled and processed in accordance with any requirements and restrictions imposed by the animal byproducts legislation
- 2.3.2 Records demonstrating compliance with rule 2.3.1 shall be maintained.

Table 2.3 Waste types					
Waste Codes	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, 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 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 02 99	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 04	materials unsuitable for consumption or processing				
02 03 05	sludges from on-site effluent treatment				
02 03 99	sludge from production of edible fats and oils to include 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				

Table 2.3 V	Vaste types			
Waste				
Codes	Description			
02 04 99	other wastes			
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 food condemned, 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	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, yeast and yeast like residues, sludge from production process.			
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 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 04 01 05	fleshings and lime split wastes tanning liquor free of chromium			
04 01 03	sludges not containing chromium			
04 01 07	waste from the textile industry			
04 02 10	organic matter from natural products, e.g. grease, wax			
07	WASTES FROM ORGANIC CHEMICAL PROCESSES			
07 01	wastes from the manufacture, formulation, supply and use of basic organic chemicals			
07 01 08	glycerol			
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 – not allowed if any non biodegradable coating or preserving substance present. Excludes laminates such as Tetrapaks.			
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 present.			
15 01 05	composite packaging - must conform to BS EN 13432 and not allowed if any non biodegradable coating or preserving substance present.			
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	wastes from physiochemical treatments of waste			
19 02 03	waste types listed within this table, Table 2.3, that have been mixed together only			

Table 2.3 Waste types				
Waste Codes	Description			
19 02 06	sludge types from waste listed within this table, Table 2.3, that have been heat treated only			
19 02 10	glycerol not designated as hazardous i.e excludes EWC code 19 02 08			
19 05	wastes from the 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 wastes			
19 05 03	off-specification compost from source segregated biodegradable waste			
19 05 99	composting liquors			
19 06	waste 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 wastewater treatment works			
19 08 09	grease and oil mixture containing only edible oils and fats			
19 08 12	sludge 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 within this table, Table 2.3, 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	municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions			
20 01 01	paper and cardboard– not allowed if any non biodegradable coating or preserving substance present. Excludes laminates such as Tetrapaks			
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 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	wastes from markets, allowed only if source segregated biodegradable fractions e.g. plant material, fruit and vegetables.			

2.4 Operating techniques

2.4.1 The activities shall be operated using the techniques and in the manner described in Table 2.4 below.

Table 2.4 Operating techniques

Measures

- 1) All bulking, transfer and pre-treatment of waste shall be carried out in an enclosed building.
- 2) All waste solids, liquids and sludges shall be stored and processed on an impermeable surface with a sealed drainage system. Wastes shall be stored or treated within enclosed containers, reactor vessels or enclosed well ventilated buildings fitted with a biofilter and/or scrubbing system. The biofilter must be specifically designed to minimise the release of odour, bioaerosols and microorganisms and maintained for the process undertaken and be fit for purpose.
- 3) All storage and process tanks shall be located on an impermeable surface (a hydraulic permeability not greater than 1x10-9 m/s) with sealed construction joints within a bunded area. The bunded area

shall have a capacity at least 110% of the largest vessel or 25% of the total tankage volume, whichever is the greater. Bunds shall be regularly inspected to ensure that bunds filled by rainwater are regularly emptied. Connections and fill points should be within the bunded area and no pipework should penetrate the bund wall. Underground tanks shall have secondary containment and appropriate leak detection. No less than 95% of the bund capacity shall be maintained at all times.

- 4) Digestate shall be stored within covered containers or covered lagoons and should be of a design and capacity fit for purpose. Lagoons shall have a free board of 750 mm.
- 5) Gas engine stack height shall be no less than 3 metres.
- 6) All biogas condensate shall be discharged into a sealed drainage system or recirculated back into the digester.
- 7) Emissions of unburned biogas and the operation of the auxiliary flare shall be minimised. Any significant emissions of unburned biogas (including the operation of the pressure relief valves) and the operation of the auxiliary flare shall be recorded.

3 Emissions and monitoring

3.1 Emissions to air, water or land

- 3.1.1 There shall be no point source emissions to air, water or land, except from the sources and emission points listed in table 3.1
- 3.1.2 The limits given in table 3.1 shall not be exceeded.

Table 3.1 Point source emissions to air - emission limits and monitoring requirements					
Emission Point and Source	Parameter	Limit (including units)	Monitoring Frequency and Standard or Method		
Stacks on	Oxides of Nitrogen	500 mg/m ³	Annual monitoring		
engines	Carbon monoxide	1400 mg/m ³			
	Suphur dioxide	350 mg/m ³	Monitoring equipment, techniques, personnel and		
	Total volatile organic compounds including methane	1000 mg/m ³	organisations employed for the engine stack emissions monitoring programme (including the measurement of exhaust gas temperature) shall have either MCERTS certification or MCERTS accreditation (as appropriate).		
	J	Emission levels at Normal Temperature and Pressure and 5%O2, unless otherwise agreed in writing by the Agency			
		Uncertainty allowance as stated in EA guidance LFTGN08 v2 2010.			
		To ensure effective plume breakaway, minimum stack gas exit velocity shall be no less than 15 m/s or the gas exit temperature shall be no less than of 200°C			
Stacks on boilers burning biogas	Oxides of Nitrogen	No limit set	None specified		
Auxiliary flare	Oxides of Nitrogen	No limit set	Record of operating hours		
Pressure relief valves	Biogas	No limit set	Weekly visual or remote monitoring to ensure valves is correctly seated.		

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 rule 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 Natural Resources Wales that the activities are giving rise to pollution, submit to Natural Resources Wales for approval within the period specified an emissions management plan;
- (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.
- 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 Natural Resources Wales, 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) maintain and implement an odour management plan;
 - (b) f notified by Natural Resources Wales that the activities are giving rise to pollution outside the site due to odour, submit to Natural Resources Wales for approval within the specified period, a revised odour management plan;
 - (c) implement any approved revised odour management plan from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

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 Natural Resources Wales, 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 Natural Resources Wales that the activities are giving rise to pollution outside the site due to noise and vibration, submit to Natural Resources Wales for approval within the period specified, a noise and vibration management plan;
 - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by Natural Resources Wales, undertake the monitoring specified in table 3.1.
- 3.5.2 The operator shall maintain records of all monitoring required by these standard rules including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, test and surveys and any assessment or evaluation made on the basis of such data.

4 Information

4.1 Records

- 4.1.1 All records required to be made by these standard rules 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 by Natural Resources Wales, 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 land and groundwater
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by these standard rules, unless otherwise agreed in writing by Natural Resources Wales.

4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by these standard rules to Natural Resources Wales using the contact details supplied in writing by Natural Resources Wales.
- 4.2.2 Within one month of the end of each quarter, the operator shall submit to Natural Resources Wales 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 (a) In the event 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 Natural Resources Wales,
 - (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) in the event of a breach of any permit condition the operator must immediately
 - (i) inform Natural Resources Wales, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
 - (c) in the event 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 Natural Resources Wales has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform Natural Resources Wales when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to Natural Resources Wales at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 Natural Resources Wales shall be notified within 14 days of the occurrence of the following matters except where such disclosure is prohibited by Stock Exchange rules:
 - (a) Where the operator is a registered company:
 - any change in the operator's trading name, registered name or registered office address;
 and
 - any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.
 - (b) Where the operator is a corporate body other than a registered company:
 - any change in the operator's name or address; and
 - any steps taken with a view to the dissolution of the operator.
 - (c) In any other case:
 - the death of any of the named operators (where the operator consists of more than one named individual);
 - any change in the operator's name(s) or address(es);and
 - 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 them being in a partnership, dissolving the partnership.

4.4 Interpretation

- 4.4.1 In these standard rules the expressions listed below shall have the meaning given.
- 4.4.2 In these standard rules references to reports and notifications mean written reports and notifications, except when reference is being made to notification being made "without delay", in which case it may be provided by telephone.

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

"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 anaerobe and facultative anaerobe bacteria species, which convert the inputs to a methanerich biogas and whole digestate.

"animal by-products legislation" refers to animal by-products which are subject to the requirements and controls in Regulation (EC) 1069/2009 (as amended) and its corresponding implementing Regulation (EC) 142/2011 (as amended). These are enforced through The Animal By-Products (Enforcement) (England) Regulations 2011 and The Animal By-Products (Enforcement) (No2) (Wales) Regulations 2011. You will need to add NI and Scot legislation if QP covers the UK.

"animal by-products" are defined in Article 3 of Regulation (EC) 1069/2009 as 'entire bodies or parts of animals, products of animal origin or other products obtained from animals that are not intended for human consumption'. This includes catering waste, used cooking oil, former foodstuffs, butcher and slaughterhouse waste, blood, feathers, wool, hides and skins, fallen stock, pet animals, zoo and circus animals, hunt trophies, manure, ova, embryos and semen not intended for breeding purposes.

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

"authorised officer" means any person authorised by Natural Resources Wales 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.

"D" means a disposal operation provided for in Annex IIA to Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on Waste.

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

"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 these standard rules or from other localised or diffuse sources, which are not controlled by an emission limit.

"European Site" means candidate or Special Area of Conservation and proposed or Special Protection Area in England and Wales, within the meaning of Council Directives 79/409/EEC on the conservation of wild birds and 92/43/EEC on the conservation of natural habitats and of wild flora and fauna and the Conservation of Habitats and Species Regulations 2010. Internationally designated Ramsar sites are dealt with in the same way as European sites as a matter of government policy and for the purpose of these rules will be considered as a European Site.

"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.

"groundwater source protection zone" has the meaning given in the document titled "Groundwater protection: Principles and practice" published by the Environment Agency in 2012.

"impermeable surface" means a surface or pavement constructed and maintained to a standard sufficient to prevent the transmission of liquids beyond the pavement surface, and should be read in conjunction with the term "sealed drainage system" (below).

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

"nearest sensitive receptor" means the nearest place to the permitted activities where people are likely to be for prolonged periods. This term would therefore apply to dwellings and associated gardens (including farmhouses) and to many types of workplaces. We would not normally regard a place where people are likely to be present for less than 6 hours at one time as being a sensitive receptor. The term does not apply to the operators of the permitted facility, their staff when they are at work or to visitors to the facility, as their health is covered by Health and Safety at Work legislation.

"pollution" means emissions as a result of human activity which may—

- (a) be harmful to human health or the quality of the environment,
- (b) cause offence to a human sense,
- (c) result in damage to material property, or
- (d) impair or interfere with amenities and other legitimate uses of the environment.

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

"R" means a recovery operation provided for in Annex IIB to Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 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:

- (a) no liquid will run off the surface otherwise than via the system;
- (b) except where they may lawfully be discharged to foul sewer, all liquids entering the system are collected in a sealed sump.

"secure storage" means storage where waste cannot escape and members of the public do not have access to it.

"site" means the location where waste storage and treatment activities can take place.

"specified AQMA" means an air quality management area within the meaning of the Environment Act 1995 which has been designated due to concerns about oxides of nitrogen.

"SSSI" means Site of Special Scientific Interest within the meaning of the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000).

"year" means calendar year commencing on 1st January.

End of standard rules