



Headquarters,  
P.O. Box 3000,  
Johnstown Castle Estate  
County Wexford, Ireland

## PROPOSED DECISION

**Waste Licence:** 54-2

**Licensee:** Eco-Safe Systems Limited

**Location of Facility:** Unit 1A, Allied Industrial Estate, Kylemore  
Road, Ballyfermot, Dublin 10

# INTRODUCTION

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

Eco-Safe Systems Limited is currently licensed to accept and sterilise Healthcare Risk Waste at their facility in Unit 1A, Allied Industrial Estate, Kylemore Road, Ballyfermot, Dublin 10. They have applied to review their existing licence. The acceptance and sterilisation of healthcare risk waste will continue at the facility. The revised licence allows them to operate a transfer station at their facility (primarily for hazardous waste); to sterilise additional waste types in their existing autoclave; to sterilise obsolete mechanical equipment in a new static autoclave shred tyres and to provide a confidential data destruction service. Alterations to the odour abatement equipment will be required prior to the heat treatment of certain infectious waste types.

This licensee is required to manage and operate the facility to ensure that the activities do not cause environmental pollution. The licensee is required to carry out regular environmental monitoring and submit all monitoring results, and a wide range of reports on the operation and management of the facility to the Agency.

This licence sets out in detail the conditions under which Eco-Safe Systems Limited will operate and manage the facility.

# *Table of Contents*

	Page No.
<b>DECISIONS &amp; REASONS FOR THE DECISION</b>	<b>1</b>
<b><i>Part I ACTIVITIES LICENCED</i></b>	<b>1</b>
<b>INTERPRETATION</b>	<b>2</b>
<b><i>Part II CONDITIONS</i></b>	<b>5</b>
<b>CONDITION 1 SCOPE OF THE LICENCE</b>	<b>5</b>
<b>CONDITION 2 MANAGEMENT OF THE FACILITY</b>	<b>6</b>
<b>CONDITION 3 FACILITY INFRASTRUCTURE</b>	<b>8</b>
<b>CONDITION 4 RESTORATION AND AFTERCARE</b>	<b>11</b>
<b>CONDITION 5 FACILITY OPERATIONS</b>	<b>11</b>
<b>CONDITION 6 EMISSIONS</b>	<b>17</b>
<b>CONDITION 7 NUISANCE CONTROL</b>	<b>19</b>
<b>CONDITION 8 MONITORING</b>	<b>19</b>
<b>CONDITION 9 CONTINGENCY ARRANGEMENTS</b>	<b>20</b>
<b>CONDITION 10 RECORDS</b>	<b>21</b>
<b>CONDITION 11 REPORTS AND NOTIFICATIONS</b>	<b>23</b>
<b>CONDITION 12 CHARGES AND FINANCIAL PROVISIONS</b>	<b>24</b>
<b>SCHEDULE A : Waste Acceptance</b>	<b>26</b>
<b>SCHEDULE B : Specified Engineering Works</b>	<b>26</b>
<b>SCHEDULE C : Emission Limits</b>	<b>27</b>
<b>SCHEDULE D : Monitoring</b>	<b>28</b>
<b>SCHEDULE E : Recording and Reporting to the Agency</b>	<b>31</b>
<b>SCHEDULE F : Content of the Annual Environmental Report</b>	<b>32</b>

# DECISION & REASONS FOR THE DECISION

## Reasons for the Decision

The Environmental Protection Agency (the Agency) is satisfied, on the basis of the information available, that the waste activity, or activities, licensed hereunder will comply with the requirements of Section 40(4) of the Waste Management Act, 1996.

In reaching this decision the Agency has considered the application and supporting documentation received from the applicant, a submission received from a third party and the report of its inspector.

### *Part I Activities Licensed*

In pursuance of the powers conferred on it by the Waste Management Act, 1996, the Agency under Section 46(2) of the said Act hereby grants this Waste Licence to Eco-Safe Systems Limited to carry on the waste activities listed below at Allied Industrial Estate, Kylemore Road, Ballyfermot, Dublin 10 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 Act 1996

<b>Class 7.</b>	<b>Physico-chemical treatment not referred to elsewhere in this Schedule (including evaporation, drying and calcination) which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1. to 10. of this Schedule.</b>  Class 7 is the principal activity and refers to the sterilisation of healthcare risk waste in a Rotoclave and a Static Autoclave at the facility.
<b>Class 12.</b>	<b>Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.</b>  This activity relates to the baling and repackaging of various waste types prior to disposal off-site.
<b>Class 13.</b>	<b>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 was produced.</b>  This activity relates to the storage of hazardous waste at the facility prior to disposal on-site or off-site.

Licensed Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Act 1996

<b>Class 3.</b>	<b>Recycling or reclamation of metals and metal compounds</b>  This activity relates to the separation and recycling of various metal wastes (generally diagnostic equipment) upon sterilisation.
<b>Class 4.</b>	<b>Recycling or reclamation of other inorganic materials</b>  This activity relates to the separation and recycling of various inorganic wastes
<b>Class 13.</b>	<b>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 was produced.</b>  This activity is limited to the storage of waste at the facility prior to on-site or off-site recovery.

# INTERPRETATION

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

<b>Adequate lighting</b>	20 lux measured at ground level.
<b>Agreement</b>	Agreement in writing.
<b>Annually</b>	At approximately twelve monthly intervals.
<b>Attachment</b>	Any reference to Attachments in this licence refers to attachments submitted as part of the waste licence application.
<b>Application</b>	The application by the licensee for this waste licence.
<b>Appropriate facility</b>	A waste management facility, duly authorised under relevant law and technically suitable.
<b>Bi-annually</b>	All or part of a period of six consecutive months.
<b>CFU</b>	Colony Forming Units
<b>Condition</b>	A condition of this licence.
<b>Consignment Note</b>	All movements of hazardous waste within Ireland must be accompanied by a "C1" consignment note issued by a local authority under the Waste Management (Movement of Hazardous Waste) Regulations (SI No. 147 of 1998). Transfrontier shipment notification and movement/tracking form numbers are required for all exports of waste from, into or through the state under the Waste Management (Transfrontier Shipment of Waste) Regulations (SI No. 149 of 1998).
<b>Containment boom</b>	A boom which can contain spillages and prevent them from entering drains or watercourses.
<b>Daytime</b>	8.00 a.m. to 10.00 p.m.
<b>Documentation</b>	Any report, record, result, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this licence.
<b>Drawing</b>	Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this licence.
<b>Emergency</b>	Those occurrences defined in Condition 9.4
<b>Emission Limits</b>	Those limits, including concentration limits and deposition levels established in <i>Schedule C: Emission Limits</i> of this licence.
<b>European Waste Catalogue (EWC)</b>	A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 94/3/EC and any subsequent amendment published in the Official Journal of the European Community.
<b>Foul water</b>	Sewage and drainage from cart washing operations.

<b>Genetically Modified Organism</b>	As Defined in “Genetically modified organisms (contained use) Regulations” - S.I. No 73 of 2001.
<b>Health and Safety Executive Publication</b>	Chemical warehousing – The storage of packaged dangerous substances. HSGr71 HSE Books 1998 2 <sup>nd</sup> Ed.
<b>Healthcare</b>	The medical activities such as diagnosis, monitoring, treatment, prevention of disease or alleviation of handicap in humans or animals, including related research performed under the supervision of a medical practitioner or veterinary surgeon or by any other person authorised by virtue of their professional qualifications to do so.
<b>Healthcare Waste:</b>	The solid or liquid waste arising from healthcare.
<b>Healthcare Risk Waste:</b>	Healthcare Risk waste can be placed in the following categories: <ol style="list-style-type: none"> <li>1. Biological (recognisable anatomical waste)</li> <li>2. Infectious</li> <li>3. Chemical, toxic or pharmaceutical including cytotoxins</li> <li>4. Sharps (e.g. needles, scalpels, sharp broken materials)</li> <li>5. Radioactive (refer to Radioactive Waste Directive(s) )</li> </ol>
<b>Hours of Operation</b>	The hours during which the facility is authorised to be operational. The hours of operation of a facility are usually longer than the hours of waste acceptance to facilitate preparatory and completion works.
<b>Hours of Waste Acceptance</b>	The hours during which the facility is authorised to accept waste.
<b>Infectious waste</b>	Healthcare Waste <u>known or clinically assessed</u> to be at risk of being contaminated with <p>(a) any of the biological agents mentioned in Article 2(d) groups 3 and 4 or identified through the procedure set out in article 3 of the Council Directive (90/679/EEC) of 26 November 1990 (and its amendments) on the protection of workers from risks related to exposure to biological agents at work or</p> <p>(b) with other viable biological agents artificially cultivated to significantly elevated numbers.</p>
<b>Licence</b>	A Waste Licence issued in accordance with the Act.
<b>Licensee</b>	Eco-Safe Systems Limited.
<b>Maintain</b>	Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to adequately perform its function.
<b>Monthly</b>	A minimum of 12 times per year, at approximately monthly intervals.
<b>Night-time</b>	10.00 p.m. to 8.00 a.m.
<b>Noise Sensitive Location (NSL)</b>	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.
<b>Process Effluent</b>	Liquid effluent generated in the condensing of vapours extracted from the process.
<b>Quarterly</b>	At approximately three monthly intervals.

<b>Sample(s)</b>	Unless the context of this licence indicates to the contrary, samples shall include measurements by electronic instruments.
<b>Specified Emissions</b>	Those emissions listed in <i>Schedule C: Emission Limits</i> of this licence.
<b>Specified Engineering Works</b>	Those engineering works listed in <i>Schedule B: Specified Engineering Works</i> of this licence.
<b>Trigger Level</b>	A parameter value specified in the licence, the achievement or exceedance of which requires certain actions to be taken by the licensee.
<b>Weekly</b>	During all weeks of plant operation, and in the case of emissions, when emissions are taking place; with no more than one measurement in any one week.
<b>EPA Working Day</b>	Refers to the following hours: 9.00 a.m. to 5.30 p.m. Monday to Friday inclusive.

## ***PART II CONDITIONS***

### **CONDITION 1 SCOPE OF THE LICENCE**

- 1.1. Waste activities at the facility shall be restricted to those listed and described in Part I: Activities Licensed and authorised by this licence.
- 1.2. For the purposes of this licence, the facility is the area of land outlined in red on the drawing dated 18/1/99 in Attachment D5 of the application. Any reference in this licence to “facility” shall mean the area thus outlined in red.
- 1.3. This licence is for the purposes of waste licensing under the Waste Management Act 1996 only and nothing in this licence shall be construed as negating the licensee’s statutory obligations or requirements under any other enactments or regulations.
- 1.4. The maximum tonnage of untreated hazardous waste present on-site at any one time shall not exceed 120 tonnes, unless otherwise agreed with the Agency.
- 1.5. Only those waste categories and quantities listed in *Schedule A: Waste Acceptance* of this licence, shall be accepted at the facility.
- 1.6. Notwithstanding the generality of the waste types specified in *Schedule A: Waste Acceptance* of this licence the following wastes shall be specifically excluded from treatment at the facility without the prior agreement of the Agency:
  - a) anatomical waste;
  - b) processed blood products;
  - c) infectious Brucellosis-type waste;
  - d) waste loads with fluid content greater than 30% by weight;
  - e) Cytotoxic/pharmaceutical waste;
  - f) radioactive waste;
  - g) laboratory waste containing genetically modified organisms.
- 1.7. Waste Acceptance Hours and Hours of Operation
  - 1.7.1. The facility may be operated on a 24 hour basis from Monday to Saturday inclusive. The use of baling and shredding machines shall be restricted to day-time hours only.
  - 1.7.2. Waste shall not be accepted at the facility on Sundays or on Bank Holidays.
- 1.8. 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 exceedance of the daily duty capacity of the waste handling equipment;
  - d) any trigger level specified in this licence which is attained or exceeded;



- e) any test failures of waste samples taken (microbiological and temperature strips);
  - f) any malfunction of any abatement equipment.
- 1.9. Where the Agency considers that a non-compliance with any condition of this licence has occurred, it may serve a notice on the licensee specifying:
- 1.9.1. That only those wastes as specified, if any, in the notice are to be accepted at the facility after the date set down in the notice;
  - 1.9.2. That the licensee shall undertake the works stipulated in the notice, and/or otherwise comply with the requirements of the notice as set down therein, within the time-scale contained in the notice; and
  - 1.9.3. That the licensee shall carry out any other requirement specified in the notice.

When the notice has been complied with, the licensee shall provide written confirmation that the requirements of the notice have been carried out. No waste, other than that which is stipulated in the notice, shall be accepted at the facility until written permission is received from the Agency.

- 1.10. Every plan, programme or proposal submitted to the Agency for its agreement pursuant to any Condition of this licence shall include a proposed timescale for its implementation. The Agency may modify or alter any such plan, programme or proposal in so far as it considers such modification or alteration to be necessary and shall notify the licensee in writing of any such modification or alteration. Every such plan, programme or proposal shall be carried out within the timescale fixed by the Agency but shall not be undertaken without the agreement of the Agency. Every such plan, programme or proposal agreed by the Agency shall be covered by the conditions of this licence.
- 1.11. This licence is being granted in substitution for the waste licence granted to the licence on 21<sup>st</sup> December 1999 and bearing Waste Licence Register No. 54-1. The previous waste licence (Register No. 54-1) is being superceded by this licence.

<p><b>REASON:</b> <i>To clarify the scope of this licence.</i></p>
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## **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 Departmental Manager, or a deputy facility manager shall be present on the facility at all times during its operation.
- 2.1.2 Both the facility manager and Departmental Manager and any replacement manager or deputy, shall successfully complete a waste management training programme to be agreed in advance with the Agency and associated on site assessment appraisal prior to acceptance of waste at the site.
- 2.1.3 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.

## 2.2 Management Structure

2.2.1 Within three months of the date of grant of this licence, the licensee shall submit written details of the management structure of the facility to the Agency. Any proposed replacement in the management structure shall be notified in advance in writing to the Agency. Written details of the management structure shall include the following information:

- a) the names of all persons who are to provide the management and supervision of the waste activities authorised by the licence, in particular the name of the facility manager and any nominated Departmental Manager or deputies;
- b) details of the responsibilities for each individual named under a) above;
- c) details of the relevant education, training and experience held by each of the persons nominated under a) above; and
- d) awareness and training to be undertaken.

## 2.3 Environmental Management System (EMS)

2.3.1 The licensee shall maintain an EMS for the facility. Within twelve months from the date of grant of this licence, the licensee shall submit to the Agency for its agreement a proposal for updating the documented Environmental Management System (EMS) for the facility. The EMS shall be updated on an annual basis with amendments being submitted to the Agency for its agreement.

2.3.2 The EMS shall include as a minimum the following elements:

### 2.3.2.1 Schedule of Environmental Objectives and Targets

The objectives should be specific and the targets measurable. The Schedule shall address a five-year period as a minimum. The Schedule shall include a time-scale for achieving the objectives and targets and shall comply with any other written guidance issued by the Agency.

### 2.3.2.2 Environmental Management Plan (EMP)

The EMP shall include, as a minimum, the following:

- (i) methods by which the objectives and targets will be achieved in the coming year and the designation of responsibility for targets;
- (ii) any other items required by written guidance issued by the Agency.

### 2.3.2.3 Corrective Action Procedures

The Corrective Action Procedures shall detail the corrective actions to be taken should any of the procedures detailed in the EMS not be followed.

### 2.3.2.4 Awareness and Training Programme

The licensee shall, within three months of the date of grant of this licence, submit to the Agency for its agreement Awareness and Training Procedures for identifying training needs and for providing

appropriate training for all personnel whose work is related to the licensed facility. Written records of training shall be maintained.

As a minimum, this training shall:

- (i) Ensure that facility personnel are able to effectively respond to any equipment malfunction or emergency situation that may arise; and
- (ii) Contain instruction for monitoring of incoming waste and identification and proper handling of suspected unauthorised waste types.

## 2.4 Communications Programme

- 2.4.1 The licensee shall maintain a Communications Programme to ensure that members of the public can obtain information at the facility, at all reasonable times, concerning the environmental performance of the facility.

*REASON: To make provision for the proper 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 FACILITY INFRASTRUCTURE

- 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 Specified Engineering Works

- 3.2.1 The licensee shall submit proposals for all Specified Engineering Works, as defined in *Schedule B: 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.
- 3.2.2 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.
- 3.2.3 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 include the following information:
  - a) a description of the works;
  - b) as-built drawings of the works;
  - c) records and results of all tests carried out (including failures);
  - d) drawings and sections showing the location of all samples and tests carried out;
  - e) daily record sheets/diary;
  - f) name(s) of contractor(s)/individual(s) responsible for undertaking the specified engineering works;
  - g) name(s) of individual(s) responsible for supervision of works and for quality assurance validation of works;

- h) records of any problems and the remedial works carried out to resolve those problems; and
- i) any other information requested in writing by the Agency.

### 3.3 Facility Notice Board

3.3.1 The licensee shall provide and maintain a 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.

3.3.2 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.

3.4 The licensee shall provide and maintain a plan of the facility (1200mm x 750mm) clearly identifying the location of each storage and treatment area. The plan shall be displayed as close as possible to the entrance of the facility on a durable material such that it is legible at all times. The plan shall be replaced as material changes to the facility are made.

### 3.5 Facility Security

3.5.1 The licensee shall maintain the existing security measures at the facility.

3.5.2 The licensee shall remedy any defect in the gates and/or fencing as follows:

- a) a temporary repair shall be made by the end of the working day; and,
- b) a repair to the standard of the original gates and/or fencing shall be undertaken within three working days.

### 3.6 Facility Roads /Traffic layout

3.6.1 Site roads shall be provided and maintained to ensure the safe movement of vehicles within the facility.

3.6.2 Traffic layout at the facility shall be such that emergency services' vehicles shall have access to all parts of the facility at all times.

### 3.7 Facility Office

3.7.1 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.

3.7.2 The licensee shall provide and maintain a working telephone and facsimile/method for electronic transfer of information at the facility.

### 3.8 Waste Inspection and Quarantine Areas

3.8.1 A Waste Inspection Area and a Waste Quarantine Area shall be provided and maintained at the facility.

- 3.8.2 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.
- 3.8.3 Drainage from these bunded areas shall be collected and managed in accordance with their contents.
- 3.9 Weighbridge
- 3.9.1 The licensee shall provide and maintain an appropriately sized weighbridge(s) at the facility.
- 3.10 Waste handling, ventilation and processing plant
- 3.10.1 Items of plant deemed critical to the efficient and adequate processing of waste at the facility (including shredders, compactors and bin lifting equipment) shall be provided on the following basis:
- 100% duty capacity;
  - 50% standby capacity available on a routine basis;
  - Provision of contingency arrangements and/or back up and spares in the case of breakdown of critical equipment.
- 3.10.2 Within six months of the date of grant of this licence, 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: Waste Acceptance*, of this licence.
- 3.10.3 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 by greater than 10% shall be treated as an incident.
- 3.11 Tank and Drum Storage Areas
- 3.11.1 Construction of the new bunded areas shall be in accordance with any guidance issued by the Agency.
- 3.11.2 All tank and drum storage areas shall be rendered impervious to the materials stored therein.
- 3.11.3 All 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:
- a) 110% of the capacity of the largest tank or drum within the bunded area; or
  - b) 25% of the total volume of substance which could be stored within the bunded area.
- 3.11.4 All drainage from bunded areas shall be diverted for collection and safe disposal.
- 3.11.5 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.11.6 All tanks and containers shall be labelled to clearly indicate their contents.
- 3.11.7 Each bunded area shall be clearly labelled so that it is legible to persons outside the bunded area and shall clearly indicate the material class type that can be stored in that area and the maximum quantity of material that can be stored therein. The

arrangements shall ensure that no mixing of incompatible substances, as a result of spillages or otherwise, shall take place.

- 3.11.8 The integrity and water tightness of all the bunds and their resistance to penetration by water or other materials stored therein shall be confirmed by the licensee and shall be reported to the Agency following its installation and prior to its use as a storage area. This confirmation shall be repeated at least once every three years thereafter and reported to the Agency on each occasion.
- 3.12 All wastewater sewers, drainage grids and manhole covers shall be painted with red squares. All surface water discharge gullies, drainage grids and manhole covers shall be painted with blue triangles. These colour codes shall be maintained so as to be visible at all times.
- 3.13 The integrity and water tightness of all pipes and tanks and their resistance to penetration by water or other materials stored therein shall be tested and demonstrated by the licensee. This testing shall be carried out by the licensee at least once every five 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.
- 3.14 Unless otherwise agreed, each bunded storage area indicated on Drawing L/26/01, received by the Agency on 23/10/02, shall contain only compatible classes of waste and raw materials that are separated in accordance with the requirements of the Health and Safety Publication.
- 3.15 Monitoring Infrastructure
- 3.15.1 Replacement of Infrastructure
- (i) 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 appropriate infrastructure for the protection of the environment.*

## **CONDITION 4 RESTORATION AND AFTERCARE**

- 4.1. A proposal for a Decommissioning and Aftercare Plan for the facility shall be submitted to the Agency within twelve months of the date of grant of this licence. Such a plan shall be in agreement with the requirement to provide Financial provision as per Condition 12.2 of this licence. The licensee shall update these schemes when required by the Agency.

*REASON: To provide for the restoration of the facility.*

## **CONDITION 5 FACILITY OPERATIONS**

- 5.1 Hazardous wastes that are allowed to be accepted and fuels shall only be stored at appropriately bunded locations on the facility.
- 5.2 Waste Acceptance and Characterisation
- 5.2.1 Wastes shall only be accepted at the facility from holders of waste collection permits issued under the Waste Management (Collection) Permit Regulations 2001. Copies of these waste collection permits must be maintained at the facility.

- 5.2.2 The licensee shall only accept waste from an appropriate person as defined in Section 32 of the Waste Management Act, 1996. The licensee shall not accept any waste at the facility, where such waste has previously been held at any facility not authorised under the Waste Management Act, 1996.
- 5.2.3 The facility will only accept healthcare risk waste which is stored in wheeled carts containing UN compliant marked and tagged bags and sharps in appropriate canisters in accordance with the packaging guidelines issued by the Department of Health and Children, unless otherwise agreed with the Agency.
- 5.2.4 Acceptance of Laboratory Waste
- (i) Laboratory waste that has been previously autoclaved may be accepted at the facility.
  - (ii) Prior to the acceptance of any non-autoclaved laboratory waste at the facility, a detailed waste acceptance and handling procedure dealing with infectious and non-infectious waste shall be agreed with the Agency.
  - (iii) Laboratory waste containing genetically modified organisms may be accepted at the facility subject to the licensee obtaining the appropriate consent under the "Genetically Modified Organisms (Contained use) Regulations" - S.I. No 73 of 2001 and to the submission of a waste acceptance procedure to the Agency for agreement.
- 5.2.5 Prior to the commencement of acceptance of waste other than healthcare risk waste at the facility, the licensee shall establish and maintain detailed written procedures for the acceptance, handling and sampling of incoming wastes to include analysis, weighing, documentation, transfer, storage and record keeping.
- 5.2.6 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.
- 5.2.7 Unless otherwise agreed with or instructed by the Agency, the processing, handling and analysis of healthcare risk waste and the diversion of unacceptable healthcare risk waste shall be in accordance with the standard operating procedures and work instructions submitted as part of the waste licence application.
- 5.2.8 Waste shall only be accepted at the facility 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.
- 5.2.9 Prior to the acceptance of any waste at the transfer station facility, the licensee shall submit 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.

### 5.3 Waste Storage

- 5.3.1 The licensee shall designate and maintain a controlled contamination area for untreated healthcare risk waste loading area separate from the rest of the plant.
- 5.3.2 The licensee shall designate and maintain a dedicated storage area for all treated waste prior to test results confirming its successful treatment.

- 5.3.3 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.
- 5.3.4 Each container shall be tracked such that its location, whether at or away from the facility, may be determined at all times.
- 5.3.5 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, smoking, cutting or welding, hot surfaces, frictional heat, sparks (static, electrical or mechanical), spontaneous ignition (e.g. from heat-producing chemical reactions) and radiant heat.
- 5.4 Waste Repackaging / Reprocessing
- 5.4.1 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 banded areas such that any spillage arising from the activity may be contained and collected.
- 5.4.2 All redrumming or other exposure of drum contents to the atmosphere shall take place indoors protected against spillage. Appropriate control measures shall be put in place to minimise any emissions which may arise from such activity.
- 5.5 Operational Controls
- 5.5.1 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
- 5.5.2 No smoking shall be allowed on the facility (other than in the facility office).
- 5.5.3 All waste processing and storage of healthcare risk waste shall be carried out inside the facility building.
- 5.5.4 No mixing or blending of hazardous wastes shall be undertaken at the facility, except for the sterilisation of mixed batches of healthcare risk wastes at the facility.
- 5.6 Sterilisation of Healthcare Risk Waste in Rotoclave
- 5.6.1 The Rotoclave shall sterilise waste on set sterilisation parameters of a minimum 134°C for 15 minutes at 45psi, unless otherwise agreed with the Agency. The quantity of waste to be processed in an individual cycle of the Rotoclave shall not exceed 0.7 tonnes, unless otherwise agreed with or instructed by the Agency.
- 5.6.2 The performance of the Rotoclave shall be evaluated as follows:
- (a) by determining residence time in the Rotoclave,
  - (b) by use of thermal indicator strips,
  - (c) by performing challenge tests against spore-forming bacteria in accordance with *Schedule D: Monitoring*, of this licence.
- 5.6.3 The parameter settings, which control residence time and temperature, shall be tamper proof and shall be subsequently modified only with the prior agreement of the Agency.



- 5.6.4 During the operation of the autoclave chambers, the process shall be continuously monitored to ensure that operating parameters are being maintained within the established limits. The autoclave chambers should be set in such a manner so as to ensure that the chambers are not opened prior to having attained the required operating parameters, unless an incident occurs.
- 5.6.5 The Rotoclave shall be operated such that there is a 6 log reduction of *Bacillus subtilis* or *Bacillus stearothermophilus* spores in challenge tests.
- 5.6.6 Should any of the samples taken for the purposes of *Schedule D: Monitoring*, of this licence indicate test failure:
- a) the batch of processed waste being held shall be further processed and retested;
  - b) all methods of sampling and testing specified in *Schedule D: Monitoring*, of this licence shall be carried out for each batch for the next four consecutive working days;
  - c) should this additional sampling and testing show the continued presence of the relevant microorganisms, the acceptance and processing of health care 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.

## 5.7 Sterilisation of Other Wastes

- 5.7.1 The sterilisation of each of the excluded waste types listed in Condition 1.6, other than (a), (e) and (f), may be undertaken in the event that a detailed report on the proposed waste handling/processing and an odour abatement procedure has been submitted and agreed by the Agency. This report shall include the following as a minimum:
- (i) The state of the waste (frozen, liquid, solid).
  - (ii) The nature, type and expected numbers of the principal biological agents contained within the waste.
  - (iii) Details on the quantity of these waste streams that are to be accepted on a monthly/annual basis.
  - (iv) Expected emissions from the heat treatment of these materials.
  - (v) Evidence that the odour abatement system in place is capable of treating these emissions.
  - (vi) Odour dispersion modelling including expected impacts on all odour sensitive locations.
  - (vii) Evidence that the existing monitoring programme (microbiological / air emissions) is capable of detecting expected emissions from the treatment of these waste types.
  - (viii) Copies of the written procedures in place to deal with these waste types.
  - (ix) Any other information requested by the Agency.

## 5.8 Static Autoclave Commissioning

Prior to the use of the static autoclave for the sterilisation of waste, the licensee shall submit a report on the commissioning tests to the Agency for agreement. The report shall:

- a) describe the programme as carried out;
- b) provide all analytical results obtained;
- c) concisely interpret those results;

- d) detail the parameter settings by which the process will be operated; and
- e) detail the records of the operational cycle of the static autoclave to be held at the facility, as appropriate.

5.8.1 Notwithstanding the requirements of the commissioning tests, the sterilisation of obsolete mechanical equipment in the Static Autoclave shall only be permitted in the event that written confirmation from the equipment manufacturer or equivalent is available to the effect that such treatment is suitable for this equipment and is not liable to result in the evolution of off-gases. A record of this confirmation should be held at the facility for each batch of obsolete mechanical equipment treated in the Static Autoclave for a period of two years.

#### 5.9 Shredding of Non-Hazardous Material

5.9.1 The shredding of non-hazardous material (confidential records only) shall be as outlined in *Attachment A (Revision No.2)* of the waste licence application unless otherwise agreed with the Agency.

5.9.2 Emissions from the shredding of this material shall pass through an appropriately sized filter.

#### 5.10 Asbestos waste

5.10.1 The transfer station shall be used for the temporary storage of asbestos waste prior to its removal for final disposal.

5.10.2 The licensee shall ensure that during transport, handling and storage of waste containing asbestos fibres or dust that no such fibres or dust is emitted or released to any environmental medium.

5.10.3 Before acceptance of asbestos waste at the facility at least 7 days notice must be received from the customer.

5.10.4 Asbestos waste shall only be accepted at the facility in containers, owned and controlled by the licensee, that have previously been delivered to the customer, unless otherwise agreed with the Agency.

5.10.5 Before acceptance of asbestos waste in the containers referred to above, all fibrous asbestos waste and dust shall have been enclosed in sealed plastic bags, double wrapped, of a minimum thickness of 1,000 gauge, or other sealed containers as approved in advance by the Health and Safety Authority (H.S.A). "Hard" waste shall have been wrapped in heavy duty plastic and sealed, in a manner approved in advance with the HSA.

5.10.6 No unwrapped asbestos waste shall be accepted or stored at the facility. Care shall be taken in handling the waste that no damage is caused to any plastic bags or wrapping as may permit the escape of fibres and dust. Any damage shall be recorded as an incident. In addition, no unwrapping of asbestos waste shall be carried out.

5.10.7 Asbestos waste shall be placed in lockable transport containers immediately on arrival at the facility, or into dedicated buildings/structures for temporary storage. Containers and any dedicated buildings shall remain locked at all times when asbestos waste is not being placed in them. No asbestos waste shall be deposited or allowed to accumulate outside the containers or buildings being used for waste storage. Containers used to store asbestos waste shall not be used for any other purpose.

5.10.8 All containers used to store or transport asbestos waste before onward transport shall be of a design suitable for washing and cleansing without lodgement or escape of

debris or fibres. The design should also ensure maximum protection from accidental or deliberate damage.

- 5.10.9 Appropriate warning labels shall be displayed on containers so that persons using or near the facility are aware of its hazards. All full containers shall be sealed and clearly labelled and shall only be stored at an agreed location.
- 5.10.10 At least one month prior to the commencement of the acceptance of asbestos waste at the facility the licensee shall undertake asbestos fibre monitoring at two locations to be agreed with the Agency. Thereafter, the licensee shall undertake asbestos fibre monitoring on a quarterly basis as specified in *Schedule D: Monitoring*, of this licence.
- 5.10.11 Copies of the results of any asbestos fibre monitoring carried out for health and safety reasons shall be submitted to the Agency within 10 days of such results becoming available to the licensee.

#### 5.11 Waste Retention Time

Unless otherwise agreed by the Agency:

- 5.11.1 No infectious waste or biological waste shall be stored for a period greater than 36 hours. The storage of this waste type up-to a maximum time period of 60 hours is allowed subject to storage under refrigerated conditions or under a negative pressure abatement system as previously agreed by the Agency.
- 5.11.2 No waste in tanks shall be stored in the waste transfer station in excess of six months.
- 5.11.3 Waste in drums or full containers of Asbestos waste shall be removed as soon as operationally possible and, in any case, at no longer than three monthly intervals.

#### 5.12 Off-site Disposal and Recovery

- 5.12.1 Waste sent off-site for recovery or disposal shall only be conveyed by a waste carrier agreed in advance by the Agency. Any request for such agreement of a waste carrier shall include the following:
  - (i) Copies of the waste carrier's permit(s) under the Waste Management (Collection Permit) Regulations 2001;
  - (ii) Details of the waste types it is proposed the carrier will transfer from the facility; and
  - (iii) TFS documentation if appropriate.
- 5.12.2 All waste transferred from the facility shall only be transferred 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.
- 5.12.3 All wastes removed off-site for recovery or disposal shall be transported from the facility to the consignee in a manner which will not adversely affect the environment.

5.12.4 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. The testing laboratory to be employed during operation of the facility shall be agreed in advance with the Agency.

5.13 Maintenance

5.13.1 Maintenance of the Rotoclave, Static Autoclave, conveyors and shredders shall be in accordance with the instructions issued by the manufacturer/supplier.

5.13.2 All treatment/abatement and emission control equipment shall be calibrated and maintained, in accordance with the instructions issued by the manufacturer/supplier or installer. Written records of the calibrations and maintenance shall be made and kept by the licensee.

5.13.3 The licensee shall maintain and clearly label and name all sampling and monitoring locations.

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

## CONDITION 6 EMISSIONS

6.1. No specified emission from the facility shall exceed the emission limit values set out in *Schedule C: Emission Limits* of this licence. There shall be no other emissions of environmental significance.

6.2. The licensee shall ensure that the activities shall be carried out in a manner such that emissions do not result in significant impairment of, or significant interference with the environment beyond the facility boundary.

6.3. Emission limits for emissions to atmosphere in this licence shall be interpreted in the following way:

6.3.1. 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 all other parameters, no 30 minute mean value shall exceed the emission limit value.

(iii) For flow, no hourly or daily mean value shall exceed the emission limit value.

6.4. The concentration limits for emissions to atmosphere specified in this licence shall be based on gas volumes under standard conditions of :

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

6.5. Emissions to Sewer

6.5.1. Unless otherwise agreed in advance with the Agency and the Sanitary Authority, the following shall apply for the discharge of wastewater, which shall be via the agreed

sewer location on the Kylemore Road. There shall be no other discharge or emission to sewer of environmental significance.

- 6.5.2. Emission limits for emissions to sewer shall be interpreted as follows.
- (i) No pH value shall deviate from the specified range.
  - (ii) No temperature value shall exceed the emission limit value.
  - (iii) Eight out of ten consecutive results, calculated as daily mean concentration or mass emission values on the basis of flow proportional composite sampling shall not exceed 1.2 times the emission limit value.
  - (iv) For parameters other than pH, temperature and flow, no grab sample value shall exceed 1.2 times the emission limit value.
- 6.5.3. No substance shall be present in emissions to sewer in such concentrations as would constitute a danger to sewer maintenance personnel working in the sewerage system, or as would be damaging to the fabric of the sewer, or as would interfere with the biological functioning of a downstream wastewater treatment works.
- 6.5.4. The licensee shall permit authorised persons of the Agency and the Sanitary Authority to inspect, examine and test, at all reasonable times, any works and apparatus installed, in connection with the discharge or emission, and to take samples of the discharge or emission.
- 6.5.5. Monitoring and analyses equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission or discharge.
- 6.5.6. The licensee shall ensure that the discharge shall not contain dissolved methane, petroleum spirits or organic solvents (including chlorinated organic solvents), at concentrations, which would give rise to flammable or explosive vapours in the sewer.
- 6.5.7. Non-trade effluent wastewater (e.g. firewater, accidental spillage) which occurs on-site shall not be discharged to the sewer without the prior authorisation of the Sanitary Authority.
- 6.5.8. The licensee shall provide and maintain an inspection chamber in a suitable position in connection with each pipe through which a discharge or emission is being made. Each such inspection chamber or manhole shall be constructed and maintained by the licensee so as to permit the taking of samples of the discharge.
- 6.5.9. The licensee shall submit monitoring results to the Sanitary Authority on an annual basis.
- 6.5.10. The trade effluent shall be screened prior to discharge to remove gross solids and avoid blockages in the sewer.
- 6.5.11. The trade effluent shall not contain active viruses, pathogens and/or unsterilised body fluids.
- 6.5.12. No radioactive material shall be discharged to sewer.
- 6.6 There shall be no direct emissions to groundwater.
- 6.7 There shall be no clearly audible tonal component or impulsive component in the noise emissions from the activity at the noise sensitive locations.

6.8 Trigger Level for Airborne micro-organisms

6.8.1 The trigger level for airborne micro-organisms from the facility measured at any location on the boundary of the facility is:

Airborne micro-organisms greater than 1000 cfu/m<sup>3</sup>.

**REASON:** *To control emissions from the facility and provide for the protection of the environment.*

## CONDITION 7 NUISANCE CONTROL

7.1 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.

7.2 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.

7.3 The road network in the vicinity of the facility shall be kept free from any debris caused by vehicles entering or leaving the facility. Any such debris or deposited materials shall be removed without delay.

**REASON:** *To provide for the control of nuisances.*

## CONDITION 8 MONITORING

8.1. The licensee shall carry out such monitoring and at such locations and frequencies as set out in Schedule D: *Monitoring*, of this licence and as specified in this licence.

8.2. The licensee shall amend the frequency, locations, methods and scope of monitoring as required by this licence only upon the written instruction of the Agency and shall provide such information concerning such amendments as may be requested in writing by the Agency. Such alterations shall be carried out within any timescale nominated by the Agency.

8.3. Monitoring and analysis equipment shall be operated and maintained in accordance with the manufacturers' instructions (if any) so that all monitoring results accurately reflect any emission, discharge or environmental parameter.

8.4. The licensee shall provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency.

8.5. The licensee shall maintain all sampling and monitoring points, and clearly label and name all sampling and monitoring locations, so that they may be used for representative sampling and monitoring.

8.6. 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.

8.7. All automatic monitors and samplers shall be functioning at all times when the activity is being carried on, unless alternative sampling or monitoring has been agreed, in writing, by the

Agency. 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. Prior written agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.

8.8. Nuisance Monitoring

8.8.1. The licensee shall, at a minimum of one-week intervals, inspect the facility and its immediate surrounds for nuisances caused by litter, vermin, birds, flies, mud, dust and odours.

***REASON:** To ensure compliance with the conditions of this licence by provision of a satisfactory system of monitoring of emissions.*

## **CONDITION 9 CONTINGENCY ARRANGEMENTS**

9.1. In the event of an incident the licensee shall immediately:

- a) identify the date, time and place of the incident;
- b) carry out an immediate investigation to identify the nature, source and cause of the incident and any emission arising there from;
- c) isolate the source of any such emission;
- d) evaluate the environmental pollution, if any, caused by the incident;
- e) identify and execute measures to minimise the emissions/malfunction and the effects thereof;
- f) provide a proposal to the Agency for its agreement within one month of the incident occurring to:
  - i) identify and put in place measures to avoid reoccurrence of the incident; and
  - ii) identify and put in place any other appropriate remedial action.

9.2. Prior to the construction of the bunded areas for hazardous waste storage, the licensee shall submit a written Emergency Response Procedure (ERP) to the Agency for its agreement. The ERP shall address any emergency situations, which may originate on the facility and shall include provision for minimising the effects of any emergency on the environment. This shall include a risk assessment to determine the requirements at the facility for fire fighting and fire water retention facilities. The Fire Authority shall be consulted by the licensee during this assessment regarding, contingency arrangements for the facility and shall be agreed with the Agency.

9.3. 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.

9.4. Emergencies

9.4.1. Breakdown of the plant shall be treated as an emergency. In the case of a breakdown, the operator shall close down operations as soon as practicable until normal operations can be restored. The licensee shall:

- a) Provide sufficient refrigerated storage for waste in the event of plant breakdown;
  - b) agree emergency unloading procedures for the shredder with the Agency, which shall include in-situ disinfection of the untreated waste.
- 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 ensure compliance with the conditions of this licence by provision of a satisfactory system of monitoring of emissions.*

## CONDITION 10 RECORDS

- 10.1 The licensee shall keep the following documents at the facility office:
- a) the current waste licence relating to the facility;
  - b) the current EMS for the facility;
  - c) the previous year's AER for the facility;
  - d) all written procedures produced by the licensee which relate to the licensed activities; and
  - e) a copy of an Operations and Maintenance (O&M) manual describing operation and maintenance of the facility, including the equipment manufacturer's operating, safety and maintenance procedures.
- 10.2 The licensee shall maintain a written record for each load of waste arriving at and departing from the facility. The licensee shall record the following:
- a) the time and date of arrival and departure;
  - b) the name of the carrier (including waste collection permit number);
  - c) the vehicle registration number;
  - d) the name of the producer(s)/collector(s) of the waste as appropriate;
  - e) the name of the waste facility (if appropriate) from which the load originated including the waste licence or waste permit register number;
  - f) the method used to process/sort the waste at the facility;
  - g) a description of the waste including the associated EWC codes;
  - h) the quantity of the waste, recorded in tonnes;
  - i) the name of the person checking the load;
  - j) where loads or wastes are removed or rejected, details of the date of occurrence, the types of waste and the facility to which they were removed;
  - k) the identification of each bin or other container in the load;
  - l) where applicable a consignment note number (including transfrontier shipment notification and movement/tracking form numbers, as appropriate);
  - m) Written confirmation that the consigned waste has reached its destination and/or has been subjected to the recovery/disposal process for which it was destined, as appropriate; and



n) TFS Documentation as appropriate.

10.3 Continuous records shall be kept of the following process control parameters for each of the Rotoclaves:-

- (a) operating cycle;
- (b) temperature inside the autoclave throughout the cycle;
- (c) pressure inside the autoclave throughout the cycle;
- (d) the effective residence time; and
- (e) the time of the cycle.

The records shall be held on site for a minimum period of four weeks and made available for inspection by the Agency or other party at all reasonable times. Records shall be kept of the Static Autoclave in accordance with the format agreed with the Agency upon completion of the commissioning trials.

10.4. Written Records

The following written records shall be maintained by the licensee:

- a) the types and quantities of waste treated at the facility each year. These records shall include the relevant EWC Codes;
- b) all training undertaken by facility staff;
- c) results from all integrity tests of bunds and other structures and any maintenance or remedial work arising from them;
- d) details of all nuisance inspections;
- e) details of all daily inspections when waste is being held at the facility;
- f) all waste being held in the waste quarantine area at any given time; and
- g) the names and qualifications of all persons who carry out all sampling and monitoring as required by this licence and who carry out the interpretation of the results of such sampling and monitoring.

10.5 The licensee shall maintain a written record of all complaints relating to the operation of the activity. Each such record shall give details of the following:

- a) date and time of the complaint;
- b) the name of the complainant;
- c) details of the nature of the complaint;
- d) actions taken on foot of the complaint and the results of such actions; and
- e) the response made to each complainant.

10.6 The licensee shall maintain a written record of residual waste that failed the test procedures outlined in *Schedule D: Monitoring*, of this licence and the procedures followed thereafter.

10.7 Unless otherwise agreed in writing with the Agency, copies of all written records, reports and other documents referred to in this licence shall be maintained at the facility and shall be made available to the Agency at all reasonable times.

- 10.8 Unless otherwise agreed in advance in writing with the Agency, all written records, reports and other documents required to be maintained under this licence shall be retained by the licensee until the licensee receives notice from the Agency in accordance with Section 48(8) of the Waste Management Act, 1996. The licensee shall then transfer documentation specified by the Agency, or copies of it, to the Agency within a time and in the manner specified in writing by the Agency.

**REASON:** *To provide for the keeping of proper records of the operation of the facility.*

## **CONDITION 11 REPORTS AND NOTIFICATIONS**

- 11.1 Unless otherwise agreed by the Agency, all reports and notifications submitted to the Agency shall:
- a) be sent to the Agency's Regional Inspectorate at Inniscarra, Co. Cork;
  - b) comprise one original and three copies;
  - c) be formatted in accordance with any written instruction or guidance issued by the Agency;
  - d) include whatever information as is specified in writing by the Agency;
  - e) be identified by a unique code, indicate any modification or amendment, and be correctly dated to reflect any such modification or amendment;
  - f) be submitted in accordance with the relevant reporting frequencies specified by this licence, such as in *Schedule E: Recording and Reporting to the Agency* of this licence;
  - g) be accompanied by a written interpretation setting out their significance in the case of all monitoring data; and
  - h) be transferred electronically to the Agency's computer system if required by the Agency.
- 11.2 All written records, reports and other documents submitted to the Agency shall be certified accurate and representative by the licensee.
- 11.3 In the event of an incident occurring on the facility, the licensee shall:
- a) notify the Agency as soon as practicable and in any case not later than 10.00 am the following working day after the occurrence of any incident;
  - b) submit a written record of the incident, including all aspects described in Condition 9.1(a-e), to the Agency as soon as practicable and in any case within five working days after the occurrence of any incident; and
  - c) should any further actions be taken as a result of an incident occurring, the licensee shall forward a written report of those actions to the Agency as soon as practicable and no later than ten days after the initiation of those actions.
- 11.4 Unless otherwise agreed in advance in writing with the Agency, the licensee must give at least fourteen days notice to the Agency of the following events:
- a) the cessation of waste disposal activities at the facility for a period in excess of twenty-eight days;
  - b) the re-commencement of waste disposal activities at the facility following a period of cessation referred to at a) above.

## 11.5 Annual Environmental Report

11.5.1 The licensee shall submit to the Agency for its agreement, by 31<sup>st</sup> January 2004, and within one month after the end of each year thereafter, an Annual Environmental Report (AER).

11.5.2 The AER shall include as a minimum the information specified in *Schedule F: Content of the Annual Environmental Report* of this licence and shall be prepared in accordance with any relevant written guidance issued by the Agency.

<b>REASON:</b> <i>To provide for proper reporting and notification of the Agency.</i>
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## CONDITION 12 CHARGES AND FINANCIAL PROVISIONS

### 12.1 Agency Charges

12.1.1 The licensee shall pay to the Agency an annual contribution of € 19,712 or such sum as the Agency from time to time determines, towards the cost of monitoring the activity or otherwise in performing any functions in relation to the activity, as the Agency considers necessary for the performance of its functions under the Waste Management Act, 1996. The licensee shall in 2004 and subsequent years, not later than January 31 of each year, pay to the Agency this amount updated in accordance with changes in the Public Sector Average Earnings Index from the date of the licence to the renewal date. The updated amount shall be notified to the licensee by the Agency. For 2003, the licensee shall pay a pro rata amount from the date of this licence to 31<sup>st</sup> December, 2003. This amount shall be paid to the Agency within one month of the date of grant of this licence.

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.

### 12.2 Environmental Liabilities

12.2.1 Prior to the commencement of the storage of hazardous waste other than healthcare risk waste or within six months of the date of this licence, whichever is the sooner, the licensee shall arrange for an independent third party risk assessment of the facility to be carried out. The risk assessment shall have particular regard to any accidents, emergencies, or other incidents, which might occur at the facility and their effect on the environment, on the neighbours of the facility and on adjoining land-uses. The risk assessment shall include a comprehensive and fully costed Environmental Liabilities Risk Assessment for the facility together with a proposal for Financial Provision arising from the carrying on of the activities to which this licence relates. A report on this assessment shall be agreed by the Agency.

12.2.2 The amount of financial provision, held under Condition 12.1.1 shall be reviewed and revised as necessary, but at least annually. Any proposal for such a revision shall be submitted to the Agency for its agreement.

12.2.3 The licensee shall within two weeks of purchase, renewal or revision of the financial provision required under Condition 12.1.1, forward to the Agency written proof of such indemnity.

12.2.4 Unless otherwise agreed any revision to the fund shall be computed using the following formula:

$$\text{Cost} = (\text{ECOST} \times \text{WPI}) + \text{CiCC}$$

Where:

Cost = Revised restoration and aftercare cost

ECOST = Existing restoration and aftercare cost

WPI = Appropriate Wholesale Price Index [Capital Goods, Building & Construction (i.e. Materials & Wages) Index], as published by the Central Statistics Office, for the year since last closure calculation/revision.

CiCC = Change in compliance costs as a result of change in site conditions, changes in law, regulations, regulatory authority charges, or other significant changes.

12.3 The licensee shall inform the Agency in the event of any change in the financial provision made by the licensee within two weeks of such occurrence.

12.4 Sanitary Authority Charges

12.4.1 Charges as required by the Sanitary Authority based on volume and load, will be applied at appropriate intervals. Annual monitoring costs of €762 shall be made payable to the Sanitary Authority once per year. Sanitary Authority charges will increase from time to time in response to increased costs in providing drainage and monitoring.

***REASON:*** *To provide for adequate financing for monitoring and financial provisions for measures to protect the environment.*

## SCHEDULE A : Waste Acceptance

### A.1 Waste Acceptance for On-site Treatment in Rotoclave or Static Autoclave

**Table A.1 Waste Categories and Quantities**

WASTE TYPE	MAXIMUM (TONNES PER ANNUM)
Used sharp instruments	1000
Infected or potentially hazardous health care risk waste	1000
Laboratory waste	1000
Obsolete Mechanical Equipment <sup>Note 1</sup>	87
HEPA filters <sup>Note 1</sup>	87
Surgical Equipment <sup>Note 1</sup>	87
TOTAL	3,261

**Note 1:** These waste types may be treated in the Static Autoclave as detailed in the Commissioning Trials.

**Table A.2 Other Wastes Acceptable at the Facility**

WASTE TYPE	MAXIMUM (TONNES PER ANNUM)
Non-Hazardous Wastes	6,000 <sup>Note 1</sup>
Hazardous Wastes (types as listed in Attachment D3 - Activity 5 of the application form)	480
Total	6,480

**Note 1:** This includes Confidential Records, Bank Records, Insurance Details and Patient Files only.

## SCHEDULE B : Specified Engineering Works

Specified Engineering Works
Installation of bunded areas.
Installation of waste handling and processing infrastructure.
Installation of emissions abatement equipment.
Any other works notified in writing by the Agency.

## SCHEDULE C :Emission Limits

### C.1 Emissions to Sewer

Emission Point Reference No: E310423 N 232905

Emission to : Foul Sewer on Kylemore Road

Volume to be emitted: 15m<sup>3</sup>/day

Parameter	Emission Limit Value		
	Grab Sample (mg/l)	Daily Mean Concentration	Daily Mean Loading (kg/day)
BOD	1,000	800	12
COD	3,000	2,400	24
Sulphates	1,000	1,000	1
Suspended Solids	500	400	0.4
pH	6-10	6-10	
Temperature	42°C		

### C.2 Noise Emissions: (Measured at any noise sensitive location).

Day dB(A) L <sub>Aeq</sub> (30 minutes)	Night dB(A) L <sub>Aeq</sub> (30 minutes)
55	45

### C.3 Emissions to Atmosphere

Emission Point Reference Nos.

EP1

Name of Emission Point:

Main Stack following abatement

Parameter	Emission Limit Value <sup>(Note 1)</sup>
Indicator Microorganisms	2,000 cfu/m <sup>3</sup>
Total Particulates	50mg/m <sup>3</sup>
Ammonia	50 mg/m <sup>3</sup> (at mass flows > 0.1kg/hr)
Hydrogen Sulphide and Mercaptans	5 mg/m <sup>3</sup>
Total Volatile Organic Compounds	0.1 kg/hr

## SCHEDULE D : Monitoring

Monitoring to be carried out as specified below.

### D.1 Monitoring Locations

Monitoring locations shall be those as set out in Table D.1.1.

**Table D.1.1 Monitoring Locations**

Rotoclave Temperature Stations	Noise Stations	Ambient Air Monitoring	Air Emission Point	Emissions to Sewer
Note 1	NMP 3,4,5,6	4 Boundary monitoring locations (Note 2)	EP1	FS1 <sup>Note 3</sup>

**Note 1:** Thermocouple locations in Rotoclave unit to be agreed with the Agency.

**Note 2:** Locations to be agreed with the Agency.

**Note 3:** Foul Sewer in Kylemore Road.

### D.2 Emissions to Sewer

**Table D.2.1 Sewer Monitoring Frequency and Techniques**

Parameter	Monitoring Frequency	Analysis Method/Technique
PH	Quarterly	Electrometry
Biological Oxygen Demand	Quarterly	Standard Methods <sup>Note 1</sup>
COD	Quarterly	Standard Methods <sup>Note 1</sup>
Sulphates	Quarterly	Standard Methods <sup>Note 1</sup>
Suspended Solids	Quarterly	Standard Methods <sup>Note 1</sup>
Volume	Quarterly	Method to be agreed with the Agency
Total coliform/100ml	Quarterly	Standard Methods <sup>Note 1</sup>
Faecal coliform/100ml	Quarterly	Standard Methods <sup>Note 1</sup>
Faecal streptococci/100ml	Quarterly	Standard Methods <sup>Note 1</sup>
Culturable Enteroviruses	Quarterly	Standard Methods <sup>Note 1</sup>

**Note 1:** "Standards Methods for the Examination of Water and Wastewater", (prepared and published jointly by A.P.H.A., A.W.W.A & W.E.F) 20th Ed., American Public Health Association, 1015 Fifteenth Street, Washington DC 20005, USA.

### D. 3 Noise

**Table D.3.1 Noise Monitoring Frequency and Technique**

Parameter	Monitoring Frequency	Analysis Method/Technique
L(A) <sub>EQ</sub> [30 minutes]	Annual	Standard <sup>Note 1</sup>
L(A) <sub>10</sub> [30 minutes]	Annual	Standard <sup>Note 1</sup>
L(A) <sub>90</sub> [30 minutes]	Annual	Standard <sup>Note 1</sup>
Frequency Analysis(1/3 Octave band analysis)	Annual	Standard <sup>Note 1</sup>

**Note 1:** "International Standards Organisation. ISO 1996. Acoustics - description and Measurement of Environmental noise. Parts 1, 2 and 3."

### D.4 Emissions to Atmosphere

Emission Point Reference No. EP1  
 Name of Emission Point: Process Flue Shaft

**Table D.4.1 Emissions to Atmosphere: Monitoring Frequency and Technique**

Parameter	Monitoring Frequency	Analysis Method/ Technique (Note 1)
Ammonia	Biannually	Note 2
Volatile Organics	Biannually	Adsorption / Desorption, GCMS
Indicator Microorganisms	Biannually	Note 2
Hydrogen Sulphide and Mercaptans	Biannually	Note 2
Particulates	Annually	Isokinetic/Gravimetric

**Note 1:** Or equivalent method acceptable to Agency.

**Note 2:** As per method submitted in waste licence application.

### D.5 Ambient Air Monitoring

**Table D.5.1 Ambient Air Monitoring: Monitoring Frequency and Technique**

Parameter	Monitoring Frequency	Analysis Method/ Technique
Airborne Microorganisms	Biannually	To be agreed with the Agency

### D.6 Rotoclave Abatement/Treatment Control

**Abatement Equipment:**

Monitoring:

Monitoring to be carried out	Monitoring	Monitoring Equipment
Set point pressure levels	Continuous	Pressure Gauge with audible alarm
Filter Integrity	Daily "sniff test"	Not applicable
Filter Integrity	Visual Weekly Check	Not applicable



Equipment:

Equipment	Equipment Maintenance	Equipment backup
Air Abatement Equipment	See Note 1	Spares held on site

**Note 1:** Preventative maintenance as per manufacturers instructions

***D.7 Monitoring of Process Control / Processed Waste in the Rotoclave***

Parameter	Frequency <sup>(Note1)</sup>	Analysis Method /Technique (Note 1)
Residence Time	Each batch	To be agreed with the Agency
Temperature	Daily	Temperature indicator strips (Note 2)
Processed Waste (size particle dimensions)	Daily	Note 3
Challenge Test	Each Batch	Challenge Test against <i>Bacillus spores</i> (Note 4)
<b>Treated Waste Testing</b>	<b>Biannual</b>	Note 5

**Note 1:** For each Rotoclave Any deviations from the protocol outlined above shall be with prior written approval of the Agency

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

**Note 3:** Method as per SOP 43.

**Note 4:** Test method as per SOP. In addition, positive and negative controls to be included with all samples taken.

**Note 5:** Random samples of treated waste to be tested on a biannual basis. Method to be agreed with the Agency.

***D.8 Asbestos Fibre Monitoring***

**Monitoring Locations :** Two locations to be agreed with the Agency

**Monitoring Frequency:** As per Table D.8.1

***Table D.8.1: Asbestos Fibre Monitoring***

Parameter (fibres/ml)	Monitoring Frequency	Analysis Method/Technique
Asbestos Fibre Concentration	Quarterly <sup>Note1</sup>	Standard Method <sup>Note 2</sup>

**Note 1 :** Monitoring shall be performed at least one month prior to commencement of the acceptance of asbestos at the facility.

**Note 2:** Method used shall be "Asbestos Fibre in Air" Health and Safety Executive MDHS 39/4, UK (1995) or another method agreed with the Agency. Monitoring shall be carried out by an independent laboratory agreed with the Agency.

## SCHEDULE E : Recording and Reporting to the Agency

Report	Reporting Frequency <sup>Note1</sup>	Report Submission Date
Environmental Management System Updates	Annually	One month after the end of the year reported on.
Annual Environment Report (AER)	Annually	Thirteen months from the date of grant of licence and one month after the end of each calendar year thereafter.
Record of incidents	As they occur	Within five days of the incident.
Bund, tank and container integrity assessment	Every three years	Six months from the date of grant of licence and one month after end of the three year period being reported on.
Specified Engineering Works reports	As they arise	Prior to the works commencing.
Monitoring of Foul water	Biannually	Ten days after end of the six month period r being reported on.
Stack Air Monitoring	Biannually	Ten days after end of the six month period being reported on.
Ambient Air Monitoring	Biannually	Ten days after end of the six month period being reported on.
Waste testing / process control	Quarterly	Ten days after end of quarter being reported on.
Noise Monitoring	Annually	One month after end of the year being reported on.
Any other monitoring	As they occur	Within ten days of obtaining results.

**Note 1:** Unless altered at the request of the Agency.

## **SCHEDULE F : Content of the Annual Environmental Report**

### **Annual Environmental Report Content** <sup>Note 1</sup>

Reporting Period.

Waste activities carried out at the facility.

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

Summary report on emissions.

Summary of results and interpretations of environmental monitoring, including a location plan of all monitoring locations.

Resource and energy consumption summary.

Development / Infrastructural works in place and planned, to process waste quantities projected for the following year (including plant operating capacity, provision of adequate standby capacity and provision of contingency, backup and spares in the case of breakdown).

Schedule of Environmental Objectives and Targets for the forthcoming year.

Report on the progress towards achievement of the Environmental Objectives and Targets contained in previous year's report.

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

Tank, drum, pipeline and bund testing and inspection report.

Reported Incidents and Complaints summaries.

Review of Nuisance Controls.

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

Report detailing the treatment capability and capacity of the wastewater treatment plant.

Volume of foul water treated on-site.

Volume of process effluent transported off-site.

Any other items specified by the Agency.

**Note 1:** Content to be revised subject to the agreement of the Agency after cessation of waste acceptance at the facility.

**Signed on behalf of the said Agency**  
on the 15th day of April 2003

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Ray Cullinane, **Authorised Person**