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## Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Healthcare Environmental Services Limited

HES North Tyne
Unit BT 99/10
Chollerton Drive
North Tyne Industrial Estate
Newcastle Upon Tyne
NE12 9SZ

#### Permit number

EPR/LP3936AB

# HES North Tyne Permit number EPR/LP3936AB

### Introductory note

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

The main features of the Installation are as follows:

There are a number of regulated activities at the Installation. These activities are:

- The physico-chemical treatment of hazardous clinical waste- this is a Schedule 1, S5.3 Part A (1) (a) (ii) activity. Clinical waste is accepted and stored prior to being shredded and treated in an autoclave. This sanitises the waste which is compacted and stored prior to disposal off site. The operator will undertake microbial validation testing to demonstrate that the waste has been treated to a level where it is safe for off site treatment.
- The repackaging of hazardous waste prior to recovery off site- this is a Schedule 1, S5.3 Part A (1) (a) (iv) activity. The operator will accept sharps bins for cleaning. The sharps from the bins will be stored in bulk before being sent off site for recovery.
- The operator will undertake the temporary storage of hazardous waste prior to disposal off site. The
  wastes will primarily be those associated with healthcare premises, including photographic fixing
  chemicals and medicines. The waste will be stored in leak proof bins within the building. The operator
  has confirmed that they will store less than 50 tonnes on site at any one time, meaning this is a waste
  operation.
- The operator will undertake the temporary storage of non hazardous waste before this is sent off site for recovery or disposal. These wastes will primarily be those associated with healthcare premises, including medicines, chemicals and waste electronic and electrical equipment. This is a waste operation.

The operator will discharge boiler blowdown and effluent from bin washing to foul sewer under a trade effluent discharge consent.

The facility has three point source emissions to air. A1 is the emission point associated with the 5MW thermal input natural gas boiler. A2 is attached to the autoclave and will only be used for emergency venting within the building. A3 is attached to the shredder and releases via a high-efficiency particulate air (HEPA) filter and a carbon filter into the building.

We have included a pre-operational condition requiring the operator to provide a validation report demonstrating that the autoclaves reach the required treatment efficacy, as well as their monitoring proposals. This condition is taken from Environment Agency guidance document 'EPR 5.07 Clinical Waste'.

We have included two improvement conditions (IC). IC1 requires the operator to undertake a noise monitoring survey and assessment which formalises the commitment the operator has made in the application. IC2 requires the operator to undertake a survey to assess the condition of their on-site drains and if necessary, include a timescale for any improvement works.

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/LP3936AB/A001	Duly made 07/07/15	Application for a clinical waste treatment and transfer station storing hazardous and non hazardous waste.
Additional information received	28/07/15	Response to a schedule 5 notice detailing the waste classification system used.

Status log of the permit		
Description	Date	Comments
Additional information received	04/08/15	Response to a schedule 5 notice including a site drainage plan.
Permit determined EPR/LP3936AB (PAS Billing ref. LP3936AB)	27/08/15	Permit issued to Healthcare Environmental Services Limited.

End of introductory note

#### **Permit**

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

#### **Permit number**

#### EPR/LP3936AB

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

Healthcare Environmental Services Limited ("the operator"),

whose registered office is

Hassockrigg Ecopark Shotts Road Shotts Lanarkshire ML7 5TQ

company registration number SC173861

to operate a regulated facility at

HES North Tyne
Unit BT 99/10
Chollerton Drive
North Tyne Industrial Estate
Newcastle Upon Tyne
NE12 9SZ

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

Name	Date
Emma Pemberton	27/08/15

Authorised on behalf of the Environment Agency

#### **Conditions**

### 1 Management

#### 1.1 General management

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

#### 1.2 Energy efficiency

- 1.2.1 For the following activities referenced in schedule 1, table S1.1 (A1 to A5) 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 A5) the operator shall:
  - (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
  - (b) maintain records of raw materials and water used in the activities:
  - (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
  - (d) take any further appropriate measures identified by a review.

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

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

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

### 2 Operations

#### 2.1 Permitted activities

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the "activities").
- 2.1.2 For the following activities referenced in schedule 1, table S1.1 (A1 to A5) 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.

### 2.3 Operating techniques

- 2.3.1 For the following activities referenced in schedule 1, table S1.1 (A1 to A5) the activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 Any raw materials or fuels listed in schedule 2, table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
  - (a) it is of a type and quantity listed in schedule 2 tables S2.2, S2.3, S2.4 and S2.5; and
  - (b) it conforms to the description in the documentation supplied by the producer and holder.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
  - (a) the nature of the process producing the waste;
  - (b) the composition of the waste;
  - (c) the handling requirements of the waste;
  - (d) the hazardous property associated with the waste, if applicable; and
  - (e) the waste code of the waste.
- 2.3.6 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

#### Hazardous waste storage and treatment

2.3.7 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.

#### 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 the measures specified in schedule 1 table, S1.4 have been completed.

### 3 Emissions and monitoring

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

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3, tables S3.1, S3.2 and S3.3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

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

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

#### 3.3 Odour

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

#### 3.4 Noise and vibration

3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the

operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

#### 3.4.2 The operator shall:

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

#### 3.5 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, S3.2 and S3.3;
  - (b) bioaerosol monitoring specified in table \$3.4;
  - (c) process monitoring specified in table S3.5.
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3, tables S3.1, S3.2, S3.3, S3.4 and S3.5 unless otherwise agreed in writing by the Environment Agency.

#### 3.6 Pests

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

#### 4 Information

#### 4.1 Records

4.1.1 All records required to be made by this permit shall:

- (a) be legible;
- (b) be made as soon as reasonably practicable;
- (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
  - (i) off-site environmental effects; and
  - (ii) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

#### 4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 For the following activities referenced in schedule 1, table S1.1 (A1 to A5) A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:
  - (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
  - (b) the annual production /treatment data set out in schedule 4 table S4.2; and
  - (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
  - (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
  - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.
- 4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

#### 4.3 Notifications

- 4.3.1 In the event:
  - (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—

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

Where the operator is a registered company:

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

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

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

In any other case:

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

## 4.4 Interpretation

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

## **Schedule 1 – Operations**

Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
A1	S5.3 Part A (1) (a) (ii)	Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day; involving physico-chemical treatment. Physico-chemical treatment of hazardous waste in a shredder and autoclave.  D09 - Physico-chemical treatment not specified elsewhere which results in final compounds or mixtures which are disposed of by any of the operations numbered D01 to D12	Hazardous waste types as specified in Table S2.2. From receipt of waste, treatment in autoclave to the dispatch of treated waste for off site disposal. Includes the temporary storage of waste prior to treatment and the shredding of untreated waste.  No more than 50 tonnes of hazardous waste shall be stored on site at any one time.  No more than 20,000 tonnes shall be accepted for autoclave treatment annually.
A2	S5.3 Part A (1) (a) (iv)	Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day; involving repackaging prior to submission to any of the other activities in this section or in section 5.1.  Repackaging sharps into bulk storage containers prior to sending for recovery off site.  R 4 Recycling/reclamation of metals and metal compounds is produced)	Hazardous waste types as specified in Table S2.3, limited to sharps only.  From receipt of waste to repackaging for bulk storage of sharps before dispatch off site.  No more than 50 tonnes of hazardous waste shall be stored on site at any one time.  No more than 1,000 tonnes shall be accepted for repackaging annually.
Directly Asso	ciated Activity	, , , , , , , , , , , , , , , , , , , ,	repackaging annually.
A3	Steam generation	5MWth gas boiler	Includes fuel receipt and demineralised water plant
A4	Bin cleaning facility	Washing and disinfection of re-usable containers for the storage of healthcare/ clinical waste	Handling, cleaning and storage of bins to dispatch for re-use

Table S1.1 ac	ctivities				
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of activity and Nand II operation	VFD Annex I	Limits of specified activity and waste types	
A5	Raw material storage	Storage of ravincluding detedisinfectants, boiler maintenchemicals.	rgents, diesel and	From receipt of raw materials to despatch for use within the facility	
Activity reference	Description of activities for operations	waste	Limits of activities		
A6	operations numbered D01 to (excluding temporary storage	D15 - Storage pending any of the operations numbered D01 to D14 (excluding temporary storage pending collection on the site where it is produced).		Hazardous waste types as specified in Table S2.4.  Temporary storage of hazardous waste prior to off site disposal.  No more than 50 tonnes of hazardous waste shall be stored on site at any one time.  No more than 1000 tonnes of hazardous waste shall be accepted for temporary storage without treatment per year.	
A7	operations numbered R1 to F temporary storage, pending of the site where it is produced)	D15 - Storage pending any of the		orage of non hazardous off site disposal.	
	(excluding temporary storage pending collection on the site where it is produced).			40 tonnes of non-hazardous e stored on site prior to y one time.	
			hazardous wa	8000 tonnes of non- ste shall be accepted for rage without treatment per	

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	Parts B2 and B3 of the application form and referenced supporting information.	Duly Made 07/07/15
Application	ation Email response to request for information providing details on operating techniques, monitoring, risk assessment, waste pre-acceptance measures and site layout plan.	
	Emission point plan titled 'Figure 4.1 Release Points'	04/08/15
	Email response to request for information including the following documents	12/08/15
	'Newcastle - Environmental Risk Assessment V3'	
	'Waste Pre-acceptance Procedure version 3'	
	'Site Spillage Procedure'	
	Odour management plan version 5	
	Email response to request for information including 'Answers to EA questions – 12/08/15'	14/08/15

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	The Operator shall undertake a comprehensive noise assessment by an experienced and suitably qualified person (i.e. a noise consultant with an appropriate qualification accredited by the Institute of Acoustics) in accordance with the procedures given in BS4142: 2014 (Methods for assessing industrial and commercial sound).	Within three months of the completion of site commissioning.
	On completion of the assessment a copy of the survey shall be submitted to the Environment Agency in the form of a report with an interpretation of the results and conclusions drawn	
IC2	The Operator shall undertake an assessment of the integrity of drainage structures.	Within two months of
	A written report summarising the findings shall be submitted to the Agency. A timescale for implementation of any improvements shall be included for agreement with the Environment Agency.	permit issue

Table S1.4 Pre-operational measures		
Reference	Pre-operational measures	
1	The operator shall submit a written site commissioning validation report to the Environment Agency for approval, that demonstrates:	
	(i) the treatment efficacy of the waste facility, in accordance with the appropriate measures in Sections 2.1, 2.3 and Annex 1 of the sector guidance note EPR S5.07 on clinical wastes;	
	(ii) the proposals for routine monitoring of treatment efficacy comply with the appropriate measures in section 3.2 and Annex 2 of the sector guidance note EPR S5.07 on clinical wastes;	
	(iii) the installation's emissions, in accordance with the appropriate measures in Section 3.3 and Annex 3 of the sector guidance note EPR S5.07 on clinical wastes;	
	(iv) the proposals for routine monitoring of emissions comply with the appropriate measures in section 3.3 and Annex 3 of the sector guidance note EPR S5.07 on clinical wastes.	
	The treatment process (D9) shall not be made operational until the Environment Agency has given prior written approval under this condition.	

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

Table S2.1 Raw materials and fuels	
Raw materials and fuel description Specification	
-	-

Table S2.2 Permitted waste types and quantities for activity reference A1- hazardous waste treatment in autoclaves		
Maximum quantity	No more than 20,000 tonnes shall be accepted per year.  No more than 50 tonnes of hazardous waste shall be stored at any one time.	
Waste code	Description	
18	Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)	
18 01	wastes from natal care, diagnosis, treatment or prevention of disease in humans	
18 01 03*	wastes whose collection and disposal is subject to special requirements in order to prevent infection <sup>1</sup>	
18 02	wastes from research, diagnosis, treatment or prevention of disease involving animals	
18 02 02*	wastes whose collection and disposal is subject to special requirements in order to prevent infection <sup>1</sup>	
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions	
20 01	separately collected fractions (except 15 01)	
20 01 99	other fractions not otherwise specified (comprising only of separately collected fractions of municipal clinical waste (not arising from healthcare and/or related research i.e. not including waste from natal care, diagnosis, treatment or prevention of disease) which is subject to special requirements in order to prevent infection).	

<sup>1</sup>In addition, the following wastes are specifically excluded from waste treatment activities:

<sup>(</sup>i): Any waste containing waste medicines and chemicals, waste contaminated with cytotoxic and cytostatic medicines, anatomical waste (identifiable human or animal tissue arising from healthcare), or Dental amalgam;

<sup>(</sup>ii): Sharps boxes containing any of the excluded wastes from (i) and (iii) or Sharps that are contaminated with pharmaceuticals in any quantity (including syringes that are fully discharged, partially discharged or undischarged).

<sup>(</sup>iii): Biohazard waste: Any waste known or likely to contain ACDP Hazard Group 4 biological agents; Any waste from a containment level 3 laboratory: and All Microbiological cultures from any source, and, any potentially infected waste from pathology departments and other clinical or research laboratories (Unless autoclaved before leaving the site of production).

Table S2.3 Permitted waste types and quantities for activity reference A2- repackaging of hazardous waste- sharps only		
Maximum quantity	No more than 1,000 tonnes shall be accepted per year.  No more than 50 tonnes of hazardous waste shall be stored at any one time.	
Waste code	Description	
18	Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)	
18 01	wastes from natal care, diagnosis, treatment or prevention of disease in humans	
18 01 03*	wastes whose collection and disposal is subject to special requirements in order to prevent infection	
18 02	wastes from research, diagnosis, treatment or prevention of disease involving animals	
18 02 02*	wastes whose collection and disposal is subject to special requirements in order to prevent infection	

Table S2.4 Permitted waste types and quantities for activity reference A6- temporary storage of hazardous waste		
Maximum quantity	No more than 1,000 tonnes shall be accepted per year.  No more than 50 tonnes of hazardous waste shall be stored at any one time.	
Waste code	Description	
09	Wastes from the photographic industry	
09 01	wastes from the photographic industry	
09 01 01*	water-based developer and activator solutions <sup>2</sup>	
09 01 02*	water-based offset plate developer solutions <sup>2</sup>	
09 01 03*	solvent-based developer solutions <sup>2</sup>	
09 01 04*	fixer solutions <sup>2</sup>	
09 01 05*	bleach solutions and bleach fixer solutions <sup>2</sup>	
16	Wastes not otherwise specified in the list	
16 02	wastes from electrical and electronic equipment	
16 02 13*	discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12	
18	Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)	
18 01	wastes from natal care, diagnosis, treatment or prevention of disease in humans	
18 01 03*	wastes whose collection and disposal is subject to special requirements in order to prevent infection	
18 01 06*	chemicals consisting of or containing hazardous substances (excluding X-ray photochemicals)	
18 01 08*	cytotoxic and cytostatic medicines	
18 01 10*	amalgam waste from dental care	
18 02	wastes from research, diagnosis, treatment or prevention of disease involving animals	

Maximum quantity	No more than 1,000 tonnes shall be accepted per year.  No more than 50 tonnes of hazardous waste shall be stored at any one time.
Waste code	Description
18 02 02*	wastes whose collection and disposal is subject to special requirements in order to prevent infection
18 02 05*	chemicals consisting of or containing hazardous substances (excluding X-ray photochemicals)
18 02 07*	cytotoxic and cytostatic medicines
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 11*	other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)
20 01 17*	photochemicals
20 01 21*	fluorescent tubes and other mercury-containing waste
20 01 23*	discarded equipment containing chlorofluorocarbons
20 01 27*	paint, inks, adhesives and resins containing hazardous substances
20 01 29*	detergents containing hazardous substances
20 01 31*	cytotoxic and cytostatic medicines
20 01 33*	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
20 01 99	other fractions not otherwise specified (comprising of separately collected fractions of municipal clinical waste (not arising from healthcare and/or related research i.e. not including waste from natal care, diagnosis, treatment or prevention of disease)

Table S2.5 Permitted waste types and quantities for activity reference A7- temporary storage of non hazardous waste						
Maximum quantity	No more than 8,000 tonnes shall be accepted per year.  No more than 40 tonnes of non-hazardous waste shall be stored as part of this activity any one time.					
Waste code	Description					
09	Wastes from the photographic industry					
09 01	wastes from the photographic industry					
09 01 07	photographic film and paper containing silver or silver compounds					
09 01 08	photographic film and paper free of silver or silver compounds					
09 01 99	wastes not otherwise specified- lead foils only					

Maximum quantity	No more than 8,000 tonnes shall be accepted per year.  No more than 40 tonnes of non-hazardous waste shall be stored as part of this activity any one time.
Waste code	Description
18	Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)
18 01	wastes from natal care, diagnosis, treatment or prevention of disease in humans
18 01 01	sharps (except 18 01 03) <sup>3</sup>
18 01 02	body parts and organs including blood bags and blood preserves (except 18 01 03)
18 01 04	wastes whose collection and disposal is not subject to special requirements in order to prevent infection (for example dressings, plaster casts, linen, disposable clothing diapers) <sup>3</sup>
18 01 07	chemicals other than those mentioned in 18 01 06 (excluding X-ray photochemicals)
18 01 09	medicines other than those mentioned in 18 01 08
18 02	wastes from research, diagnosis, treatment or prevention of disease involving animals
18 02 01	sharps (except 18 02 02) <sup>3</sup>
18 02 03	wastes whose collection and disposal is not subject to special requirements in order to prevent infection <sup>3</sup>
18 02 06	chemicals other than those mentioned in 18 02 05 (excluding X-ray photochemicals)
18 02 08	medicines other than those mentioned in 18 02 07
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)
20 01 32	medicines other than those mentioned in 20 01 31
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
20 01 99	other fractions not otherwise specified (comprising only of non-clinical human and animal offensive/hygiene waste (not arising from healthcare and/or related research i.e. not including waste from natal care, diagnosis, treatment or prevention of disease) which is not subject to special requirements in order to prevent infection) <sup>3</sup>

## Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 Point A1 on site plan in Schedule 7	Boiler	Combustion gasses	no limit set	-	-	-
A2 Point A2 on site plan in schedule 7	Emergency vent from autoclaves	Steam, Volatile organic compounds (VOCs) and microbial emissions	no limit set	-	-	-
A3 Point A3 on site plan in schedule 7	Shredder exhaust fitted with carbon and HEPA filters	Microbial emissions: Bacillus spores	1000cfu per cubic metre	-	During commissioning and annually thereafter	In accordance with our Sector Guidance Note EPR 5.07 Clinical Waste Annex 3.

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 on site plan in schedule 7 emission to Longbenton Letch via public surface water drainage system	Uncontaminated surface water drainage from external yard areas	No parameters set	No limit set	-	-	-

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site- emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1 on site plan in schedule 7 emission to Northumbrian Water Howden Wastewater Treatment Works	Boiler blowdown, binwashing effluent, condensate from autoclave treatment and internal drainage	Bacillus Spores	300cfu per litre	-	Annual	In accordance with our Sector Guidance Note EPR 5.07 Clinical Waste Annex 3.

Table S3.4 Bioaerosol monitoring requirements					
Location or description of point of measurement	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
Air – sample points <10m from the treatment plant	Microbial emissions: Bacillus spores	1000cfu per cubic metre		During commissioning and annually thereafter	In accordance with our Sector Guidance Note EPR 5.07 Clinical Waste Annex 3.
Air – sample points >10m from the treatment plant	Microbial emissions: Bacillus spores	300cfu per cubic metre		During commissioning and annually thereafter	In accordance with our Sector Guidance Note EPR 5.07 Clinical Waste Annex 3.
Surface – sample points < 10m from the treatment plant	Microbial emissions: Bacillus spores	20000cfu per square metre per hour	Hourly	During commissioning and annually thereafter	In accordance with our Sector Guidance Note EPR 5.07 Clinical Waste Annex 3.
Surface – sample points > 10 m from the treatment plant	Microbial emissions: Bacillus spores	5000cfu per square metre per hour	Hourly	During commissioning and annually thereafter	In accordance with our Sector Guidance Note EPR 5.07 Clinical Waste Annex 3.

Table S3.5 Process monitoring requirements					
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications	
Autoclave treatment system	Routine efficacy monitoring	Weekly for the first six months of operation following validation and monthly thereafter or as agreed in writing with the Environment Agency	In accordance with our Sector Guidance Note EPR 5.07 Clinical Waste Annex 2.	-	
Autoclave treatment system	Treatment process validation	4 yearly intervals	In accordance with our Sector Guidance Note EPR 5.07 Clinical Waste Annex 1.	-	

## Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data					
Parameter	Emission or monitoring point/reference	Reporting period	Period begins		
Emissions to sewer Parameters as required by condition 3.5.1	Discharge to foul sewer S1	Every 12 months	1 January		
Bioaerosol monitoring Parameters as required by condition 3.5.1	As outlined in table S3.1 and S3.4	Every 12 months	1 January		
Process monitoring Parameters as required by condition 3.5.1	Autoclave treatment system	Every month	1 January		

Table S4.2 Annual production/treatment				
Parameter	Units			
Hazardous waste treated	tonnes			
Waste (non-treatable) accepted for transfer	tonnes			
Non hazardous waste treated	tonnes			
Treated waste sent for disposal	tonnes			

Table S4.3 Performance parameters				
Parameter	Frequency of assessment	Units		
Water usage	Annually	tonnes		
Energy usage	Annually	MWh		
Total raw material used	Annually	tonnes		

Table S4.4 Reporting forms				
Media/parameter	Media/parameter Reporting format			
Bioaerosol	Form bioaerosol 1 or other form as agreed in writing by the Environment Agency	13/08/15		
Sewer	Form sewer 1 or other form as agreed in writing by the Environment Agency	13/08/15		
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	13/08/15		
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	13/08/15		
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	13/08/15		

## Schedule 5 - Notification

These pages outline the information that the operator must provide.

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

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

#### Part A

Permit Number

Name of operator	
Location of Facility	
Time and date of the detection	
	iny malfunction, breakdown or failure of equipment or techniques, nce not controlled by an emission limit which has caused, is pollution
To be notified within 24 hours of o	detection
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for t	the breach of a limit
To be notified within 24 hours of	detection unless otherwise specified below
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Parameter			Notification period
(c) Notification requirements for	the detection of a	ny significant a	dvorse environmental effect
To be notified within 24 hours of		ily Significant a	averse environmental enect
Description of where the effect on	detection		
the environment was detected			
Substances(s) detected			
Concentrations of substances detected			
Date of monitoring/sampling			
Any more accurate information on t	T	n as pract	icable
Any more accurate information on t notification under Part A.	the matters for	n as pract	icable
	the matters for	n as pract	icable
Any more accurate information on to notification under Part A.  Measures taken, or intended to be	taken, to prevent taken, to rectify, environment	n as pract	icable
Any more accurate information on to notification under Part A.  Measures taken, or intended to be a recurrence of the incident  Measures taken, or intended to be limit or prevent any pollution of the	taken, to prevent taken, to rectify, environment by the emission	n as pract	icable
Any more accurate information on to notification under Part A.  Measures taken, or intended to be a recurrence of the incident  Measures taken, or intended to be limit or prevent any pollution of the which has been or may be caused  The dates of any unauthorised emissions.	taken, to prevent taken, to rectify, environment by the emission	n as pract	icable
Any more accurate information on to notification under Part A.  Measures taken, or intended to be a recurrence of the incident  Measures taken, or intended to be limit or prevent any pollution of the which has been or may be caused. The dates of any unauthorised emisfacility in the preceding 24 months.	taken, to prevent taken, to rectify, environment by the emission	n as pract	icable
Any more accurate information on to notification under Part A.  Measures taken, or intended to be a recurrence of the incident  Measures taken, or intended to be limit or prevent any pollution of the which has been or may be caused  The dates of any unauthorised emissions.	taken, to prevent taken, to rectify, environment by the emission	n as pract	icable
Any more accurate information on to notification under Part A.  Measures taken, or intended to be a recurrence of the incident  Measures taken, or intended to be limit or prevent any pollution of the which has been or may be caused  The dates of any unauthorised emifacility in the preceding 24 months.  Name*	taken, to prevent taken, to rectify, environment by the emission	n as pract	icable

<sup>\*</sup> authorised to sign on behalf of the operator

## 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.

"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.

"disposal" means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

"emissions 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.

'Hazardous property' has the meaning in Annex III of the Waste Framework Directive

'Hazardous waste' has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 (as amended)

"Industrial Emissions Directive" means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

'List of Wastes' means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

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

Pests" means Birds, Vermin and Insects.

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

"recovery" means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

'Waste code' means the six digit code referable to a type of waste in accordance with the List of Wastes 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:

 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 • 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.

"year" means calendar year ending 31 December.

Where the following terms appear in the waste code list in Table S2.2, S2.3 and S2.4 they have the meaning given below.

'hazardous substance' means a substance classified as hazardous as a consequence of fulfilling the criteria laid down in parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008

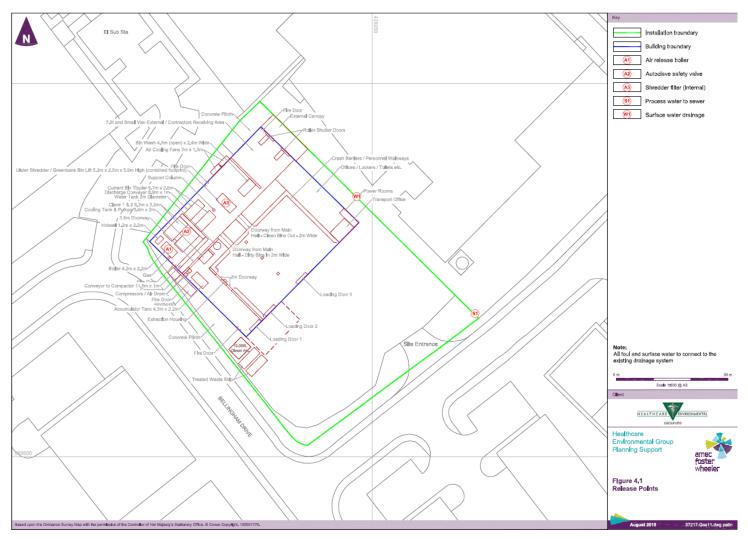
'heavy metal' means any compound of antimony, arsenic, cadmium, chromium (VI), copper, lead, mercury, nickel, selenium, tellurium, thallium and tin, as well as these materials in metallic form, as far as these are classified as hazardous substances

'polychlorinated biphenyls and polychlorinated terphenyls' ('PCBs') means PCBs as defined in Article 2(a) of Council Directive 96/59/EC'.

Article 2(a) says that 'PCBs' means:

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

## Schedule 7 – Site plan



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**END OF PERMIT**