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P.O. Box 3000
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County Wexford
Ireland

## WASTE LICENCE

## **Recommended Decision**

Licence Register Number:	145-2
Applicant:	Atlas Environmental Ireland Ltd
Location of Facility:	Unit 9, Raffeen Industrial Estate, Raffeen, Monkstown, Co. Cork

Updated: 06 Sept 2005

## INTRODUCTION

This introduction is not part of the licence and does not purport to be a legal interpretation of the licence.

Gleneden Trading Ltd. was granted a licence in February 2002 to operate a healthcare waste treatment unit at this site. Atlas Environmental Ireland Ltd now own and manage the facility. The licence was reviewed to increase the quantity and broaden the scope of licensed activities to include the acceptance, temporary storage and onward shipment off-site of other hazardous waste types mainly consisting of waste oils. These wastes will be sent off site for treatment and/or disposal. All operations will take place indoors.

The proposed waste quantity in the application is 7,000tpa consisting of waste oils (4000tpa), healthcare waste (1,600 tpa), oil filters (500tpa) and batteries (50 tpa) with the remainder consisting of small quantities of fluorescent light bulbs, contaminated soils, photographic waste, waste cooking oil, end-of-life vehicle component parts and non-liquid hazardous/contaminated waste.

There will be one emission point to air from the healthcare waste disinfection unit and there are no emissions to water, groundwater or sewer from the site.

The licence sets out in detail the conditions under which **Atlas Environmental Ireland Ltd.** will operate and manage this facility.

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## Glossary of Terms

All terms in this licence should be interpreted in accordance with the definitions in the Waste Management Acts 1996 to 2005, (the Acts), unless otherwise defined in this section.

**Aerosol** A suspension of solid or liquid particles in a gaseous medium.

**Adequate lighting** 20 lux measured at ground level.

**AER** Annual Environmental Report.

**Agreement** Agreement in writing.

**Annually** At approximately twelve monthly intervals.

**Attachment** Any reference to Attachments in this licence refers to attachments submitted as

part of this licence application.

**Application** The application by the licensee for this licence.

Appropriate facility

A waste management facility, duly authorised under relevant law and technically

suitable.

**BAT** Best Available Techniques.

**Bi-annually** All or part of a period of six consecutive months.

**Biennially** Once every two years.

**BOD** 5 day Biochemical Oxygen Demand.

Category A Healthcare Risk Waste Classification based on "Segregation, Packaging and Storage Guidelines for Healthcare Waste", Appendix 1, 3rd Edition April 2004, produced by the Department of Health and Children.

bepartment of Health and Children.

**CEN** Comité Européen De Normalisation – European Committee for Standardisation

Commercial

Waste

As defined in Section 5(1) of the Waste Management Acts 1996 to 2005.

**COD** Chemical Oxygen Demand.

Construction and Demolition Waste

Wastes that arise from construction, renovation and demolition activities:

Chapter 17 of the EWC or as otherwise may be agreed.

Containment boom

A boom, which can contain spillages and prevent them from entering drains or

watercourses or from further contaminating watercourses.

**Daily** During all days of plant operation, and in the case of emissions, when emissions

are taking place; with at least one measurement on any one day.

**Day** Any 24-hour period.

**Daytime** 0800 hrs to 2200 hrs.

**dB**(**A**) Decibels (A weighted).

**DO** Dissolved Oxygen.

**Documentation** Any report, record, result, data, drawing, proposal, interpretation or other

document in written or electronic form which is required by this licence.

**Drawing** Any reference to a drawing or drawing number means a drawing or drawing

number contained in the application, unless otherwise specified in this licence.

**EMP** Environmental Management Programme.

Emission Limits Those limits, including concentration limits and deposition rates established in

Schedule B of this licence.

Environmental Damage

Catalogue (EWC)

Has the meaning given it in Directive 2004/35/EC

**EPA** Environmental Protection Agency.

European Waste A harmonised, non-exhaustive list of wastes drawn up by the European

Commission and published as Commission Decision 2000/532/EC and any subsequent amendment published in the Official Journal of the European

Community.

**Facility** Any site or premises used for the purposes of the recovery or disposal of waste.

**Fortnightly** A minimum of 24 times per year, at approximately two week intervals.

GC/MS Gas Chromatography/Mass Spectroscopy

Green waste Waste wood (excluding timber), plant matter such as grass cuttings, and other

vegetation.

**Heavy Metals** This term is to be interpreted as set out in "Parameters of Water Quality,

Interpretation and Standards" published by the Agency in 2001. ISBN 1-84095-

015-3.

**HFO** Heavy Fuel Oil.

Hours of Operation

The hours during which the facility is authorised to be operational.

Hours of Waste Acceptance

The hours during which the i/facility is authorised to accept waste

**HSU** Healthcare Waste Sterilisation Unit

**ICP** Inductively Coupled Plasma Spectroscopy.

**Incident** The following shall constitute an incident for the purposes of this licence:

a) an emergency;

b) any emission which does not comply with the requirements of this licence;

c) any exceedence of the daily duty capacity of the waste handling equipment;

 any trigger level specified in this licence which is attained or exceeded; and.

e) any indication that environmental pollution has, or may have, taken

place.

f)

**Industrial Waste** As defined in Section 5(1) of the Waste Management Acts 1996 to 2005.

**Installation** A stationary technical unit or plant where the activity concerned referred to in

the First Schedule of EPA Acts 1992 and 2003 is or will be carried on, and shall be deemed to include any directly associated activity, which has a technical

connection with the activity and is carried out on the site of the activity.

**IPPC** Integrated Pollution Prevention & Control.

K Kelvin.

kPa Kilo Pascals.

**Leq** Equivalent continuous sound level.

**Licence** A Waste Licence issued in accordance with the Waste Management Acts 1996

to 2005.

Licensee Atlas Environmental Ireland Ltd.

**Liquid Waste** Any waste in liquid form and containing less than 2% dry matter.

**List I** As listed in the EC Directives 76/464/EEC and 80/68/EEC and amendments.

**List II** As listed in the EC Directives 76/464/EEC and 80/68/EEC and amendments.

Local Authority Cork County Council

Maintain Keep in a fit state, including such regular inspection, servicing, calibration and

repair as may be necessary to adequately perform its function.

Mass Flow Limit An Emission Limit Value, which is expressed as the maximum mass of a

substance which can be emitted per unit time.

Mass Flow Threshold A mass flow rate, above which, a concentration limit applies.

**Monthly** A minimum of 12 times per year, at approximately monthly intervals.

Night-time 2200 hrs to 0800 hrs.

Noise Sensitive Location (NSL)

Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or area of high amenity

which for its proper enjoyment requires the absence of noise at nuisance levels.

Oil Separator Device installed according to the International Standard I.S.EN 858-2:2003

(Separator systems for light liquids, (e.g. oil and petrol)-Part 2:Selection of

nominal size, installation, operation and maintenance.

**PER** Pollution Emission Register.

**Quarterly** All or part of a period of three consecutive months beginning on the first day of

January, April, July or October.

**Regional Fisheries** 

**Board** 

Southern Regional Fisheries Board.

Recyclable Materials Those waste types, such as cardboard, batteries, gas cylinders, etc, which may

be recycled.

Sanitary Authority Cork County Council

Sanitary Effluent

Waste water from facility toilet, washroom and canteen facilities

Sample(s)

Unless the context of this licence indicates to the contrary, samples shall include

measurements by electronic instruments.

SOP

Standard Operating Procedure.

Specified Emissions

Those emissions listed in *Schedule B: Emission Limits* of this licence.

Specified Engineering Works Those engineering works listed in Schedule D: Specified Engineering Works of

this licence.

Standard Methods A National, European or internationally recognised procedure (eg, I.S. EN, ISO, CEN, BS or equivalent), as an in-house documented procedure based on the above references, a procedure as detailed in the current edition of "Standard Methods for the Examination of Water and Wastewater", (prepared and published jointly by A.P.H.A., A.W.W.A & W.E.F), American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005, USA; or, an alternative method several health Association and Public Health Associ

alternative method as may be agreed by the Agency.

Storm Water

Rain water run-off from roof and non-process areas.

Temporary storage

In relation to waste is a period of less than six months as defined in the Waste

Management Acts 1996 to 2005.

The Agency

Environmental Protection Agency.

TA Luft

Technical Instructions on Air Quality Control - TA Luft in accordance with art. 48 of the Federal Immission Control Law (BImSchG) dated 15 March 1974 (BGBI. I p.721). Federal Ministry for Environment, Bonn 1986, including the amendment for Classification of Organic Substances according to section 3.1.7

TA.Luft, published in July 1997.

TOC

Total Organic Carbon.

**Trade Effluent** 

Trade Effluent has the meaning given in the water pollution Acts 1977 and 1990

**Trigger Level** 

A parameter value, the achievement or exceedance of which requires certain

actions to be taken by the licensee.

Weekly

During all weeks of plant operation, and in the case of emissions, when emissions are taking place; with at least one measurement in any one week.

**WWTP** 

Waste Water Treatment Plant.

# Decision & Reasons for the Decisions Reasons for the Decision

The Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of this licence, any emissions from the activity will comply with and will not contravene any of the requirements of the Section 40(4) of the Waste Management Acts 1996 to 2005.

In reaching this decision the Environmental Protection Agency has considered the application and supporting documentation received from the applicant, and the report of its inspector.

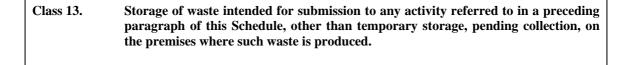
## Part I Schedule of Activities Licensed

In pursuance of the powers conferred on it by the Waste Management Acts 1996 to 2005, the Environmental Protection Agency (the Agency) proposes, under Section 46(2) of the said Act to grant this Waste Licence to **Atlas Environmental Ireland Ltd.** to carry on the waste activities listed below at **Unit 9, Raffeen Industrial Estate, Raffeen, Monkstown, Co. Cork** subject to conditions, with the reasons therefor and the associated schedules attached thereto set out in the licence.

Licensed Waste Disposal Activities, in accordance with the Third Schedule of the Waste Management Acts 1996 to 2005

Class 7.	Physico-chemical treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1 to 5 or paragraphs 8 to 10 of this Schedule (including evaporation, drying and calcination).
Class 11.	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.
Class 12.	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
Class 13.	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.

Licensed Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Acts 1996 to 2005



## Part II Schedule of Activities Refused

None of the proposed activities as set out in the licence application have been refused.

## Part III Conditions

## **Condition 1.** Scope

- 1.1 Waste activities at this facility shall be restricted to those listed and described in Part I Activities Licensed and shall be as set out in the licence application or as modified under Condition 1.5 of this licence and subject to the conditions of this licence.
- 1.2 Activities at this facility shall be limited as set out in Schedule A: Limitations.
- 1.3 The facility shall be controlled, operated, and maintained and emissions shall take place as set out in this licence. All programmes required to be carried out under the terms of this licence, become part of this licence.
- 1.4 For the purposes of this licence, the facility authorised by this licence, is the area of land outlined in **red** on Drawing No. **2004-238-01-002 Rev. B** of the application. Any reference in this licence to facility shall mean the area thus outlined in red. The licensed activities shall be the carried on only within the area outlined.
- 1.5 No alteration to, or reconstruction in respect of, the activity or any part thereof which would, or is likely to, result in
  - (a) a material change or increase in:
    - The nature or quantity of any emission,
    - The abatement/treatment or recovery systems,
    - The range of processes to be carried out,
    - The fuels, raw materials, intermediates, products or wastes generated, or
  - (b) any changes in:
    - Site management infrastructure or control with adverse environmental significance,

shall be carried out or commenced without prior notice to, and without the agreement of, the Agency.

- 1.6 This licence is for the purposes of waste licensing under the Waste Management Acts 1996 to 2005 only and nothing in this licence shall be construed as negating the licensee's statutory obligations or requirements under any other enactments or regulations.
- 1.7 This licence is being granted in substitution for the waste licence granted to the licensee on 26<sup>th</sup> February 2002 and bearing Waste Licence Register No: 145-1. The previous waste licence (Register No: 145-1) is superseded by this licence

Reason: To clarify the scope of this licence.

## **Condition 2.** Management of the Facility

### 2.1 Facility Management

2.1.1 The licensee shall employ a suitably qualified and experienced facility manager who shall be designated as the person in charge. The facility manager or a nominated, suitably qualified and experienced, deputy shall be present on the facility at all times during its operation or as otherwise required by the Agency.

2.1.2 The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and experience, as required and shall be aware of the requirements of this licence. In addition, the facility manager and his/her deputy shall successfully complete FAS waste management training programme or equivalent agreed with the Agency.

### 2.2 Environmental Management System (EMS)

- 2.2.1 The licensee shall establish and maintain an Environmental Management System (EMS) within six months of the date of grant of this licence. The EMS shall be updated on an annual basis.
- 2.2.2 The EMS shall include as a minimum the following elements:
  - 2.2.2.1 Management and Reporting Structure.
  - 2.2.2.2 Schedule of Environmental Objectives and Targets.

The licensee shall prepare a Schedule of Environmental Objectives and Targets. The Schedule shall as a minimum provide for a review of all operations and processes, including an evaluation of practicable options, for energy and resource efficiency, the use of cleaner technology, cleaner production, and the prevention, reduction and minimisation of waste, and shall include waste reduction targets. The Schedule shall include time frames for the achievement of set targets and shall address a five year period as a minimum. The Schedule shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER).

### 2.2.2.3 Environmental Management Programme (EMP)

The licensee shall, not later than six months from the date of grant of this licence, submit to the Agency for agreement an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition **2.2.2.2**. Once agreed the EMP shall be established and maintained by the licensee. It shall include:

- (b) designation of responsibility for targets;
- (c) the means by which they may be achieved;
- (d) the time within which they may be achieved.

The EMP shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER) (Condition 11).

A report on the programme, including the success in meeting agreed targets, shall be prepared and submitted to the Agency as part of the AER. Such reports shall be retained on-site for a period of not less than seven years and shall be available for inspection by authorised persons of the Agency.

### 2.2.2.4 Documentation

- (i) The licensee shall establish and maintain an environmental management documentation system which shall be to the satisfaction of the Agency.
- (ii) The licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.

### 2.2.2.5 Corrective Action

The licensee shall establish procedures to ensure that corrective action is taken should the specified requirements of this licence not be fulfilled. The responsibility and authority for initiating further investigation and corrective action in the event of a reported non-conformity with this licence shall be defined

### 2.2.2.6 Awareness and Training

The licensee shall establish and maintain procedures for identifying training needs, and for providing appropriate training, for all personnel whose work can have a significant effect upon the environment. Appropriate records of training shall be maintained.

### 2.2.2.7 Communications Programme

The licensee shall establish and maintain a Public Awareness Communications Programme to ensure that members of the public are informed and can obtain information at the facility, at all reasonable times, concerning the environmental performance of the facility.

### 2.2.2.8 Maintenance Programme

The licensee shall establish and maintain a programme for maintenance of all plant and equipment based on the instructions issued by the manufacturer/supplier or installer of the equipment. Appropriate record keeping and diagnostic testing shall support this maintenance programme. The licensee shall clearly allocate responsibility for the planning, management and execution of all aspects of this programme.

### 2.2.2.9 Efficient Process Control

The licensee shall establish and maintain a programme to ensure there is adequate control of processes under all modes of operation, identifying the key performance indicators and methods for measuring and controlling these parameters. Abnormal process operating conditions shall be documented and analysed to identify necessary corrective action.

Reason:

To make provision for management of the activity on a planned basis having regard to the desirability of ongoing assessment, recording and reporting of matters affecting the environment.

## **Condition 3.** Infrastructure and Operation

- 3.1 The licensee shall establish all infrastructure referred to in this licence prior to the commencement of the licensed activities or as required by the conditions of this licence.
- 3.2 Facility Notice Board
  - 3.2.1 The licensee shall provide and maintain an Facility Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the board shall be 1200 mm by 750 mm.
  - 3.2.2 The board shall clearly show:
    - a) the name and telephone number of the facility;
    - b) the normal hours of opening;

- c) the name of the licence holder;
- d) an emergency out of hours contact telephone number;
- e) the licence reference number; and
- f) where environmental information relating to the facility can be obtained.

### 3.3 Facility Security

- 3.3.1 Security and stockproof fencing and gates shall be installed and maintained. The base of the fencing shall be set in the ground. Subject to the implementation of the restoration and aftercare plan and to the agreement of the Agency, the requirement for such site security may be removed.
- 3.3.2 Gates shall be locked shut when the facility is unsupervised.
- 3.3.3 The licensee shall remedy any defect in the gates and/or fencing as follows:-
  - (i) A temporary repair shall be made by the end of the working day; and
  - (ii) A repair to the standard of the original gates and/or fencing shall be undertaken within three working days.

### 3.4 Facility Roads and Site Surfaces

- 3.4.1 Effective site roads shall be provided and maintained to ensure the safe and nuisance free movement of vehicles within the facility.
- 3.4.2 The licensee shall provide, and maintain an impermeable concrete surface in the areas of the facility shown on **Drawing No. Glen-2**, the surfaces shall be concreted and constructed to British Standard 8110 or an alternative as agreed by the Agency.

## 3.5 Facility Office

- 3.5.1 The licensee shall provide and maintain an office at the facility. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation.
- 3.5.2 The licensee shall provide and maintain a working telephone and a method for electronic transfer of information at the facility.
- 3.6 Waste Inspection and Quarantine Areas
  - 3.6.1 A Waste Inspection Area and a Waste Quarantine Area shall be provided and maintained at the facility. A separate waste quarantine area shall be provided for healthcare waste.
  - 3.6.2 These areas shall be constructed and maintained in a manner suitable, and be of a size appropriate, for the inspection of waste and subsequent quarantine if required. The waste inspection area and the waste quarantine area shall be clearly identified and segregated from each other.
  - 3.6.3 Drainage from the waste quarantine areas shall be held within the internal bunds for appropriate disposal.

### 3.7 Healthcare Waste Storage Areas

- 3.7.1 A controlled storage area separating the untreated healthcare waste from the rest of the plant shall be maintained at the facility.
- 3.7.2 A controlled contamination area separating the untreated healthcare risk waste loading area from the rest of the plant shall be maintained at the facility.

- 3.7.3 All treated healthcare waste shall be placed in a dedicated storage area and will be held on-site until test results as per schedule C.5.2 confirm its successful treatment.
- 3.7.4 All healthcare storage areas must be provided with a closed drainage system, be totally enclosed and locked when not in use. These areas must be adequately lit and ventilated, be clearly marked with warning signs indicating their contents and be provided with washing facilities for staff.
- 3.7.5 The licensee shall, prior to the commencement of healthcare waste treatment at the facility, provide the Agency with the following:-
  - (i) a map indicating the location of the healthcare waste quarantine area, contamination area and storage areas for treated and untreated waste and
  - (ii) details on how the requirements of condition 3.7.4 where appropriate will be met.
- 3.8 Weighbridge and Wheel Cleaner
  - 3.8.1 The licensee shall provide and maintain a weighbridge at the facility.
- 3.9 Waste handling, ventilation and processing plant
  - 3.9.1 Items of plant **and available storage capacity** deemed critical to the efficient and adequate processing of waste at the facility (including inter alia **shredders, compactors, bin lifting equipment, air handling, ventilation and abatement plant**) shall be provided on the following basis:
    - a) 100% duty capacity;
    - b) 20% standby capacity available on a routine basis; and
    - Provision of contingency arrangements and/or back up and spares in the case of breakdown of critical equipment.
  - 3.9.2 Prior to the commencement of waste activities the licensee shall provide a report for the agreement of the Agency detailing the duty and standby capacity in tonnes per day of all waste handling and processing equipment to be used at the facility. These capacities shall be based on the licensed waste intake, as per Schedule A: Limitations, of this licence.
  - 3.9.3 The quantity of waste to be accepted at the facility on a daily basis shall not exceed the duty capacity of the equipment at the facility. Any exceedance of this intake shall be treated as an incident.
- 3.10 Wastewater Treatment System
  - 3.10.1 The licensee shall provide and maintain a Wastewater Treatment System at the facility for the treatment of sanitary effluent arising onsite. The specification of the treatment plant shall be agreed in advance with the Agency. The percolation area shall satisfy the criteria set out in the Wastewater Treatment Manual, *Treatment Systems for Single Houses*, published by the Environmental Protection Agency.
- 3.11 The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.
- 3.12 Sampling equipment shall be operated and maintained such that sufficient sample is collected to meet both internal monitoring requirements and those of the Agency. A separate composite sample or homogeneous sub-sample (of sufficient volume as advised) should be refrigerated immediately after collection and retained as required for EPA use.

- 3.13 The licensee shall clearly label and provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency.
- 3.14 **Healthcare Waste**, Tank and Drum Storage Areas
  - 3.14.1 All **healthcare waste**, tank and drum storage areas shall be rendered impervious to the materials stored therein.
  - 3.14.2 All **healthcare waste**, tank and drum storage areas shall, as a minimum, be bunded, either locally or remotely, to a volume not less than the greater of the following:-
    - (i) 110% of the capacity of the largest tank or drum within the bunded area; or
    - (ii) 25% of the total volume of substance which could be stored within the bunded area
  - 3.14.3 All drainage from bunded areas shall be diverted for collection and safe disposal.
  - 3.14.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
  - 3.14.5 The integrity and water tightness of all the bunding structures and their resistance to penetration by water or other materials stored therein shall be tested and demonstrated by the licensee at least once every three years. This testing shall be carried out in accordance with any guidance published by the Agency.
- 3.15 The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the facility. Once used the absorbent material shall be disposed of at an appropriate facility.
- 3.16 Silt Traps and Oil Separators

The licensee shall install and maintain a silt trap and oil separator at the facility at the location shown in Drawing No. Glen 2, to ensure that storm water discharges from areas indicated pass through the silt trap and oil separator prior to discharge. The separator shall be a Class II full retention separator and the silt traps and separator shall be in accordance with I.S. EN 585-2:2003 (separator systems for light liquids).

- 3.17 Drainage system
  - 3.17.1 All existing storm water run-off areas as indicated in Drawing No. 2004-238-01-001 Rev B shall be collected and disposed of to the existing percolation area.
  - 3.17.2 All new storm water areas from the new warehouse and hardstanding areas shall be directed to the new soakway as indicated in Drawing No. Glen 2
- 3.18 Firewater Retention
  - 3.18.1 The licensee shall have regard to the Environmental Protection Agency Draft Guidance Note to Industry on the Requirements for Fire-Water Retention Facilities in the provision of firewater retention facilities on-site.
- 3.19 All pump sumps, storage tanks, or other treatment plant chambers from which spillage of environmentally significant materials might occur in such quantities as are likely to breach local or remote containment or separator, shall be fitted with high liquid level alarms (or oil detectors as appropriate) within **six** months from the date of grant of this licence.
- 3.20 The provision of a catchment system to collect any leaks from flanges and valves of all over ground pipes used to transport material other than water shall be examined.

This shall be incorporated into a schedule of objectives and targets set out in Condition 2.2 of this licence for the reduction in fugitive emissions.

- 3.21 The licensee shall, within three months of the date of grant of this licence, install in a prominent location on the site a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.
- 3.22 Specified Engineering Works
  - 3.22.1 The licensee shall submit proposals for all Specified Engineering Works, as defined in *Schedule D: Specified Engineering Works*, of this licence, to the Agency for its agreement at least two months prior to the intended date of commencement of any such works. No such works shall be carried out without the prior agreement of the Agency.
  - 3.22.2 All specified engineering works shall be supervised by a competent person(s) and that person, or persons, shall be present at all times during which relevant works are being undertaken.
  - 3.22.3 Following the completion of all specified engineering works, the licensee shall complete a construction quality assurance validation. The validation report shall be made available to the Agency on request. The report shall, as appropriate, include the following information:-
    - (a) A description of the works;
    - (b) As-built drawings of the works;
    - (c) Any other information requested in writing by the Agency.
- 3.13 Monitoring Infrastructure
  - 3.13.1 :Replacement of Infrastructure: Monitoring infrastructure, which is damaged or proves to be unsuitable for its purpose shall be replaced within three months of it being damaged or recognised as being unsuitable.

REASON: To provide for appropriate operation of the facility to ensure protection of the environment.

## **Condition 4.** Interpretation

- 4.1 Emission limit values for emissions to atmosphere in this licence shall be interpreted in the following way:
  - 4.1.1 Continuous Monitoring:
    - (i) No 24 hour mean value shall exceed the emission limit value.
    - (ii) 97% of all 30 minute mean values taken continuously over an annual period shall not exceed 1.2 times the emission limit value.
    - (iii) No 30 minute mean value shall exceed twice the emission limit value.
  - 4.1.2 For Non-Continuous Monitoring
    - (i) For any parameter where, due to sampling/analytical limitations, a 30 minute sample is inappropriate, a suitable sampling period should be employed and the value obtained therein shall not exceed the emission limit value.

- (ii) For flow, no hourly or daily mean value, calculated on the basis of appropriate spot readings, shall exceed the relevant limit value.
- (iii) For all other parameters, no 30 minute mean value shall exceed the emission limit value.
- 4.2 The concentration and volume flow limits for emissions to atmosphere specified in this licence shall be achieved without the introduction of dilution air and shall be based on gas volumes under standard conditions of:-
  - 4.2.1 In the case of non-combustion gases:

Temperature 273K, Pressure 101.3 kPa (no correction for oxygen or water content).

4.2.2 In the case of combustion gases:

Temperature 273K, Pressure 101.3 kPa, dry gas; 3% oxygen for liquid and gas fuels; 6% oxygen for solid fuels.

- 4.3 Where the ability to measure a parameter is affected by mixing before emission, then, with agreement from the Agency, the parameter may be assessed before mixing takes place.
- 4.4 Noise
  - 4.4.1 Noise from the facility shall not give rise to sound pressure levels (Leq,T) measured at **noise sensitive locations** of the facility which exceed the limit value(s).

*Reason:* To clarify the interpretation of limit values fixed under the licence.

## **Condition 5.** Emissions

- 5.1 No specified emission from the facility shall exceed the emission limit values set out in *Schedule B: Emission Limits* of this licence. There shall be no other emissions of environmental significance.
- 5.2 The licensee shall ensure that the activities shall be carried out in a manner such that emissions including odours do not result in significant impairment of, and/or significant interference with amenities or the environment beyond the facility boundary.
- 5.3 No substance shall be discharged in a manner, or at a concentration, which, following initial dilution, causes tainting of fish or shellfish.
- 5.4 The licensee shall ensure that vermin, birds, flies, mud, dust, litter and odours do not give rise to nuisance at the facility or in the immediate area of the facility. Any method used by the licensee to control any such nuisance shall not cause environmental pollution.
- 5.5 Emissions to Surface Water
  - 5.1.1 No trade effluent, and/or contaminated storm water shall be discharged to surface water drains, peculation areas, and surface water courses.
- 5.6 There shall be no direct emissions to groundwater.

Reason: To provide for the protection of the environment by way of control and limitation of emissions.

## **Condition 6.** Control and Monitoring

- 6.1 The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as set out below and as in accordance with Schedule C of this licence:
  - 6.1.1 Analysis shall be undertaken by competent staff in accordance with documented operating procedures.
  - 6.1.2 Such procedures shall be assessed for their suitability for the test matrix and performance characteristics determined.
  - 6.1.3 Such procedures shall be subject to a programme of Analytical Quality Control using control standards with evaluation of test responses.
  - 6.1.4 Where analysis is sub-contracted it shall be to a competent laboratory.
- All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been agreed in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. Agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.
- 6.3 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission or discharge.
- 6.4 Sampling and analysis of all pollutants as well as reference measurement methods to calibrate automated measurement systems shall be carried out in accordance with CEN-standards. If CEN standards are not available, ISO, national or international standards which will ensure the provision of data of an equivalent scientific quality shall apply.
- 6.5 All treatment/abatement and emission control equipment shall be calibrated and maintained, in accordance with the instructions issued by the manufacturer/supplier or installer.
- 6.6 Maintenance of the HSU, conveyers and shredders shall be in accordance with instructions issued by the manufacturer/supplier.
- 6.7 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended with the agreement of the Agency following evaluation of test results.
- 6.8 The licensee shall prepare a programme, to the satisfaction of the Agency, for the identification and reduction of fugitive emissions. This programme shall be included in the Environmental Management Programme.
- All tanks and pipelines shall be maintained impervious to the materials carried out or stored therein. The integrity and water tightness of all underground pipes and tanks and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the licensee. This testing shall be carried out by the licensee at least once every three years thereafter and reported to the Agency on each occasion. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.

### 6.10 Process Effluent

- 6.10.1 Process effluent generated on-site shall be tankered off-site in fully enclosed road tankers to a treatment facility to be agreed in advance with the Agency.
- 6.11 Storm water

- 6.11.1 A visual examination of the storm water discharge shall be carried out daily. A log of such inspections shall be maintained.
- 6.11.2 The drainage system, **WWTP system**, bunds, silt traps and oil separators shall be inspected weekly, desludged as necessary and properly maintained at all times. All sludge and drainage from these operations shall be collected for safe disposal.

### 6.12 Ground Water

The licensee shall within twelve months of date of grant of this licence arrange for the carrying out, by an appropriately qualified consultant/professional, of a hydrogeological baseline investigation of the site. The scope, detail and programme, including report structure and reporting schedule, for this investigation must be agreed by the Agency prior to implementation. Any recommendations arising from a report or reports on this investigation must be implemented within such a period to be agreed by the Agency.

### 6.13 Noise

- 6.13.1 The licensee shall carry out a noise survey of the site operations annually. The survey programme shall be undertaken in accordance with the methodology specified in the 'Environmental Noise Survey Guidance Document' as published by the Agency.
- 6.14 Prior to the date of commencement of the healthcare waste treatment activities at the facility, the licensee shall install and provide adequate measures for the control of odours and dust emissions, including fugitive emissions arising during the washing of healthcare waste containers, from the facility. Installation of an odour management system shall at a minimum include the following:-
  - 6.14.1 Installation and maintenance of integrity and negative pressure through the shredders of the HSU to ensure no significant escape of odours or dust.
  - 6.14.2 Installation of odour management system.
- 6.15 Operational Controls
  - 6.15.1 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
  - 6.15.2 Fuels shall be stored only at appropriately bunded locations on the facility.
  - 6.15.3 All tanks and drums shall be labelled to clearly indicate their contents.
  - 6.15.4 There shall be no casual public access to the facility.
- 6.16 Operational Controls for Healthcare Waste Sterilisation Unit (HSU)
  - 6.16.1 During the operation of the HSU the process shall be continuously monitored to ensure the operating parameters are being maintained within the established limits as established by Condition 6.21.
  - 6.16.2 The plant shall automatically shut down when the temperature is outside the range agreed with the Agency following the commissioning trials. An alarm shall sound and reprocessing of waste shall not re-start until the correct temperature is achieved. The temperature monitoring locations on the HSU shall be agreed in advance with the Agency.
  - 6.16.3 The performance of the HSU shall be evaluated in accordance with the monitoring required by Schedule C.5 and any parameters established as a result of commissioning trials undertaken as per Condition 6.21.

- 6.16.4 All healthcare waste stored under refrigeration must be brought to room temperature before sterilisation in the HSU.
- 6.16.5 The HSU shall be operated such that there is a 6 log reduction of *Enterococcus faecalis* and a 6 log reduction of *Bacillus subtilis* spores in challenge tests.
- 6.16.6 A testing laboratory agreed in advance by the Agency shall carry out all testing of waste samples and indicator organisms.
- 6.16.7 A minimum of three carriers (each containing biological indicators) shall be passed through the HSU to satisfy monitoring specified in Schedule C.5.
- 6.16.8 Processed waste shall be rendered visually unrecognisable as healthcare waste.
- 6.16.9 Should any of the samples taken for the purposes of Schedule C.5.2 indicate test failure –the following measures shall be:
  - (a) the batch of processed waste being held shall be further processed and retested;
  - (b) all methods of sampling and testing specified in Schedule C.5.2 shall be carried out on all batches for the next four consecutive working days in which healthcare waste is treated;
  - (c) should this additional sampling and testing show the continued presence of the relevant microorganisms, the acceptance and processing of healthcare risk waste shall cease until written notice from the Agency agreeing to the resumption is received;
  - (d) a written report shall be submitted to the Agency within five working days of the availability of the test results referred to in (b) above.
- 6.17 Within three months of the date of grant of this licence, the licensee shall submit to the Agency an appropriately scaled drawing(s) showing all the monitoring locations that are stipulated in this licence including any noise sensitive locations. The drawing shall include the eight-digit national grid reference of each monitoring point.
- 6.18 Nuisance Monitoring
  - 6.18.1 The licensee shall, at a minimum of one-week intervals inspect the facility and its immediate surrounds for nuisances caused by dust and odours. The licensee shall maintain a record of all nuisance inspections.
- 6.19 Monitoring Locations
  - 6.19.1 Within three months of the date of grant of this licence, the licensee shall submit to the Agency an appropriately scaled drawing(s) showing all the monitoring locations that are stipulated in this licence including any noise sensitive locations and private wells to be monitored. The drawing shall include the eight-digit national grid reference of each monitoring point.
- 6.20 Pollution Emission Register (PER)

The licensee shall prepare and maintain a PER for the site. The substances to be included in the PER shall be agreed by the Agency each year by reference to the list specified in the Agency's AER Guidance Note. The PER shall be prepared in accordance with any relevant guidelines issued by the Agency and shall be submitted as part of the AER.

6.21 Healthcare Waste Sterilisation Unit (HSU) Plant Commissioning

- 6.21.1 Initial efficacy tests shall be carried out on surrogate loads that accurately reflect the nature of the waste to be treated. Tests shall include the following;
  - (i) a minimum of three surrogate loads per day which differ in the concentrations of fluid to solid components; and
  - (ii) a surrogate load equal to the systems maximum daily treatment capacity.
- 6.21.2 Bacillus spores shall be used as biological indicators in initial daily efficacy tests. The scope of these tests shall be agreed in advance with the Agency but shall include as a minimum;
  - (i) a suitable carrier for biological indicators;
  - (ii) introduction of biological indicators in dry form and of a moisture content that accurately reflects the moisture content of the waste;
  - (i) use of at least two commercially available spore test kits; and
  - (ii) temperature indicator strips.
- 6.21.3 Successful test results for four consecutive days shall be achieved in initial efficacy tests prior to the acceptance of waste for treatment and subject to the agreement of the Agency.
- 6.21.4 A report on the commissioning tests shall be submitted for agreement to the Agency. The report shall:
  - (iii) describe the programme as carried out;
  - (iv) provide all analytical results obtained;
  - (v) concisely interpret those results; and
  - (vi) detail the parameter settings by which the process will be operated to maintain destruction of the test organisms.
- 6.21.5 Other than for commissioning, healthcare risk waste shall not be processed at the facility until the Agency has confirmed its satisfaction, in writing, with the commissioning tests as reported upon. All healthcare risk waste processed during commissioning shall be exported for disposal.
- 6.21.6 The parameter settings which control residence time and temperature shall be tamper proof and, once established during the commissioning tests, shall be subsequently modified only with the prior agreement of the Agency.
- 6.22 Test Programme
  - 6.22.1 The licensee shall prepare, to the satisfaction of the Agency, a test programme for abatement equipment installed to **healthcare waste sterilisation unit air abatement system (EP1)**. This programme shall be submitted to the Agency, prior to implementation.
  - 6.22.2 This programme, following agreement with the Agency, shall be completed within three months of the commencement of operation of the abatement equipment.
  - 6.22.3 The criteria for the operation of the abatement equipment as determined by the test programme, shall be incorporated into the standard operating procedures as approved by the Agency in **Schedule C.**
- 6.23 The test programme shall include as a minimum, the following:

- 6.23.1 Establish all criteria for operation, control and management of the abatement equipment to ensure compliance with the emission limit values specified in this licence.
- 6.23.2 Assess the performance of any monitors on the abatement system and establish a maintenance and calibration programme for each monitor.
- 6.23.3 A report on the test programme shall be submitted to the Agency within one month of completion.

Reason: To provide for the protection of the environment by way of treatment and monitoring of emissions.

## Condition 7. Resource Use and Energy Efficiency

- 7.1 The licensee shall carry out an audit of the energy efficiency of the site within one year of the date of grant of this licence. The audit shall be carried out in accordance with the guidance published by the Agency; "Guidance Note on Energy Efficiency Auditing". The energy efficiency audit shall be repeated at intervals as required by the Agency.
- 7.2 The audit shall identify all opportunities for energy use reduction and efficiency and the recommendations of the audit will be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2 above.
- 7.3 The licensee shall identify opportunities for reduction in the quantity of water used on site including recycling and reuse initiatives, wherever possible. Reductions in water usage shall be incorporated into Schedule of Environmental Objectives and Targets.
- 7.4 The licensee shall undertake an assessment of the efficiency of use of raw materials in all processes, having particular regard to the reduction in waste generated. The assessment should take account of best international practice for this type of activity. Where improvements are identified, these shall be incorporated into the Schedule of Environmental Objectives and Targets.

Reason: To provide for the efficient use of resources and energy in all site operations.

## **Condition 8.** Materials Handling

- 8.1 All waste processing shall be carried out inside the waste transfer building.
- 8.2 Waste Acceptance and Characterisation Procedures
  - 8.2.1 Waste shall only be accepted at the facility, from Local Authority waste collection or transport vehicles or holders of waste permits, unless exempted or excluded, issued under the Waste Management Acts 1996 to 2005. Copies of these waste collection permits must be maintained at the facility.
  - 8.2.2 Prior to commencement of waste acceptance at the facility the licensee shall establish and maintain detailed written procedures for

the acceptance, processing and handling of wastes to include procedures for the diversion of unacceptable healthcare waste.

- 8.2.3 Waste arriving at the facility shall be appropriately inspected, at the point of entry to the facility and subject to this inspection, weighed, documented and directed to the Waste Transfer Building. Only after such inspections shall the waste be processed for disposal or recovery.
- 8.2.4 Any waste deemed unsuitable for processing at the facility and/or in contravention of this licence shall be immediately separated and removed from the facility at the earliest possible time. Temporary storage of such wastes shall be in a designated Waste Quarantine Area. Waste shall be stored under appropriate conditions in the quarantine area to avoid putrefaction, odour generation, the attraction of vermin and any other nuisance or objectionable condition.
- 8.2.5 Waste shall be accepted at the facility only from known customers or new customers subject to initial waste profiling and waste characterisation off-site. The written records of this off-site waste profiling and characterisation shall be retained by the licensee for all active customers and for a two year period following termination of licensee/customer agreements. There shall be no casual public access to the facility.
- 8.2.6 The licensee shall inspect as appropriate and, if necessary, analyse each waste consignment arriving at the facility to determine whether it matches the identity of the waste specified on the accompanying documentation. As a minimum, the analysis must be repeated:
  - (a) when the on-site inspection indicates that the waste received at the facility is not as designated on the accompanying documentation or shipping paper, and
  - (b) when the licensee is notified or has reason to believe that the process(es) or operation(s) generating the waste has changed.

### 8.2.7 Healthcare Waste Acceptance

In addition to Conditions 8.2.1 to 8.2.5 above for healthcare waste the following shall apply:

- (a) The facility shall only accept healthcare waste which is stored in wheeled carts containing UN compliant marked and tagged bags and sharps in appropriate canisters in accordance with packaging guidelines issued by the Department of Health and Children unless otherwise agreed by the Agency.
- (b) Only autoclaved laboratory waste shall be accepted at the facility.

## 8.3 Waste Storage

- 8.3.1 Prior to the acceptance of any waste at the transfer station facility, the licensee shall submit for approval a site specific tracking system to cater for all materials being accepted at the facility to the Agency for its agreement. Any modifications to the tracking system shall be submitted to the Agency for its agreement.
- 8.3.2 All containers shall be uniquely marked with a unique identification code using indelible or other permanent or electronic markings to clearly indicate their origin, contents and date of arrival at the facility. All previous or irrelevant markings and labels shall be crossed out but shall remain legible.

- 8.3.3 Each container shall be tracked such that its location, whether at or away from the facility, may be determined at all times.
- 8.3.4 The licensee shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. The waste shall be separated from sources of ignition or reaction including but not limited to: open flames, cutting or welding, hot surfaces, frictional heat, sparks (static, electrical or mechanical), spontaneous ignition (e.g. from heat-producing chemical reactions) and radiant heat.

#### 8.4 Waste Retention Times

- 8.4.1 No waste, in drums, tanks or containers shall have a retention time in the waste transfer station in excess of six months.
- 8.4.2 No healthcare waste shall be stored for a period of greater than 48 hours. The storage of this waste type to a maximum period of 70 hours is allowed subject to storage under refrigeration or under a negative pressure abatement system, agreed by the Agency.
- 8.5 Waste Repackaging/Reprocessing
  - 8.5.1 All containers accepted at the facility shall be whole and sound. Any leaking or otherwise ruptured containers shall immediately be overdrummed or the contents transferred to a sound container in a manner, which will not adversely affect the environment. This activity shall only be carried out in bunded areas such that any spillage arising from the activity may be contained and collected.
  - 8.5.2 All redrumming or other exposure of drum contents to the atmosphere shall take place indoors. Appropriate control measures shall be put in place to minimise fugitive emissions, which may arise from such activity.
- 8.6 Off-site Disposal and Recovery
  - 8.6.1 All waste transferred from the facility shall be transferred by an authorised or exempted carrier, and only to an appropriate facility agreed by the Agency. Any request for agreement of such a facility shall be forwarded to the Agency at least one month in advance of its proposed use and shall include the following;
    - (i) A copy of the waste permit or waste licence where applicable.
    - (ii) The proposed waste types and quantities.
    - (iii) Details of any limitations on waste types and quantities acceptable at the facility.
  - 8.6.2 All processed healthcare waste removed off site shall be accompanied by a consignment note and shall be certified by a technically competent person from the testing laboratory that the waste has been processed (microbiologically tested) in accordance with this licence.
- 8.7 Disposal or recovery of waste shall only take place in accordance with the conditions of this licence and in accordance with the appropriate National and European legislation and protocols.
- 8.8 Waste shall be transported only from the site of the activity to the site of recovery/disposal in a manner which will not adversely affect the environment and in accordance with the appropriate National and European legislation and protocols. The licensee shall ensure that all vehicles delivering waste to or removing waste from the facility are fully enclosed and clean and shall not give rise to offensive odours or other nuisance

- 8.9 The licensee shall ensure that waste prior to transfer to another person shall be classified packaged and labelled in accordance with National, European and any other standards which are in force in relation to such labelling.
- 8.10 Waste shall be stored in designated areas, protected as may be appropriate, against spillage and leachate run-off. The waste is to be clearly labelled and appropriately segregated.
- 8.11 No waste classified as green list waste in accordance with the EU Transfrontier Shipment of Waste Regulations (Council Regulation EEC No.259/1993, as amended) shall be consigned for recovery without the agreement of the Agency.
- 8.12 Waste for disposal/recovery off-site shall be analysed in accordance with *Schedule C* of this licence.
- 8.13 Unless approved in writing by the Agency the licensee is prohibited from mixing a hazardous waste of one category with a hazardous waste of another category or with any other non-hazardous waste.

Reason: To provide for the appropriate handling of materials and the protection of the environment.

## Condition 9. Accident Prevention and Emergency Response

- 9.1 The licensee shall, within six months of date of grant of this licence, ensure that a documented Accident Prevention Policy is in place, which will address the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.2 The licensee shall, within six months of date of grant of this licence, ensure that a documented Emergency Response Procedure is in place, which shall address any emergency situation, which may originate on-site **including the in-situ disinfection of the untreated waste due to equipment failure during a sterilisation cycle**. This Procedure shall include provision for minimising the effects of any emergency on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.3 In the event of an incident the licensee shall immediately:-
  - (i) isolate the source of any such emission;
  - (ii) carry out an immediate investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
  - (iii) evaluate the environmental pollution, if any, caused by the incident;
  - (iv) identify and execute measures to minimise the emissions/malfunction and the effects thereof;
  - (v) identify the date, time and place of the incident:
  - (vi) provide a proposal to the Agency for its agreement within one month of the incident occurring or as otherwise agreed with the Agency to:-
    - identify and put in place measures to avoid reoccurrence of the incident; and
    - identify and put in place any other appropriate remedial action.

### 9.4 Emergencies

- 9.4.1 In the event of a breakdown of equipment or any other occurrence, which results in the closure of the transfer station building, any waste arriving at or already accepted at the facility shall be transferred directly to another appropriate facility until such time as the transfer station building is returned to a fully operational status. Such a breakdown event will be treated as an emergency and rectified as soon as possible.
- 9.4.2 All significant spillages occurring at the facility shall be treated as an emergency and immediately cleaned up and dealt with so as to alleviate their effects.
- 9.4.3 No waste shall be burnt within the boundaries of the facility. A fire at the facility shall be treated as an emergency and immediate action shall be taken to extinguish it and notify the appropriate authorities.

Reason: To provide for the protection of the environment.

## Condition 10. Decommissioning Closure, Restoration and Aftercare

- 10.1 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the site in the licensed activity, the licensee shall, to the satisfaction of the Agency, decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.
- 10.2 Residuals Management Plan:
  - 10.2.1 The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for the decommissioning or closure of the site or part thereof. This plan shall be submitted to the Agency for agreement within six months of the date of grant of this licence.
  - 10.2.2 The plan shall be reviewed annually and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the agreement of the Agency.
- 10.3 The Residuals Management Plan shall include as a minimum, the following:-
  - 10.3.1 A scope statement for the plan.
  - 10.3.2 The criteria which define the successful decommissioning of the activity or part thereof, which ensures minimum impact on the environment.
  - 10.3.3 A programme to achieve the stated criteria.
  - Where relevant, a test programme to demonstrate the successful implementation of the decommissioning plan.
  - 10.3.5 Details of costings for the plan and the financial provisions to underwrite those costs.
- 10.4 A final validation report to include a certificate of completion for the residuals management plan, for all or part of the site as necessary, shall be submitted to the Agency within three months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.

Reason:

To make provision for the proper closure of the activity ensuring protection of the environment.

## Condition 11. Notifications, Records and Reports

- 11.1 The licensee shall notify the Agency, in writing, one moth prior to the intended date of commencement of the Scheduled Activity
- 11.2 The licensee shall notify the Agency by both telephone and either facsimile or electronic mail, if available, to the Agency's Headquarters in Wexford, or to such other Agency office as may be specified by the Agency, as soon as practicable after the occurrence of any of the following:
  - i. Any release of environmental significance to atmosphere from any potential emission point including bypasses.
  - ii. Any emission which does not comply with the requirements of this licence.
  - iii. Any malfunction or breakdown of key control equipment or monitoring equipment set out in Schedule C: Control & Monitoring which is likely to lead to loss of control of the abatement system.
  - iv. Any incident with the potential for environmental contamination of surface water or groundwater, or posing an environmental threat to air or land, or requiring an emergency response by the Local Authority.

The licensee shall include as part of the notification, date and time of the incident, summary details of the occurrence, and where available, the steps taken to minimise any emissions.

- 11.3 The licensee shall make a record of any incident. This record shall include details of the nature, extent, and impact of, and circumstances giving rise to, the incident. The record shall include all corrective actions taken to; manage the incident, minimise wastes generated and the effect on the environment, and avoid recurrence. The licensee shall as soon as practicable following incident notification, submit to the Agency the incident record.
- 11.4 The licensee shall record all complaints of an environmental nature related to the operation of the activity. Each such record shall give details of the date and time of the complaint, the name of the complainant and give details of the nature of the complaint. A record shall also be kept of the response made in the case of each complaint.
- 11.5 The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the facility.
- 11.6 The licensee shall prior to the acceptance of waste at the facility submit to the Agency for agreement a procedure for dealing with the handling and reprocessing of waste in the event of test failures.
- 11.7 The licensee shall as a minimum keep the following documents at the site:-
  - (i) the licences relating to the facility;
  - (ii) the current EMS for the facility;
  - (iii) the previous year's AER for the facility;

- (iv) records of all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the facility;
- (v) relevant correspondence with the Agency;
- (vi) an up to date site drawings/plans showing the location of key process and environmental infrastructure, including monitoring locations and emission points.
- (vii) all written procedures produced by the licensee which relate to the licensed activities.

and this documentation shall be available to the Agency for inspection at all reasonable times.

- 11.8 The licensee shall submit to the Agency, by the 31<sup>st</sup> March of each year, an AER covering the previous calendar year. This report, which shall be to the satisfaction of the Agency, shall include as a minimum the information specified in *Schedule D* and shall be prepared in accordance with any relevant guidelines issued by the Agency.
- 11.9 A full record, which shall be open to inspection by authorised persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this site. This record shall be maintained on a monthly basis and shall as a minimum contain details of the following:
  - (i) The tonnages and EWC Code for the waste materials imported and/or sent off-site for disposal/recovery.
  - (ii) The names of the agent and carrier of the waste, and their waste collection permit details, if required (to include issuing authority and vehicle registration number).
  - (iii) Details of the ultimate disposal/recovery destination facility for the waste and its appropriateness to accept the consigned waste stream, to include its permit/licence details and issuing authority, if required.
  - (iv) Written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site.
  - (v) Details of all wastes consigned abroad for Recovery and classified as 'Green' in accordance with the EU Transfrontier Shipment of Waste Regulations (Council Regulation EEC No. 259/1993, as amended). The rationale for the classification must form part of the record.
  - (vi) Details of any rejected consignments.
  - (vii) Details of any approved waste mixing.
  - (viii) The results of any waste analyses required under *Schedule C*. **Including** details of any healthcare waste that failed the test procedures and the procedures followed thereafter.
  - (ix) The tonnages and EWC Code for the waste materials recovered/disposed on-site.
- 11.10 A record shall be kept of each consignment of trade effluent, leachate and/or contaminated storm water removed from the facility. The record shall include the following:
  - a) the name of the carrier;
  - b) the date and time of removal of trade effluent and/or contaminated storm water from the facility;
  - c) the volume of trade effluent, leachate and/or contaminated storm water, in cubic metres, removed from the facility on each occasion;

- d) the name and address of the Waste Water Treatment Plant to which the trade effluent and/or contaminated storm water was transported; and
- a) any incidents or spillages of trade effluent and/or contaminated storm water during its removal or transportation.
- 11.11 The licensee shall as part of the EMP submit a report on the contribution by this facility to the achievement of the recovery targets stated in national and European Union waste policies.

Reason: To provide for the collection and reporting of adequate information on the activity.

## **Condition 12. Financial Charges and Provisions**

### 12.1 Agency Charges

- 12.1.1 The licensee shall pay to the Agency an annual contribution of €12,873, or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the Waste Management Acts 1996 to 2005. The first payment shall be a pro-rata amount for the period from the date of this licence to the 31st day of December, and shall be paid to the Agency within one month from the date of the licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Waste Management Acts 1996 to 2005, and all such payments shall be made within one month of the date upon which demanded by the Agency.
- 12.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased the licensee shall contribute such sums as determined by the Agency to defraying its costs in regard to items not covered by the said annual contribution.

### 12.2 Environmental Liabilities

- 12.2.1 The licensee shall as part of the AER provide an annual statement as to the measures taken or adopted at the site in relation to the prevention of environmental damage, and the financial provisions in place in relation to the underwriting of costs for remedial actions following anticipated events (including closure) or accidents/incidents, as may be associated with the carrying on of the activity.
- 12.2.2 The licensee shall arrange for the completion, by an independent and appropriately qualified consultant, of a comprehensive and fully costed Environmental Liabilities Risk Assessment (ELRA), which addresses the liabilities from past and present activities. A report on this assessment shall be submitted to the Agency for agreement within twelve months of date of grant of this licence. The ELRA shall be reviewed as necessary to reflect any significant change on site, and in any case every three years following initial agreement: review results are to be notified as part of the AER.
- 12.2.3 As part of the measures identified in Condition 12.2.1, the licensee shall, to the satisfaction of the Agency, make financial provision to cover any

liabilities identified in Condition 12.2.2. The amount of indemnity held shall be reviewed and revised as necessary, but at least annually. Proof of renewal or revision of such financial indemnity shall be included in the annual 'statement of measures' report identified in Condition 12.2.1.

Reason: To provide for adequate financing for monitoring and financial provisions for measures to protect the environment

## **SCHEDULE A:** Limitations

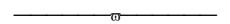
### A.1

The following waste related processes are authorised:

- i. Shredding, crushing, baling repackaging processes
- ii. bulking up of waste oils
- iii. contaminated soils storage
- iv. Storage of hazardous/non hazardous waste
- v. Clinical healthcare waste storage and treatment Category A: Healthcare Risk Waste
  - 1.1: General
  - ➤ 1.2: Microbiological cultures
  - > 3: Sharps
- vi. Storage and treatment of healthcare waste from dental practices Note 1

No addition to these processes is permitted unless agreed in advance with the Agency.

Note 1: Dental waste shall only be accepted subject to the written agreement of the Agency following demonstration that it will not have a negative impact on the treatment process



### A.2

Notwithstanding the generality of the waste types specified in Schedule A.1 the following wastes shall be specifically excluded from treatment at the facility,

- Recognisable anatomical waste
- Chemically hazardous waste
- Cytotoxic material
- **B**lood or blood components assessed as likely to contain transmissible spongiform encephalopathy agents.
- > Infections brucellosis type waste
- Laboratory waste containing genetically modified organics

## A.3 Waste Acceptance

## Table A.1 Waste Categories and Quantities

WASTE TYPE Note 1	MAXIMUM (TONNES PER ANNUM) Note 2
Commercial Waste	400
Hazardous Waste Note 3	5,000
Clinical Healthcare Waste	1,600
TOTAL	7,000

Note 1: Any proposals to accept other compatible waste streams must be agreed in advance with the Agency and the total amount of waste must be within that specified.

Note 2: The individual limitation on waste streams may be varied with the agreement of the Agency subject to the overall total limit staying the same.

Note 3: Hazardous waste types restricted to those listed in Table H.1.2 of the Article 12 compliance information submitted to the Agency on the 18th July 2005.

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## **SCHEDULE B:** Emission Limits

## **B.1** Emissions to Air

**Emission Point Reference No.:** EP1

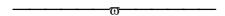
**Location:** Roof of main building (17489E, 064567N)

**Volume to be emitted:** Maximum in any one day: 22,200 m<sup>3</sup>

Maximum rate per hour: 1850 m<sup>3</sup>

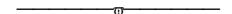
Minimum discharge height: 13.5 m above ground

Parameter	Emission Limit Value
Volatile Organic Compounds	50 mg/m <sup>3</sup>
Total Particulates	50 mg/m <sup>3</sup>
Indicator Microorganisms	2,000 cfu/m <sup>3</sup>



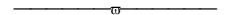
### **B.2** Emissions to Water

There are no Emissions to Water of environmental significance.



## B.3 Emission to Sewer

There are no Emissions to Sewer.



## **B.4.** Noise Emissions

Daytime dB(A) L <sub>Aeq</sub> (30 minutes)	Night-time dB(A) L <sub>Aeq</sub> (30 minutes)
55 <sup>Note 1</sup>	45 Note 1

Note 1: There shall be no clearly audible tonal component or impulsive component in the noise emission from the activity at any noise sensitive location.



## **SCHEDULE C:** Control & Monitoring

## C.1.1 Control of Emissions to Air

**Emission Point Reference No.:** EPI

**Description of Treatment:** Ceramic, Carbon and Zeolite Filters

Control Parameter	Monitoring	Key Equipment Note 1
Pressure	Daily	Differential pressure gauge
Filter Integrity	Visual weekly check	Not applicable
Other	Note 2	Note 2

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement

system

Note 2: As established by condition 6.22.3.

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## C.1.2 Monitoring of Emissions to Air

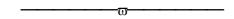
**Emission Point Reference No.:** EP1

Parameter	Monitoring Frequency	Analysis Method/Technique
Volatile Organic Compounds	Biannually	To be agreed by Agency
Total Particulates	Biannually	To be agreed by Agency
Indicator Microorganisms	Biannually	To be agreed by Agency
Odour	Biannually	To be agreed by Agency
Other Note 1	Note 1	Note 1

Note 1 As established by condition 6.22.3

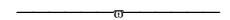
## C.2.1 Control of Emissions to Water

There are no Emissions to Water of environmental significance.



## C.2.2 Monitoring of Emissions to Water

There are no Emissions to Water of environmental significance.

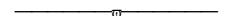


## C.2.3 Monitoring of Storm Water Emission

**Emission Point Reference No.:** 

To be agreed by the Agency

Parameter Note 1	Monitoring Frequency	Analysis Method/Technique
pH	Weekly	pH electrode/meter
Conductivity	Weekly	Standard Method
Visual Inspection	Weekly	Sample and examine for colour and odour
<b>Total Suspended Solids</b>	Monthly	Standard Method
Mineral Oils	Monthly	Standard Method



## C.3.1 Control of Emissions to Sewer

There are no Process Effluent Emissions to Sewer.



## C.3.2 Monitoring of Emissions to Sewer

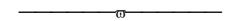
There are no Process Effluent Emissions to Sewer.



## C.4 Waste Monitoring

Waste Class	Frequency	Parameter	Method
Bund drainage	Per consignment	Note 1	To be agreed by the Agency
Washings from healthcare waste containers	Per consignment	Volume Indicator Microorganisms	To be agreed by the Agency To be agreed by the Agency
Other Note 1			

**Note 1:** Analytical requirements to be determined on a case by case basis.



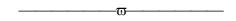
## C.5.1 Monitoring of Process Control in the HSU

Parameter	Frequency Note1	Analysis Method /Technique Note 1
Residence Time	Each batch	To be agreed with the Agency
Temperature	Continuously	Temperature probes/indicator strips Note 2
Other Note 3		

Note 1: Any deviations from the testing protocol outlined above shall be with prior written approval of the Agency

Note 2: Temperature strips and method of introduction into HSU to be agreed in Advance with the Agency

Note 3 As established through Condition 6.21



## C.5.2 Monitoring of Processed waste in the HSU

Parameter	Frequency Note1	Analysis Method /Technique Note 1
Processed Waste (size particle dimensions)	Daily	<ul> <li>Visual Inspection to ensure shredder functionality</li> <li>Also see Note 2</li> </ul>
Processed Waste	Monthly	Test for Salmonella and Shigella Note 3
Indicator Organisms	Daily	Challenge Test against Enterococcus faecalis
Indicator Organisms	Three times per week	Challenge Test against Bacillus subtilis Note 3,4

Note 1: Any deviations from the testing protocol outlined above shall be with prior written approval of the Agency

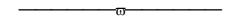
Note 2: Visual examination of processed waste in accordance with Condition 6.16.8

Note 3: Test method to be agreed in advance with the Agency

Note 4: Positive and negative controls to be included with all samples taken for Challenge Tests.

## C.6 Noise Monitoring

There is no additional noise monitoring required in this schedule.



## C.7 Ambient Monitoring

## **Groundwater Monitoring**

**Location:** 

To be agreed by Agency

Parameter	<b>Monitoring Frequency</b>	Analysis Method/Technique
рН	Annually	pH electrode/meter
COD	Annually	Standard Method
Total Ammonia	Annually	Standard Method
Conductivity	Annually	Standard Method
Mineral Oil	Annually	Standard Method
Organohalogens Note 1	Annually	GC-MS
Other	Note 2	Note 2

Note 1: Screening for priority pollutant list substances (such as US EPA volatile and/or semi-volatile compounds).

Note 2 As established under condition 6.12



## **SCHEDULE D:** Specified Engineering Works

## **Specified Engineering Works**

Development of the facility including installation of waste handling, processing, recycling/recovery infrastructure and installation of increased waste processing capacity as well as any abatement system(s).

Installation of drainage network including silt traps and oil interceptors.

Any other works notified in writing by the Agency.

## **SCHEDULE E:** Annual Environmental Report

## **Annual Environmental Report Content Note 1**

Emissions from the facility.

Waste activities carried out at the facility.

Quantity and Composition of waste recovered, received and disposed of during the reporting period and each previous year (relevant EWC codes to be used).

Full title and a written summary of any procedures developed by the licensee in the year, which relates to the facility operation.

Waste Recovery Report.

Review of Nuisance Controls.

Volume of trade effluent and/or contaminated stormwater produced and volume transported off-site.

Waste management record.

Resource consumption summary.

Complaints summary.

Schedule of Environmental Objectives and Targets

Environmental management programme – report for previous year

Environmental management programme – proposal for current year

Pollution emission register - report for previous year

Pollution emission register – proposal for current year

Noise monitoring report summary

Ambient monitoring summary

Tank and pipeline testing and inspection report

Reported incidents summary

Energy efficiency audit report summary

Report on the assessment of the efficiency of use of raw materials in processes and the reduction in waste generated.

Report on progress made and proposals being developed to minimise water demand and the volume of trade effluent discharge.

 $Development \ / \ Infrastructural \ works \ summary \ (completed \ in \ previous \ year \ or \ prepared \ for \ current \ year).$ 

Reports on financial provision made under this licence, management and staffing structure of the facility, and a programme for public information

Closure, Restoration & Aftercare management Plan

Statement of measures in relation to prevention of environmental damage and remedial actions (Environmental Liabilities) Any other items specified by the Agency.

Note 1: Content may be revised subject to the agreement of the Agency

Signed on behalf of the said Agency		
on the xx day of xxxxxx, 2006	xxxxxxxx,	<b>Authorised Person</b>