

## Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

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Operator name

Site name  
Site address  
Site address  
Site address  
Post code

Operator name

Operator address  
Operator address  
Operator address  
Post code

Permit number

EPR/AB1234CD

**Site name**  
**Permit number EPR/AB1234CD**

## Introductory note

### This introductory note does not form a part of the permit

The main features of the permit are as follows.

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

#### Status log of the permit

Description	Date	Comments
Application EPR/AB1234CD/A0001	Duly made DD/MM/YY	Application for inert and excavation waste transfer station and composting facility.
Additional information received	DD/MM/YY	Confirmation of site boundary.
Permit determined	DD/MM/YY	Permit issued to Joe Bloggs

#### Other Part A installation permits relating to this installation

Operator	Permit number	Date of issue
Alternative energy	EPR./EF1234HI	DD/MM/YY
Clean waste	EPR/JK1234MN	DD/MM/YY

End of introductory note

# Permit

The Environmental Permitting (England and Wales) Regulations 2010

**Permit number**

**EPR/AB1234CD**

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010

**[name(s)]** (“the operator”),

of/whose registered office is/whose principal office is

**[address, inc. postcode]**

company registration number [xxxxxxxx]

to operate [an installation/part of an installation/waste operations/waste mobile plant/a mining waste operation/radioactive substances activities/a water discharge activity/a groundwater activity] at

**site]**

**[address, inc. postcode]**

**[address, inc. postcode]**

**[address, inc. postcode]**

**[address, inc. postcode]**

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

Under regulation 27(2) of the Regulations, standard rules **[number(s)]** are conditions of this permit.

Name	Date
<b>[name of authorised person]</b>	<b>[DD/MM/YYYY]</b>

Authorised on behalf of the Environment Agency

# Generic Conditions

## 1 Management

### 1.1 General management

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

## 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").

### 2.3 Operating techniques

- 2.3.1 (a) *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)*  
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.
- (b) 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 specified in schedule 1, table S1.2 or otherwise required under this permit, 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.

## 2.4 Improvement programme

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

## 2.5 Pre-operational conditions

- 2.5.1 The activities shall not be brought into operation until [DD/MM/YYYY] [and until] [the measures specified in schedule 1 table S1.4A have been completed].
- 2.5.2 The operations specified in schedule 1 table S1.4B shall not commence until [DD/MM/YYYY] [and until] [the measures specified in that table have been completed].

# 3 Emissions and monitoring

## 3.1 Emissions to water, air or land

sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.

- 3.1.2 The limits given in schedule 3 shall not be exceeded.

## 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;
  - (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 Monitoring

- 3.3.1 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, S3.2 and S3.3;
  - (b) surface water or groundwater specified in table S3.5;
  - (c) noise specified in table S3.6;
  - (d) ambient air monitoring specified in table S3.7;
  - (e) process monitoring specified in table S3.8;
  - (f) land specified in table S3.9
- 3.3.2 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.
- 3.3.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.3.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.3.4 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, S3.2 [,S3.3 etc] 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.

## 4.3 Notifications

- 4.3.1 The Environment Agency shall be notified without delay following the detection of:
- (a) any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution;
  - (b) the breach of a limit specified in the permit; or
  - (c) any significant adverse environmental effects.

- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

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

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

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

## 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 "without delay", in which case it may be provided by telephone.

## Schedule 6 - Interpretation

*“accident”* means an accident that may result in pollution.

*“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.

*“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.

*“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 or background concentration limit.

*“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.

*“MCERTS”* means the Environment Agency's Monitoring Certification Scheme.

*“year”* means calendar year ending 31 December.



# Annex 1 – Waste Facilities (excluding IPPC and inert waste landfills) *delete from permit*

## 1 Management

### 1.1 General management

1.1.4 The operator shall comply with the requirements of an approved competence scheme *[or other approval issued by the Environment Agency]*.

### 1.2 Avoidance, recovery and disposal of wastes produced by the activities

1.2.1 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.

1.2.2 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

### 2.2 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

2.3.2 Waste shall only be accepted if:

- (a) it is of a type and quantity listed in schedule 2 table(s) S2.1 [, S2.2 etc]; and
- (b) *except for household waste accepted from householders*, it conforms to the description in the documentation supplied by the producer and holder.

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.*

## 2.4 Technical requirements

### Vehicle depollution and dismantling

2.4.1 The storage (including temporary storage) and treatment of waste motor vehicles shall meet the requirements of article 6(1) of the End-of-Life Vehicles Directive.

### WEEE treatment

- 2.4.1 The storage (including temporary storage) and treatment of WEEE shall be carried out in accordance with the technical requirements of Annex III of the WEEE Directive.
- 2.4.2 WEEE shall be treated using best available treatment, recovery and recycling techniques (BATRRRT).
- 2.4.3 As a minimum, the substances, preparations and components specified in table 2.4 shall be removed from any separately collected WEEE.

**Table 2.4 Substances, preparations and components to be removed from separately collected WEEE**

- Capacitors containing Polychlorinated biphenyls (PCB)
- Mercury-containing components, such as switches or backlighting lamps
- Batteries
- Printed circuit boards of mobile phones generally, and of other devices if the surface of the printed circuit board is greater than 10 square centimetres
- Toner cartridges, liquid and pasty, as well as colour toner
- Plastic containing brominated flame retardants
- Asbestos waste and components which contain asbestos
- Cathode ray tubes
- Chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC), hydrofluorocarbons (HFC), or hydrocarbons (HC)
- Gas discharge lamps
- Liquid crystal displays (together with their casing where appropriate) of a surface greater than 100 square centimetres and all those back-lighted with gas discharge lamps
- External electric cables
- Components containing refractory ceramic fibres
- Components containing radioactive substances with the exception of components that are below the exemption thresholds set in Article 3 of and the Annex I to Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation
- Electrolytic capacitors containing "substances of concern" (height > 25mm, diameter > 25 mm or proportionately similar volume)

2.4.4 All fluids contained within any WEEE shall be removed prior to further treatment.

2.4.5 Separately collected components of WEEE specified in table 2.5 shall be treated in accordance with the methods specified in that table.

**Table 2.5 Specified Treatment Methods for separately collected components of WEEE**

Component	Specified Treatment
Cathode ray tubes	The fluorescent coating shall be removed.
Gas discharge lamps	The mercury shall be removed.

- 2.4.6 Equipment shall be provided to record the weight of untreated WEEE accepted at, and components and materials leaving the site.

### **Waste battery and accumulator treatment**

- 2.4.1 Treatment of waste batteries and accumulators must meet the minimum requirements set out in Annex III, Part A of Directive 2006/66/EC of the European Parliament and of the Council on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC.

### **Hazardous waste storage and treatment**

- 2.4.1 Hazardous waste shall not be mixed, either with a different category of hazardous waste or with other waste, substances or materials, unless it is authorised by schedule 1 table S1.1 and appropriate measures are taken.

## **3 Emissions and monitoring**

### **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 emission from [point x] shall not exceed [Y] odour units.
- 3.3.3 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;
  - (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.

Or

- 3.4.1 The [rating] level of noise emitted from the site [during normal operations/annual shut down and maintenance] shall not exceed [X] dB, expressed as an  $L_{Aeq, T}$ , between [hhmm] and [hhmm] Monday to Friday and [Y] dB at any other time, as measured or assessed on the [specified boundary/boundaries/location] of the site at [location(s) x, yx, z] on plan reference Y attached to this permit. The locations shall be chosen and the measurements and assessment made according to BS4142:1997.

- 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;
  - (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) process monitoring specified in table S3.2;
  - (b) bioaerosol monitoring specified in table S3.3.

# 4 Information

## 4.2 Reporting

- 4.2.2 Within one 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.

OR

Within one month of the end of each year, 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 year.

- 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 submit to the Environment Agency a bi-annual report of the efficiency of the biofilter in the first year of compost operations. This shall include but not be limited to, the assessment of the efficiency to reduce odours, the summary of maintenance and any recommissioning planned or conducted, assessment of back pressure, venting and cracking. Thereafter the operator shall submit the report within one month of the end of each year, unless otherwise agreed in writing by the Environment Agency.

## 4.3 Notifications

- 4.3.4 In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

## Schedule 6 – Interpretation

*“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.

*“best available treatment, recovery and recycling techniques”* shall have the meaning given to it in the document published jointly by the Department for Environment, Food and Rural Affairs, the Welsh Assembly Government and the Scottish Executive on 27th November 2006, entitled “Guidance on Best Available Treatment, Recovery and Recycling Techniques (BATRRRT) and Treatment of Waste Electrical and Electronic Equipment (WEEE);

*“bioaerosol threshold limits”* means the maximum acceptable bioaerosol concentrations at the nearest sensitive receptor, or at an equivalent distance downwind of the composting operations, which are attributable to the composting operations. The maximum acceptable concentrations are respectively 300, 1000 and 500 CFU m<sup>-3</sup> for gram-negative bacteria, total bacteria and *Aspergillus fumigatus*,

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

*“compost”* means solid particulate material that is the result of composting, which has been *sanitised* and *stabilised*, and which confers beneficial effects when added to soil, used as a component of growing media or used in another way in conjunction with plants.

*“composting”* means the biological decomposition of organic materials, under conditions that are predominantly aerobic and that allow the development of thermophilic temperatures as a result of biologically produced heat.

*“controlled substances”* means chlorofluorocarbons, other fully halogenated chlorofluorocarbons, halons, carbon tetrachloride, 1,1,1-trichloroethane, methyl bromide, hydrobromofluorocarbons and hydrochlorofluorocarbons listed in Annex I of Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer, including their isomers, whether alone or in a mixture, and whether they are virgin, recovered, recycled or reclaimed. This definition shall not cover any controlled substance which is in a manufactured product other than a container used for the transportation or storage of that substance, or insignificant quantities of any controlled substance, originating from inadvertent or coincidental production during a manufacturing process, from unreacted feedstock, or from use as a processing agent which is present in chemical substances as trace impurities, or that is emitted during product manufacture or handling.

*“D”* means a disposal operation provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

*“End-of-Life Vehicles Directive”* means Directive 2000/53/EC of the European Parliament and Council of 18 September 2000 on end-of-life vehicles.

*“groundwater protection zones 1 and 2”* have the meaning given in the document titled "Groundwater Protection: Policy and Practice" published by the Environment Agency in 2006.

*“hazardous waste”* has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 No.894, the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138), the List of Wastes (England) Regulations 2005 No.895 and the List of Wastes (Wales) Regulations 2005 No. 1820 (W.148).

*“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

*“maturation”* means a stage when by agitating and turning the compost it no longer results in reheating and the monitored temperature falls to ambient without the compost being too dry or anaerobic. Phytotoxins that are formed during the 'active' composting phase are metabolised by micro-organisms, which will result in the final material not being harmful to plants. This usually coincides with drop in pH toward neutral, and the conversion of ammonia into nitrates and recolonisation of beneficial micro-organisms. The maturation phase may need active management by turning to prevent the material becoming anaerobic.

*“nearest sensitive receptors”* means the nearest place to the composting operations where people are likely to be for prolonged or frequent periods. This term would therefore apply to dwellings (including any associated gardens) and to workplaces where workers would frequently be present. It does not apply to the operators of composting facilities or their staff while carrying out the composting operation as their health is covered by Health and Safety legislation.

*“ozone-depleting substances”* “ODS” means “controlled substances” contained in refrigeration, air-conditioning and heat pump equipment, equipment containing solvents, fire protection systems and fire extinguishers.

*“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 II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

*“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.

*“WEEE”* means waste electrical and electronic equipment.

*“WEEE Directive”* means Directive 2002/96/EC of the European Parliament and of the Council of 27th January 2003 on waste electrical and electronic equipment (WEEE) as amended by Directive 2003/108/EC of the European Parliament and of the Council of 8th December 2003 on waste electrical and electronic equipment (WEEE).

# Annex 2 – Waste Mobile Plant not using a deployment form

## 2 Operations

### 2.2 The site

2.2.1 The activities shall only be carried out on the site notified to us under condition 4.3.6.

## 4 Information

### 4.2 Reporting

4.2.2 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 each site and the waste accepted and removed from it during the previous quarter.

### 4.3 Notifications

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 notified at least 14 days before the date the operator proposes to carry out the activities at a site. The notification shall include the following site specific information:

- (a) the site location and address;
- (b) the name and telephone number of the site contact;
- (c) the location on a plan where the activities will take place;
- (d) the date from which the operator proposes to carry out the activities at the site; and
- (e) the date the operator intends to cease operations at that site.

## Schedule 6 – Interpretation

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



# Annex 2a – Waste Mobile Plant using a deployment form

## 2 Operations

### 2.1 Permitted activities

- 2.1.2 Treatment activities under this permit shall not begin at any site until the Environment Agency has agreed a deployment form in writing for that particular site.
- 2.1.3 All process plant and equipment shall be commissioned, operated and maintained, and shall be fully documented and recorded, in accordance with the agreed deployment form.

### 2.2 Operating techniques

2.2.3 The total quantity of waste soils and contaminated material, substances or products treated at any site shall not exceed that listed in schedule 2 table(s) S2.2 [,S2.3 etc] and that stated in the agreed deployment form for that particular site.

2.2.4 Only those wastes listed in schedule 2 table(s) S2.2 [,S2.3 etc] and the agreed deployment form can be stored and treated under this permit.

OR

2.2.3 The total quantity of waste treated at any site shall not exceed that listed in schedule 2 table(s) S2.2 [,S2,3 etc] and that stated in the agreed deployment form for that particular site.

2.2.4 Only those wastes listed in schedule 2 table(s) S2.2 [,S2.3 etc] and the agreed deployment form can be stored and treated under this permit.

## 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 listed in the agreed deployment form.
- 3.1.2 The limits given in the agreed deployment form shall not be exceeded.

### 3.5 Monitoring

- 3.5.1 The operator shall undertake monitoring for the parameters, at the locations and not less than the frequencies specified in the agreed deployment form.

## 4 Information

### 4.2 Reporting

4.2.2 Within one 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 each site and the waste accepted and removed from it during the previous quarter.

### 4.3 Notifications

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 operator shall notify the Environment Agency at least 7 days prior to commencement of agreed deployment.

4.3.7 The operator shall notify the Environment Agency at least 7 days prior to the end of agreed deployment.

## Schedule 6 – Interpretation

*“contaminated material, substances or products”* means contaminated material, substances or products for the purpose of remedial action with respect to land and controlled waters.

*“deployment form”* means the Environment Agency form that requires site specific information and control measures to be provided and agreed prior to the use of any mobile plant at a site.

*“quarter”* means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

# Annex 3 – Part A Low Impact Installations

## 1 Management

### 1.1 General management

1.1.4 The operator shall comply with the requirements of an approved competence scheme [or other approval issued by the Environment Agency].

### 1.2 Energy efficiency

1.2.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall:

- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
- (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (c) take any further appropriate measures identified by a review.

### 1.3 Efficient use of raw materials

1.3.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* 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

### 2.2 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 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The activities shall, subject to the conditions of this permit, be operated in accordance with the Low Impact Installation criteria specified in the Environment Agency's Environmental Permitting application form at the time the permit application was duly made.

2.3.2 *Waste shall only be accepted if:*

- (a) it is of a type and quantity listed in schedule 2 table(s) S2.2 [, S2.3 etc]; and
- (b) it conforms to the description in the documentation supplied by the producer and holder.

## 3 Emissions and monitoring

### 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 emission from [point x] shall not exceed [Y] odour units.
- 3.3.3 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;
  - (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.

OR

3.4.1 The [rating] level of noise emitted from the site [during normal operations/annual shut down and maintenance] shall not exceed [X] dB, expressed as an  $L_{Aeq, T}$ , between [hhmm] and [hhmm] Monday to Friday and [Y] dB at any other time, as measured or assessed on the [specified boundary/boundaries/location] of the site at [location(s) x, yx, z] on plan reference Y attached to this permit. The locations shall be chosen and the measurements and assessment made according to BS4142:1997.

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;
- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

## 4 Information

### 4.2 Reporting

4.2.2 A report 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 shall include as a minimum, a review of the results of the actual and anticipated operation of the installation against the low impact criteria issued by the Environment Agency at the time of the review.

4.2.3 Within one 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, if during that quarter the total amount accepted exceeds 100 tonnes of non-hazardous waste or 10 tonnes of hazardous waste.

OR

Within one 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

4.3.4

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);

- (b) any change in the operator's name(s) or address(es); and
  - (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.
- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
  - (a) the Environment Agency shall be notified at least 14 days before making the change; and
  - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.
- 4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:
  - (a) a decision by the Secretary of State not to re-certify the agreement;
  - (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
  - (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

## Schedule 6 - Interpretation

*"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.

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

*"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.

# Annex 4 - Part A non-landfill installations

## 1 Management

### 1.1 General management

1.1.4 The operator shall comply with the requirements of an approved competence scheme [or other approval issued by the Environment Agency].

### 1.2 Energy efficiency

1.2.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall:

(a) take appropriate measures to ensure that energy is used efficiently in the activities;

OR

(a) take appropriate measures to ensure that energy is recovered with a high level of energy efficiency and energy is used efficiently in the activities.

(b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and

(c) take any further appropriate measures identified by a review.

### 1.3 Efficient use of raw materials

1.3.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* 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:

(d) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and

(e) 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

- (f) 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.

## 1.5 Multiple operator installations

- 1.5.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Where the operator notifies the Environment Agency under condition 4.3.1 (a) or 4.3.1 (c), the operator shall also notify without delay the other operator(s) of the installation of the same information.

## 2 Operations

### 2.1 Permitted activities

- 2.1.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Waste authorised by this permit shall be clearly distinguished from any other waste on the site.

### 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.

OR

- 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, which is within the area edged in red on the site plan that represents the extent of the installation covered by this permit and that/those of (the) other operator(s) of the installation.

### 2.3 Operating techniques

- 2.3.2 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.3 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 table(s) S2.2 [, S2.3 etc]; and
  - (b) it conforms to the description in the documentation supplied by the producer and holder.
- 2.3.4 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.

- 2.3.5 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.

### **Waste battery and accumulator treatment**

- 2.3.6 Treatment of waste batteries and accumulators must meet the minimum requirements set out in Annex III, Part A of Directive 2006/66/EC of the European Parliament and of the Council on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC.

### **Hazardous waste storage and treatment**

- 2.3.6 Hazardous waste shall not be mixed, either with a different category of hazardous waste or with other waste, substances or materials, unless it is authorised by schedule 1 table S1.1 and appropriate measures are taken.

## **3 Emissions and monitoring**

### **3.1 Emissions to water, air or land**

- 3.1.3 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Where a substance is specified in schedule 3 table S3.2 or S3.3 but no limit is set for it, the concentration of such substance in emissions to water from the relevant emission point shall be no greater than the background concentration.
- 3.1.4 Total annual emissions from the emission point(s) set out in tables schedule 3 S3.1, S3.2 and S3.3 of a substance listed in schedule 3 table S3.4 shall not exceed the relevant limit in table S3.4.

### **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.

*For intensive farm Part A installations, an odour management plan is required if the site is within 400m of a sensitive receptor.*

- 3.3.2 The emission from [point x] shall not exceed [Y] odour units.
- 3.3.3 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;
  - (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.

OR

3.4.1 The [rating] level of noise emitted from the site [during normal operations/annual shut down and maintenance] shall not exceed [X] dB, expressed as an  $L_{Aeq, T}$ , between [hhmm] and [hhmm] Monday to Friday and [Y] dB at any other time, as measured or assessed on the [specified boundary/boundaries/location] of the site at [location(s) x, yx, z] on plan reference Y attached to this permit. The locations shall be chosen and the measurements and assessment made according to BS4142:1997.

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;
- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

## 4 Information

### 4.2 Reporting

4.2.2 For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.) 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, if during that quarter the total amount accepted exceeds 100 tonnes of non-hazardous waste or 10 tonnes of hazardous waste.

OR

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.

4.2.6 The operator shall submit an annual solvent management plan in order to demonstrate compliance with the requirements of the Solvent Emissions Directive, as specified in Article 9(1) of the Directive, by 31 January each year in respect of the previous year.

### 4.3 Notifications

4.3.4

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:

- (a) a decision by the Secretary of State not to re-certify the agreement;
- (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
- (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

## Schedule 6 - Interpretation

“*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.

“*background concentration*” means such concentration of that substance as is present in:

- for emissions to surface water, the surface water quality up-gradient of the site; or
- for emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge.

“*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.

“*hazardous property*” has the meaning given in Schedule 3 of the Hazardous Waste (England and Wales) Regulations 2005 No.894 and the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138).

“*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.

“*Solvent Emissions Directive*” means Directive 1999/13/EC (as amended by Directive 2004/42/EC) on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations.

“*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

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:

- (a) 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 and gaseous fuels, 6% dry for solid fuels; and/or
- (b) 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

# Annex 5 – Intensive Farming

## 2 Operations

### 2.3 Operating techniques

- 2.3.2 The operator shall maintain and implement a system to record the number of animal places and animal movements.
- 2.3.3 The operator shall take appropriate measures in off-site disposal or recovery of solid manure or slurry to prevent, or where this is not practicable to minimise, pollution.
- 2.3.4 The operator shall:
- (a) maintain and implement a manure management plan;
  - (b) review and record at least every four years whether changes to the plan should be made;
  - (c) make any appropriate changes to the plan identified by the review.

## Schedule 6 - Interpretation

*“Animal Health”* is the government agency that licences small on farm incinerators; formerly known as the State Veterinary Service.

*“Manure and slurry”* have the following meaning:

- Manures may be either slurries or solid manures.
- Slurries consist of excreta produced by livestock whilst in a yard or building mixed with rainwater and wash water and, in some cases, waste bedding and feed. Slurries can be pumped or discharged by gravity.
- Slurry includes duck effluent, seepage from manure and wash water.
- Solid manures include farmyard manure (FYM) and comprise material from straw-based housing systems, excreta with lots of straw/sawdust/woodchips in it, or solids from mechanical separators.
- Most poultry systems produce solid manure (litter).
- Solid manure can generally be stacked.

*“Manure management plan”* means the requirements described in Section 2.3 of SGN 6.09 How to Comply – Intensive Farming.

*“SRM”* means Specified Risk Material which includes those tissues of cattle, sheep and goats which are known to, or might potentially, harbour detectable BSE infectivity.

*“SGN How to comply – Intensive Farming”* The EPR Sector Guidance Note 6.09 for intensive pig and poultry farmers, Version 2 published January 2010.

# Annex 6 – Combustion Sector (excluding coal and oil fired power stations included within the future regulatory framework)

## 2 Operations

### 2.3 Operating techniques

2.3.2 *Subject to condition 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.

2.3.3 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Standby fuel [x] may be used but for no more than [500] hours per year.

2.3.4 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The activities shall not be operated for more than 20,000 operational hours (excluding start up and shut down) between 1 January 2008 and 31 December 2015.

Or;

2.3.4 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The activities shall not be operated for more than 10,000 operational hours (excluding start up and shut down) between 1 January 2008 and 31 December 2015.

2.3.5 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* From 1 January 2008 the following conditions apply where there is a malfunction or breakdown of any abatement equipment:

2.3.5.1 The Operator shall notify the Environment Agency within 48 hours of any such malfunction or breakdown unless notification has already been made under condition 4.3.1.

2.3.5.2 Unless otherwise agreed in writing by the Environment Agency:

- (a) if a return to normal operations is not achieved within 24 hours, the operator shall reduce or close down operations, or shall operate the activities using low polluting fuels; and
- (b) the cumulative duration of unabated operation in any 12-month period shall not exceed 120 hours.

## 3 Emissions and monitoring

### 3.5 Monitoring

- 3.5.5 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Any combustion plant that operates between 300 and 500 hours in any 12-month period shall be subject to either discontinuous or continuous measurement systems consistent with MCERTS requirements specified in condition 3.6.3.

## **3.6 Monitoring for the purposes of the Large Combustion Plant Directive**

- 3.6.1 All LCP monitoring required by this permit shall be carried out in accordance with the provisions of Annex VIII of the Large Combustion Plant Directive.
- 3.6.2 If the monitoring results for more than 10 days a year are invalidated within the meaning set out in schedule 3, the Operator shall:
- (a) within 28 days of becoming aware of this fact, review the causes of the invalidations and submit to the Environment Agency for approval, proposals for measures to improve the reliability of the continuous measurement systems, including a timetable for the implementation of those measures; and
  - (b) implement the approved measures.
- 3.6.3 Continuous measurement systems on emission points from the LCP shall be subject to quality control by means of parallel measurements with reference methods at least once every calendar year.
- 3.6.4 Unless otherwise agreed in writing by the Environment Agency in accordance with condition 3.6.5 below, the operator shall carry out the methods, including the reference measurement methods, to use and calibrate continuous measurement systems in accordance with the appropriate CEN standards.
- 3.6.5 If CEN standards are not available, ISO standards, national or international standards which will ensure the provision of data of an equivalent scientific quality shall be used, as agreed in writing with the Environment Agency.
- 3.6.6 Where required by a condition of this permit to check the measurement equipment the operator shall submit a report to the Environment Agency in writing, within 28 days of the completion of the check.

## **4 Information**

### **4.2 Reporting**

- 4.2.2 (d) Where condition 3.5.5 applies the hours of operation in any year shall be reported to the Environment Agency by 31 January in the following year.

### **4.3 Notifications**

- 4.3.8 From 1 January 2008 the operator shall inform the Environment Agency in writing of the closure of any LCP within 28 days of the date of closure.

## Schedule 6 - Interpretation

“biomass” means:

- a) vegetable matter from agriculture and forestry;
- b) vegetable waste from the food processing industry, if the heat generated is recovered;
- c) fibrous vegetable waste from virgin pulp production and from production of paper from pulp, if it is co-incinerated at the place of production and the heat generated is recovered;
- d) cork waste;
- e) wood waste with the exception of wood waste which may contain halogenated organic compounds or heavy metals as a result of treatment with wood preservatives or coating, and which includes in particular such wood waste originating from construction and demolition waste.

“calendar monthly mean” means the value across a calendar month of all validated hourly means.

“CEN” means Comité Européen de Normalisation

“Combustion Technical Guidance Note” means IPPC Sector Guidance Note Combustion Activities, version 2.03 dated 27<sup>th</sup> July 2005 published by Environment Agency.

“DLN” means dry, low NO<sub>x</sub> burners.

“large combustion plant” or “LCP” is a combustion plant or group of combustion plants discharging waste gases through a common windshield or stack, where the total thermal input is 50 MWth or more, based on gross calorific value.

“Large Combustion Plant Directive” means Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants.

“mcr” means maximum continuous rating.

“Natural gas” means naturally occurring methane with no more than 20% by volume of inert or other constituents.

“National Emission Reduction Plan” (NERP) is the plan issued by Defra in accordance with Article 4.6 of the Large Combustion Plants Directive and associated guidance.

“NERP Register” means the register maintained by the Environment Agency in accordance with regulation 6(1) of the Large Combustion Plants (National Emission Reduction Plan) Regulations 2007.

“ncv” means net calorific value.

“operational hours” are whole hours commencing from the first unit ending start up and ending when the last unit commences shut down.

“SI” means site inspector



# Annex 7 – Combustion Sector (National Emission Reduction Plan within the future regulatory framework) (Drax & Eggborough)

## 2 Operations

### 2.3 Operating techniques

- 2.3.5 Where the activities include any boiler which is fitted with fully commissioned and operational FGD, that boiler shall only be operated without the simultaneous operation of its FGD, if this occurs in accordance with “A Protocol for dealing with malfunction or breakdown of abatement equipment at coal fired power stations from 1 January 2008 to 31 December 2015” dated 15 November 2006 or any subsequent revision to this protocol agreed in writing with the Environment Agency.
- 2.3.6 From 1 January 2008, the following conditions apply where there is a malfunction or breakdown of any abatement equipment, subject to the provisions of “A Protocol for dealing with malfunction or breakdown of abatement equipment at coal fired power stations from 1 January 2008 to 31 December 2015” dated 15 November 2006 or any subsequent revision to this protocol agreed in writing with the Environment Agency
- 2.3.6.1 The operator shall notify the Environment Agency within 48 hours of any such malfunction or breakdown unless notification has already been made under condition 4.3.1.
- 2.3.6.2 In the case of a breakdown and unless otherwise agreed in writing by the Environment Agency:
- (a) if a return to normal operation is not achieved within 24 hours, the operator shall reduce or close down operations, or shall operate the plant using low polluting fuels; and
  - (b) the cumulative duration of unabated operation in any twelve month period shall not exceed 120 hours.

## 3 Emissions and monitoring

### 3.6 Monitoring For the purposes of the Large Combustion Plant Directive

- 3.6.1 All monitoring required by this permit shall be carried out in accordance with the provisions of Annex VIII of the Large Combustion Plant Directive.
- 3.6.2 If the monitoring results for more than 10 days a year are invalidated within the meaning set out in schedule 3, the operator shall:
- (a) within 28 days of becoming aware of this fact, review the causes of the invalidations and submit to the Environment Agency for approval, proposals for measures to improve the reliability of the continuous measurement systems, including a timetable for the implementation of those measures; and

- (b) implement the approved proposals.
- 3.6.3 Continuous measurement systems on emission points from the LCP shall be subject to quality control by means of parallel measurements with reference methods at least once every calendar year.
- 3.6.4 Unless otherwise agreed in writing by the Environment Agency in accordance with condition 3.6.5 below, the operator shall carry out the methods, including the reference measurement methods, to use and calibrate continuous measurement systems in accordance with the appropriate CEN standards.
- 3.6.5 If CEN standards are not available, ISO standards, national or international standards which will ensure the provision of data of an equivalent scientific quality shall be used, as agreed in writing with the Environment Agency.
- 3.6.6 Where required by a condition of this permit to check the measurement equipment, the operator shall submit a report to the Environment Agency in writing, within 28 days of the completion of the check.

### **3.7 Air Quality Management Plan**

- 3.7.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The emissions from the activities shall not contribute significantly to any exceedance of EU air quality limit values or objectives of the Air Quality Strategy for England, Scotland, Wales and Northern Ireland for sulphur dioxide, oxides of nitrogen and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>).
- 3.7.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The activities shall be operated in accordance with the Air Quality Management Plan dated INSERT DATE (or any subsequent revision to this plan agreed in writing with the Environment Agency), except that the following methodologies (including any subsequent revisions to the methodologies agreed in writing with the Environment Agency) will be used:
  - (a) Methodology for the Use and Interpretation of Monitoring and Modelling for AQS Management Plans (*Issue 5, January 2002*)
  - (b) Technical Methodology for Dispersion Modelling Related to Power Station AQS Management Plans (*Issue 4, January 2003*)
  - (c) Monitoring To Assess Power Station Compliance With AQS Objectives Technical Methodology (*Issue 6, March 2003*)
  - (d) Generic Methodology for Compiling Station Hourly Emission Datasets from Generation Data (*Issue 4, January 2003*).

## **4 Information**

### **4.3 Notifications**

- 4.3.8 From 1 January 2008, the operator shall inform the Environment Agency of the closure of a relevant LCP within 28 days of the date of closure.

## Schedule 6 - Interpretation

“assessment year” means any complete calendar year except that the first assessment year for the purposes of this permit shall run from 1 October 2006 until 31<sup>st</sup> December 2007

“CEN” means Comité Européen de Normalisation

“central office” means an address for reporting forms for the attention of Environment Agency head office staff, which has been separately notified to the operator.

“combustion technical guidance note” means IPPC Sector guidance Note Combustion Activities, version 2.03 dated 27th July 2005 published by the Environment Agency.

“FGD” means flue gas desulphurisation

“large combustion plant” or “LCP” is a boiler or group of boilers discharging waste gases through a common windshaft or stack, where the total thermal input is 50 MWth or more, based on gross calorific value.

“Large Combustion Plant Directive” means Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants.

“National Emission Reduction Plan” (NERP) is the plan issued by Defra in accordance with Article 4.6 of the Large Combustion Plants Directive 2001/80/EC and associated guidance.

“NERP Register” means the register maintained by the Environment Agency in accordance with regulation 6(1) of the Large Combustion Plants (National Emission Reduction Plan) Regulations 2007.

“operational hours” of an LCP is the time spent between start up and shut down of the LCP.

“operator B limit” means the limit for the assessment year in question specified in column 3 of Table S3.4 in schedule 3 or such other limit for that year as has been approved by the Environment Agency following notification by the operator on form SO1 or NO1, as referred to in schedule 5, table S5.4.

“process B limit” means such limit for the assessment year in question, as has been approved by the Environment Agency following a notification by the operator on form SO2 or NO2, as referred to in schedule 4, table S4.4 or for a single station operator “process B limit” has the same meaning as “operator B limit”.

“relevant processes” means the combustion processes at [XXXXX power station, Seaside, Kent, KT12 9BL] and at [XXXXX power station, Deasside, Gwent, KT12 9BL] carried on by [XYZ Energy plc] which are subject to permits requiring compliance with an operator B limit and “relevant process” means any one such process carried on by [XYZ Energy plc].

“process B limit” means such limit for the assessment year in question, as has been approved by the Environment Agency following a notification by the operator on form SO2 or NO2, as referred to in schedule 4, table S4.4

“Shut down” is defined as when the output from last unit within an LCP has fallen below SOP in accordance with “Principles for Determining MSG and SOP Thresholds for a Unit “ Issue 3.0, 23 October 2006 or any subsequent revision to this protocol agreed in writing with the Environment Agency

*“Start up”* is defined as when the first unit within an LCP has started up in accordance with “Principles for Determining MSG and SOP Thresholds for a Unit “ Issue 3.0, 23 October or any subsequent revision to this protocol agreed in writing with the Environment Agency.

# **Annex 8 – Combustion Sector (Emission Limit Value within the future regulatory framework) (Fiddlers Ferry, Ferrybridge, West Burton, Cottam, Aberthaw, Ratcliffe, Uskmouth, Rugeley)**

## **2 Operations**

### **2.3 Operating techniques**

- 2.3.5 From 1 January 2008, where the activities include any boiler which is fitted with fully commissioned and operational FGD, that boiler shall only be operated without the simultaneous operation of its FGD, if this occurs in accordance with "A Protocol for dealing with malfunction or breakdown of abatement equipment at coal fired power stations from 1 January 2008 to 31 December 2015" dated 15 November 2006 or any subsequent revision to this protocol agreed in writing with the Environment Agency.
- 2.3.6 From 1 January 2008, the following conditions apply where there is a malfunction or breakdown of any abatement equipment, subject to the provisions of "A Protocol for dealing with malfunction or breakdown of abatement equipment at coal fired power stations from 1 January 2008 to 31 December 2015" dated 15 November 2006 or any subsequent revision to this protocol agreed in writing with the Environment Agency.
- 2.3.6.1 The operator shall notify the Environment Agency within 48 hours of any such malfunction or breakdown unless notification has already been made under condition 4.3.1.
- 2.3.6.2 In the case of a breakdown and unless otherwise agreed in writing by the Environment Agency:
- (a) if a return to normal operation is not achieved within 24 hours, the operator shall reduce or close down operations, or shall operate the plant using low polluting fuels; and
  - (b) the cumulative duration of unabated operation in any twelve month period shall not exceed 120 hours.

## **3 Emissions and monitoring**

### **3.6 Monitoring for the purposes of the Large Combustion Plant Directive**

- 3.6.1 All LCP monitoring required by this permit shall be carried out in accordance with the provisions of Annex VIII of the Large Combustion Plant Directive.

- 3.6.2 If the monitoring results for more than 10 days a year are invalidated within the meaning set out in schedule 3, the Operator shall:
- (a) within 28 days of becoming aware of this fact, review the causes of the invalidations and submit to the Environment Agency for approval, proposals for measures to improve the reliability of the continuous measurement systems, including a timetable for the implementation of those measures; and
  - (b) implement the approved measures
- 3.6.3 Continuous measurement systems on emission points from the LCP shall be subject to quality control by means of parallel measurements with reference methods at least once every calendar year.
- 3.6.4 Unless otherwise agreed in writing by the Environment Agency in accordance with condition 3.6.5 below, the operator shall carry out the methods, including the reference measurement methods, to use and calibrate continuous measurement systems in accordance with the appropriate CEN standards.
- 3.6.5 If CEN standards are not available, ISO standards, national or international standards which will ensure the provision of data of an equivalent scientific quality shall be used, as agreed in writing with the Environment Agency.
- 3.6.6 Where required by a condition of this permit to check the measurement equipment, the operator shall submit a report to the Environment Agency in writing, within 28 days of the completion of the check.

### 3.7 Air Quality Management Plan

- 3.7.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The emissions from the activities shall not contribute significantly to any exceedance of EU air quality limit values or objectives of the Air Quality Strategy for England, Scotland, Wales and Northern Ireland for sulphur dioxide, oxides of nitrogen and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>).
- 3.7.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The activities shall be operated in accordance with the Air Quality Management Plan dated INSERT DATE (or any subsequent revision to this plan agreed in writing with the Environment Agency), except that the following methodologies (including any subsequent revisions to the methodologies agreed in writing with the Environment Agency) will be used:
- (a) Methodology for the Use and Interpretation of Monitoring and Modelling for AQS Management Plans (*Issue 5, January 2002*)
  - (b) Technical Methodology for Dispersion Modelling Related to Power Station AQS Management Plans (*Issue 4, January 2003*)
  - (c) Monitoring To Assess Power Station Compliance With AQS Objectives Technical Methodology (*Issue 6, March 2003*)
  - (d) Generic Methodology for Compiling Station Hourly Emission Datasets from Generation Data (*Issue 4, January 2003*).

## 4 Information

### 4.2 Reporting

- 4.2.6 The Operator shall by 1 October in each assessment year submit to the Environment Agency a completed form SO<sub>2</sub> (as referred to in schedule 4, table S4.4) indicating the initial sulphur dioxide process B limits applicable for the next assessment year, subject to Environment Agency approval.
- 4.2.7 From 1 January 2008, the operator shall submit revised forms SO<sub>2</sub> and NO<sub>2</sub> (as referred to in schedule 4, table S4.4) within 28 days of the date of the closure of a relevant LCP.
- 4.2.8 The Operator shall by 1 October in each assessment year submit to the Environment Agency a completed form NO<sub>2</sub> (as referred to in schedule 4, table S4.4) indicating the initial oxides of nitrogen process B limits applicable for the next assessment year, subject to Environment Agency approval.

### 4.3 Notifications

- 4.3.8 From 1 January 2008, the operator shall inform the Environment Agency of the closure of a relevant LCP within 28 days of the date of closure.

## Schedule 6 - Interpretation

*“assessment year”* means any complete calendar year except that the first assessment year for the purposes of this permit shall run from 1 October 2006 until 31st December 2007

*“CEN”* means *Comité Européen de Normalisation*

*“central office”* means an address for reporting forms for the attention of Environment Agency head office staff, which has been separately notified to the operator.

*“combustion technical guidance note”* means IPPC Sector guidance Note Combustion Activities, version 2.03 dated 27th July 2005 published by the Environment Agency.

*“FGD”* means flue gas desulphurisation

*“large combustion plant”* or *“LCP”* is a boiler or group of boilers discharging waste gases through a common windshield or stack, where the total thermal input is 50 MWth or more, based on gross calorific value.

*“Large Combustion Plant Directive”* means Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants.

*“operational hours”* of an LCP is the time spent between start up and shut down of the LCP.

*“operator B Limit”* means the limit for the assessment year in question specified in column 3 of Table S3.4 in schedule 3 or such other limit for that year as has been approved by the Environment Agency following notification by the operator on form SO1 or NO1, as referred to in schedule 4, table S4.4.

*“process B limit”* means such limit for the assessment year in question, as has been approved by the

Environment Agency following a notification by the operator on form SO2 or NO2, as referred to in schedule 4, table S4.4 or for a single station operator "*process B limit*" has the same meaning as "*operator B limit*".

"*relevant processes*" means the combustion processes at [XXXXX power station, Seaside, Kent, KT12 9BL] and at [XXXXX power station, Deasside, Gwent, KT12 9BL] carried on by [XYZ Energy plc] which are subject to permits requiring compliance with an operator B limit and "*relevant process*" means any one such process carried on by [XYZ Energy plc].

"*Shut down*" is defined as when the output from last unit within an LCP has fallen below SOP in accordance with "Principles for Determining MSG and SOP Thresholds for a Unit " Issue 3.0, 23 October 2006 or any subsequent revision to this protocol agreed in writing with the Environment Agency

"*Start up*" is defined as when the first unit within an LCP has started up in accordance with "Principles for Determining MSG and SOP Thresholds for a Unit " Issue 3.0, 23 October 2006 or any subsequent revision to this protocol agreed in writing with the Environment Agency.



# Annex 9 – Combustion Sector (opted out coal within the future regulatory framework)(Tilbury, Didcot, Ironbridge, Kingsnorth)

## 2 Operations

### 2.3 Operating techniques

2.3.4 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The activities shall not be operated for more than 20,000 operational hours (excluding start up and shut down) between 1 January 2008 and 31 December 2015.

OR

2.3.4 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The activities shall not be operated for more than 10,000 operational hours (excluding start up and shut down) between 1 January 2008 and 31 December 2015.

2.3.5 From 1 January 2008, the following conditions apply where there is a malfunction or breakdown of any abatement equipment, subject to the provisions of "A Protocol for dealing with malfunction or breakdown of abatement equipment at coal fired power stations from 1 January 2008 to 31 December 2015" dated October 2006 or any subsequent revision to this protocol agreed in writing with the Environment Agency

2.3.5.1 The operator shall notify the Environment Agency within 48 hours of any such malfunction or breakdown unless notification has already been made under condition 4.3.1.

2.3.5.2 Unless otherwise agreed in writing by the Environment Agency:

- (a) if a return to normal operation is not achieved within 24 hours, the operator shall reduce or close down operations, or shall operate the plant using low polluting fuels; and
- (b) the cumulative duration of unabated operation in any twelve month period shall not exceed 120 hours.

## 3 Emissions and monitoring

### 3.6 Monitoring for the purposes of the Large Combustion Plant Directive

3.6.1 All monitoring required by this permit shall be carried out in accordance with the provisions of Annex VIII of the Large Combustion Plant Directive.

3.6.2 If the monitoring results for more than 10 days a year are invalidated within the meaning set out in schedule 3, the Operator shall:

- (a) within 28 days of becoming aware of this fact, review the causes of the invalidations and submit to the Environment Agency for approval, proposals for measures to improve the reliability of the continuous measurement systems , including a timetable for the implementation of those measures; and
  - (b) implement the approved measures.
- 3.6.3 Continuous measurement systems on release points from the LCP shall be subject to quality control by means of parallel measurements with reference methods at least once every calendar year.
- 3.6.4 Unless otherwise agreed in writing by the Environment Agency in accordance with condition 3.6.5 below, the Operator shall carry out the methods, including the reference measurement methods, to use and calibrate continuous measurement systems in accordance with the appropriate CEN standards.
- 3.6.5 If CEN standards are not available, ISO standards, national or international standards which will ensure the provision of data of an equivalent scientific quality shall be used, as agreed in writing with the Environment Agency.
- 3.6.6 Where required by a condition of this permit to check the measurement equipment, the operator shall submit a report to the Environment Agency in writing, within 28 days of the completion of the check.

### **3.7 Air Quality Management Plan**

- 3.7.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The emissions from the activities shall not contribute significantly to any exceedance of EU air quality limit values or objectives of the Air Quality Strategy for England, Scotland, Wales and Northern Ireland for sulphur dioxide, oxides of nitrogen and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>).
- 3.7.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The activities shall be operated in accordance with the Air Quality Management Plan dated INSERT DATE (or any subsequent revision to this plan agreed in writing with the Environment Agency), except that the following methodologies (including any subsequent revisions to the methodologies agreed in writing with the Environment Agency) will be used:
  - (a) Methodology for the Use and Interpretation of Monitoring and Modelling for AQS Management Plans (*Issue 5, January 2002*)
  - (b) Technical Methodology for Dispersion Modelling Related to Power Station AQS Management Plans (*Issue 4, January 2003*)
  - (c) Monitoring To Assess Power Station Compliance With AQS Objectives Technical Methodology (*Issue 6, March 2003*)
  - (d) Generic Methodology for Compiling Station Hourly Emission Datasets from Generation Data (*Issue 4, January 2003*).

## 4 Information

### 4.2 Reporting

- 4.2.6 The operator shall by 1 October in each Assessment Year submit to the Environment Agency a completed Form SO<sub>2</sub> (as referred to in schedule 4, table S4.4) indicating the initial sulphur dioxide process B limits applicable for the next assessment year, subject to Environment Agency approval.
- 4.2.7 From 1 January 2008, the operator shall submit revised forms SO<sub>2</sub> and NO<sub>2</sub> (as referred to in schedule 4, table S4.4) within 28 days of the date of the closure of a relevant LCP.
- 4.2.8 The Operator shall by 1 October in each assessment year submit to the Environment Agency a completed form NO<sub>2</sub> (as referred to in schedule 4, table S4.4) indicating the initial oxides of nitrogen process B limits applicable for the next assessment year, subject to Environment Agency approval.

### 4.3 Notifications

- 4.3.8 From 1 January 2008, the operator shall inform the Environment Agency of the closure of a relevant LCP within 28 days of the date of closure.

## Schedule 6 - Interpretation

*"assessment year"* means any complete calendar year except that the first assessment year for the purposes of this permit shall run from 1 October 2006 until 31 December 2007

*"CEN"* means Comité Européen de Normalisation

*"large combustion plant"* or *"LCP"* is a boiler or group of boilers discharging waste gases through a common windshaft or stack, where the total thermal input is 50 MWth or more, based on gross calorific value.

*"Large Combustion Plant Directive"* means Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants.

*"operational hours"* of an LCP is the time spent between start up and shut down of the LCP.

*"operator B Limit"* means the limit for the assessment year in question specified in column 3 of Table S3.4 in schedule 3 or such other limit for that year as has been approved by the Environment Agency following notification by the operator on form SO1 or NO1, as referred to in schedule 4, table S4.4.

*"process B limit"* means such limit for the assessment year in question, as has been approved by the Environment Agency following a notification by the operator on form SO<sub>2</sub> or NO<sub>2</sub>, as referred to in schedule 4, table S4.4

“relevant processes” means the combustion processes at [XXXXX power station, Seaside, Kent, KT12 9BL] and at [XXXXX power station, Deasside, Gwent, KT12 9BL] carried on by [XYZ Energy plc] which are subject to permits requiring compliance with an operator B limit and “relevant process” means any one such process carried on by [XYZ Energy plc].

“Shut down” is defined as when the output from last unit within an LCP has fallen below SOP in accordance with “Principles for Determining MSG and SOP Thresholds for a Unit “ Issue 3.0, 23 October or any subsequent revision to this protocol agreed in writing with the Environment Agency

“Start up” is defined as when the first unit within an LCP has started up in accordance with “Principles for Determining MSG and SOP Thresholds for a Unit “ Issue 3.0, 23 October or any subsequent revision to this protocol agreed in writing with the Environment Agency

“t SO<sub>2</sub>/GWh” is given by the following equation,

$$t.SO_2/GWh = Tot_s/G_e$$

Where:

Tot<sub>s</sub> is the total mass of SO<sub>2</sub> released over an Assessment Year.

G<sub>e</sub> is the total electricity generated using fuels combusted at the power station expressed as GWh over an Assessment Year.

In the absence of an agreed protocol based on the continuous measurement of sulphur dioxide or other method agreed in writing with the Environment Agency, the release of sulphur dioxide shall be calculated in accordance with the formula:

$$\text{Sulphur dioxide released (Tot}_s\text{)(tonnes) = }[(\mathbf{Sc} \times \mathbf{Tc} \times 0.95) + (\mathbf{So} \times \mathbf{To}) + (\mathbf{Sg} \times \mathbf{Tg})] \times 0.02$$

where -

- Sc** = sulphur content of solid fuel (% w/w);
- So** = sulphur content of liquid fuel (% w/w);
- Sg** = sulphur content of gas (% w/w);
- Tc** = solid fuel burned (tonnes);
- To** = liquid fuel burned (tonnes);
- Tg** = gaseous fuel burned (tonnes)

# Annex 10 – Combustion Sector (opted out oil within the future regulatory framework)(Fawley, Grain, Littlebrook)

## 2 Operations

### 2.3 Operating techniques

2.3.4 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The activities shall not be operated for more than 20,000 operational hours (excluding start up and shut down) between 1 January 2008 and 31 December 2015.

OR:

2.3.4 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The activities shall not be operated for more than 10,000 operational hours (excluding start up and shut down) between 1 January 2008 and 31 December 2015.

2.3.5 Unless otherwise notified in writing by the Environment Agency, the operator shall ensure that:

- (a) average unit generation shall not exceed [11 GWh per day @ Grain & 8 GWh per day @ Fawley ] in any 14 day period; and
- (b) total generation shall not exceed [600 GWh per annum @Grain & 700GWh per annum at Fawley ].

2.3.6 From 1 January 2008, the following conditions apply where there is a malfunction or breakdown of any abatement equipment, subject to the provisions of "A Protocol for dealing with malfunction or breakdown of abatement equipment at coal fired power stations from 1 January 2008 to 31 December 2015" dated October 2006 or any subsequent revision to this protocol agreed in writing with the Environment Agency

2.3.6.1 The operator shall notify the Environment Agency within 48 hours of any such malfunction or breakdown unless notification has already been made under condition 4.3.1.

2.3.6.2 Unless otherwise agreed in writing by the Environment Agency:

- (a) if a return to normal operation is not achieved within 24 hours, the operator shall reduce or close down operations, or shall operate the plant using low polluting fuels; and
- (b) the cumulative duration of unabated operation in any twelve month period shall not exceed 120 hours.

## 3 Emissions and monitoring

### 3.6 Monitoring for the purposes of the Large Combustion Plant Directive

- 3.6.1 All monitoring required by this permit shall be carried out in accordance with the provisions of Annex VIII of the Large Combustion Plant Directive.
- 3.6.2 If the monitoring results for more than 10 days a year are invalidated within the meaning set out in schedule 3, the Operator shall:
- (a) within 28 days of becoming aware of this fact, review the causes of the invalidations and submit to the Environment Agency for approval, proposals for measures to improve the reliability of the continuous measurement systems, including a timetable for the implementation of those measures; and
  - (b) implement the approved measures.
- 3.6.3 Continuous measurement systems on release points from the LCP shall be subject to quality control by means of parallel measurements with reference methods at least once every calendar year.
- 3.6.4 Unless otherwise agreed in writing by the Environment Agency in accordance with condition 3.6.5 below, the Operator shall carry out the methods, including the reference measurement methods, to use and calibrate continuous measurement systems in accordance with the appropriate CEN standards.
- 3.6.5 If CEN standards are not available, ISO standards, national or international standards which will ensure the provision of data of an equivalent scientific quality shall be used, as agreed in writing with the Environment Agency.
- 3.6.6 Where required by a condition of this permit to check the measurement equipment, the operator shall submit a report to the Environment Agency in writing, within 28 days of the completion of the check.

### 3.7 Air Quality Management Plan

- 3.7.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The emissions from the activities shall not contribute significantly to any exceedance of EU air quality limit values or objectives of the Air Quality Strategy for England, Scotland, Wales and Northern Ireland for sulphur dioxide, oxides of nitrogen and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>).
- 3.7.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The activities shall be operated in accordance with the Air Quality Management Plan dated 29 May 2001 (or any subsequent revision to this plan agreed in writing with the Environment Agency), except that the following methodologies (including any subsequent revisions to the methodologies agreed in writing with the Environment Agency) will be used:
- (a) Methodology for the Use and Interpretation of Monitoring and Modelling for AQS Management Plans (*Issue 5, January 2002*)
  - (b) Technical Methodology for Dispersion Modelling Related to Power Station AQS Management Plans (*Issue 4, January 2003*)
  - (c) Monitoring To Assess Power Station Compliance With AQS Objectives Technical Methodology (*Issue 6, March 2003*)

- (d) Generic Methodology for Compiling Station Hourly Emission Datasets from Generation Data (*Issue 4, January 2003*).

## 4 Information

### 4.2 Reporting

- 4.2.6 The operator shall by 1 October in each Assessment Year submit to the Environment Agency a completed Form SO<sub>2</sub> (as referred to in schedule 4, table S4.4) indicating the initial sulphur dioxide process B limits applicable for the next assessment year, subject to Environment Agency approval.
- 4.2.7 From 1 January 2008, the operator shall submit revised forms SO<sub>2</sub> and NO<sub>2</sub> (as referred to in schedule 4, table S4.4) within 28 days of the date of the closure of a relevant LCP.
- 4.2.8 The Operator shall by 1 October in each assessment year submit to the Environment Agency a completed form NO<sub>2</sub> (as referred to in schedule 4, table S4.4) indicating the initial oxides of nitrogen process B limits applicable for the next assessment year, subject to Environment Agency approval.

### 4.3 Notifications

- 4.3.8 From 1st January 2008, the operator shall inform the Environment Agency of the closure of a relevant LCP within 28 days of the date of closure.

## Schedule 6 - Interpretation

“assessment year” means any complete calendar year except that the first assessment year for the purposes of this permit shall run from 1 October 2006 until 31<sup>st</sup> December 2007

“CEN” means Comité Européen de Normalisation

“Large Combustion Plant Directive” means Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants.

“large combustion plant” or “LCP” is a boiler or group of boilers discharging waste gases through a common windshaft or stack, where the total thermal input is 50 MWth or more, based on gross calorific value.

“operational hours” of an LCP is the time spent between start up and shut down of the LCP.

“operator B Limit” means the limit for the assessment year in question specified in column 3 of Table S3.4 in schedule 3 or such other limit for that year as has been approved by the Environment Agency following notification by the operator on form SO<sub>1</sub> or NO<sub>1</sub>, as referred to in schedule 4, table S4.4.

“process B limit” means such limit for the assessment year in question, as has been approved by the Environment Agency following a notification by the operator on form SO<sub>2</sub> or NO<sub>2</sub>, as referred to in schedule 4, table S4.4.

“relevant processes” means the combustion processes at [XXXXX power station, Seaside, Kent, KT12 9BL] and at [XXXXX power station, Deasside, Gwent, KT12 9BL] carried on by [XYZ Energy plc] which are subject to permits requiring compliance with an operator B limit and “relevant process” means any one such process carried on by [XYZ Energy plc].

“Shut down” is defined as when the output from last unit within an LCP has fallen below SOP in accordance with “Principles for Determining MSG and SOP Thresholds for a Unit “ Issue 3.0, 23 October 2006 or any subsequent revision to this protocol agreed in writing with the Environment Agency

“Start up” is defined as when the first unit within an LCP has started up in accordance with “Principles for Determining MSG and SOP Thresholds for a Unit “ Issue 3.0, 23 October 2006 or any subsequent revision to this protocol agreed in writing with the Environment Agency

“t SO<sub>2</sub>/GWh” is given by the following equation,

$$t.SO_2/GWh = Tot_s/G_e$$

Where:

Tot<sub>s</sub> is the total mass of SO<sub>2</sub> released over an Assessment Year.

G<sub>e</sub> is the total electricity generated using fuels combusted at the power station expressed as GWh over an Assessment Year.

In the absence of an agreed protocol based on the continuous measurement of sulphur dioxide or other method agreed in writing with the Environment Agency, the release of sulphur dioxide shall be calculated in accordance with the formula:

$$\text{Sulphur dioxide released (Tot}_s\text{)(tonnes) = }[(\mathbf{Sc} \times \mathbf{Tc} \times 0.95) + (\mathbf{So} \times \mathbf{To}) + (\mathbf{Sg} \times \mathbf{Tg})] \times 0.02$$

where -

<b>Sc</b>	=	sulphur content of solid fuel (% w/w);
<b>So</b>	=	sulphur content of liquid fuel (% w/w);
<b>Sg</b>	=	sulphur content of gas (% w/w);
<b>Tc</b>	=	solid fuel burned (tonnes);
<b>To</b>	=	liquid fuel burned (tonnes);
<b>Tg</b>	=	gaseous fuel burned (tonnes)



# Annex 11 – WID

## 2 Operations

### 2.3 Operating techniques

- 2.3.6 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall burn only those hazardous wastes where the throughputs, calorific values and pollutant compositions are within the ranges specified in table S2.[X] of schedule 2.
- 2.3.7 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall ensure that prior to accepting waste subject to condition [2.3.6] at the site, it has obtained sufficient information about the hazardous wastes to be burned to demonstrate compliance with the characteristics described in condition [2.3.6].
- 2.3.8 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall take representative samples of all hazardous waste deliveries to the site unless otherwise agreed in writing with the Environment Agency and test a representative selection of these samples to verify conformity with the information obtained as required by condition [2.3.7]. These samples shall be retained for inspection by the Environment Agency for a period of [at least 1 month] [a longer period] after the material is incinerated and results of any analysis made of such samples will be retained for at least 2 years after the material is incinerated.
- 2.3.9 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* [Waste][Waste fuel] shall not be charged, or shall cease to be charged, if:
- (a) the [combustion chamber][other specified temperature monitor] temperature is below, or falls below, [850°C [1100°]] [1000°C]] [xxx°C ]; or
  - (b) any continuous emission limit value in schedule 3 table S3.1(a) is exceeded; or
  - (c) any continuous emission limit value in schedule 3 table S3.1 is exceeded, other than under WID abnormal operating conditions ; or
  - (d) monitoring results required to demonstrate compliance with any continuous emission limit value in schedule 3 table S3.1 are unavailable other than under WID abnormal operating conditions.
- 2.3.10 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall have at least one auxiliary burner in each line at start up or shut down or whenever the operating temperature falls below that specified in condition [2.3.9], as long as incompletely burned waste is present in the combustion chamber. Unless the temperature specified in condition [2.3.9] is maintained in the combustion chamber, such burner(s) may be fed only with fuels which result in emissions no higher than those arising from the use of gas oil, liquefied gas or natural gas.
- 2.3.11 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall record the beginning and end of each period of "WID abnormal operation".
- 2.3.12 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* During a period of "WID abnormal operation", the operator shall restore normal operation of the failed equipment or replace the failed equipment as rapidly as possible.

- 2.3.13 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Where, during "WID abnormal operation", any of the following situations arise, the operator shall, as soon as is practicable, cease the burning of waste until normal operation can be restored:
- (a) continuous measurement shows that an emission exceeds any emission limit value in schedule 3 table S3.1 due to disturbances or failures of the abatement systems, or continuous emission monitor(s) [or continuous effluent monitoring device(s)] are out of service, as the case may be, for a total of 4 hours uninterrupted duration;
  - (b) the cumulative duration of "WID abnormal operation" periods over 1 calendar year exceeds 60 hours on an incineration line;
  - (c) continuous measurement shows that an emission exceeds any emission limit value in schedule 3 table S3.1 (a) due to disturbances or failures of the abatement systems;
  - (d) the alternative techniques to demonstrate compliance with the "WID abnormal operation" emission limit value(s) for particulates, TOC and / or CO in schedule 3 table S3.1 (a), as detailed in the application or as agreed in writing with the Environment Agency, are unavailable.
- 2.3.14 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall interpret the end of the period of "WID abnormal operation" as the earliest of the following:
- (a) when the failed equipment is repaired and brought back into normal operation;
  - (b) when the operator initiates a shut down of the [waste][waste fuel] combustion activity, as described in the application or as agreed in writing with the Environment Agency;
  - (c) when a period of four hours has elapsed from the start of the "WID abnormal operation";
  - (d) when, in any calendar year, an aggregated period of 60 hours "WID abnormal operation" has been reached for a given incineration line.
- 2.3.15 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Infectious clinical waste must be placed in the furnace without first being mixed with other categories of waste, using techniques which are no less effective than those described in the application.
- 2.3.16 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Bottom ash and APC residues shall not be mixed.

## 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, S3.2 and S3.3 [except in "WID abnormal operation", when 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(a), S3.2 and S3.3].
- 3.1.5 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Wastes produced at the site shall, as a minimum, be sampled and analysed in accordance with schedule 3 table S 3.9. Additional samples shall be taken and tested and appropriate action taken, whenever:
- (a) disposal or recovery routes change; or
  - (b) it is suspected that the nature or composition of the waste has changed such that the route currently selected may no longer be appropriate.

## 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, S3.1(a) S3.2 and S3.3;
- 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) unless otherwise agreed in writing by the Environment Agency. *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.) Newly installed CEMs, or CEMs replacing existing CEMs, shall have MCERTS certification and have an MCERTS certified range which is not greater than 1.5 times the daily emission limit value (ELV) specified in schedule 3 table S3.1. The CEM shall also be able to measure instantaneous values over the ranges which are to be expected during all operating conditions. If it is necessary to use more than one range setting of the CEM to achieve this requirement, the CEM shall be verified for monitoring supplementary, higher ranges.*
- 3.5.5 Where Continuous Emission Monitors are installed to comply with the monitoring requirements in schedule 3 table S3.1; the Continuous Emission Monitors shall be used such that;
- (a) the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed the following percentages:
- |   |     |
|---|-----|
| • Carbon monoxide   | 10% |
| • Sulphur dioxide   | 20% |
| • Oxides of nitrogen (NO & NO <sub>2</sub> expressed as NO <sub>2</sub> ) | 20% |
| • Particulate matter  | 30% |
| • Total organic carbon (TOC)  | 30% |
| • Hydrogen chloride   | 40% |
- (b) valid half-hourly average values shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted the value of the confidence intervals in condition 3.5.5;
- (c) where it is necessary to calibrate or maintain the monitor and this means that data are not available for a complete half-hour period, the half-hourly average shall in any case be considered valid if measurements are available for a minimum of 20 minutes during the half-hour period. The number of half-hourly averages so validated shall not exceed 5 per day;
- (d) daily average values shall be determined as the average of all the valid half-hourly average values within a calendar day. The daily average value shall be considered valid if no more than five half-hourly average values in any day have been determined not to be valid;
- (e) no more than ten daily average values per year shall be determined not to be valid.

## 4 Information

### 4.2 Reporting

#### 4.2.2

(d) the functioning and monitoring of the incineration plant in a format agreed with the Environment Agency. The report shall, as a minimum requirement (as required by Article 12(2) of the Waste Incineration Directive) give an account of the running of the process and the emissions into air and water compared with the emission standards in the WID.

## Schedule 6 - Interpretation

“*abatement equipment*” means that equipment dedicated to the removal of polluting substances from releases from the installation to air or water media.

“*APC residues*” means air pollution control residues

“*bi-annual*” means twice per year with at least five months between tests;

“*bottom ash*” means [ash falling through the grate][transported by the grate] [installation specific definition of bottom ash];

“*CEM*” Continuous emission monitor

“*CEN*” means Comité Européen de Normalisation

“*daily average*” for releases of substances to air means the average of valid half-hourly averages over [a calendar day] [consecutive discrete periods of 24 hours as described in the application / agreed with the Environment Agency] during normal operation.

“*dioxin and furans*” means polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans.

“*incineration line*” means all of the incineration equipment related to a common discharge to air location.

“*infectious clinical waste*” means clinical waste incorporating substances containing viable micro-organisms or their toxins which are known or reliably believed to cause disease in man or other living organisms

“*ISO*” means International Standards Organisation.

“*LOI*” means loss on ignition a technique used to determine the combustible material by heating the ash residue to a high temperature

“*PAH*” means Poly-cyclic aromatic hydrocarbon, and comprises Anthanthrene, Benzo[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[b]naph(2,1-d)thiophene, Benzo[c]phenanthrene, Benzo[ghi]perylene, Benzo[a]pyrene, Cholanthrene, Chrysene, Cyclopenta[c,d]pyrene, Dibenzo[ah]anthracene, Dibenzo[a,i]pyrene Fluoranthene, Indo[1,2,3-cd]pyrene, Naphthalene

“*PCB*” means *Polychlorinated Biphenyl*. *Dioxin-like PCBs are the non-ortho and mono-ortho PCBs listed in the table below.*

“quarterly” for reporting/sampling means after/during each 3 month period, January to March; April to June; July to September and October to December and, when sampling, with at least 2 months between each sampling date.

“shut down” is any period where the plant is being returned to a non-operational state [and there is no waste being burned] [as described in the application or agreed in writing with the Environment Agency].

“start up” is any period, where the plant has been non-operational, [after igniting the auxiliary burner] until [waste][waste fuel] has been fed to the plant [in sufficient quantity to cover the grate and] to initiate steady-state conditions [as described in the application or agreed in writing with the Environment Agency].

“TOC” means *Total Organic Carbon*. In respect of releases to air, this means the gaseous and vaporous organic substances, expressed as TOC. [In respect of Bottom Ash, this means the total carbon content of all organic species present in the ash (excluding carbon in elemental form).]

“Waste Incineration Directive” means Directive 2000/76/EC on the incineration of waste (O.J. L 332, 28.12.2000)

“WID abnormal operation” means any technically unavoidable stoppages, disturbances, or failures of the abatement plant or the measurement devices [other than continuous emission monitors for releases to air of particulates, TOC and/or CO], during which the concentrations in the discharges into air and the purified waste water of the regulated substances may exceed the normal emission limit values.

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:

- (a) 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 and gaseous fuels, 6% dry for solid fuels; and/or
- (b) 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
- (c) in relation to gases from incineration plants other than those burning waste oil, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 11% dry, in relation to gases from co-incineration plants the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of [??% dry]
- (d) where hazardous wastes are burned in an incineration or co-incineration plant and the emissions of pollutants are reduced by gas treatment, standardisation of the gas with respect to oxygen content shall be carried out only if the oxygen concentration measured over the same period exceeds the relevant oxygen content defined in conditions [(a) – (c)] above. In other cases, the measured emissions shall be standardised only for moisture, pressure and temperature.

For dioxins/furans and dioxin-like PCBs the determination of the toxic equivalence concentration (I-TEQ, & WHO-TEQ for dioxins/furans, WHO-TEQ for dioxin-like PCBs) stated as a release limit and/ or reporting requirement, the mass concentrations of the following congeners have to be multiplied with their respective toxic equivalence factors before summing. When reporting on measurements of dioxins/furans and dioxin-like PCBs, the toxic equivalence concentrations should be reported as a range based on: all congeners less than the detection limit assumed to be zero as a minimum, and all congeners less than the detection limit assumed to be at the detection limit as a maximum.

Congener	I-TEF(1990)	WHO-TEF (1997/8)		
		Humans / Mammals	Fish	Birds
<b>Dioxins</b>				
2,3,7,8-TCDD	1	1	1	1
1,2,3,7,8-PeCDD	0.5	1	1	1
1,2,3,4,7,8-HxCDD	0.1	0.1	0.5	0.05
1,2,3,6,7,8-HxCDD	0.1	0.1	0.01	0.01
1,2,3,7,8,9-HxCDD	0.1	0.1	0.01	0.1
1,2,3,4,6,7,8-HpCDD	0.01	0.01	0.001	<0.001
OCDD	0.001	0.0001	-	-
<b>Furans</b>				
2,3,7,8-TCDF	0.1	0.1	0.05	1
1,2,3,7,8-PeCDF	0.05	0.05	0.05	0.1
2,3,4,7,8-PeCDF	0.5	0.5	0.5	1
1,2,3,4,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,7,8,9-HxCDF	0.1	0.1	0.1	0.1
1,2,3,6,7,8-HxCDF	0.1	0.1	0.1	0.1
2,3,4,6,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,4,6,7,8-HpCDF	0.01	0.01	0.01	0.01
1,2,3,4,7,8,9-HpCDF	0.01	0.01	0.01	0.01
OCDF	0.001	0.0001	0.0001	0.0001

Congener	WHO-TEF (1997/8)		
	Humans / mammals	Fish	Birds
<b>Non-ortho PCBs</b>			
3,4,4',5-TCB (81)	0.0001	0.0005	0.1
3,3',4,4'-TCB (77)	0.0001	0.0001	0.05
3,3',4,4',5-PeCB (126)	0.1	0.005	0.1
3,3',4,4',5,5'-HxCB(169)	0.01	0.00005	0.001
<b>Mono-ortho PCBs</b>			
2,3,3',4,4'-PeCB (105)	0.0001	<0.000005	0.0001
2,3,4,4',5-PeCB (114)	0.0005	<0.000005	0.0001
2,3',4,4',5-PeCB (118)	0.0001	<0.000005	0.00001
2',3,4,4',5-PeCB (123)	0.0001	<0.000005	0.00001
2,3,3',4,4',5-HxCB (156)	0.0005	<0.000005	0.0001
2,3,3',4,4',5'-HxCB (157)	0.0005	<0.000005	0.0001
2,3',4,4',5,5'-HxCB (167)	0.00001	<0.000005	0.00001
2,3,3',4,4',5,5'-HpCB (189)	0.0001	<0.000005	0.00001

# Annex 12 – Crude Oil Refinery (including LCPD conditions)

## 2 Operations

### 2.3 Operating techniques

- 2.3.3 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Standby fuel x may be used but for no more than 500 hours per year.
- 2.3.4 No LCP\* or [no specified] LCP \* shall be operated for more than 20,000 operational hours (excluding start up and shut down) between 1<sup>st</sup> January 2008 and 31<sup>st</sup> December 2015.
- 2.3.5 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* From 1<sup>st</sup> January 2008 the following conditions apply where there is a malfunction or breakdown of any abatement equipment:
- (a) The operator shall notify the Environment Agency within 48 hours of any such malfunction or breakdown unless notification has already been made under condition 4.3.1.
  - (b) Unless otherwise agreed in writing by the Environment Agency:
    - (i) if a return to normal operations is not achieved within 24 hours, the operator shall reduce or close down operations, or shall operate the activities using low polluting fuels; and
    - (ii) the cumulative duration of unabated operation in any 12-month period shall not exceed 120 hours.

## 3 Emissions and monitoring

### 3.6 Monitoring for the purposes of the Large Combustion Plant Directive

- 3.6.1 All LCP monitoring required by this permit shall be carried out in accordance with the provisions of Annex VIII of the Large Combustion Plant Directive.
- 3.6.2 If the monitoring results for more than 10 days a year are invalidated within the meaning set out in schedule 3, the Operator shall:
- (b) within 28 days of becoming aware of this fact, review the causes of the invalidations and submit to the Environment Agency for approval, proposals for measures to improve the reliability of the continuous measurement systems, including a timetable for the implementation of those measures; and
  - (b) implement the approved measures.

- 3.6.3 Continuous measurement systems on emission points from the LCP shall be subject to quality control by means of parallel measurements with reference methods at least once every calendar year.
- 3.6.4 Unless otherwise agreed in writing by the Environment Agency in accordance with condition 3.6.5 below, the operator shall carry out the methods, including the reference measurement methods, to use and calibrate continuous measurement systems in accordance with the appropriate CEN standards.
- 3.6.5 If CEN standards are not available, ISO standards, national or international standards which will ensure the provision of data of an equivalent scientific quality shall be used, as agreed in writing with the Environment Agency.
- 3.6.6 Where required by a condition of this permit to check the measurement equipment the operator shall submit a report to the Environment Agency in writing, within 28 days of the completion of the check.

## 4 Information

### 4.2 Reporting

- 4.2.2 (d) the total annual emissions from, and total amount of energy input to, each Large Combustion Plant in accordance with the requirements of Annex VIII(B) of the LCPD .

### 4.3 Notifications

- 4.3.8 From 1 January 2008 the operator shall inform the Environment Agency in writing of the intended closure of any LCP, giving as much notice as possible before closure.

## Schedule 6 - Interpretation

*"BS EN 14181"* will include the requirements of BS EN 15267-3 through QAL1. MCERTS certification for the appropriate ranges and determinands is a way of demonstrating of compliance with the requirements of BS EN 15267-3.

*"calendar monthly mean"* means the value across a calendar month of all validated hourly means.

*"DLN"* means dry, low NOx burners.

*"DSD"* means Dangerous Substances Directive.

*"FCCU"* means fluidised catalytic cracking unit.

*"large combustion plant"* or *"LCP"* is a combustion plant or group of combustion plants discharging waste gases through a common windshield or stack, where the total thermal input is 50 MWth or more, based on gross calorific value.



*“Large Combustion Plant Directive”* means Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants.

*“LDAR”*, means Leak Detection and Repair, a managed scheme and programme for testing potential sources of fugitive emissions, from operational plant at the installation, and repairing or carrying out other actions to prevent, or where that is not possible, minimise continued emissions from those sources. The LDAR programme at the installation shall be consistent with the requirements of the Institute of Petroleum (Energy Institute) Protocol.

*“mcr”* means maximum continuous rating.

*“Natural gas”* means naturally occurring methane with no more than 20% by volume of inert or other constituents.

*“National Emission Reduction Plan”* (NERP) is the plan issued by Defra in accordance with Article 4.6 of the Large Combustion Plants Directive and associated guidance

*“ncv”* means net calorific value.

*“operational hours”* are whole hours commencing from the first unit ending start up and ending when the last unit commences shut down.

*“Sector Guidance Note”* means IPPC Sector Guidance Note on Gasification, Liquefaction and Refining Activities, IPPC S1.02.

*“SRU”* means sulphur recovery unit.

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:

- (a) 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 and gaseous fuels, 6% dry for solid fuels; and/or
- (b) in relation to emissions from gas turbine and compression ignition engine 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 15% dry for liquid and gaseous fuels; and/or
- (c) 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

# Annex 13 – Crude Oil Refinery (including LCPD and WID conditions)

## 2 Operations

### 2.3 Operating techniques

- 2.3.3 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Standby fuel x may be used but for no more than 500 hours per year.
- 2.3.4 No LCP\* or [no specified] LCP \* shall be operated for more than 20,000 operational hours (excluding start up and shut down) between 1 January 2008 and 31 December 2015.
- 2.3.5 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* From 1 January 2008 the following conditions apply where there is a malfunction or breakdown of any abatement equipment:
- (a) The operator shall notify the Environment Agency within 48 hours of any such malfunction or breakdown unless notification has already been made under condition 4.3.1.
  - (b) Unless otherwise agreed in writing by the Environment Agency:
    - (i) if a return to normal operations is not achieved within 24 hours, the operator shall reduce or close down operations, or shall operate the activities using low polluting fuels; and
    - (ii) the cumulative duration of unabated operation in any 12-month period shall not exceed 120 hours.
- 2.3.6 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall incinerate only those hazardous wastes where the throughputs, calorific values and pollutant composition are within the ranges specified in table S2.[X] of schedule 2.
- 2.3.7 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall ensure that prior to accepting waste subject to condition [2.3.3] at the site, it has obtained sufficient information about the hazardous wastes to be burned to demonstrate compliance with the characteristics described in condition [2.3.6].
- 2.3.8 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall take representative samples of all hazardous waste deliveries to the site unless otherwise agreed in writing with the Environment Agency and test a representative selection of these samples to verify conformity with the information obtained as required by condition [2.3.7]. These samples shall be retained for inspection by the Environment Agency for a period of [at least one month] [a longer (specify alternative) period] after the material is incinerated and results of any analysis made of such samples will be retained for at least two years after the material is incinerated.

- 2.3.9 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Waste shall not be charged, or shall cease to be charged, into the incinerator if:
- (a) the combustion chamber temperature is below, or falls below, [850°C ] [1100°C] [1000°C ] [xxx°C ]; or
  - (b) the oxygen level is below, or falls below, [6% (wet)] [x%] by volume; or
  - (c) any continuous emission limit value in schedule 3 table S3.1(a) is exceeded; or
  - (d) any continuous emission limit value in schedule 3 table S3.1 is exceeded, other than under WID abnormal operating conditions ; or
  - (e) monitoring results required to demonstrate compliance with any continuous emission limit value in schedule 3 table S3.1 are unavailable other than under WID abnormal operating conditions.
- 2.3.10 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall operate at least one auxiliary burner in each line at start up and shut down or whenever the operating temperature falls below that specified in condition [2.3.9], as long as incompletely burned waste is present in the combustion chamber. Unless the temperature specified in condition [2.3.9] is maintained in the combustion chamber, such burners(s) may be fed only with fuels which result in emissions no higher than those arising from the use of gas oil, liquefied gas or natural gas.
- 2.3.11 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall record the beginning and end of each period of "WID abnormal operation".
- 2.3.12 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* During a period of "WID abnormal operation", the operator shall restore normal operation of the failed equipment or replace the failed equipment as rapidly as possible.
- 2.3.13 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Where, during "WID abnormal operation", any of the following situations arise, the operator shall, as soon as is practicable, cease the burning of waste until normal operation can be restored:
- (a) continuous measurement shows that an emission exceeds any emission limit value in table S3.1 of schedule 3, or continuous emission monitor(s) [or continuous effluent monitoring device(s)] are out of service, as the case may be, for a total of four hours uninterrupted duration;
  - (b) the cumulative duration of "WID abnormal operation" periods over one calendar year exceeds 60 hours on an incineration line;
  - (c) continuous measurement shows that an emission exceeds any limit value in table S3.1(a) of schedule 3;
  - (d) the alternative techniques to demonstrate compliance with the "WID abnormal operation" emission limit value(s) for **particulates, TOC and / or CO** in table S3.1(a) of schedule 3, as detailed in the application or as agreed in writing with the Environment Agency, are unavailable.
- 2.3.14 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall interpret the end of the period of "WID abnormal operation" as the earliest of the following:
- (a) when the failed equipment is repaired and brought back into operation;
  - (b) when the operator initiates a shut down of the waste combustion activity, as described in the application;
  - (c) when a period of four hours has elapsed from the start of the "WID abnormal operation";
  - (d) when, in any calendar year, an aggregated period of 60 hours "WID abnormal operation" has been reached for a given incineration line.

2.3.15 For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.) Bottom ash and APC residues shall not be mixed.

## 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, S3.2 and S3.3 [except in "WID abnormal operation", when 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(a), S3.2 and S3.3].

3.1.6 For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.) Wastes produced at the site shall, as a minimum, be sampled and analysed in accordance with schedule 3 table S3.9. Additional samples shall be taken and tested and appropriate action taken, whenever:

- (a) disposal or recovery routes change; or
- (b) it is suspected that the nature or composition of the waste has changed such that the route currently selected may no longer be appropriate.

### 3.5 Monitoring

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) unless otherwise agreed in writing by the Environment Agency. For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.) Newly installed CEMs, or CEMs replacing existing CEMs, shall have MCERTS certification and have an MCERTS certified range which is not greater than 1.5 times the daily emission limit value (ELV) specified in table S3.1 in schedule 3. The CEM shall also be able to measure instantaneous values over the ranges which are to be expected during all operating conditions. If it is necessary to use more than one range setting of the CEM to achieve this requirement, the CEM shall be verified for monitoring supplementary, higher ranges.

3.5.5 Where Continuous Emission Monitors are installed to comply with the monitoring requirements in schedule 3 table S3.1; the Continuous Emission Monitors shall be used such that;

- (a) the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed the following percentages:
  - Carbon monoxide 10%
  - Sulphur dioxide 20%
  - Oxides of nitrogen (NO & NO<sub>2</sub> expressed as NO<sub>2</sub>) 20%
  - Particulate matter 30%
  - Total organic carbon (TOC) 30%
  - Hydrogen chloride 40%

- (b) valid half-hourly average values shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted the value of the confidence intervals in condition 3.5.5;
- (c) where it is necessary to calibrate or maintain the monitor and this means that data are not available for a complete half-hour period, the half-hourly average shall in any case be considered valid if measurements are available for a minimum of 20 minutes during the half-hour period. The number of half-hourly averages so validated shall not exceed 5 per day;
- (d) daily average values shall be determined as the average of all the valid half-hourly average values within a calendar day. The daily average value shall be considered valid if no more than five half-hourly average values in any day have been determined not to be valid;
- (e) no more than ten daily average values per year shall be determined not to be valid.

### **3.6 Monitoring for the purposes of the Large Combustion Plant Directive**

- 3.6.1 All LCP monitoring required by this permit shall be carried out in accordance with the provisions of Annex VIII of the Large Combustion Plant Directive.
- 3.6.2 If the monitoring results for more than 10 days a year are invalidated within the meaning set out in schedule 3, the Operator shall:
  - (a) within 28 days of becoming aware of this fact, review the causes of the invalidations and submit to the Environment Agency for approval, proposals for measures to improve the reliability of the continuous measurement systems, including a timetable for the implementation of those measures; and
  - (b) implement the approved measures.
- 3.6.3 Continuous measurement systems on emission points from the LCP shall be subject to quality control by means of parallel measurements with reference methods at least once every calendar year.
- 3.6.4 Unless otherwise agreed in writing by the Environment Agency in accordance with condition 3.6.5 below, the operator shall carry out the methods, including the reference measurement methods, to use and calibrate continuous measurement systems in accordance with the appropriate CEN standards.
- 3.6.5 If CEN standards are not available, ISO standards, national or international standards which will ensure the provision of data of an equivalent scientific quality shall be used, as agreed in writing with the Environment Agency.
- 3.6.6 Where required by a condition of this permit to check the measurement equipment the operator shall submit a report to the Environment Agency in writing, within 28 days of the completion of the check.

## 4 Information

### 4.2 Reporting

- 4.2.2 (d) the total annual emissions from, and total amount of energy input to, each Large Combustion Plant in accordance with the requirements of Annex VIII(B) of the LCPD .
- (e) the functioning and monitoring of the incineration plant in a format agreed with the Environment Agency. The report shall, as a minimum requirement (as required by Article 12(2) of the Waste Incineration Directive) give an account of the running of the process and the emissions into air and water compared with the emission standards in the WID.

### 4.3 Notifications

4.3.1

- (d) any incident which has led to a period of abnormal operation of the [co-]incineration plant.

- 4.3.8 From 1 January 2008 the operator shall inform the Environment Agency in writing of the intended closure of any LCP, giving as much notice as possible before closure.

## Schedule 6 - Interpretation

*“abatement equipment”* means that equipment dedicated to the removal of polluting substances from releases from the installation to air or water media.

*“APC residues”* means air pollution control residues.

*“BS EN 14181”* will include the requirements of BS EN 15267-3 through QAL1. MCERTS certification for the appropriate ranges and determinands is a way of demonstrating of compliance with the requirements of BS EN 15267-3.

*“calendar monthly mean”* means the value across a calendar month of all validated hourly means.

*“bi-annual”* means twice per year with at least five months between tests;

*“bottom ash”* means [ash falling through the grate or transported by the grate] [installation specific definition of bottom ash];

*“CEM”* Continuous emission monitor

*“CEN”* means Comité Européen de Normalisation

*“daily average”* for releases of substances to air means the average of half-hourly averages over [a calendar day] [consecutive discrete periods of 24 hours as described in the application / agreed with the Environment Agency] during normal operation. Where any of abnormal operation, start up or shut down occur during the [day] [24-hour period] in such a way that there are less than 43 half-hourly averages recorded during normal operation, no daily average shall be recorded for that day.

“*dioxin and furans*” means polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans.

“*DLN*” means dry, low NO<sub>x</sub> burners.

“*DSD*” means Dangerous Substances Directive.

“*FCCU*” means fluidised catalytic cracking unit.

“*incineration line*” means all of the incineration equipment related to a common discharge to air location.

“*ISO*” means International Standards Organisation.

“*large combustion plant*” or “*LCP*” is a combustion plant or group of combustion plants discharging waste gases through a common windshaft or stack, where the total thermal input is 50 MWth or more, based on gross calorific value.

“*Large Combustion Plant Directive*” means Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants.

“*LDAR*”, means Leak Detection and Repair, a managed scheme and programme for testing potential sources of fugitive emissions, from operational plant at the installation, and repairing or carrying out other actions to prevent, or where that is not possible, minimise continued emissions from those sources. The LDAR programme at the installation shall be consistent with the requirements of the Institute of Petroleum (Energy Institute) Protocol.

“*LOI*” means loss on ignition a technique used to determine the combustible material by heating the ash residue to a high temperature.

“*mcr*” means maximum continuous rating.

“*Natural gas*” means naturally occurring methane with no more than 20% by volume of inert or other constituents.

“*National Emission Reduction Plan*” (NERP) is the plan issued by Defra in accordance with Article 4.6 of the Large Combustion Plants Directive and associated guidance

“*ncv*” means net calorific value.

“*operational hours*” are whole hours commencing from the first unit ending start up and ending when the last unit commences shut down.

“*PAH*” means Poly-cyclic aromatic hydrocarbon, and comprises Anthanthrene, Benzo[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[b]naph(2,1-d)thiophene, Benzo[c]phenanthrene, Benzo[ghi]perylene, Benzo[a]pyrene, Cholanthrene, Chrysene, Cyclopenta[c,d]pyrene, Dibenzo[ah]anthracene, Dibenzo[a,i]pyrene Fluoranthene, Indo[1,2,3-cd]pyrene, Naphthalene

“*PCB*” means *Polychlorinated Biphenyl*. *Dioxin-like PCBs are the non-ortho and mono-ortho PCBs listed in the table below*

“*quarterly*” for reporting/sampling means after/during each 3 month period, January to March; April to June; July to September and October to December and, when sampling, with at least 2 months between each sampling date.

“Sector Guidance Note” means IPPC Sector Guidance Note on Gasification, Liquefaction and Refining Activities, IPPC S1.02.

“shut down”, when applied to the incinerator, is any period where the plant is being returned to a non-operational state [and there is no waste being burned] [as described in the application].

“SRU” means sulphur recovery unit.

“start up”, when applied to the incinerator, is any period where the plant has been non-operational, after igniting the auxiliary burner until waste has been fed to the incinerator [in sufficient quantity to cover the grate and] to initiate steady-state conditions [as described in the application].

“TOC” means *Total Organic Carbon*. In respect of releases to air, this means the gaseous and vaporous organic substances, expressed as TOC. In respect of Bottom Ash, this means the total carbon content of all organic species present in the ash (excluding carbon in elemental form).

“Waste Incineration Directive” means Directive 2000/76/EC on the incineration of waste (O.J. L 332, 28.12.2000)

“WID abnormal operation” means any technically unavoidable stoppages, disturbances, or failures of the abatement plant or the measurement devices [other than continuous emission monitors for releases to air of particulates, TOC and/or CO], during which the concentrations in the discharges into air and the purified waste water of the regulated substances may exceed the normal emission limit values.

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:

- (a) 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 and gaseous fuels, 6% dry for solid fuels; and/or
- (b) in relation to emissions from gas turbine and compression ignition engine 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 15% dry for liquid and gaseous fuels; and/or
- (c) 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.
- (d) in relation to gases from incineration plants other than those burning waste oil, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 11% dry.
- (e) where hazardous wastes are burned in an incineration or co-incineration plant and the emissions of pollutants are reduced by gas treatment, standardisation of the gas with respect to oxygen content shall be carried out only if the oxygen concentration measured over the same period exceeds the relevant oxygen content defined in conditions [(a) – (c)] above. In other cases, the measured emissions shall be standardised only for moisture, pressure and temperature.

For dioxins/furans and dioxin-like PCBs the determination of the toxic equivalence concentration (I-TEQ, & WHO-TEQ for dioxins/furans, WHO-TEQ for dioxin-like PCBs) stated as a release limit and/ or reporting requirement, the mass concentrations of the following congeners have to be multiplied with their respective toxic equivalence factors before summing. When reporting on measurements of dioxins/furans and dioxin-like PCBs, the toxic equivalence concentrations should be reported as a range based on: all congeners less than the detection limit assumed to be zero as a minimum, and all congeners less than the detection limit assumed to be at the detection limit as a maximum.



Congener	I-TEF(1990)	WHO-TEF (1997/8)		
		Humans / Mammals	Fish	Birds
<b>Dioxins</b>				
2,3,7,8-TCDD	1	1	1	1
1,2,3,7,8-PeCDD	0.5	1	1	1
1,2,3,4,7,8-HxCDD	0.1	0.1	0.5	0.05
1,2,3,6,7,8-HxCDD	0.1	0.1	0.01	0.01
1,2,3,7,8,9-HxCDD	0.1	0.1	0.01	0.1
1,2,3,4,6,7,8-HpCDD	0.01	0.01	0.001	<0.001
OCDD	0.001	0.0001	-	-
<b>Furans</b>				
2,3,7,8-TCDF	0.1	0.1	0.05	1
1,2,3,7,8-PeCDF	0.05	0.05	0.05	0.1
2,3,4,7,8-PeCDF	0.5	0.5	0.5	1
1,2,3,4,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,7,8,9-HxCDF	0.1	0.1	0.1	0.1
1,2,3,6,7,8-HxCDF	0.1	0.1	0.1	0.1
2,3,4,6,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,4,6,7,8-HpCDF	0.01	0.01	0.01	0.01
1,2,3,4,7,8,9-HpCDF	0.01	0.01	0.01	0.01
OCDF	0.001	0.0001	0.0001	0.0001

Congener	WHO-TEF (1997/8)		
	Humans / mammals	Fish	Birds
<b>Non-ortho PCBs</b>			
3,4,4',5-TCB (81)	0.0001	0.0005	0.1
3,3',4,4'-TCB (77)	0.0001	0.0001	0.05
3,3',4,4',5-PeCB (126)	0.1	0.005	0.1
3,3',4,4',5,5'-HxCB(169)	0.01	0.00005	0.001
<b>Mono-ortho PCBs</b>			
2,3,3',4,4'-PeCB (105)	0.0001	<0.000005	0.0001
2,3,4,4',5-PeCB (114)	0.0005	<0.000005	0.0001
2,3',4,4',5-PeCB (118)	0.0001	<0.000005	0.00001
2',3,4,4',5-PeCB (123)	0.0001	<0.000005	0.00001
2,3,3',4,4',5-HxCB (156)	0.0005	<0.000005	0.0001
2,3,3',4,4',5'-HxCB (157)	0.0005	<0.000005	0.0001
2,3',4,4',5,5'-HxCB (167)	0.00001	<0.000005	0.00001
2,3,3',4,4',5,5'-HpCB (189)	0.0001	<0.000005	0.00001

# Annex 14 – Landfills for Inert Waste

## 1 Management

### 1.1 General management

1.1.4 The operator shall comply with the requirements of an approved competence scheme.

### 1.2 Finance

1.2.1 The financial provision for meeting the obligations under this permit <set out in the operator's letter dated (include serial number for identification)/ agreement made between the operator and the Environment Agency dated> shall be maintained by the operator throughout the subsistence of this permit and the operator shall produce evidence of such provision whenever required by the Environment Agency.

Or

1.2.1 No activities authorised by this permit shall be commenced unless the operator has entered into an Agreement with the Environment Agency to secure financial provision for meeting the obligations under this permit and has provided the provision.

1.2.2 The operator shall give prior notice to the Environment Agency of its intention to commence operations at the site.

1.2.3 The financial provision provided under condition 1.2.1 above shall thereafter be maintained by the operator throughout the subsistence of the permit and the Operator shall produce evidence of such provision whenever required by the Environment Agency.

1.2.4 The operator shall ensure that the charges it makes for the disposal of waste in the landfill cover all of the following:

- (a) the costs of setting up and operating the landfill;
- (b) the costs of the financial provision required by condition 1.2.1; and
- (c) the estimated costs for the closure and aftercare of the landfill.

1.2.2 The operator shall ensure that the charges it makes for the disposal of waste in the landfill cover all of the following:

- (a) the costs of setting up and operating the landfill;
- (b) the costs of the financial provision required by condition 1.2.1; and
- (c) the estimated costs for the closure and aftercare of the landfill.

## 2 Operations

### 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.

## 2.6 Landfill Engineering

- 2.6.1 (a) *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* No construction of any new cell shall commence until the operator has submitted construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.
- (b) *The operator shall review the construction proposals every [12] months*
- 2.6.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The construction of a new cell shall take place only in accordance with the approved construction proposals unless:
- (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or
- (b) a change has otherwise been agreed in writing by the Environment Agency.
- 2.6.3 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall submit a CQA Validation Report to the Environment Agency as soon as practicable following the construction of the new cell.
- OR** *The operator shall prepare a CQA Validation Report to cover every [six] month period of construction of the new cell. The operator shall submit the CQA validation report to the Environment Agency as soon as practicable.*
- 2.6.4 No construction of landfill infrastructure shall commence until the operator has submitted relevant construction proposals or a written request to use previous construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.
- 2.6.5 The construction of the landfill infrastructure shall take place only in accordance with the approved construction proposals unless:
- (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or
- (b) a change has otherwise been agreed in writing by the Environment Agency.
- 2.6.6 The operator shall submit a CQA Validation Report as soon as practicable following the construction of the landfill infrastructure.
- 2.6.7 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.6.4 and 2.6.5 do not apply and the relevant landfill infrastructure may be constructed, provided that the construction proposals are submitted to the Environment Agency as soon as practicable.
- 2.6.8 For the purposes of conditions 2.6.1, 2.6.3 and 2.6.4, the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the relevant construction proposals or CQA Validation Report, either:
- (a) confirmed whether or not it is satisfied; or
- (b) informed the operator that it requires further information.
- 2.6.9 Where the Environment Agency has required further information under condition 2.6.8(a), the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the further information, either:
- (a) confirmed whether or not it is satisfied; or
- (b) informed the operator that it requires further information.

## 2.7 Waste acceptance

2.7.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Wastes shall only be accepted for disposal if:

- (a) they are listed in schedule 2, and
- (b) they are inert waste, and
- (c) they are not liquid waste (including waste waters but excluding sludge), and
- (d) all the relevant waste acceptance procedures have been completed, and
- (e) they fulfil the relevant waste acceptance criteria, and
- (f) they have not been diluted or mixed solely to meet the relevant waste acceptance criteria, and
- (g) they are wastes which have been treated, except for wastes for which treatment is not technically feasible.

2.7.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall visually inspect:

- (a) without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the landfill; and
- (b) waste at the point of deposit;
- (c) waste at the point of dispatch

and shall satisfy itself that it conforms to the basic characterisation documentation submitted by the holder.

2.7.3 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Where the operator has taken samples to establish that the waste is in conformity with the documentation submitted by the holder then the samples taken shall be retained for at least one month and results of any analysis for at least two years.

2.7.4 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator on accepting each delivery of waste shall provide a receipt to the person delivering it.

2.7.5 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawing [ESID4].

2.7.6 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits in schedule 1 table S1.5.

2.7.7 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall maintain and implement a system which ensures that a record is made of the quantity, characteristics, date of delivery and, where practicable, origin of any waste that is received for disposal or recovery and of the identity of the producer, or in the case of multiple collection vehicles, of the collector of such waste. Any information regarded by the operator as commercially confidential shall be clearly identified in the record.

## 2.8 Closure and aftercare

2.8.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall maintain a closure and aftercare management plan.

## 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 for surface water quality specified in schedule 3, table S3.4 shall not be exceeded.**
- 3.1.3 **The limits for landfill gas arising from the facility set out in schedule 3, tables S3.3 shall not be exceeded.**
- 3.1.4 **The limits for particulate matter arising from the facility set out in schedule 3, table S3.5, shall not be exceeded.**
- 3.1.5 **The operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment:**
- (a) **between nine and six months prior to the sixth anniversary of the granting of the permit, and**
  - (b) **between nine and six months prior to every subsequent six years after the sixth anniversary of the granting of the permit.**

### 3.3 Noise and vibration

- 3.3.1 **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.**

**OR**

- 3.3.1 **The [rating] level of noise emitted from the site [during normal operations/annual shut down and maintenance] shall not exceed [X] dB, expressed as an  $L_{Aeq, T}$ , between [hhmm] and [hhmm] Monday to Friday and [Y] dB at any other time, as measured or assessed on the [specified boundary/boundaries/location] of the site at [location(s) x, yx, z] on plan reference Y attached to this permit. The locations shall be chosen and the measurements and assessment made according to BS4142:1997.**
- 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 noise and vibration, submit to the Environment Agency 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 the Environment Agency.**

### 3.4 Monitoring

- 3.4.1 **The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring and any other actions for the parameters specified in the following tables in schedule 3 to this permit:**
- (a) **Point source emissions specified in table S3.1;**
  - (b) **Groundwater specified in table S3.2;**

- (c) Landfill gas specified in table S3.3;
  - (d) Surface water specified in table S3.4; and
  - (e) Particulate matter specified in table S3.5.
- 3.4.2 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.
- 3.4.3 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* A topographical survey of the site referenced to Ordnance Datum shall be carried out:
- (a) annually, or prior to the disposal of waste in any new cell or new development area of the landfill whichever is the shorter period, and
  - (b) following closure of the landfill or part of the landfill.
- The topographical survey shall be used to produce a plan of a scale adequate to show the surveyed features of the site.

## 4 Information

### 4.1 Records

- 4.1.1 (d)
- (i) the results of groundwater monitoring;
  - (ii) landfill gas monitoring;
  - (iii) waste types and quantities;
  - (iv) the specification and as built drawings of the basal and sidewall engineering systems

### 4.2 Reporting

- 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 this permit against the relevant assumptions, parameters and results in the risk assessments submitted in relation to this installation and any agreed amendments thereto;
  - (b) *the annual production/ treatment set out in schedule 4 table S4.2.*
  - (c) the topographical surveys required by condition 3.4.3 other than those submitted as part of a CQA validation report;
  - (d) the volumetric difference (reported in cubic metres) between the most recent topographical survey and the previous annual topographical survey i.e. the additional volume of the landfill void that is occupied by waste;

- (e) an assessment of the settlement behavior of the landfill body based on the difference between the most recent topographical survey and previous annual topographical survey for the areas of the landfill which did not receive waste between the surveys;
  - (f) a calculation of the remaining capacity (reported in cubic metres) derived from the pre-settlement contours and the most recent topographical survey;
- 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 S4.3; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 Within one 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

#### 4.3.4

In any other case:

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

## Schedule 6 - Interpretation

*"annually"* means once every year.

*"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.

*"Construction Proposals"*,

- for new cells, means written information at a level of detail appropriate to the complexity and pollution risk, on stability assessment (where relevant) and the construction quality assurance (CQA) programme in relation to the new cell.
- for landfill infrastructure, means the design, specifications of materials selected, stability assessment (where relevant) and the construction quality assurance (CQA) programme in relation to the landfill infrastructure.

“CQA Validation Report” means the final “as built” construction and engineering details of the new cell or of the Landfill Infrastructure. It must provide a comprehensive record of the construction and must include, where relevant:

- The results of all testing required by the CQA programme - this must include the records of any failed tests with a written explanation, details of the remedial action taken, referenced to the appropriate secondary testing;
- Plans showing the location of all tests;
- “As-built” plans and sections of the works;
- Copies of the site engineer’s daily records;
- Records of any problems or non-compliance and the solution applied;
- Any other site specific information considered relevant to proving the integrity of the new cell or Landfill Infrastructure;
- Validation by a qualified person that all of the construction has been carried out in accordance with the construction proposals.

“Landfill Infrastructure” means any specified element of the:

- surface water drainage systems;
- groundwater monitoring boreholes;
- landfill gas monitoring boreholes;

within the Site.

“Liquids” means any liquid other than leachate within the landfill.

“New Cell” means any new cell, part of a cell or other similar new area of the Site where waste deposit is to commence after issue of this permit and can comprise:

- groundwater under-drainage system;
- sub-grade;
- artificially established geological barriers;
- cell or area surface water drainage system;
- side wall subgrade and containment systems;

for the new cell.

“No impact” means that the change made to the construction process will not alter the agreed design criteria, specification or performance in a way that has a negative effect.

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



“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.

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 the limit.

# Annex 15 – Part A Landfills for Haz non-haz Waste

## 1 Management

### 1.1 General management

1.1.4 The operator shall comply with the requirements of an approved competence scheme.

### 1.2 Finance

1.2.1 The financial provision for meeting the obligations under this permit <set out in the operator's letter dated (include serial number for identification)/ agreement made between the operator and the Environment Agency dated> shall be maintained by the operator throughout the subsistence of this permit and the operator shall produce evidence of such provision whenever required by the Environment Agency.

Or

1.2.1 No activities authorised by this permit shall be commenced unless the operator has entered into an Agreement with the Environment Agency to secure financial provision for meeting the obligations under this permit and has provided the provision.

1.2.2 The operator shall give prior notice to the Environment Agency of its intention to commence operations at the site.

1.2.3 The financial provision provided under condition 1.2.1 above shall thereafter be maintained by the operator throughout the subsistence of the permit and the Operator shall produce evidence of such provision whenever required by the Environment Agency.

1.2.4 The operator shall ensure that the charges it makes for the disposal of waste in the landfill cover all of the following:

- (a) the costs of setting up and operating the landfill;
- (b) the costs of the financial provision required by condition 1.2.1; and
- (c) the estimated costs for the closure and aftercare of the landfill.

1.2.2 The operator shall ensure that the charges it makes for the disposal of waste in the landfill cover all of the following:

- (a) the costs of setting up and operating the landfill;
- (b) the costs of the financial provision required by condition 1.2.1; and
- (c) the estimated costs for the closure and aftercare of the landfill.

### 1.3 Energy efficiency

1.3.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* 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) Implement any appropriate measures identified by a review.

## **1.4 Multiple operator installations**

1.4.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Where the operator notifies the Environment Agency under condition 4.3.1 (a) or 4.3.1 (c), the operator shall also notify without delay the other operator(s) of the installation of the same information.

## **1.5 Efficient use of raw materials**

1.5.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* 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.

## **1.6 Avoidance, recovery and disposal of wastes produced by the activities**

1.6.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall:

- (a) take appropriate measures to ensure that waste produced by the activities is avoided or reduced, or where waste is produced it is recovered wherever practicable or otherwise disposed of in a manner which minimises its impact on the environment;
- (b) review and record at least every four years whether changes to those measures should be made; and
- (c) take any further appropriate measures identified by a review.

# **2 Operations**

## **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.

OR

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, which is within the area edged in red on the site plan that represents the extent of the installation covered by this permit and that/those of (the) other operator(s) of the installation.

## 2.3 Operating techniques

2.3.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Any raw materials or fuels listed in schedule 2 table S2.2 shall conform to the specifications set out in that table.

2.3.3 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.

2.3.4 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

## 2.6 Landfill Engineering

2.6.1 No construction of any new cell of the landfill shall commence until the operator has submitted construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.

2.6.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Where the operator proposes to construct any new cell other than the first cell, but proposes no change from the design of the most recently approved cell which could have any impact on the performance of any element of the design, no construction of the new cell shall commence until the operator has submitted a cell layout drawing and the Environment Agency has confirmed that it is satisfied with the cell layout drawing.

2.6.3 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The construction /of a new cell shall take place only in accordance with the approved construction proposals unless:

- (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or
- (b) a change has otherwise been agreed in writing by the Environment Agency.

2.6.4 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* No disposal of waste shall take place in a new cell until the operator has submitted a CQA Validation Report and the Environment Agency has confirmed that it is satisfied with the CQA Validation Report.

2.6.5 No construction of landfill infrastructure shall commence until the operator has submitted relevant construction proposals or a written request to use previous construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.

2.6.6 The construction of the landfill infrastructure shall take place only in accordance with the approved construction proposals unless:

- (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or
- (b) a change has otherwise been agreed in writing by the Environment Agency.

- 2.6.7 The operator shall submit a CQA Validation Report as soon as practicable following the construction of the relevant landfill infrastructure.
- 2.6.8 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.6.5 and 2.6.6 do not apply and the relevant landfill infrastructure may be constructed, provided that the construction proposals are submitted to the Environment Agency as soon as practicable.
- 2.6.9 For the purposes of conditions 2.6.1, 2.6.2, 2.6.4 and 2.6.5, the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the relevant construction proposals or CQA Validation Report, either:
- (a) confirmed whether or not it is satisfied; or
  - (b) informed the operator that it requires further information.
- 2.6.10 Where the Environment Agency has required further information under condition 2.6.9(b), the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the further information, either:
- (a) confirmed whether or not it is satisfied; or
  - (b) informed the operator that it requires further information.

## 2.7 Waste acceptance

- 2.7.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.) Wastes shall only be accepted for disposal if:*
- (a) they are listed in schedule 2, and
  - (b) they are hazardous waste, and
  - (c) they are not liquid waste (including waste waters but excluding sludge [and excluding liquid waste accepted at a permitted leachate treatment activity]), and
  - (d) they are not waste which in the conditions of landfill is explosive, corrosive, oxidising, highly flammable or flammable, and
  - (e) they are not hospital and other clinical infectious wastes from medical or veterinary establishments, and
  - (f) they are not chemical substances from research and development or teaching activities, for example laboratory residues, which are unidentified and/or which are new and whose effects on man and/or the environment are unknown, and
  - (g) all the relevant waste acceptance procedures have been completed, and
  - (h) they fulfil the relevant waste acceptance criteria, and
  - (i) they have not been diluted or mixed solely to meet the relevant waste acceptance criteria, and
  - (j) they are wastes which have been treated, except for where treatment would not reduce its quantity or the hazards which it poses to human health or the environment, [or liquid waste accepted for treatment at a permitted leachate treatment activity].
- 2.7.1 Wastes shall only be accepted for disposal if:
- (a) they are listed in schedule 2, and

- (b) they are non- hazardous waste [or] [asbestos and construction materials containing asbestos] [or] [stable, non reactive hazardous wastes], and
  - (c) they are not whole used tyres (other than bicycle tyres and tyres with an outside diameter of more than 1400mm), and
  - (d) they are not shredded used tyres, and
  - (e) they are not liquid waste (including waste waters but excluding sludge~~and excluding liquid waste accepted at a permitted leachate treatment activity~~), and
  - (f) they are not chemical substances from research and development or teaching activities, for example laboratory residues, which are unidentified and/or which are new and whose effects on man and/or the environment are unknown, and
  - (g) all the relevant waste acceptance procedures have been completed, and
  - (h) they fulfil the relevant waste acceptance criteria, and
  - (i) they have not been diluted or mixed solely to meet the relevant waste acceptance criteria, and
  - (j) they are wastes which have been treated, except for: inert wastes for which treatment is not technically feasible; or it is waste other than inert waste and treatment would not reduce its quantity or the hazards which it poses to human health or the environment, [or liquid waste accepted for treatment at a permitted leachate treatment activity, and
  - (k) where they are wastes with a code beginning with 07 05 and 16 03, they shall exclude waste medicinal products and pharmaceutically active waste materials arising from their manufacture.
- 2.7.2 Stable non-reactive hazardous waste shall not be deposited in cells used or intended to be used for the disposal of biodegradable non-hazardous waste. Stable non-reactive hazardous waste and non-hazardous waste which is landfilled in the same cell must meet the relevant waste acceptance criteria.
- 2.7.3 Gypsum and other high sulphate bearing waste shall only be disposed of in cells where no biodegradable waste is accepted. Wastes disposed of in a cell with gypsum and other high sulphate bearing wastes must meet the relevant waste acceptance criteria.
- 2.7.4 Asbestos containing wastes and construction materials containing asbestos shall only be disposed of with other suitable wastes and not in cells containing biodegradable non-hazardous waste. Asbestos waste and construction material containing asbestos must meet the relevant waste acceptance criteria and must be covered daily and before each compaction operation with appropriate material.
- 2.7.5 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall visually inspect:
- (a) without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the landfill; and
  - (b) waste at the point of deposit;
  - (c) waste at the point of dispatch
- and shall satisfy itself that it conforms to the basic characterisation documentation submitted by the holder.

- 2.7.6 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Where the operator has taken samples to establish that the waste is in conformity with the documentation submitted by the holder then the samples taken shall be retained for at least one month and results of any analysis for at least two years.
- 2.7.7 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)*The operator on accepting each delivery of waste shall provide a receipt to the person delivering it.
- 2.7.8 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawing [ESID4].
- 2.7.9 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits in schedule 1 table S1.5.
- 2.7.10 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall maintain and implement a system which ensures that a record is made of the quantity, characteristics, date of delivery and, where practicable, origin of any waste that is received for disposal or recovery and of the identity of the producer, or in the case of municipal waste and multiple collection vehicles, of the collector of such waste. Any information regarded by the operator as commercially confidential shall be clearly identified in the record.
- 2.7.11 The operator shall maintain and implement a system to record the disposal location of any hazardous waste.
- 2.7.12 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The waste acceptance ratios shall not exceed the limits set out in schedule 1 table S1.6.

## 2.8 Leachate levels

- 2.8.1 The limits for the level of leachate listed in schedule 3 table S3.1 shall not be exceeded.  
There are no conditions relating to leachate levels in this permit.

## 2.9 Closure and aftercare

- 2.9.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)*The operator shall maintain a closure and aftercare management plan.

## 2.10 Landfill gas management

- 2.10.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall take appropriate measures, including, but not limited to, those specified in any approved landfill gas management plan, to:
- (a) collect landfill gas; and
  - (b) control the migration of landfill gas.
- 2.10.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall use the collected landfill gas to produce energy. If the collected landfill gas cannot be used to produce energy, the operator shall flare the gas.
- 2.10.3 The operator shall:

- (b) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a revised landfill gas management plan;
- (b) implement the revised landfill gas management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

## 2.11 Pests

2.11.1 The activities shall not give rise to pollution or hazards from pests. 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.

2.11.2 The operator shall:

- (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan;
- (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

# 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 S3.2, S3.3 and S3.4.

3.1.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The limits given in Table S3.2 shall not be exceeded, save that compliance with an emission limit in that table shall include incorporation of the uncertainty allowance stated in Environment Agency guidance LFTGN 05 and LFTGN 08.

3.1.3 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Where a substance is specified in schedule 3 table S3.3 or S3.4 but no limit is set for it, the concentration of such substance in emissions to water from the relevant emission point shall be no greater than the background concentration.

3.1.4 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* There shall be no emission from the activities into groundwater of any hazardous substances contrary to the EP Regulations.

3.1.5 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* There shall be no emission from the activities into groundwater of any non-hazardous pollutants so as to cause pollution.

3.1.6 The trigger levels for emissions into groundwater for the parameter(s) and monitoring point(s) set out in schedule 3 table S3.5 shall not be exceeded.

3.1.7 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment:



- (a) between nine and six months prior to the sixth anniversary of the granting of the permit, and
- (b) between nine and six months prior to every subsequent six years after the sixth anniversary of the granting of the permit.

OR

- 3.1.7 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)*The operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment between nine and six months prior to the [1<sup>st</sup> November 2014] and between nine and six months prior to every sixth anniversary thereafter.
- 3.1.8 The limits for landfill gas arising from the installation set out in schedule 3, tables S3.6 and S3.7 shall not be exceeded.
- 3.1.9 The limits for particulate matter arising from the installation set out in schedule 3, table S3.12 shall not be exceeded.

### 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 emission from [point x] shall not exceed [Y] odour units.
- 3.3.3 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;
  - (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.

OR

- 3.4.1 The [rating] level of noise emitted from the site [during normal operations/annual shut down and maintenance] shall not exceed [X] dB, expressed as an  $L_{Aeq, T}$ , between [hhmm] and [hhmm] Monday to Friday and [Y] dB at any other time, as measured or assessed on the [specified boundary/boundaries/location] of the site at [location(s) x, yx, z] on plan reference Y attached to this permit. The locations shall be chosen and the measurements and assessment made according to BS4142:1997.
- 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;

- (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 and any other actions specified in the following tables in schedule 3 to this permit:
- (a) Leachate specified in tables S3.1 and S3.9;
  - (b) Point source emissions specified in tables S3.2, S3.3 and S3.4;
  - (c) Groundwater specified in tables S3.5 and S3.11;
  - (d) Landfill gas specified in tables S3.6, S3.7 and S3.8;
  - (e) Surface water specified in table S3.10; and
  - (f) Particulate matter specified in table S3.12.
- 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 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* A topographical survey of the site referenced to ordnance datum shall be carried out:
- (a) annually, and
  - (b) prior to the disposal of waste in any new cell or new development area of the landfill, and
  - (c) following closure of the landfill or part of the landfill.

The topographical survey shall be used to produce a plan of a scale adequate to show the surveyed features of the site.

## 4. Information

### 4.1 Records

- 4.1.1 (d)
- (i) the results of groundwater monitoring;
  - (ii) sub-surface landfill gas monitoring;
  - (iii) leachate levels, quality and quantities;
  - (iv) landfill gas generation and collection;
  - (v) waste types and quantities;
  - (vi) the location of hazardous waste deposits; and
  - (vii) the specification and as built drawings of the basal, sidewall and capping engineering systems.

## 4.2 Reporting

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 this permit against the relevant assumptions, parameters and results in the risk assessments submitted in relation to this installation and any agreed amendments thereto;
- (b) the energy consumed at the site, reported in the format set out in schedule 4 table S4.3
- (c) the annual production/treatment set out in schedule 4 table S4.2;
- (d) the topographical surveys required by condition 3.5.3 other than those submitted as part of a CQA validation report;
- (e) the volumetric difference (reported in cubic metres) between the most recent topographical survey and the previous annual topographical survey i.e. the additional volume of the landfill void that is occupied by waste;
- (f) an assessment of the settlement behavior of the landfill body based on the difference between the most recent topographical survey and previous annual topographical survey for the areas of the landfill which did not receive waste between the surveys;
- (g) a calculation of the remaining capacity (reported in cubic metres) derived from the pre-settlement contours and the most recent topographical survey;
- (h) details of compliance with the waste acceptance ratios set out in schedule 1 table S1.6.

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 Within one 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.

4.2.5 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.

## 4.3 Notifications

4.3.4 In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and

- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

## Schedule 6 - Interpretation

*“annually”* means once every year.

*“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.

*“Background concentration”* means such concentration of that substance as is present in:

- For emissions to surface water, the surface water quality up-gradient of the site; or
- For emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge; or
- For emissions of landfill gas, the ground or air outside the site and not attributable to the site.

*“Cell layout drawing”* means:

- (a) A drawing or drawings of the proposed new cell that illustrate(s) in sufficient detail:
  - i. the location of the new cell on the site;
  - ii. the proposed level (Above Ordnance Datum) of the base of the excavation;
  - iii. the proposed finished levels of all containment and leachate drainage layers;
  - iv. the positions of leachate management infrastructure; and
  - v. the positions of landfill gas infrastructure (if appropriate).
- (b) A detailed written explanation of any minor design changes from the most recently approved cell that result from the new cell layout. This would include, for example:
  - i. changes to slope length and gradient within the cell;
  - ii. new leachate or landfill gas infrastructure construction design;
  - iii. slope stability issues such as new basal excavation level; and/or
  - iv. depth of waste.

*“Construction Proposals”* means written information, at a level of detail appropriate to the complexity and pollution risk, on the design, specifications of materials selected, stability assessment (where relevant) and the construction quality assurance (CQA) programme in relation to the New Cell or Landfill

Infrastructure.

*“CQA Validation Report”* means the final “as built” construction and engineering details of the New Cell or of the Landfill Infrastructure. It must provide a comprehensive record of the construction and must include, where relevant:

- The results of all testing required by the CQA programme - this must include the records of any failed tests with a written explanation, details of the remedial action taken, referenced to the appropriate secondary testing;
- Plans showing the location of all tests;
- “As-built” plans and sections of the works;
- Copies of the site engineer’s daily records;
- Records of any problems or non-compliances and the solution applied;
- Any other site specific information considered relevant to proving the integrity of the New Cell or Landfill Infrastructure;
- Validation by a qualified person that all of the construction has been carried out in accordance with the Construction Proposals.

*“Landfill Infrastructure”* means any specified element of the:

- permanent capping;
- temporary capping (i.e. engineered temporary caps not cover materials);
- leachate abstraction systems;
- leachate transfer, treatment and storage systems;
- surface water drainage systems;
- leachate monitoring wells;
- groundwater monitoring boreholes;
- landfill gas monitoring boreholes;
- landfill gas management systems;
- lining within the installation.

within the site.

*“Liquids”* means any liquid other than leachate within the engineered landfill containment system.

*“LFTGN 05”* means Environment Agency Guidance for monitoring enclosed landfill gas flares.

*“LFTGN 07”* means Environment Agency Guidance on monitoring landfill gas surface emissions.

*“LFTGN 08”* means Environment Agency Guidance for monitoring landfill gas engines.

*“Medicinal product”* means any medicine licensed by the Medicines and Healthcare products Regulatory Agency (MHRA) of their predecessors under the Medicines Act 1968, section 130.

*“M2”* means Environment Agency Guidance Monitoring of stack emissions to air.

*“New Cell”* means any new cell, part of a cell or other similar new area of the site where waste deposit is

to commence after issue of this permit and can comprise:

- groundwater under-drainage system;
- permanent geophysical leak location system;
- leak detection layer;
- sub-grade;
- barriers;
- liners;
- leachate collection system;
- leachate abstraction system;
- separation bund/layer;
- cell or area surface water drainage system;
- side wall subgrade and containment systems;

for the New Cell.

*"No impact"* means that the change made to the construction process will not affect the agreed design criteria, specification or performance in a way that has a negative effect.

*"Pests"* means Birds, Vermin and Insects.

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

*"Review of the Hydrogeological Risk Assessment"* means a written review of the hydrogeological risk assessment included in the Application, together with any other parts of the Application that addressed the requirements of the EP Regulations. The review shall assess whether the activities of disposal or tipping for the purpose of disposal of waste authorised by the permit continue to meet the requirements of the EP Regulations.

*"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.

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 the standards included in Environment Agency Guidance for Monitoring Enclosed Landfill Gas Flares LFTGN 05 or Guidance for Monitoring Landfill Gas Engine Emissions LFTGN 08.

# Annex 16 – Landfills for Inert Waste (in aftercare phase)

## 1 Management

### 1.1 General management

1.1.4 The operator shall comply with the requirements of an approved competence scheme.

### 1.2 Finance

1.2.1 The financial provision for meeting the obligations under this permit set out in the operator's letter dated (include serial number for identification)/ agreement made between the operator and the Environment Agency dated shall be maintained by the operator throughout the subsistence of this permit and the operator shall produce evidence of such provision whenever required by the Environment Agency.

## 2 Operations

### 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.

### 2.6 Landfill Engineering

2.6.1 No construction of landfill infrastructure shall commence until the operator has submitted relevant construction proposals or a written request to use previous construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.

2.6.2 The construction of the landfill infrastructure shall take place only in accordance with the approved construction proposals unless:

- (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or
- (b) a change has otherwise been agreed in writing by the Environment Agency.

2.6.3 The operator shall submit a CQA Validation Report as soon as practicable following the construction of the landfill infrastructure.

2.6.4 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.6.1 and 2.6.2 do not apply and the relevant landfill infrastructure may be constructed, provided that the construction proposals are submitted to the Environment Agency as soon as practicable.

- 2.6.5 For the purpose of conditions 2.6.1, the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the relevant construction proposals or CQA Validation Report, either:
- (a) confirmed whether or not it is satisfied; or
  - (b) informed the operator that it requires further information.
- 2.6.6 Where the Environment Agency has required further information under condition 2.6.5(b), the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the further information, either:
- (a) confirmed whether or not it is satisfied; or
  - (b) informed the operator that it requires further information.

## 2.7 Waste acceptance

- 2.7.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* No waste shall be accepted for disposal at the site.
- 2.7.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Wastes shall only be accepted for recovery if:
- (a) they are listed in schedule 2, and
  - (b) they are not liquid waste (including waste waters but excluding sludge).
- 2.7.3 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall visually inspect:
- (a) without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the landfill; and
  - (b) waste at the point of deposit;
  - (c) waste at the point of dispatch
- and shall satisfy itself that it conforms to the basic characterisation documentation submitted by the holder.
- 2.7.4 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawing [ESID4].
- 2.7.5 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits in schedule 1 table S1.5.
- 2.7.6 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall maintain and implement a system which ensures that a record is made of the quantity, characteristics, date of delivery and, where practicable, origin of any waste that is received for recovery and of the identity of the producer, or in the case of multiple collection vehicles, of the collector of such waste. Any information regarded by the operator as commercially confidential shall be clearly identified in the record.

## 2.8 Closure and aftercare

- 2.8.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall maintain a closure and aftercare management plan.



## 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 for surface water quality specified in schedule 3, table S3.2 shall not be exceeded.
- 3.1.3 The limits for landfill gas arising from the facility set out in schedule 3, table S3.3 shall not be exceeded.
- 3.1.4 The limits for particulate matter arising from the facility set out in schedule 3, table S3.5 shall not be exceeded.
- 3.1.5 The operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment:
- (a) between nine and six months prior to the fourth anniversary of the granting of the permit, and
  - (b) between nine and six months to every subsequent four years after the sixth anniversary of the granting of the permit.

### 3.3 Noise and vibration

- 3.3.1 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.

OR

- 3.3.1 The [rating] level of noise emitted from the site [during normal operations/annual shut down and maintenance] shall not exceed [X] dB, expressed as an  $L_{Aeq, T}$ , between [hhmm] and [hhmm] Monday to Friday and [Y] dB at any other time, as measured or assessed on the [specified boundary/boundaries/location] of the site at [location(s) x, yx, z] on plan reference Y attached to this permit. The locations shall be chosen and the measurements and assessment made according to BS4142:1997.
- 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 noise and vibration, submit to the Environment Agency 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 the Environment Agency.

### 3.4 Monitoring

- 3.4.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring and any other actions for the parameters specified in the following tables in schedule 3 to this permit:
- (a) Point source emissions specified in table S3.1;
  - (b) Groundwater specified in table S3.2;

- (c) Landfill gas specified in table S3.3;
  - (d) Surface water specified in table S3.4; and
  - (e) Particulate matter specified in table S3.5.
- 3.4.2 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.
- 3.4.3 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* A topographical survey of the site referenced to Ordnance Datum shall be carried out
- (a) annually, unless otherwise agreed with the Environment Agency, and
  - (b) following closure of the landfill.
- The topographical survey shall be used to produce a plan of a scale adequate to show the surveyed features of the site.

## 4 Information

### 4.1 Records

- 4.1.1 (d)
- (iii) the results of groundwater monitoring;
  - (iv) landfill gas monitoring;
  - (v) waste types and quantities;

### 4.2 Reporting

- 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 this permit against the relevant assumptions, parameters and results in the risk assessments submitted in relation to this site and any agreed amendments thereto;
  - (b) the topographical survey required by condition 3.4.3;
  - (c) the volumetric difference (reported in cubic metres) between the most recent topographical survey and the previous annual topographical survey i.e. the additional volume of the landfill void that is occupied by waste;
  - (d) an assessment of the settlement behaviour of the landfill body based on the difference between the most recent topographical survey and previous annual topographical survey for the areas of the landfill which did not receive waste between the surveys;
  - (e) a calculation of the remaining capacity (reported in cubic metres) derived from the pre-settlement contours and the most recent topographical survey;

permit.

- 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 S4.3; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 Within one 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.
- 4.2.5 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.

### 4.3 Notifications

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

## Schedule 6 - Interpretation

*"annually"* means once every year.

*"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.

*"Construction Proposals"*, for landfill infrastructure, means the design, specification of materials selected, stability assessment (where relevant) and the construction quality assurance (CQA) programme in relation to the landfill infrastructure.

“CQA Validation Report” means the final “as built” construction and engineering details of the Landfill Infrastructure. It must provide a comprehensive record of the construction and must include, where relevant:

- The results of all testing required by the CQA programme - this must include the records of any failed tests with a written explanation, details of the remedial action taken, referenced to the appropriate secondary testing;
- Plans showing the location of all tests;
- “As-built” plans and sections of the works;
- Copies of the site engineer’s daily records;
- Records of any problems or non-compliance and the solution applied;
- Any other site specific information considered relevant to proving the integrity of the Landfill Infrastructure;
- Validation by a qualified person that all of the construction has been carried out in accordance with the construction proposals.

“Landfill Infrastructure” means any specified element of the:

- surface water drainage systems;
- groundwater monitoring boreholes;
- landfill gas monitoring boreholes;

within the Site.

“Liquids” means any liquid other than leachate within the landfill.

“No impact” means that the change made to the construction process will not alter the agreed design criteria, specification or performance in a way that has a negative effect.

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

“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.

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 the limit.

# Annex 17 – Part A Landfills for Haz non-haz Waste (in the aftercare phase)

## 1 Management

### 1.1 General management

1.1.4 The operator shall comply with the requirements of an approved competence scheme.

### 1.2 Finance

1.2.1 The financial provision for meeting the obligations under this permit set out in the operator's letter dated (include serial number for identification)/ agreement made between the operator and the Environment Agency dated shall be maintained by the operator throughout the subsistence of this permit and the operator shall produce evidence of such provision whenever required by the Environment Agency.

### 1.3 Energy efficiency

1.3.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall:

- (a) Review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (b) Implement any appropriate measures identified by a review.

### 1.4 Multiple operator installations

1.4.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Where the operator notifies the Environment Agency under condition 4.3.1 (a) or 4.3.1 (c), the operator shall also notify without delay the other operator(s) of the installation of the same information.

## 2 Operations

### 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.

### 2.6 Landfill Engineering

2.6.1 No construction of landfill infrastructure shall commence until the operator has submitted relevant construction proposals or a written request to use previous construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.

- 2.6.2 The construction of the landfill infrastructure shall take place only in accordance with the approved construction proposals unless:
- (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or
  - (b) a change has otherwise been agreed in writing by the Environment Agency.
- 2.6.3 The operator shall submit a CQA Validation Report as soon as practicable following the construction of the relevant landfill infrastructure.
- 2.6.4 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.6.1 and 2.6.2 do not apply and the relevant landfill infrastructure may be constructed, provided that the construction proposals are submitted to the Environment Agency as soon as practicable.
- 2.6.5 For the purpose of condition 2.6.1, the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the relevant construction proposals or CQA Validation Report, either:
- (a) confirmed whether or not it is satisfied; or
  - (b) informed the operator that it requires further information.
- 2.6.6 Where the Environment Agency has required further information under condition 2.6.5(b), the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the further information, either:
- (a) confirmed whether or not it is satisfied; or
  - (b) informed the operator that it requires further information.

## 2.7 Waste acceptance

- 2.7.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.) No waste shall be accepted for disposal within the facility*
- 2.7.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.) Wastes shall only be accepted for recovery if:*
- (a) they are listed in schedule 2,
  - (b) they are not liquid waste (including waste waters but excluding sludge [and excluding liquid waste accepted at a permitted leachate treatment activity]).
- 2.7.3 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall visually inspect:
- (a) without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the landfill; and
  - (b) waste at the point of deposit;
  - (c) waste at the point of dispatch
- and shall satisfy itself that it conforms to the basic characterisation documentation submitted by the holder.
- 2.7.4 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator on accepting each delivery of waste shall provide a receipt to the person delivering it.

- 2.7.5 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawing [ESID4].
- 2.7.6 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits in schedule 1 table S1.4.
- 2.7.7 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall maintain and implement a system which ensures that a record is made of the quantity, characteristics, date of delivery and, where practicable, origin of any waste that is received for recovery and of the identity of the producer. Any information regarded by the operator as commercially confidential shall be clearly identified in the record.

## 2.8 Leachate levels

- 2.8.1 The limits for the level of leachate listed in schedule 3 table S3.1 shall not be exceeded.
- There are no conditions relating to leachate levels in this permit.

## 2.9 Closure and aftercare

- 2.9.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall maintain a closure and aftercare management plan.

## 2.10 Landfill Gas Management

- 2.10.1 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall take appropriate measures, including, but not limited to, those specified in any approved landfill gas management plan, to:
- (a) collect landfill gas; and
  - (b) control the migration of landfill gas.
- 2.10.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall use the collected landfill gas to produce energy. If the collected landfill gas cannot be used to produce energy, the operator shall flare or otherwise treat the gas.
- 2.10.3 The operator shall:
- (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a revised landfill gas management plan;
  - (b) implement the revised landfill gas management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

# 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 S3.2, S3.3 and S3.4.

- 3.1.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The limits given in Table S3.2 shall not be exceeded, save that compliance with an emission limit in that table shall include incorporation of the uncertainty allowance stated in Environment Agency guidance LFTGN 05 and LFTGN 08.
- 3.1.3 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Where a substance is specified in schedule 3 table S3.3 or S3.4 but no limit is set for it, the concentration of such substance in emissions to water from the relevant emission point shall be no greater than the background concentration.
- 3.1.4 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* There shall be no emission from the activities into groundwater of any hazardous substances contrary to the EP Regulations.
- 3.1.5 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* There shall be no emission from the activities into groundwater of any non-hazardous pollutants so as to cause pollution.
- 3.1.6 The trigger levels for emissions into groundwater for the parameter(s) and monitoring point(s) set out in schedule 3 table S3.5 shall not be exceeded.
- 3.1.7 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment:
- (a) between nine and six months prior to the sixth anniversary of the granting of the permit, and
  - (b) between nine and six months prior to every subsequent six years after the sixth anniversary of the granting of the permit.
- 3.1.8 The limits for landfill gas arising from the [installation/facility] set out in schedule 3, tables S3.6 and S3.7 shall not be exceeded.
- 3.1.9 The limits for [particulate matter arising from the [installation/facility]] set out in schedule 3, table S3.13 shall not be exceeded.

### 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 emission from [point x] shall not exceed [Y] odour units.
- 3.3.3 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;
  - (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.

OR

3.4.1 The [rating] level of noise emitted from the site [during normal operations/annual shut down and maintenance] shall not exceed [X] dB, expressed as an  $L_{Aeq, T}$ , between [hhmm] and [hhmm] Monday to Friday and [Y] dB at any other time, as measured or assessed on the [specified boundary/boundaries/location] of the site at [location(s) x, yx, z] on plan reference Y attached to this permit. The locations shall be chosen and the measurements and assessment made according to BS4142:1997.

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;
- (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 and any other actions specified in the following tables in schedule 3 to this permit:

- (a) Leachate specified in tables S3.1 and S3.9;
- (b) Point source emissions specified in tables S3.2, S3.3 and S3.4;
- (c) Groundwater specified in tables S3.5 and S3.11;
- (d) Landfill gas specified in tables S3.6, S3.7 and S3.8;
- (e) Surface water specified in table S3.10; and
- (f) Particulate matter specified in table S3.12.

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 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* A topographical survey of the site referenced to ordnance datum shall be carried out:

- (a) annually, and
- (b) following closure of the landfill or part of the landfill.

The topographical survey shall be used to produce a plan of a scale adequate to show the surveyed features of the site.

## 4. Information

### 4.1 Records

- 4.1.1 (d)
- (iii) the results of groundwater monitoring;
  - (iv) sub-surface landfill gas monitoring;
  - (v) leachate levels, quality and quantities;
  - (vi) landfill gas generation and collection;
  - (vii) waste types and quantities;
  - (viii) the location of hazardous waste deposits; and
  - (ix) the specification and as built drawings of the basal, sidewall and capping engineering systems.

### 4.2 Reporting

- 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 this permit against the relevant assumptions, parameters and results in the risk assessments submitted in relation to this [installation/facility] and any agreed amendments thereto;
  - (b) the energy consumed at the site, reported in the format set out in schedule 4 table S4.3
  - (c) the annual production/treatment set out in schedule 4 table S4.2;
  - (d) the topographical surveys required by condition 3.5.3 other than those submitted as part of a CQA validation report;
  - (e) the volumetric difference (reported in cubic metres) between the most recent topographical survey and the previous annual topographical survey i.e. the additional volume of the landfill void that is occupied by waste;
  - (f) an assessment of the settlement behaviour of the landfill body based on the difference between the most recent topographical survey and previous annual topographical survey for the areas of the landfill which did not receive waste between the surveys;
  - (g) a calculation of the remaining capacity (reported in cubic metres) derived from the pre-settlement contours and the most recent topographical survey;
- 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 Within one 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.

4.2.5 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.

### 4.3 Notifications

4.3.4 In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

## Schedule 6 - Interpretation

*"annually"* means once every year.

*"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.

*"Background concentration"* means such concentration of that substance as is present in:

- For emissions to surface water, the surface water quality up-gradient of the site; or
- For emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge; or
- For emissions of landfill gas, the ground or air outside the site and not attributable to the site.

*"Construction Proposals"* means written information, at a level of detail appropriate to the complexity and pollution risk, on the design, specifications of materials selected, stability assessment (where relevant) and the construction quality assurance (CQA) programme in relation to the Landfill Infrastructure.

*"CQA Validation Report"* means the final "as built" construction and engineering details of the Landfill

Infrastructure. It must provide a comprehensive record of the construction and must include, where relevant:

- The results of all testing required by the CQA programme - this must include the records of any failed tests with a written explanation, details of the remedial action taken, referenced to the appropriate secondary testing;
- Plans showing the location of all tests;
- "As-built" plans and sections of the works;
- Copies of the site engineer's daily records;
- Records of any problems or non-compliances and the solution applied;
- Any other site specific information considered relevant to proving the integrity of the Landfill Infrastructure;
- Validation by a qualified person that all of the construction has been carried out in accordance with the Construction Proposals.

"*Landfill Infrastructure*" means any specified element of the:

- permanent capping;
- leachate abstraction systems;
- leachate transfer, treatment and storage systems;
- surface water drainage systems;
- leachate monitoring wells;
- groundwater monitoring boreholes;
- landfill gas monitoring boreholes;
- landfill gas management systems;

within the site.

"*Liquids*" means any liquid other than leachate within the engineered landfill containment system.

"*LFTGN 05*" means Environment Agency Guidance for monitoring enclosed landfill gas flares.

"*LFTGN 07*" means Environment Agency Guidance on monitoring landfill gas surface emissions.

"*LFTGN 08*" means Environment Agency Guidance for monitoring landfill gas engines.

"*M2*" means Environment Agency Guidance Monitoring of stack emissions to air.

"*New Cell*" means any new cell, part of a cell or other similar new area of the site where waste deposit is to commence after issue of this permit and can comprise:

- groundwater under-drainage system;
- permanent geophysical leak location system;
- leak detection layer;
- sub-grade;
- barriers;

- liners;
- leachate collection system;
- leachate abstraction system;
- separation bund/layer;
- cell or area surface water drainage system;
- side wall subgrade and containment systems;

for the New Cell.

*“No impact”* means that the change made to the construction process will not affect the agreed design criteria, specification or performance in a way that has a negative effect.

*“quarter”* means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

*“Review of the Hydrogeological Risk Assessment”* means a written review of the hydrogeological risk assessment included in the Application, together with any other parts of the Application that addressed the requirements of the EP Regulations. The review shall assess whether the activities of disposal or tipping for the purpose of disposal of waste authorised by the permit continue to meet the requirements of the EP Regulations.

*“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.

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 the standards included in Environment Agency Guidance for Monitoring Enclosed Landfill Gas Flares LFTGN 05 or Guidance for Monitoring Landfill Gas Engine Emissions LFTGN 08.

# Annex 18 – Mining waste operations

## 1 Management

### 1.1 General management

- 1.1.4 The operator shall not start the closure of the mining waste facility[ies] unless agreed in writing by the Environment Agency.
- 1.1.5 The financial provision for meeting the obligations under this permit set out in the [operator's letter dated (include serial number for identification) / agreement made between the operator and the Environment Agency dated] shall be maintained by the operator throughout the subsistence of this permit and the operator shall produce evidence of such provision whenever required by the Environment Agency.

## 2 Operations

### 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

- 2.3.2 The operator shall review the waste management plan every five years from the date of initial approval.
- 2.3.3 The concentration of weak acid dissociable cyanide at the point of discharge of the tailings from the processing plant into the pond shall not exceed 10 parts per million.  
  
OR  
  
The concentration of weak acid dissociable cyanide at the point of discharge of the tailings from the processing plant into the pond shall not exceed 50 parts per million, reducing to 25 parts per million from 1 May 2013 and 10 parts per million from 1 May 2018.

## 3 Emissions and monitoring

### 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 emission from [point x] shall not exceed [Y] odour units.
- 3.3.3 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;
- (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.

OR

3.4.1 The [rating] level of noise emitted from the site [during normal operations/annual shut down and maintenance] shall not exceed [X] dB, expressed as an  $L_{Aeq, T}$ , between [hhmm] and [hhmm] Monday to Friday and [Y] dB at any other time, as measured or assessed on the [specified boundary/boundaries/location] of the site at [location(s) x, yx, z] on plan reference Y attached to this permit. The locations shall be chosen and the measurements and assessment made according to BS4142:1997.

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;
- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

## 4 Information

### 4.2 Reporting

4.2.2 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.

4.2.3 A report describing the behaviour of the mining waste facility[ies] 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 shall include a review of the results of the monitoring and assessment carried out in accordance with the conditions of this permit including an interpretive review of that data.

## 4.3 Notifications

4.3.4 In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.3.5 Where the operator proposes to make an amendment to the approved waste management plan, which 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 implementing the amended waste management plan in place of the original; and
- (b) the notification shall contain a description of the proposed amendment.

4.3.6 Following closure of the mining waste facility[ies], the Environment Agency shall be notified without delay following the detection of:

- (a) any events or developments likely to affect the stability of the waste facility; or
- (b) any significant adverse environmental effects revealed by the relevant control and monitoring procedures.

4.3.7 Any information provided under condition 4.3.5 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

4.3.8 In the event of a major accident, the operator shall immediately provide the Competent Authority with all necessary information to help minimise the consequences for human health and to assess and minimise the extent, actual or potential, of the environmental damage.

## Schedule 6 - Interpretation

*"approved waste management plan"* means a plan of the type described in Article 5(1) of Directive 2006/21/EC of the European Parliament and of the Council of 15 March 2006 on the management of waste from extractive industries and amending Directive 2004/35/EC, approved as part of the grant or variation of an environmental permit and as revised from time to time.

*"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.

*"Competent Authority"* means, in relation to –

- (a) London, the London Fire and Emergency Planning Authority;
- (b) an area where there is a fire and civil defence authority, that authority;
- (c) the Isles of Scilly, the Council of the Isles of Scilly;
- (d) an area in the rest of England, the county council for that area, or where there is no county council for that area, the district council for that area;



(e) an area in Wales, the county council or the county borough council for that area.

Whoever has drawn up the emergency plan for that Mining Waste Facility.

*“extractive waste”* means waste resulting from the prospecting, extraction, treatment and storage of mineral resources and the working of quarries, excluding waste which does not directly result from these operations.

*“hazardous waste”* has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 No.894, the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138), the List of Wastes (England) Regulations 2005 No.895 and the List of Wastes (Wales) Regulations 2005 No. 1820 (W.148).

*“inert waste”* means waste that does not undergo any significant physical, chemical or biological transformations. Inert waste will not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm human health. The total leachability and pollutant content of the waste and the ecotoxicity of the leachate must be insignificant, and in particular not endanger the quality of surface water and/or groundwater. All of the criteria listed in Article 1 of Commission Decision 2009/359 must be fulfilled.

*“mining waste facility”* means a waste facility as defined in Article 3(15) of Directive 2006/21/EC of the European Parliament and of the Council of 15 March 2006 on the management of waste from extractive industries and amending Directive 2004/35/EC, where a mining waste operation is carried out.

*“pond”* means a natural or engineered facility for disposing of fine grained waste, normally tailings, along with varying amounts of free water, resulting from the treatment of mineral resources and from the clearing and recycling of process water.

*“weak acid dissociable cyanide”* means cyanide and cyanide compounds that are dissociated with a weak acid at a defined pH.

# Annex 19 – Cement and Lime Works burning waste

## 2 Operations

### 2.3 Operating techniques

- 2.3.6 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall burn only those waste derived fuels at the locations specified in table S2.2 of schedule 2 and within the usage ranges specified in that table.
- 2.3.7 All waste derived fuels used at the installation are subject to the following conditions:
- (a) No radioactive materials or radioactive wastes (as defined by sections 1 and 2 of the Radioactive Substances Act 1993) shall be included.
  - (b) No substances with PCB concentrations greater than 10mg/kg shall be included.
  - (c) No substances with PCP concentrations greater than 100mg/kg shall be included.
  - (d) No pharmaceutical products, pesticide products, biocide products and iodine compounds shall be included except as constituents of other materials and at levels that are minimised as far as reasonably practicable.
  - (e) No dioxins or furans shall be included except as constituents of other materials and at levels that are minimised as far as reasonably practicable.
  - (f) No medical/clinical waste shall be included.
- 2.3.8 No new waste derived fuels shall be used for the purposes of carrying out a feasibility trial without obtaining the Environment Agency's prior written approval in each case. Any such feasibility trials will be limited to a maximum of [100] tonnes of the fuel and a maximum duration of [14] days.
- 2.3.9 No new waste materials shall be used as raw materials in the process except with the prior written approval of the Environment Agency, and shall be subject to the specification in table S2.1 of schedule 2 or otherwise agreed in writing with the Environment Agency.
- 2.3.10 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall ensure that prior to accepting waste derived fuels subject to condition [2.3.2] at the site, it has obtained sufficient information about the wastes to be burned as fuel to demonstrate compliance with the characteristics described in condition [2.3.2].
- 2.3.11 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall take representative samples of all waste derived fuels delivered to the site unless otherwise agreed in writing with the Environment Agency and test a representative selection of these samples to verify conformity with the information obtained as required by condition [2.3.7]. These samples shall be retained for inspection by the Environment Agency for a period of [at least 1 month] [a longer period] after the material is burned and results of any analysis made of such samples will be retained for at least 2 years after the material is burned.
- 2.3.12 Waste derived fuels shall not be burned, or shall cease to be burned, if:

- (a) the kiln is in start up (as agreed in writing with the Environment Agency); or
  - (b) the kiln is in the process of shutting down (as agreed in writing with the Environment Agency); or
  - (c) clinker production is less than [80] tonnes/hr ; or
  - (d) the [combustion chamber][other specified temperature monitor] temperature is below, or falls below, 850°C or
  - (e) the [combustion chamber][other specified temperature monitor] temperature is below, or falls below, 1100°C exceeds 1%; or
  - (f) any continuous emission limit value in schedule 3 table S3.1 is exceeded due to disturbances or failures of the abatement systems, other than under "WID abnormal operating conditions"; or
  - (g) monitoring results required to demonstrate compliance with any continuous emission limit value in schedule 3 table S3.1 are unavailable other than under "WID abnormal operating conditions".
- 2.3.13 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall record the beginning and end of each period of "WID abnormal operation", and shall restore normal operation of the failed equipment or replace the failed equipment as rapidly as possible.
- 2.3.14 Where, during "WID abnormal operation", any of the following situations arise, the operator shall, as soon as is practicable, cease the burning of waste derived fuels until normal operation can be restored:
- (a) continuous measurement shows that an emission exceeds any emission limit value in schedule 3 table S3.1 due to disturbances or failures of the abatement systems, or continuous emission monitor(s) or continuous effluent monitoring device(s) are out of service, as the case may be, for a total of four hours uninterrupted duration;
  - (b) the cumulative duration of WID abnormal operation periods over one calendar year exceeds 60 hours on each kiln.
- 2.3.15 The operator shall interpret the end of the period of "WID abnormal operation" as the earliest of the following:
- (a) when the failed equipment is repaired and brought back into normal operation;
  - (b) when the operator initiates a shut down of the waste derived fuels, as described in the application or as agreed in writing with the Environment Agency;
  - (c) when a period of four hours has elapsed from the start of the "WID abnormal operation";
  - (d) when, in any calendar year, an aggregated period of 60 hours "WID abnormal operation" has been reached for a given kiln.

## 3 Emissions and monitoring

### 3.1 Emissions to water, air or land

3.1.5 Process Wastes produced at the site shall, as a minimum, be sampled and analysed in accordance with schedule 3 table S3.10. Additional samples shall be taken and tested and appropriate action taken, whenever:

- (a) disposal or recovery routes change; or
- (b) it is suspected that the nature or composition of the waste has changed such that the route currently selected may no longer be appropriate.

### 3.5 Monitoring

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) unless otherwise agreed in writing by the Environment Agency. Newly installed CEMs, or CEMs replacing existing CEMs, shall have MCERTS certification and have an MCERTS certified range which is not greater than 1.5 times the daily emission limit value (ELV) specified in schedule 3 table S3.1. The CEM shall also be able to measure instantaneous values over the ranges which are to be expected during all operating conditions. If it is necessary to use more than one range setting of the CEM to achieve this requirement, the CEM shall be verified for monitoring supplementary, higher ranges.*

3.5.5 Where Continuous Emission Monitors are installed to comply with the monitoring requirements in schedule 3 table S3.1; the Continuous Emission Monitors shall be used such that;

- (a) the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed the following percentages:

• Carbon monoxide	10%
• Sulphur dioxide	20%
• Oxides of nitrogen (NO & NO <sub>2</sub> expressed as NO <sub>2</sub> )	20%
• Particulate matter	30%
• Total organic carbon (TOC)	30%
• Hydrogen chloride	40%
- (b) valid half-hourly average values shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted the value of the confidence intervals in condition 3.5.5;
- (c) where it is necessary to calibrate or maintain the monitor and this means that data are not available for a complete half-hour period, the half-hourly average shall in any case be considered valid if measurements are available for a minimum of 20 minutes during the half-hour period. The number of half-hourly averages so validated shall not exceed 5 per day;
- (d) daily average values shall be determined as the average of all the valid half-hourly average values within a calendar day. The daily average value shall be considered valid if no more than five half-hourly average values in any day have been determined not to be valid;
- (e) no more than ten daily average values per year shall be determined not to be valid.

3.5.6 Where Continuous Emission Monitors are installed to comply with the monitoring requirements in schedule 3 table S3.1:

- a QAL2 test as specified in BS EN 14181 shall be performed at least every three years or whenever there are significant changes to either the process, the fuel used or to the CEMs themselves;
- an Annual Surveillance Test (AST) shall be performed at least annually, as specified within BS EN 14181;
- the operator shall have a procedure to apply the QAL3 requirements of EN 14181.

## 4 Information

### 4.2 Reporting

4.2.2

- (d) the functioning and monitoring of the plant involved with the burning of waste derived fuels, in a format agreed with the Environment Agency. The report shall, as a minimum requirement (as required by Article 12(2) of the Waste Incineration Directive) give an account of the running of the process and the emissions into air and water compared with the emission standards in the WID.(

## Schedule 6 - Interpretation

“*abatement equipment*” means that equipment dedicated to the removal of polluting substances from releases from the installation to air or water media.

“*annually*” means once every year.

“*CEN*” means Comité Européen de Normalisation

“*daily average*” for releases of substances to air means the average of valid half-hourly averages over [a calendar day] [consecutive discrete periods of 24 hours as described in the application / agreed with the Environment Agency] during normal operation.

“*dioxin and furans*” means polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans.

“*Group II Metals*” means Cadmium (Cd) and Thallium (Tl)

“*Group III Metals*” means Antimony (Sb), Arsenic (As), Chromium (Cr), Cobalt (Co), Copper (Cu), Lead (Pb), Manganese (Mn), Nickel (Ni), & Vanadium (V)

“*ISO*” means International Standards Organisation.

**“MBM”** means Meat and Bone Meal. It is produced at animal rendering plants during the high temperature processing of animal remains comprising mainly abattoir waste arising in the course of preparing meat for consumption. It is a granular solid residue that is left after extracting fat (tallow) during the rendering process. The waste for rendering may contain Specified Risk Material (SRM) such as brain and spinal cords from animals. MBM is classified as a non-hazardous waste by the waste code 02 02 03, defined as “Wastes from the preparation and processing of meat, fish and other foods of animal origin” and the sub-clause “Materials unsuitable for consumption or processing”. MBM cannot contain raw or unprocessed meat, bones or animal parts, or any other waste of agricultural, horticultural or industrial origin.

**“PAH”** means Poly-cyclic aromatic hydrocarbon, and comprises Anthanthrene, Benzo[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[b]naph(2,1-d)thiophene, Benzo[c]phenanthrene, Benzo[ghi]perylene, Benzo[a]pyrene, Cholanthrene, Chrysene, Cyclopenta[c,d]pyrene, Dibenzo[ah]anthracene, Dibenzo[a,i]pyrene Fluoranthene, Indo[1,2,3-cd]pyrene, Naphthalene

**“PCB”** means *Polychlorinated Biphenyl*. Dioxin-like PCBs are the non-ortho and mono-ortho PCBs listed in the table below.

**“quarterly”** for reporting/sampling means after/during each 3 month period, January to March; April to June; July to September and October to December and, when sampling, with at least 2 months between each sampling date.

**“shut down”** or **“shutting down”** is any period where the plant is being returned to a non-operational state [and there is no waste being burned] [as described in the application or agreed in writing with the Environment Agency].

**“start up”** is any period, where the plant has been non-operational, [after igniting the auxiliary burner] until [waste derived fuel] has been fed to the kiln [in sufficient quantity] to initiate steady-state conditions [as described in the application or agreed in writing with the Environment Agency].

**“TOC”** means *Total Organic Carbon*. In respect of releases to air, this means the gaseous and vaporous organic substances, expressed as TOC.

**“Waste Incineration Directive”** means Directive 2000/76/EC on the incineration of waste (O.J. L 332, 28.12.2000)

**“WID abnormal operation”** means any technically unavoidable stoppages, disturbances, or failures of the abatement plant or the measurement devices, during which the concentrations in the discharges into air or waste water of the regulated substances may exceed the normal emission limit values.

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:

- (a) in relation to emissions from cement kilns, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 10% dry for all fuels;
- (b) in relation to emissions from lime kilns, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 11% dry for all fuels;
- (c) in relation to emissions from non-combustion sources, no correction is required for temperature, pressure, oxygen or water vapour content.

For dioxins/furans and dioxin-like PCBs the determination of the toxic equivalence concentration (I-TEQ, & WHO-TEQ for dioxins/furans, WHO-TEQ for dioxin-like PCBs) stated as a release limit and/ or reporting requirement, the mass concentrations of the following congeners have to be multiplied with their respective toxic equivalence factors before summing. When reporting on measurements of dioxins/furans and dioxin-like PCBs, the toxic equivalence concentrations should be reported as a range based on: all congeners less than the detection limit assumed to be zero as a minimum, and all congeners less than the detection limit assumed to be at the detection limit as a maximum.

<b>Congener</b>	<b>I-TEF(1990)</b>	<b>WHO-TEF (1997/8)</b>		
		<b>Humans / Mammals</b>	<b>Fish</b>	<b>Birds</b>
<b>Dioxins</b>				
2,3,7,8-TCDD	1	1	1	1
1,2,3,7,8-PeCDD	0.5	1	1	1
1,2,3,4,7,8-HxCDD	0.1	0.1	0.5	0.05
1,2,3,6,7,8-HxCDD	0.1	0.1	0.01	0.01
1,2,3,7,8,9-HxCDD	0.1	0.1	0.01	0.1
1,2,3,4,6,7,8-HpCDD	0.01	0.01	0.001	<0.001
OCDD	0.001	0.0001	-	-
<b>Furans</b>				
2,3,7,8-TCDF	0.1	0.1	0.05	1
1,2,3,7,8-PeCDF	0.05	0.05	0.05	0.1
2,3,4,7,8-PeCDF	0.5	0.5	0.5	1
1,2,3,4,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,7,8,9-HxCDF	0.1	0.1	0.1	0.1
1,2,3,6,7,8-HxCDF	0.1	0.1	0.1	0.1
2,3,4,6,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,4,6,7,8-HpCDF	0.01	0.01	0.01	0.01
1,2,3,4,7,8,9-HpCDF	0.01	0.01	0.01	0.01
OCDF	0.001	0.0001	0.0001	0.0001

<b>Congener</b>	<b>WHO-TEF (1997/8)</b>		
	<b>Humans / mammals</b>	<b>Fish</b>	<b>Birds</b>
<b>Non-ortho PCBs</b>			
3,4,4',5-TCB (81)	0.0001	0.0005	0.1
3,3',4,4'-TCB (77)	0.0001	0.0001	0.05
3,3',4,4',5 - PeCB (126)	0.1	0.005	0.1
3,3',4,4',5,5'-HxCB(169)	0.01	0.00005	0.001
<b>Mono-ortho PCBs</b>			
2,3,3',4,4'-PeCB (105)	0.0001	<0.000005	0.0001
2,3,4,4',5-PeCB (114)	0.0005	<0.000005	0.0001
2,3',4,4',5-PeCB (118)	0.0001	<0.000005	0.00001
2',3,4,4',5-PeCB (123)	0.0001	<0.000005	0.00001
2,3,3',4,4',5-HxCB (156)	0.0005	<0.000005	0.0001
2,3,3',4,4',5'-HxCB (157)	0.0005	<0.000005	0.0001
2,3',4,4',5,5'-HxCB (167)	0.00001	<0.000005	0.00001
2,3,3',4,4',5,5'-HpCB (189)	0.0001	<0.000005	0.00001

# Annex 20 – Sheep dip discharges to ground

## 2 Operations

### 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, centred at National Grid Reference[s] **XX 11111 22222** [, **XX 1111 2222 etc**] .
- 2.2.2 The discharge shall be made to the overall disposal site[s] centred at National Grid Reference[s] **XX 11111 22222** [, **XX 1111 2222 etc**].

### 2.3 Operating techniques

- 2.3.2 The discharge shall be made by spreading onto an area of land [**with an established vegetation cover**] of minimal wildlife value. The area of land shall not include hedgerows, woodlands or wildflower meadows, or land that is bare as part of a crop rotation. [**The spreading shall be conducted in strips across the discharge area such that there are strips at least ## metres wide between the strips on which the discharge has taken place.**]
- 2.3.3 No discharge shall take place within:
- (a) 10 metres of the nearest watercourse (which includes ditches and open land drains which may run dry for part of the year) [**or 30 metres of a river designated as a European Site, Site or Special Scientific Interest (SSSI)**];
  - (b) 50 metres of any well, spring or borehole, irrespective of its current use;
  - (c) 500 metres of any well, spring or borehole where the water is intended for human consumption;
  - (d) **25 metres of an identified swallow hole.**
- 2.3.4 No discharge shall be made within two metres of any field boundary or footpath.
- 2.3.5 No discharge shall take place on land which:
- (a) [**is under drained**] **or** [**has been under drained or mole drained within 12 months**] prior to any discharge operation, or is cracked down to the drain or any backfill;
  - (b) has a slope greater than 11 degrees (approximately 1 in 5);
  - (c) is frozen hard or snow covered;
  - (d) is liable to flooding;
  - (e) is severely compacted or waterlogged.



- 2.3.6 Discharge equipment and / or methods shall be designed and operated such that the requirements of Conditions 2.3.7 and 2.3.11 are met.
- 2.3.7 The discharge of used / waste sheep dip shall not be made to land on which crops are currently being grown for human consumption.

## Volume

- 2.3.8 The maximum volume of used / waste sheep dip (of working strength) before any dilution to assist safe spreading, shall not exceed #### cubic metres per annum discharged to the land identified in schedule 7 and subject to the requirements of condition 2.3.11.
- 2.3.9 The maximum daily spreading rate of used / waste working strength sheep dip shall not exceed ### cubic metres spread evenly on a minimum of ### hectares of the land identified in schedule 7.
- 2.3.9 The maximum daily spreading rate of used / waste working strength sheep dip further diluted in the ratio of ### part(s) dip to ### parts slurry or water shall not exceed AAA cubic metres spread evenly on a minimum of BBB hectares of the land identified in schedule 7.

## Discharge period

- 2.3.10 The discharge of used / waste sheep dip shall only be carried out between the dates of AA BB and XX YY each year inclusive.
- 2.3.11 The discharge of used / waste sheep dip to the land identified in schedule 7 shall not be undertaken more frequently than once per year
- OR
- 2.3.11 The discharge of used / waste sheep dip to the same individual area of land within the overall disposal site identified in schedule 7 shall not be undertaken more frequently than once per year. A maximum of ### discharges may be made per year, but the area of land must be rotated within the overall disposal site. The site plan identified in schedule 7 shall clearly show sub-divisions highlighting individual areas for each discharge.

# 3 Emissions and monitoring

## 3.2 Emissions of substances not controlled by emission limits

- 3.2.4 Appropriate measures shall be taken to prevent the input of hazardous substances to groundwater by avoiding the entry of those substances into groundwater and by avoiding any significant increase in their concentration in groundwater.

## 3.3 Monitoring

- 3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1 and S3.3;

## 4 Information

### 4.1 Records

4.1.3 Records for discharges of waste sheep dip shall include:

- (a) name, address and NGR of the site where the used / waste sheep dip originated;
- (a) or (b) daily volumes of undiluted used / waste sheep dip discharged;
- (b) or (c) rates of discharge;
- (c) or (d) location and area of discharge;
- (d) or (e) nature of used dip (marketing authorisation name will suffice);
- (e) or (f) any materials added to dilute or treat the used / waste sheep dip, including water or slurry.
- (f) or (g) for multiple discharges, records demonstrating compliance with only one permitted discharge per designated area of land per year shall be kept.

### 4.3 Notifications

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 notified at least 24 hours in advance of any planned discharge.

## Schedule 6 – Interpretation

*“European Site”* means Special Area of Conservation or candidate Special Area of Conservation or Special Protection Area or proposed 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 this permit will be considered as a European Site.

*“Mole drained”* means drainage by means of a system of narrow diameter tunnels, or passage-ways, which are self supporting in soils (like mole-holes), created by a tool towed at shallow depth behind a tractor and designed to drain water from poorly drained soils.

*“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).

*“Under drained”* means drainage of land where a system of pipes or mole drains have been installed in poorly drained ground (for example clays) to direct percolating water away and prevent water logging.

# Annex 21 – Pesticide washings discharges to ground

## 2 Operations

### 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, centred at National Grid Reference[s] **XX 11111 22222** [, **XX 1111 2222 etc**].
- 2.2.2 The discharge shall be made to the overall disposal site[s] centred at National Grid Reference[s] **XX 11111 22222** [, **XX 1111 2222 etc**].

### 2.3 Operating techniques

- 2.3.2 The discharge shall be made by spreading onto an area of land [with an established vegetation cover] of minimal wildlife value. The area of land shall not include hedgerows, woodlands or wildflower meadows, or land that is bare as part of a crop rotation. [The spreading shall be conducted in strips across the discharge area such that there are strips at least ## metres wide between the strips on which the discharge has taken place.]
- 2.3.3 No discharge shall take place within:
- (a) 10 metres of the nearest watercourse (which includes ditches and open land drains which may run dry for part of the year) [or 30 metres of a river designated as a European Site or Site of Special Scientific Interest (SSSI) ];
  - (b) 50 metres of any well, spring or borehole, irrespective of its current use;
  - (c) 500 metres of any well, spring or borehole where the water is intended for human consumption;
  - (d) 25 metres of an identified swallow hole.
- 2.3.4 No discharge shall be made within two metres of any field boundary or footpath.
- 2.3.5 No discharge shall take place on land which:
- (a) [is under drained] or [has been under drained or mole drained within 12 months] prior to any discharge operation, or is cracked down to the drain or any backfill;
  - (b) has a slope greater than 11 degrees (approximately 1 in 5);
  - (c) is frozen hard or snow covered;
  - (d) is liable to flooding;
  - (e) is severely compacted or waterlogged.

- 2.3.6 Discharge equipment and / or methods shall be designed and operated such that the requirements of Conditions 2.3.7 and 2.3.10 are met.
- 2.3.7 (a) Washing of spray equipment and vehicles after use shall take place in an area selected for the purpose, which can not drain into drains, ditches and surface watercourses;
- (b) Contaminated wash water should be stored and re-used later as make-up water for a further batch of pesticide spray solution;
- (c) Where re-use is impractical, pesticide washings should be applied to the treated crop if this is within the terms of the product approval. The maximum dose must not be exceeded;
- (d) Where spreading to the treated crop is either not practicable or not possible, discharge shall be to an area of land identified in schedule 7 and shall comply with the Conditions set out in this Permit.
- 2.3.8 The operator of the spray equipment shall take appropriate measures to eliminate or minimise the amount of working strength pesticide solution requiring discharge.

## Volume

- 2.3.9 The maximum volume of pesticide washings following dilution to assist safe spreading, shall not exceed #### cubic metres per annum discharged to the land identified in schedule 7 and subject to the requirements of condition 2.3.10.
- 2.3.10 The maximum daily spreading rate of working strength pesticide further diluted with slurry or water [ : in the ratio of ## part(s) pesticide to ## parts slurry or water] shall not exceed ## cubic metres spread evenly on a minimum of ## hectares of the land identified in schedule 7.

## Discharge period

- 2.3.11 The discharge of pesticide washings shall **only** be carried out between the dates of AA BB and XX YY each year inclusive.
- 2.3.12 The minimum interval between each spreading of pesticide washings to the same area of land shall be at least three days.
- 2.3.13 A maximum of ### discharges of pesticide washings may be made per year, but the area of land must be rotated within the overall disposal site.

# 3 Emissions and monitoring

## 3.2 Emissions of substances not controlled by emission limits

- 3.2.4 Appropriate measures shall be taken to prevent the input of hazardous substances to groundwater by avoiding the entry of those substances into groundwater and by avoiding any significant increase in their concentration in groundwater.

### 3.3 Monitoring

3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

- (a) point source emissions specified in tables S3.1 and S3.3;

## 4 Information

### 4.1 Records

4.1.3 Records for discharges of pesticide washings shall include:

- (a) daily volumes working strength pesticide solution discharged;
- (b) rates of discharge;
- (c) location and area of discharge;
- (d) the pesticides present in any discharge (brand names will suffice);
- (e) any materials added to dilute pesticides, including water or slurry.

### 4.3 Notifications

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 notified at least 24 hours in advance of any planned discharge.

## Schedule 6 - Interpretation

*“European Site”* means Special Area of Conservation or candidate Special Area of Conservation or Special Protection Area or proposed 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 this permit will be considered as a European Site.

*“Mole drained”* means drainage by means of a system of narrow diameter tunnels, or passage-ways, which are self supporting in soils (like mole-holes), created by a tool towed at shallow depth behind a tractor and designed to drain water from poorly drained soils.

*“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).

*“Under drained”* means drainage of land where a system of pipes or mole drains have been installed in poorly drained ground (for example clays) to direct percolating water away and prevent water logging.

# Annex 22 – Discharge to groundwater via infiltration system

## 2 Operations

### 2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green and the discharge(s) shall be made at the point(s) marked on the site plan at schedule 7 to this permit and as listed in table S3.2 (discharge points).

### 2.3 Operating techniques

2.3.2 The infiltration system specified in table S1.1 shall be constructed to comply with the following:

- (a) no part of the infiltration system constructed shall be more than [2] metres below ground level;
- (b) no part of the infiltration system shall be less than [1] metre above the highest predicted annual groundwater level;
- (c) the infiltration system shall not connect to any land drainage system;
- (d) the infiltration system shall not be situated within [10] metres of any watercourse (including any ditch that runs dry for part of the year), or any other surface water;
- (e) the infiltration system shall not be situated within [50] metres of a well or borehole used for water supply.

2.3.2 The [well(s)/(shaft(s)/borehole(s)]

- (a) shall not extend below the depth(s) specified in table S1.1
- (b) shall comply with the minimum depth(s) below ground level [for un-perforated linings / and / cement grouted annuluses] specified in table S1.1;
- (c) shall not connect to any land drainage system;
- (d) shall not be situated within [10] metres of any watercourse (including any ditch that runs dry for part of the year), or any other surface water;
- (e) shall not be within [50] metres of a well or borehole used for water supply.

2.3.3 The [sewage treatment plant/septic tank/and/infiltration system] shall conform to all relevant British Standards in force at the time of installation.

2.3.4 For the activities referenced in schedule 1, table S1.1 [A1 to A4 etc.] the operator shall comply with the relevant requirements of the Urban Waste Water Treatment (England and Wales) Regulations 1994.

## 3 Emissions and monitoring

### 3.1 Emissions to water, air or land

3.1.3 For the emission limits in schedule 3 to which this condition applies, if the Environment Agency has been satisfied that (a) unusual weather conditions were adversely affecting the operation of the sewage treatment works and (b) the operator has used appropriate measures to mitigate that adverse effect, no result of any sample of the discharge taken during that time shall be taken into account in deciding whether or not the emission limit of the permit has been complied with.

Or

3.1.3 For the emission limits in schedule 3 to which this condition applies, if the Environment Agency has been satisfied that (a) unusual weather conditions were adversely affecting the operation of the sewage treatment works and (b) the operator has used appropriate measures to mitigate that adverse effect, no inspection of the sewage treatment works during that time shall be used in deciding whether or not the emission limit has been complied with.

- 3.1.4
- (a) If the measured Dry Weather Flow exceeds the permitted Dry Weather Flow limit then the operator shall, as soon as is practicable, investigate the reasons for the exceedance. The operator shall report the reasons for the exceedance to the Environment Agency and the steps that it proposes to take to restore compliance. An exceedance of the Dry Weather Flow limit shall not be recorded as a failure if the operator takes appropriate steps to restore compliance;
  - (b) If the measured Dry Weather Flow exceeds the permitted Dry Weather Flow limit because of unusual rainfall during the 12-month period, then it will not be recorded as a failure of the Dry Weather Flow limit. For the purposes of this condition, unusual rainfall shall mean rainfall that causes significantly higher sewage flows during the three-month period that normally records the lowest flows;
  - (c) The permitted Dry Weather Flow limit is set at the operator's planned annual 80% exceeded flow;
  - (d) For compliance with this permit, the measured Dry Weather Flow is that total daily volume that is exceeded by 90% of the recorded measured total daily volume values in any period of 12 months; and
  - (e) For unusual rainfall to be considered, the operator shall notify the Environment Agency and provide supporting evidence as part of the normal specified data returns.

3.1.5 The limit for any of the relevant parameters set out in schedule 3 may be exceeded where: in a series of samples of the discharge taken at regular but randomised intervals in a period of 12 consecutive months as listed in schedule 3A, no more than the relevant number of samples, as listed in column 2 of schedule 3A, exceed the applicable limit for that relevant parameter.

### 3.2 Emissions of substances not controlled by emission limits

3.2.4 Appropriate measures shall be taken to prevent the input of hazardous substances to groundwater by avoiding the entry of those substances into groundwater and by avoiding any significant increase in their concentration in groundwater.

### 3.3 Monitoring

- 3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1 and S3.3.

### Installation of monitoring boreholes

- 3.3.5 A minimum of [x] monitoring borehole(s) shall be installed within [x] months of the date of issue of this permit at locations agreed in advance and in writing by the Environment Agency for the purpose of 'requisite surveillance' monitoring.
- 3.3.6 The monitoring borehole(s) shall be installed to depths, by methods and according to a design agreed in advance and in writing by the Environment Agency.
- 3.3.7 The following details regarding the monitoring borehole(s) shall be provided to the Environment Agency within [x] month(s) of installation:
- (a) casings/linings (length, diameter, material, type of grout or filter media and whether slotted or plain);
  - (b) depths and diameters of unlined sections;
  - (c) standing groundwater levels;
  - (d) details of strata encountered during drilling;
  - (e) reference levels in metres above ordnance datum;
  - (f) a location plan at a suitable scale showing the boreholes in relation to the point of discharge;
  - (g) national grid references of the borehole(s) in the form AB 12345 67890;
  - (h) any other information obtained from the borehole(s) relevant to the interpretation of water sample analysis.

## 4 Information

### 4.2 Reporting

- 4.2.2 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 S4.2; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

### 4.3 Notifications

- 4.3.1 (d) any emergency discharge that has occurred.



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.

# Annex 23 – Combined sewer overflow discharge

## 2 Operations

### 2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green and the discharge(s) shall be made at the point(s) marked on the site plan at schedule 7 to this permit and as listed in table S3.2 (discharge points).

### 2.3 Operating techniques

2.3.2 For the discharge(s) specified in table S3.3:

- (a) The discharge shall only occur when and only for as long as the flow passed forward is equal to or greater than the overflow setting indicated due to rainfall and/or snow melt and shall only consist of flows in excess of that figure.
- (b) The off-line and/or storm tank storage capacity indicated must be fully utilised before a discharge occurs. It shall only fill when the flow passed forward exceeds the overflow setting indicated due to rainfall and/or snow melt and only with flows in excess of that figure and shall be emptied and its contents returned to the continuation sewer as soon as practicable.
- (c) The on-line storage capacity indicated must be fully utilised before a discharge occurs. It shall only fill with the excess flows due to rainfall and/or snow melt. The storage shall be emptied and its contents returned to the continuation sewer as soon as practicable.
- (d) The discharge shall not be comminuted or macerated.
- (e) The discharge shall have passed through screens as specified and shall not contain a significant quantity of solid matter with a particle size greater than any indicated. All screenings shall be removed from the discharge.
- (f) Where a mechanically raked screen is installed, a telemetry alarm system shall be installed and maintained so as to give the operator immediate notification of a failure of the screen raking mechanism. The operator shall take appropriate measures to return the screen raking mechanism to normal operation as soon as reasonably practicable after receipt of notification of the failure.

2.3.3 For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.) Where the discharge results in unsatisfactory solid matter being visible in the receiving waters or on the <banks of the receiving waters><beach><shoreline>, in the vicinity of the outfall, the operator shall take all reasonable steps to collect and remove such matter as soon as reasonably practicable after the discharge has been reported.

### 3.1 Emissions to water

3.1.1 There shall be no point source emissions to water except from the sources and emission points listed in schedule 3.

3.1.2 The limits given in schedule 3 shall not be exceeded.

### 3.3 Monitoring

3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

- (a) point source emissions specified in tables S3.1 and S3.4;

## 4 Information

### 4.2 Reporting

4.2.2 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 S4.2; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.3 The operator shall send all reports and notifications required by the permit to the relevant local food/environmental health authority.

- 4.2.4 a) The operator shall supply the relevant local food/environmental health authority with an annual written report of the operation of the combined sewer overflow, to include date, start time and duration of each spill in accordance with the format provided by the Environment Agency.
- b) Provision of this report will coincide with the annual classification under the Shellfish Hygiene Directive. The report shall cover the 12 month period 1 April – 31 March inclusive, and shall be provided by the end of the following May.

### 4.3 Notifications

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 operator shall notify the relevant local food/environmental health authority in the event of the discharge of the <permitted sewage in emergency discharge>. Such notification must be made as soon as practicable and no later than 24 hours after the event, and shall detail the reasons why the situation occurred, and the actions taken by the operator.

## Schedule 6 - Interpretation

"*Overflow setting*" means the minimum flow passed forward to the continuation sewer when the overflow operates.

# Annex 24 – STW with secondary treated sewage effluent, with / without settled storm and storm discharges - numeric

## 2 Operations

### 2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green and the discharge(s) shall be made at the point(s) marked on the site plan at schedule 7 to this permit and as listed in table S3.2 (discharge points).

### 2.3 Operating techniques

2.3.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall comply with the relevant requirements of the Urban Waste Water Treatment (England and Wales) Regulations 1994.

2.3.3 For the discharge(s) specified in table S3.3:

- (a) The discharge shall only occur when and only for as long as the flow passed forward is equal to or greater than the overflow setting indicated due to rainfall and/or snow melt and shall only consist of flows in excess of that figure.
- (b) The off-line and/or storm tank storage capacity indicated must be fully utilised before a discharge occurs. It shall only fill when the flow passed forward exceeds the overflow setting indicated due to rainfall and/or snow melt and only with flows in excess of that figure and shall be emptied and its contents returned to the continuation sewer as soon as practicable.
- (c) The on-line storage capacity indicated must be fully utilised before a discharge occurs. It shall only fill with the excess flows due to rainfall and/or snow melt. The storage shall be emptied and its contents returned to the continuation sewer as soon as practicable.
- (d) The discharge shall not be comminuted or macerated.
- (e) The discharge shall have passed through screens as specified and shall not contain a significant quantity of solid matter with a particle size greater than any indicated. All screenings shall be removed from the discharge.
- (f) Where a mechanically raked screen is installed, a telemetry alarm system shall be installed and maintained so as to give the operator immediate notification of a failure of the screen raking mechanism. The operator shall take appropriate measures to return the screen raking mechanism to normal operation as soon as reasonably practicable after receipt of notification of the failure.

2.3.4 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Where the discharge results in unsatisfactory solid matter being visible in the receiving waters or on the <banks of the receiving waters><beach><shoreline>, in the vicinity of the outfall, the operator

shall take all reasonable steps to collect and remove such matter as soon as reasonably practicable after the discharge has been reported.

- 2.3.5 (a) The use of any chemical for treatment of the effluent must be agreed in writing with the Environment Agency prior to use.
- (b) The chemical dosing material shall at all times conform to the British Standards specification(s) relating to potable products or other equivalent specification as agreed in writing with the Environment Agency prior to use.

## 3 Emissions and monitoring

### 3.1 Emissions to water

- 3.1.1 There shall be no point source emissions to water except from the sources and emission points listed in schedule 3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 For the emission limits in schedule 3 to which this condition applies, if the Environment Agency has been satisfied that (a) unusual weather conditions were adversely affecting the operation of the sewage treatment works and (b) the operator has used appropriate measures to mitigate that adverse effect, no result of any sample of the discharge taken during that time shall be used in deciding whether or not the emission limit has been complied with.
- 3.1.4 If the Environment Agency has been satisfied that (a) abnormal operating conditions were adversely affecting the operation of the sewage treatment works and (b) the operator has used appropriate measures to mitigate that adverse effect, no result of any sample of the discharge taken during that time shall be taken into account in deciding whether or not the Urban Waste Water Treatment (England and Wales) Regulations 1994 emission limit of the permit have been complied with.
- 3.1.5 (a) If the measured Dry Weather Flow exceeds the permitted Dry Weather Flow limit then the operator shall, as soon as is practicable, investigate the reasons for the exceedance. The operator shall report the reasons for the exceedance to the Environment Agency and the steps that it proposes to take to restore compliance. An exceedance of the Dry Weather Flow limit shall not be recorded as a failure if the operator takes appropriate steps to restore compliance;
- (b) If the measured Dry Weather Flow exceeds the permitted Dry Weather Flow limit because of unusual rainfall during the 12-month period, then it will not be recorded as a failure of the Dry Weather Flow limit. For the purposes of this condition, unusual rainfall shall mean rainfall that causes significantly higher sewage flows during the three-month period that normally records the lowest flows;
- (c) The permitted Dry Weather Flow limit is set at the operator's planned annual 80% exceeded flow;
- (d) For compliance with this permit, the measured Dry Weather Flow is that total daily volume that is exceeded by 90% of the recorded measured total daily volume values in any period of 12 months; and
- (e) For unusual rainfall to be considered, the operator shall notify the Environment Agency and provide supporting evidence as part of the normal specified data returns.

- 3.1.6 Unless the concentration is specifically regulated by condition 3.1.2 and appears in table S3.1 of this permit, the concentration of a List 1 Substance (as defined in the Dangerous Substances Directive 2006/11/EC) and a Priority Substance (as defined in the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 5) in the discharge shall not exceed that specified for that substance in the "Priority Substances and List 1 General Standards" in schedule 3B of this permit.
- 3.1.7 Unless the concentration is specifically regulated by condition 3.1.2 and appears in table S3.1 of this permit, the discharge shall not contain a concentration of any List 2 substance (as defined in the Dangerous Substances Directive 2006/11/EC) or Specific Pollutant (as defined in the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 4) such as to cause any relevant Environmental Quality Standards, set out in DOE Circular 007/89, SI 1997 No 2560 and SI 1998 No 389 or the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 4, to be exceeded in the receiving water.
- 3.1.8 The limit for any of the relevant parameters set out in schedule 3 may be exceeded where: in a series of samples of the discharge taken at regular but randomised intervals in a period of 12 consecutive months as listed in schedule 3A, no more than the relevant number of samples, as listed in column 2 of schedule 3A, exceed the applicable limit for that relevant parameter. <For relevant parameters also subject to schedule 3D the assessment is based on a fixed calendar year from 1 January to 31 December inclusive.>

### 3.3 Monitoring

- 3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1 and S3.4;
  - (b) inlet quality specified in table S3.1 and S3.4
- 3.3.5 The monitoring programme for the determinands subject to schedule 3C shall be:
- (a) pre-scheduled to cover a calendar year and the programme recorded before the start of a calendar year sample period; and
  - (b) spot samples collected at approximately equal intervals during the year, including samples from different days of the week and different times. Approximately 10% of samples should be outside the normal sampling window which is 9am-3pm, Monday to Friday.
- 3.3.6 After becoming aware, or following a notification that a sample has not been taken on the schedule 3C Monitoring Programme pre-scheduled date, or is lost, or a result for that sample can not be reported, the operator shall record the details and reschedule the sample.
- 3.3.7 The monitoring programme for the determinands subject to schedule 3D shall be pre-scheduled before each calendar year. Samples must be collected at approximately equal intervals during the year from different days of the week and approximately 10% of samples should be taken at weekends.

## 4 Information

### 4.2 Reporting

4.2.2 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) or the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.2; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.3 The operator shall send all reports and notifications required by the permit to the relevant local food/environmental health authority.

- 4.2.4
- a) The operator shall supply the relevant local food/environmental health authority with an annual written report of the operation of the combined sewer overflow, to include date, start time and duration of each spill in accordance with the format provided by the Environment Agency.
  - b) Provision of this report will coincide with the annual classification under the Shellfish Hygiene Directive. The report shall cover the 12 month period 1 April – 31 March inclusive, and shall be provided by the end of the following May.

### 4.3 Notifications

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 operator shall notify the relevant local food/environmental health authority in the event of the discharge of the <permitted sewage in emergency discharge>. Such notification must be made as soon as practicable and no later than 24 hours after the event, and shall detail the reasons why the situation occurred, and the actions taken by the operator.



## Schedule 6 - Interpretation

"ATU-BOD as O<sub>2</sub>" means the biochemical oxygen demand (measured after 5 days at 20° C with nitrification suppressed by the addition of allylthiourea).

"COD as O<sub>2</sub>" means the chemical oxygen demand (measured using the standard dichromate procedure).

"Discharge" means a point source emission to water.

*"Urban Waste Water Treatment (England and Wales) Regulations 1994" means Urban Waste Water Treatment (England and Wales) Regulations 1994 SI 2841 and the words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.*

"Overflow setting" means the minimum flow passed forward to the continuation sewer when the overflow operates.

# Annex 25 – Secondary treated sewage effluent discharge - descriptive private

## 2 Operations

### 2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green and the discharge(s) shall be made at the point(s) marked on the site plan at schedule 7 to this permit and as listed in table S3.2 (discharge points).

### 2.3 Operating techniques

2.3.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* The operator shall comply with the relevant requirements of the Urban Waste Water Treatment (England and Wales) Regulations 1994.

2.3.3 The sewage treatment plant/septic tank shall conform to all relevant British Standards in force at the time of installation

### 3.1 Emissions to water

3.1.1 There shall be no point source emissions to water except from the sources and emission points listed in schedule 3.

3.1.2 The limits given in schedule 3 shall not be exceeded.

### 3.3 Monitoring

3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

(a) point source emissions specified in tables S3.1 and S3.3.

## 4 Information

### 4.2 Reporting

4.2.2 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 S4.2; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

### 4.3 Notifications

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.

## Schedule 6 - Interpretation

*“Adverse visible effect”* means dead or distressed fish, other animals or plants in the vicinity of the discharge, appreciable deposit of solid material; growth of sewage fungus; or appreciable discoloration.

# Annex 26 – UV disinfection

## 2 Operations

### 2.3 Operating techniques

- 2.3.5 (a) The discharge in table S3.3b shall consist solely of [secondary/biologically] treated sewage effluent which has been disinfected by means of ultra violet (UV) radiation as specified in that table.
- (b) The full dose limit in table S3.3b must be exceeded in at least 99% of the specified measurements in [any period of 12 consecutive months/the period specified in table S3.3b].
- (c) No more than 10% of measurements taken consecutively during any 24 hour period from midnight to midnight should fall below the 50% dose limit specified in table S3.3b.
- (d) In the event of a failure of the flow monitor and/or UV [transmittance/ intensity meter] used in the control of the UV dosing system:
- (i) the maximum available number of duty banks of UV lamps shall be automatically activated;
  - (ii) the minimum applied UV dose at maximum effluent flow rates calculated using the 5%ile transmittance shown in table S3.3b, shall not be less than the full dose limit shown in that table.
- (e) There shall be no failure to achieve the full dose limit in table S3.3b which is as a result of planned maintenance.
- 2.3.6 Continuous recorders, with on-site visual display from which readings may be readily obtained, shall be provided and maintained by the operator enabling the following to be measured and recorded at 15 minute intervals:
- (a) the instantaneous flow rate through each UV irradiation channel;
  - (b) the instantaneous applied UV dose for each UV irradiation channel;
  - (c) the instantaneous received UV dose for each UV irradiation channel;
  - (d) the instantaneous measured applied UV dose for each UV irradiation channel;
  - (e) the number of operational UV lamps for each UV irradiation channel;
  - (f) the instantaneous measured UV transmittance at the inlet to the UV irradiation plant;
  - (g) the instantaneous measured UV intensity for each bank;
  - (h) any other parameters used in calculating the UV dose.

## 3 Emissions and monitoring

### 3.3 Monitoring

3.3.1 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:

(b) efficacy monitoring specified in table S3.5.

# Annex 27 – Secondary treated sewage effluent discharge - descriptive Water Co

## 2 Operations

### 2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green and the discharge(s) shall be made at the point(s) marked on the site plan at schedule 7 to this permit and as listed in table S3.2 (discharge points).

## 3 Emissions and monitoring

### 3.1 Emissions to water

- 3.1.1 There shall be no point source emissions to water except from the sources and emission points listed in schedule 3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 For the emission limits in schedule 3 to which this condition applies, if the Environment Agency has been satisfied that (a) unusual weather conditions were adversely affecting the operation of the sewage treatment works and (b) the operator has used appropriate measures to mitigate that adverse effect, no inspection of the sewage treatment works during that time shall be used in deciding whether or not the emission limit has been complied with.

### 3.3 Monitoring

- 3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1 and S3.3.

## 4 Information

### 4.2 Reporting

- 4.2.2 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 S4.2; and

- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

### 4.3 Notifications

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.

## Schedule 6 - Interpretation

*"Adverse visible effect"* means dead or distressed fish, other animals or plants in the vicinity of the discharge, appreciable deposit of solid material; growth of sewage fungus; or appreciable discoloration.

# Annex 28 – Private secondary treated sewage effluent discharges – numeric <sup>t</sup>

## 2 Operations

### 2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green and the discharge(s) shall be made at the point(s) marked on the site plan at schedule 7 to this permit and as listed in table S3.2 (discharge points).

### 2.3 Operating techniques

- 2.3.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.) The operator shall comply with the relevant requirements of the Urban Waste Water Treatment (England and Wales) Regulations 1994.*

## 3 Emissions and monitoring

### 3.1 Emissions to water

- 3.1.1 There shall be no point source emissions to water except from the sources and emission points listed in schedule 3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 For the emission limits in schedule 3 to which this condition applies, if the Environment Agency has been satisfied that (a) unusual weather conditions were adversely affecting the operation of the sewage treatment works and (b) the operator has used appropriate measures to mitigate that adverse effect, no result of any sample of the discharge taken during that time shall be used in deciding whether or not the emission limit has been complied with.
- 3.1.4 Unless the concentration is specifically regulated by condition 3.1.2 and appears in table S3.1 of this permit, the concentration of a List 1 Substance (as defined in the Dangerous Substances Directive 2006/11/EC) and a Priority Substance (as defined in the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 5) in the discharge shall not exceed that specified for that substance in the "Priority Substances and List 1 General Standards" in schedule 3B of this permit.



- 3.1.5 Unless the concentration is specifically regulated by condition 3.1.2 and appears in table S3.1 of this permit, the discharge shall not contain a concentration of any List 2 substance (as defined in the Dangerous Substances Directive 2006/11/EC) or Specific Pollutant (as defined in the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 4) such as to cause any relevant Environmental Quality Standards, set out in DOE Circular 007/89, SI 1997 No 2560 and SI 1998 No 389 or the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 4, to be exceeded in the receiving water.
- 3.1.6 The limit for any of the relevant parameters set out in schedule 3 may be exceeded where: in a series of samples of the discharge taken at regular but randomised intervals in a period of 12 consecutive months as listed in schedule 3A, no more than the relevant number of samples, as listed in column 2 of schedule 3A, exceed the applicable limit for that relevant parameter.

### **3.3 Monitoring**

- 3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1 and S3.3.
- 3.3.5 The monitoring programme for the determinands subject to schedule 3C shall be:
- (a) Pre-scheduled to cover a calendar year and the programme recorded before the start of a calendar year sample period; and
- (b) Spot samples collected at approximately equal intervals during the year, including samples from different days of the week and different times. Approximately 10% of samples should be outside the normal sampling window which is 9am-3pm, Monday to Friday.
- 3.3.6 After becoming aware, or following a notification that a sample has not been taken on the schedule 3C Monitoring Programme pre-scheduled date, or is lost, or a result for that sample can not be reported, the operator shall record the details and reschedule the sample.

## **4 Information**

### **4.2 Reporting**

- 4.2.2 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 S4.2; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

## 4.3 Notifications

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.

## Schedule 6 - Interpretation

*"ATU-BOD as O<sub>2</sub>"* means the biochemical oxygen demand (measured after 5 days at 20° C with nitrification suppressed by the addition of allylthiourea).

*"COD as O<sub>2</sub>"* means the chemical oxygen demand (measured using the standard dichromate procedure).

# Annex 29 - Returned abstracted water – fish farms

## 2 Operations

### 2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green and the discharge(s) shall be made at the point(s) marked on the site plan at schedule 7 to this permit and as listed in table S3.2 (discharge points).

### 2.3 Operating techniques

- 2.3.2 Inlet and discharge points on the farm shall be adequately screened to prevent ingress of wild fish and escapes of farm stock. Smolt traps shall be provided in appropriate situations.

## 3 Emissions and monitoring

### 3.1 Emissions to water

- 3.1.1 There shall be no point source emissions to water except from the sources and emission points listed in schedule 3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Unless the concentration is specifically regulated by condition 3.1.2 and appears in table S3.1 of this permit, the discharge shall not contain a concentration of any List 2 substance (as defined in the Dangerous Substances Directive 2006/11/EC) or Specific Pollutant (as defined in the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 4) such as to cause any relevant Environmental Quality Standards, set out in DOE Circular 007/89, SI 1997 No 2560 and SI 1998 No 389 or the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 4, to be exceeded in the receiving water.
- 3.1.4 Samples of the incoming and discharge water shall be taken on each sampling occasion. The difference between the discharge and incoming measurements will be calculated for each sampling occasion.

### 3.3 Monitoring

- 3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1 and S3.3;
  - (b) inlet quality specified in table S3.1 and S3.3;

## 4 Information

### 4.2 Reporting

4.2.2 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.

### 4.3 Notifications

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.

## Schedule 6 - Interpretation

"ATU-BOD as O<sub>2</sub>" means the biochemical oxygen demand (measured after 5 days at 20° C with nitrification suppressed by the addition of allylthiourea).

## Annex 30 - Returned abstracted water – cooling waters

## 2 Operations

### 2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green and the discharge(s) shall be made at the point(s) marked on the site plan at schedule 7 to this permit and as listed in table S3.2 (discharge points).

## 3 Emissions and monitoring

### 3.1 Emissions to water

- 3.1.1 There shall be no point source emissions to water except from the sources and emission points listed in schedule 3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Unless the concentration is specifically regulated by condition 3.1.2 and appears in table S3.1 of this permit, the concentration of a List 1 Substance (as defined in the Dangerous Substances Directive 2006/11/EC) and a Priority Substance (as defined in the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 5) in the discharge shall not exceed that specified for that substance in the "Priority Substances and List 1 General Standards" in schedule 3B of this permit.
- 3.1.4 Unless the concentration is specifically regulated by condition 3.1.2 and appears in table S3.1 of this permit, the discharge shall not contain a concentration of any List 2 substance (as defined in the Dangerous Substances Directive 2006/11/EC) or Specific Pollutant (as defined in the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 4) such as to cause any relevant Environmental Quality Standards, set out in DOE Circular 007/89, SI 1997 No 2560 and SI 1998 No 389 or the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 4, to be exceeded in the receiving water.
- 3.1.5 Samples of the incoming and discharge water shall be taken on each sampling occasion. The difference between the discharge and incoming measurements shall be calculated for each sampling occasion.

### 3.3 Monitoring

- 3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1 and S3.3;
  - (b) inlet quality specified in table S3.1 and S3.3;

## 4 Information

### 4.2 Reporting

- 4.2.2 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 S4.2; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

### 4.3 Notifications

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.

# Annex 31 - Trade effluent rainfall dependent discharges

## 2 Operations

### 2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green and the discharge(s) shall be made at the point(s) marked on the site plan at schedule 7 to this permit and as listed in table S3.2 (discharge points).

## 3 Emissions and monitoring

### 3.1 Emissions to water

- 3.1.1 There shall be no point source emissions to water except from the sources and emission points listed in schedule 3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 For the emission limits in schedule 3 to which this condition applies, if the Environment Agency has been satisfied that (a) unusual weather conditions were adversely affecting the operation of the sewage treatment works and (b) the operator has used appropriate measures to mitigate that adverse effect, no result of any sample of the discharge taken during that time shall be used in deciding whether or not the emission limit has been complied with.
- 3.1.4 Unless the concentration is specifically regulated by condition 3.1.2 and appears in table S3.1 of this permit, the concentration of a List 1 Substance (as defined in the Dangerous Substances Directive 2006/11/EC) and a Priority Substance (as defined in the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 5) in the discharge shall not exceed that specified for that substance in the "Priority Substances and List 1 General Standards" in schedule 3B of this permit.
- 3.1.5 Unless the concentration is specifically regulated by condition 3.1.2 and appears in table S3.1 of this permit, the discharge shall not contain a concentration of any List 2 substance (as defined in the Dangerous Substances Directive 2006/11/EC) or Specific Pollutant (as defined in the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 4) such as to cause any relevant Environmental Quality Standards, set out in DOE Circular 007/89, SI 1997 No 2560 and SI 1998 No 389 or the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 4, to be exceeded in the receiving water.

### **3.3 Monitoring**

3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

- (a) point source emissions specified in tables S3.1 and S3.3;

## **4 Information**

### **4.2 Reporting**

4.2.2 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 S4.2; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

### **4.3 Notifications**

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.



## Annex 32 - Trade effluent known volume

### 2 Operations

#### 2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green and the discharge(s) shall be made at the point(s) marked on the site plan at schedule 7 to this permit and as listed in table S3.2 (discharge points).

### 3 Emissions and monitoring

#### 3.1 Emissions to water

- 3.1.1 There shall be no point source emissions to water except from the sources and emission points listed in schedule 3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 For the emission limits in schedule 3 to which this condition applies, if the Environment Agency has been satisfied that (a) unusual weather conditions were adversely affecting the operation of the sewage treatment works and (b) the operator has used appropriate measures to mitigate that adverse effect, no result of any sample of the discharge taken during that time shall be used in deciding whether or not the emission limit has been complied with.
- 3.1.4 Unless the concentration is specifically regulated by condition 3.1.2 and appears in table S3.1 of this permit, the concentration of a List 1 Substance (as defined in the Dangerous Substances Directive 2006/11/EC) and a Priority Substance (as defined in the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 5) in the discharge shall not exceed that specified for that substance in the "Priority Substances and List 1 General Standards" in schedule 3B of this permit.
- 3.1.5 Unless the concentration is specifically regulated by condition 3.1.2 and appears in table S3.1 of this permit, the discharge shall not contain a concentration of any List 2 substance (as defined in the Dangerous Substances Directive 2006/11/EC) or Specific Pollutant (as defined in the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 4) such as to cause any relevant Environmental Quality Standards, set out in DOE Circular 007/89, SI 1997 No 2560 and SI 1998 No 389 or the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 4, to be exceeded in the receiving water.

#### 3.3 Monitoring

- 3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

- (a) point source emissions specified in tables S3.1 and S3.3.
- 3.3.5 The monitoring programme for the determinands subject to schedule 3C shall be:
- (a) pre-scheduled to cover a calendar year and the programme recorded before the start of a calendar year sample period; and
  - (b) spot samples collected at approximately equal intervals during the year, including samples from different days of the week and different times. Approximately 10% of samples should be outside the normal sampling window which is 9am-3pm, Monday to Friday.
- 3.3.6 After becoming aware, or following a notification that a sample has not been taken on the schedule 3C Monitoring Programme pre-scheduled date, or is lost, or a result for that sample can not be reported, the operator shall record the details and reschedule the sample.

## 4 Information

### 4.2 Reporting

- 4.2.2 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 S4.2; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

### 4.3 Notifications

- 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.

# Annex 33 - Trade effluent mixed effluent discharges

## 2 Operations

### 2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green and the discharge(s) shall be made at the point(s) marked on the site plan at schedule 7 to this permit and as listed in table S3.2 (discharge points).

### 2.3 Operating techniques

2.3.2 The sewage treatment plant shall conform to all relevant British Standards in place at the time of installation.

## 3 Emissions and monitoring

### 3.1 Emissions to water

3.1.1 There shall be no point source emissions to water except from the sources and emission points listed in schedule 3.

3.1.2 The limits given in schedule 3 shall not be exceeded.

3.1.3 For the emission limits in schedule 3 to which this condition applies, if the Environment Agency has been satisfied that (a) unusual weather conditions were adversely affecting the operation of the sewage treatment works and (b) the operator has used appropriate measures to mitigate that adverse effect, no result of any sample of the discharge taken during that time shall be used in deciding whether or not the emission limit has been complied with.

3.1.4 Unless the concentration is specifically regulated by condition 3.1.2 and appears in table S3.1 of this permit, the concentration of a List 1 Substance (as defined in the Dangerous Substances Directive 2006/11/EC) and a Priority Substance (as defined in the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 5) in the discharge shall not exceed that specified for that substance in the "Priority Substances and List 1 General Standards" in schedule 3B of this permit.

3.1.5 Unless the concentration is specifically regulated by condition 3.1.2 and appears in table S3.1 of this permit, the discharge shall not contain a concentration of any List 2 substance (as defined in the Dangerous Substances Directive 2006/11/EC) or Specific Pollutant (as defined in the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 4) such as to cause any relevant Environmental Quality Standards, set out in DOE Circular 007/89, SI 1997 No 2560 and SI 1998 No 389 or the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive)(England and Wales) Directions 2010 Part 4, to be exceeded in the receiving water.

### **3.3 Monitoring**

3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

(a) point source emissions specified in tables S3.1 and S3.3.

3.3.5 The monitoring programme for the determinands subject to schedule 3C shall be:

(a) pre-scheduled to cover a calendar year and the programme recorded before the start of a calendar year sample period; and

(b) spot samples collected at approximately equal intervals during the year, including samples from different days of the week and different times. Approximately 10% of samples should be outside the normal sampling window which is 9am-3pm, Monday to Friday.

3.3.6 After becoming aware, or following a notification that a sample has not been taken on the schedule 3C Monitoring Programme pre-scheduled date, or is lost, or a result for that sample can not be reported, the operator shall record the details and reschedule the sample.

## **4 Information**

### **4.2 Reporting**

4.2.2 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 S4.2; and

(c) giving the information from such results and assessments as may be required by the forms specified in those tables.

### **4.3 Notifications**

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.

## Schedule 6 - Interpretation

"*ATU-BOD as O<sub>2</sub>*" means the biochemical oxygen demand (measured after 5 days at 20° C with nitrification suppressed by the addition of allylthiourea).

# Annex 34 - Emergency overflow discharges

## 2 Operations

### 2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green and the discharge(s) shall be made at the point(s) marked on the site plan at schedule 7 to this permit and as listed in table S3.2 (discharge points).

### 2.3 Operating techniques

2.3.2 For the discharge(s) specified in table S3.3:

- (a) The discharge shall only occur when and only for as long as the flow passed forward is equal to or greater than the overflow setting indicated due to rainfall and/or snow melt and shall only consist of flows in excess of that figure.
- (b) The off-line and/or storm tank storage capacity indicated must be fully utilised before a discharge occurs. It shall only fill when the flow passed forward exceeds the overflow setting indicated due to rainfall and/or snow melt and only with flows in excess of that figure and shall be emptied and its contents returned to the continuation sewer as soon as practicable.
- (c) The on-line storage capacity indicated must be fully utilised before a discharge occurs. It shall only fill with the excess flows due to rainfall and/or snow melt. The storage shall be emptied and its contents returned to the continuation sewer as soon as practicable.
- (d) The discharge shall not be comminuted or macerated.
- (e) The discharge shall have passed through screens as specified and shall not contain a significant quantity of solid matter with a particle size greater than any indicated. All screenings shall be removed from the discharge.
- (f) Where a mechanically raked screen is installed, a telemetry alarm system shall be installed and maintained so as to give the operator immediate notification of a failure of the screen raking mechanism. The operator shall take appropriate measures to return the screen raking mechanism to normal operation as soon as reasonably practicable after receipt of notification of the failure.

2.3.3 *For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.)* Where the discharge results in unsatisfactory solid matter being visible in the receiving waters or on the <banks of the receiving waters><beach><shoreline>, in the vicinity of the outfall, the operator shall take all reasonable steps to collect and remove such matter as soon as reasonably practicable after the discharge has been reported.

### **3.1 Emissions to water**

- 3.1.1 There shall be no point source emissions to water except from the sources and emission points listed in schedule 3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.

### **3.3 Monitoring**

- 3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1 and S3.4.

## **4 Information**

### **4.2 Reporting**

- 4.2.2 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 S4.2; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.3 The operator shall send all reports and notifications required by the permit to the relevant local food/environmental health authority.
- 4.2.4 a) The operator shall supply the relevant local food/environmental health authority with an annual written report of the operation of the combined sewer overflow, to include date, start time and duration of each spill in accordance with the format provided by the Environment Agency.
- b) Provision of this report will coincide with the annual classification under the Shellfish Hygiene Directive. The report shall cover the 12 month period 1 April – 31 March inclusive, and shall be provided by the end of the following May.

### **4.3 Notifications**

- 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 operator shall notify the relevant local food/environmental health authority in the event of the discharge of the <permitted sewage in emergency discharge>. Such notification

must be made as soon as practicable and no later than 24 hours after the event, and shall detail the reasons why the situation occurred, and the actions taken by the operator.

## **Schedule 6 - Interpretation**

*“Overflow setting”* means the minimum flow passed forward to the continuation sewer when the overflow operates.



# Annex 35 – Recirculation from a ground source heating and cooling system to groundwater via borehole

## 2 Operations

### 2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green and the discharge(s) shall be made at the point(s) marked on the site plan at schedule 7 to this permit and as listed in table S3.2 (discharge points).

### 2.3 Operating techniques

2.3.2 The re-injection borehole system shall be constructed to comply with the following:

- (a) no re-injection borehole(s) shall extend below the depth(s) specified in table S1.1
- (b) the re-injection borehole(s) shall comply with the minimum depth(s) below ground level [for un-perforated linings / and / cement grouted annuluses] specified in table S1.1;
- (c) the outlet of the re-injection borehole(s), including any associated diffusers, shall be within the saturation zone at all times;
- (d) no part of the re-injection borehole system shall be situated within [10] metres of any watercourse (including any ditch that runs dry for part of the year), or any other surface water;
- (e) no part of the re-injection borehole system shall be situated within [50] metres of a well or borehole used for any purpose, other than abstraction from that well or borehole for the sole purpose of supplying water to the activity specified in table S1.1

## 3 Emissions and monitoring

### 3.2 Emissions of substances not controlled by emission limits

3.2.4 Appropriate measures shall be taken to prevent the input of hazardous substances to groundwater by avoiding the entry of those substances into groundwater and by avoiding any significant increase in their concentration in groundwater.

### 3.3 Monitoring

3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

- (a) point source emissions specified in tables S3.1 and S3.3;

## Installation of monitoring boreholes

- 3.3.5 A minimum of [x] monitoring borehole(s) shall be installed within [x] months of the date of issue of this permit at locations agreed in advance and in writing by the Environment Agency for the purpose of 'requisite surveillance' monitoring.
- 3.3.6 The monitoring borehole(s) shall be installed to depths, by methods and according to a design agreed in advance and in writing by the Environment Agency.
- 3.3.7 The following details regarding the monitoring borehole(s) shall be provided to the Environment Agency within [x] month(s) of installation:
- (a) casings/linings (length, diameter, material, type of grout or filter media and whether slotted or plain);
  - (b) depths and diameters of unlined sections;
  - (c) standing groundwater levels;
  - (d) details of strata encountered during drilling;
  - (e) reference levels in metres above ordnance datum;
  - (f) a location plan at a suitable scale showing the boreholes in relation to the point of discharge;
  - (g) national grid references of the borehole(s) in the form AB 12345 67890;
  - (h) any other information obtained from the borehole(s) relevant to the interpretation of water sample analysis.

## 4 Information

### 4.2 Reporting

- 4.2.2 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 S4.2; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

### 4.3 Notifications

- 4.3.1 (d) any emergency discharge that has occurred.
- 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.

# Annex 36 – Recirculation of treated water (pump and treat) to groundwater via infiltration system or well/shaft/borehole

## 2 Operations

### 2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green and the discharge(s) shall be made at the point(s) marked on the site plan at schedule 7 to this permit and as listed in table S3.2 (discharge points).

### 2.3 Operating techniques

2.3.2 The infiltration system specified in table S1.1 shall be constructed to comply with the following:

- (a) no part of the infiltration system constructed shall be more than [2] metres below ground level;
- (b) no part of the infiltration system shall be less than [1] metre above the highest predicted annual groundwater level;
- (c) the infiltration system shall not connect to any land drainage system;
- (d) no part of the infiltration system shall be situated within [10] metres of any watercourse (including any ditch that runs dry for part of the year), or any other surface water;
- (e) the infiltration system shall not be situated within [50] metres of a well or borehole used for water supply.

2.3.2 The [well(s)/(shaft(s)/borehole(s)]

- (a) shall not extend below the depth(s) specified in table S1.1
- (b) shall comply with the minimum depth(s) below ground level [for un-perforated linings / and / cement grouted annuluses] specified in table S1.1;
- (c) shall not connect to any land drainage system;
- (d) shall not be situated within [10] metres of watercourse (including any ditch that runs dry for part of the year), or any other surface water;
- (e) shall not be within [50] metres of a well or borehole used for water supply.

## 3 Emissions and monitoring

### 3.2 Emissions of substances not controlled by emission limits

3.2.4 Appropriate measures shall be taken to prevent the input of hazardous substances to groundwater by avoiding the entry of those substances into groundwater and by avoiding any significant increase in their concentration in groundwater.

### 3.3 Monitoring

3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

- (a) point source emissions specified in tables S3.1 and S3.3;

### Installation of monitoring boreholes

3.3.5 A minimum of [x] monitoring borehole(s) shall be installed within [x] months of the date of issue of this permit at locations agreed in advance and in writing by the Environment Agency for the purpose of 'requisite surveillance' monitoring.

3.3.6 The monitoring borehole(s) shall be installed to depths, by methods and according to a design agreed in advance and in writing by the Environment Agency.

3.3.7 The following details regarding the monitoring borehole(s) shall be provided to the Environment Agency within [x] month(s) of installation:

- (a) casings/linings (length, diameter, material, type of grout or filter media and whether slotted or plain);
- (b) depths and diameters of unlined sections;
- (c) standing groundwater levels;
- (d) details of strata encountered during drilling;
- (e) reference levels in metres above ordnance datum;
- (f) a location plan at a suitable scale showing the boreholes in relation to the point of discharge;
- (g) national grid references of the borehole(s) in the form AB 12345 67890;
- (h) any other information obtained from the borehole(s) relevant to the interpretation of water sample analysis.

## 4 Information

### 4.2 Reporting

4.2.2 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 S4.2; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

### **4.3 Notifications**

- 4.3.1 (d) any emergency discharge that has occurred.
- 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.

# Annex 37 - Burial of animal carcasses (where derogation to ABPR applies – for example on loW or in the event of a disease outbreak) <sup>t</sup>

## 2 Operations

### 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.
- 2.2.2 The disposal of animal carcasses shall be made by burial on an area of land centred at National Grid Reference **XX 11111 22222**.

### 2.3 Operating techniques

- 2.3.2 No burial of animal carcasses shall take place within:
- (a) 10 metres of the nearest land drain or 30 metres from the nearest watercourse (which includes ditches and open land drains which may run dry for part of the year) or any other surface water;
  - (b) 50 metres of any well, spring or borehole, irrespective of its current use;
  - (c) [250] metres of any well, spring or borehole where the water is intended for human consumption;
  - (d) 50 metres of an identified swallow hole.
- 2.3.3 No burial of animal carcasses shall be made within [2] metres of any field boundary or footpath.
- 2.3.4 No burial of animal carcasses shall take place on land which is liable to flooding.

## 3 Emissions and monitoring

### 3.2 Emissions of substances not subject to emission limits

- 3.2.4 Appropriate measures shall be taken to prevent the input of hazardous substances to groundwater by avoiding the entry of those substances into groundwater and by avoiding any significant increase in their concentration in groundwater.

### 3.3 Monitoring

- 3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1 and S3.3;

## 4 Information

### 4.1 Records

4.1.3 Records for burial of animal carcasses shall include:

- (a) date(s) of burial
- (b) area, orientation and depth of the burial pit
- (c) types, numbers and weights of carcasses
- (d) details of the disease/reason for culling
- (e) other materials buried with the carcasses
- (f) soil and groundwater conditions of the pit as dug
- (g) other information relevant to pollution of groundwater such as pharmaceutical products or chemicals used on the animals prior to burial

### 4.3 Notifications

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 notified at least 24 hours in advance of any planned disposal of carcasses.



# Annex 38 – Waste bulb dip discharges to ground

## 2 Operations

### 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, centred at National Grid Reference[s] **XX 11111 22222** [, **XX 1111 2222 etc**].
- 2.2.2 The discharge shall be made to the overall disposal site[s] centred at National Grid Reference[s] **XX 11111 22222** [, **XX 1111 2222 etc**].

### 2.3 Operating techniques

- 2.3.2 The discharge shall be made by spreading onto an area of land [with an established vegetation cover] of minimal wildlife value. The area of land shall not include hedgerows, woodlands or wildflower meadows, or land that is bare as part of a crop rotation. [The spreading shall be conducted in strips across the discharge area such that there are strips at least ## metres wide between the strips on which the discharge has taken place.]
- 2.3.3 No discharge shall take place within:
- (a) 10 metres of the nearest watercourse (which includes ditches and open land drains which may run dry for part of the year) [or 30 metres of a river designated as a European Site or Site of Special Scientific Interest (SSSI) ];
  - (b) 50 metres of any well, spring or borehole, irrespective of its current use;
  - (c) 500 metres of any well, spring or borehole where the water is intended for human consumption;
  - (d) 25 metres of an identified swallow hole.
- 2.3.4 No discharge shall be made within two metres of any field boundary or footpath.
- 2.3.5 No discharge shall take place on land which:
- (a) [is under drained] or [has been under drained or mole drained within 12 months] prior to any discharge operation, or is cracked down to the drain or any backfill;
  - (b) has a slope greater than 11 degrees (approximately 1 in 5);
  - (c) is frozen hard or snow covered;
  - (d) is liable to flooding;
  - (e) is severely compacted or waterlogged.
- 2.3.6 Discharge equipment and / or methods shall be designed and operated such that the requirements of Conditions 2.3.7 and 2.3.9 are met.
- 2.3.7 The operator shall take appropriate measures to minimise the amount of working strength waste bulb dip requiring discharge.

## Volume

- 2.3.8 The maximum volume of [waste bulb dip (of working strength)] or [waste bulb dip following dilution to assist safe spreading], shall not exceed #### cubic metres per annum discharged to the land identified in schedule 7 and subject to the requirements of condition 2.3.9.
- 2.3.9 The maximum daily spreading rate of working strength waste bulb dip and where necessary further diluted with slurry or water [: in the ratio of ## part(s) pesticide to ## parts slurry or water] shall not exceed ## cubic metres spread evenly on a minimum of ## hectares of the land identified in schedule 7.

## Discharge period

- 2.3.10 The discharge of waste bulb dip shall **only** be carried out between the dates of **AA BB** and **XX YY** each year inclusive.
- 2.3.11 The minimum interval between each spreading of waste bulb dip to the same area of land shall be at least three days.
- 2.3.12 A maximum of ### discharges of waste bulb dip may be made per year, but the area of land must be rotated within the overall disposal site.

## 3 Emissions and monitoring

### 3.2 Emissions of substances not controlled by emission limits

- 3.2.4 Appropriate measures shall be taken to prevent the input of hazardous substances to groundwater by avoiding the entry of those substances into groundwater and by avoiding any significant increase in their concentration in groundwater.

### 3.3 Monitoring

- 3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1 and S3.3;

## 4 Information

### 4.1 Records

- 4.1.3 Records for discharges of waste bulb dip shall include:
- (a) daily volumes working strength waste bulb dip discharged;
- (b) rates of discharge;
- (c) location and area of discharge;
- (d) the bulb dip present in any discharge (brand names will suffice);
- (e) any materials added to dilute the waste bulb dip.

## 4.3 Notifications

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 notified at least 24 hours in advance of any planned discharge.

## Schedule 6 - Interpretation

*“European Site”* means Special Area of Conservation or candidate Special Area of Conservation or Special Protection Area or proposed 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 this permit will be considered as a European Site.

*“Mole drained”* means drainage by means of a system of narrow diameter tunnels, or passage-ways, which are self supporting in soils (like mole-holes), created by a tool towed at shallow depth behind a tractor and designed to drain water from poorly drained soils.

*“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).

*“Under drained”* means drainage of land where a system of pipes or mole drains have been installed in poorly drained ground (for example clays) to direct percolating water away and prevent water logging.

# Annex 39 – Waste disinfectant discharges to ground <sup>t</sup>

## 2 Operations

### 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, centred at National Grid Reference[s] **XX 11111 22222** [, **XX 1111 2222 etc**].
- 2.2.2 The discharge shall be made to the overall disposal site[s] centred at National Grid Reference[s] **XX 11111 22222** [, **XX 1111 2222 etc**].

### 2.3 Operating techniques

- 2.3.2 The discharge shall be made by spreading onto an area of land [with an established vegetation cover] of minimal wildlife value. The area of land shall not include hedgerows, woodlands or wildflower meadows, or land that is bare as part of a crop rotation. [The spreading shall be conducted in strips across the discharge area such that there are strips at least ## metres wide between the strips on which the discharge has taken place.]
- 2.3.3 No discharge shall take place within:
- (a) 10 metres of the nearest watercourse (which includes ditches and open land drains which may run dry for part of the year) [or 30 metres of a river designated as a European Site or Site of Special Scientific Interest (SSSI) ];
  - (b) 50 metres of any well, spring or borehole, irrespective of its current use;
  - (c) 500 metres of any well, spring or borehole where the water is intended for human consumption;
  - (d) 25 metres of an identified swallow hole.
- 2.3.4 No discharge shall be made within two metres of any field boundary or footpath.
- 2.3.5 No discharge shall take place on land which:
- (a) [is under drained] or [has been under drained or mole drained within 12 months] prior to any discharge operation, or is cracked down to the drain or any backfill;
  - (b) has a slope greater than 11 degrees (approximately 1 in 5);
  - (c) is frozen hard or snow covered;
  - (d) is liable to flooding;
  - (e) is severely compacted or waterlogged.

- 2.3.6 Discharge equipment and / or methods shall be designed and operated such that the requirements of Conditions 2.3.7 and 2.3.10 are met.
- 2.3.7 (a) Washing of spray equipment and vehicles after use shall take place in an area selected for the purpose, which can not drain into drains, ditches and surface watercourses;
- (b) Contaminated wash water should be stored and re-used later as make-up water for a further batch of pesticide spray solution;
- (c) Where reuse is either not practicable or not possible, discharge shall be to an area of land identified in schedule 7 and shall comply with the Conditions set out in this Permit.
- 2.3.8 The operator of the spray equipment shall take appropriate measures to eliminate or minimise the amount of working strength disinfectant solution requiring discharge.

## Volume

- 2.3.9 The maximum volume of disinfectants following dilution to assist safe spreading, shall not exceed #### cubic metres per annum discharged to the land identified in schedule 7 and subject to the requirements of condition 2.3.10.
- 2.3.10 The maximum daily spreading rate of working strength disinfectant further diluted with slurry or water [in the ratio of ## part(s) disinfectant to ## parts slurry or water] shall not exceed ## cubic metres spread evenly on a minimum of ## hectares of the land identified in schedule 7.

## Discharge period

- 2.3.11 The discharge of disinfectants shall **only** be carried out between the dates of AA BB and XX YY each year inclusive.
- 2.3.12 The minimum interval between each spreading of disinfectants to the same area of land shall be at least three days.
- 2.3.13 A maximum of ### discharges of disinfectant may be made per year, but the area of land must be rotated within the overall disposal site.

# 3 Emissions and monitoring

## 3.2 Emissions of substances not controlled by emission limits

- 3.2.4 Appropriate measures shall be taken to prevent the input of hazardous substances to groundwater by avoiding the entry of those substances into groundwater and by avoiding any significant increase in their concentration in groundwater.

## 3.3 Monitoring

- 3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1 and S3.3;

## 4 Information

### 4.1 Records

4.1.3 Records for discharges of disinfectants shall include:

- (a) daily volumes working strength disinfectant solution discharged;
- (b) rates of discharge;
- (c) location and area of discharge;
- (d) the disinfectants present in any discharge (brand names will suffice);
- (e) any materials added to dilute disinfectants, including water or slurry.

### 4.3 Notifications

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 notified at least 24 hours in advance of any planned discharge.

## Schedule 6 - Interpretation

*“European Site”* means Special Area of Conservation or candidate Special Area of Conservation or Special Protection Area or proposed 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 this permit will be considered as a European Site.

*“Mole drained”* means drainage by means of a system of narrow diameter tunnels, or passage-ways, which are self supporting in soils (like mole-holes), created by a tool towed at shallow depth behind a tractor and designed to drain water from poorly drained soils.

*“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).

*“Under drained”* means drainage of land where a system of pipes or mole drains have been installed in poorly drained ground (for example clays) to direct percolating water away and prevent water logging.

Permit Number: AB1234CD

Operator: [Operator name]

Facility: [Facility name]

Form Number: Air1 / DD/MM/YY

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

Emission Point	Substance / Parameter	Emission		Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>
		Limit Value						
A1	Particulate Matter	20 mg/m <sup>3</sup>		Continuous		BS EN 13284-1		
A1	Particulate Matter	20 mg/m <sup>3</sup>		1 hour period		BS EN 13284-1		
A1	VOC as Total Organic Carbon (TOC)	20 mg/m <sup>3</sup>		1 hour period		BS EN 12619		
A1	Hydrogen chloride	30 mg/m <sup>3</sup>		1 hour period		BS EN 1911		
A1	Hydrogen fluoride	2 mg/m <sup>3</sup>		1 hour period		ISO 15713		
A1	Carbon monoxide	100 mg/m <sup>3</sup>		(average of ½-hour averages) over minimum 4 hour period		BS EN 15058		
A1	Sulphur dioxide	200 mg/m <sup>3</sup>		(average of hourly averages) over minimum 4 hour period		BS EN 14791		
A1	Sulphur dioxide	150 mg/m <sup>3</sup>		Continuous		BS EN 15267-3		
A2	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	400 mg/m <sup>3</sup>		(average of ½-hour averages) over minimum 4 hour period		BS EN 14792		
A2	Cadmium & thallium and their compounds (total)	0.05 mg/m <sup>3</sup>		over minimum 30 minute, maximum 8 hour period		BS EN 14385		
A2	Mercury and its compounds	0.05 mg/m <sup>3</sup>		over minimum 30 minute, maximum 8 hour period		BS EN 13211		
A2	Sb, As, Pb, Cr, Co, Cu, Mn, Ni	0.5 mg/ m <sup>3</sup>		over minimum 30 minute, maximum 8 hour period		BS EN 14385		

Emission Point	Substance / Parameter	Emission		Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>
		Limit Value						
	and V and their compounds (total)							

- [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 .....  
 (Authorised to sign as representative of Operator)

Date.....



Permit Number:  
 Facility: [Facility name]

Operator: [ ]  
 Form Number: Water1 / DD/MM/YY

**Reporting of emissions to water (other than to sewer) and land for the period from DD/MM/YYYY to DD/MM/YYYY**

Emission							
Emission Point	Substance / Parameter	Limit Value	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>
W1	Total suspended solids	30 mg/l	For 95% of all measured values of periodic samples taken over one month		BS EN 872		
W1	Mercury and its compounds, expressed as mercury (Total Hg)	0.005 mg/l	24-hour flow proportional sample		BS EN 135006		
W1	Cadmium and its compounds, expressed as cadmium (Total Cd)	0.01 mg/l	24-hour flow proportional sample		BS 6068-2.89		
W1	pH	6-10	Continuous		BS6068-2.50		
W1	BOD	25 mg/l	Periodic		BS EN 1899-1 (1998)		

- [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.....

Permit Number: AB1234CD

Operator: [Operator name]

Facility: [Facility name]

Form Number: Sewer1 / DD/MM/YY

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

Emission Point	Substance / Parameter	Emission		Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>
		Limit Value						
S1	Total suspended solids	30 mg/l		For 95% of all measured values of periodic samples taken over one month		BS EN 872		
S1	Mercury and its compounds, expressed as mercury (Total Hg)	0.005 mg/l		24-hour flow proportional sample		BS EN 135006		
S1	Cadmium and its compounds, expressed as cadmium (Total Cd)	0.01 mg/l		24-hour flow proportional sample		BS 6068-2.89		

- [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 .....  
(Authorised to sign as representative of Operator)

Date.....

Permit Number: AB1234CD

Operator: [Operator name]

Facility: [Facility name]

Form Number: WaterUsage1 / DD/MM/YY

**Reporting of Water Usage for the year 2006**

Water Source	Usage (m <sup>3</sup> /year)	Specific Usage (m <sup>3</sup> /unit output)
Mains water		
Site borehole		
River abstraction		
<b>TOTAL WATER USAGE</b>		

Operator's comments :

Signed .....  
(authorised to sign as representative of Operator)

Date.....

*Drafting note: if the operator is required to submit Resource Efficiency Physical Index (REPI) data to the Pollution Inventory, please ensure that no metrics are repeated in this reporting form.*

Permit Number: AB1234CD

Operator: [Operator name]

Facility: [Facility name]

Form Number: Energy1 / DD/MM/YY

**Reporting of Energy Usage for the year 2006**

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 electricity to primary energy = 2.4

Operator's comments :

Signed ..... Date.....  
(Authorised to sign as representative of Operator)

*Drafting note: if the operator is required to submit Resource Efficiency Physical Index (REPI) data to the Pollution Inventory, please ensure that no metrics are repeated in this reporting form.*

Permit Number: AB1234CD

Operator: [Operator name]

Facility: [Facility name]

Form Number: Performance1 / DD/MM/YY

**Reporting of other performance indicators for the period DD/MM/YYYY to DD/MM/YYYY**

Parameter	Units
Total raw material used	tonnes
mass release of oxides of sulphur per tonnes of product	Kg SO <sub>2</sub> /tonnes of product
Zn releases to River Ouse per tonne of product	kg Zn/tonne of product
Cu releases to River Ouse per tonne of product	kg Cu/tonne of product

Operator's comments :

Signed ..... Date.....  
 (Authorised to sign as representative of Operator)

*Drafting note: if the operator is required to submit Resource Efficiency Physical Index (REPI) data to the Pollution Inventory, please ensure that no metrics are repeated in this reporting form.*

Permit Number: AB1234CD

Operator: [Operator name]

Facility: [Facility name]

Form Number: Leachate 1 / DD/MM/YY

Reporting of leachate monitoring for the period from DD/MM/YYYY to DD/MM/YYYY

Monitoring Point	Substance / Parameter	Compliance limit	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>
L1	leachate head	X m above cell base					

- [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 .....  
(Authorised to sign as representative of Operator)

Date.....

Permit Number: AB1234CD

Operator: [Operator name]

Facility: [Facility name]

Form Number: Groundwater1 / DD/MM/YY

Reporting of groundwater monitoring for the period from DD/MM/YYYY to DD/MM/YYYY

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>
GW1	Mercury and its compounds, expressed as mercury (Total Hg)	0.005 mg/l			BS EN 135006		
GW1	Cadmium and its compounds, expressed as cadmium (Total Cd)	0.01 mg/l			BS 6068-2.89		
GW1	pH	6-10			BS6068-2.50		
GW1	BOD	25 mg/l			BS EN 1899-1 (1998)		

- [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 .....  
 (Authorised to sign as representative of Operator)

Date.....

Permit Number: AB1234CD

Operator: [Operator name]

Facility: [Facility name]

Form Number: LFG1 / DD/MM/YY

Reporting of landfill gas monitoring for the period from DD/MM/YYYY to DD/MM/YYYY

Monitoring Point	Substance / Parameter	Compliance limit	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>
LFG1	methane	1 % v/v					
LFG 1	carbon dioxide	1.5 % v/v					
LFG 1	oxygen	-					

- [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 .....  
(Authorised to sign as representative of Operator)

Date.....



Permit Number: AB1234CD

Operator: [Operator name]

Facility: [Facility name]

Form Number: Particulate1 / DD/MM/YY

Reporting of particulates for the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance / Parameter	Emission		Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>
		Limit Value						
A1	Particulate Matter	mg/m <sup>3</sup>		Continuous		BS EN 15267-3		
A1	Particulate Matter	mg/m <sup>3</sup>		1 hour period		BS EN 13284-1		

[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 .....  
(Authorised to sign as representative of Operator)

Date.....