

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

# WASTE LICENCE

| Licence Register No:  | 55-2  |
|-----------------------|---|
| Licensee:             | Sterile Technologies Ireland Limited  |
| Location of Facility: | Units 420 - 430 Beech Road,<br>Western Industrial Estate, Naas Road,<br>Dublin 12 |

# INTRODUCTION

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

Sterile Technologies Ireland Limited is currently licensed to accept and treat Healthcare Risk Waste at their facility at Unit 430 Beech Road, Western Industrial Estate, (Waste Licence Reg. No. 55-1, granted 14/12/1999). The licensee secured a ten-year all-Ireland contract for the collection, transportation, treatment and disposal of healthcare risk waste in December 2003. The contracting authority is the Joint Waste Management Board, set up by the Department of Health and Children, Dublin and the Department of Health and Social Services, Belfast.

The facility is licensed to undertake the following operations:

- operate two sterilisation treatment lines with a maximum processing rate of 2.5 tonnes per hour and an annual throughput of 15,000 tonnes of healthcare risk waste;
- establish a transfer station for hazardous healthcare waste, handling up to 2,000 tonnes per annum;
- establish a waste recovery facility for the recovery of paper, plastics, glass, textiles and metals from healthcare risk waste following treatment; and
- accept 1,000 tonnes per annum of commercially derived plastic waste for recovery.

The licence sets out in detail the conditions under which Sterile Technologies Ireland Limited will operate and manage this facility.

# Table of Contents

| Glossary of Terms  |   | Page No. |
|--------------------|---|----------|
|                    | ns for the Decisions                                | 5        |
| •                  | Activities Licensed                                 | 5        |
| Part II Conditions |   | 6        |
| Condition 1.       | Scope   | 6        |
| Condition 2.       | Management of the Facility                          | 7        |
| Condition 3.       | Infrastructure and Operation                        | 8        |
| Condition 4.       | Interpretation                                      | 12       |
| Condition 5.       | Emissions   | 14       |
| Condition 6.       | Control and Monitoring                              | 15       |
| Condition 7.       | Resource Use and Energy Efficiency                  | 17       |
| Condition 8.       | Materials Handling                                  | 18       |
| Condition 9.       | Accident Prevention and Emergency Response          | 22       |
| Condition 10.      | Decommissioning, Closure, Restoration and Aftercare | 22       |
| Condition 11.      | Notifications, Records and Reports                  | 23       |
| Condition 12.      | Financial Charges and Provisions                    | 26       |
| SCHEDULE A:        | Limitations   | 28       |
| SCHEDULE B:        | Emission Limits                                     | 29       |
| SCHEDULE C:        | Control & Monitoring                                | 32       |
| SCHEDULE D:        | Specified Engineering Works                         | 37       |
| SCHEDULE E:        | Reporting   | 38       |
| SCHEDULE F:        | Annual Environmental Report                         | 39       |

# 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.

**6 log<sub>10</sub> reduction** A six decade reduction or a 0.000001 survival probability in a microbial

population; i.e. a 99.9999% reduction.

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

**AER** Annual Environmental Report.

**Agreement** Agreement in writing.

Anatomical Waste As defined in Appendix 1 of the 'Segregation, Packaging and Storage

Guidelines for Healthcare Risk Waste', Dept. of Health and Children, 3<sup>rd</sup> Ed., 2004. It includes all human tissue, organs, body parts, carcasses and animals used for medical tests or research, (such as leeches and worms). It does not include general Healthcare Risk Waste such as wound dressings, swabs, gloves

and gowns that are blood stained, etc.

**Annually** At approximately twelve monthly intervals.

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

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

part of this licence (55-2) application.

**BAT** Best Available Techniques.

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

**Biennially** Once every two years.

**Bin** Wheeled cart for the containment of healthcare risk waste; the specification of

which is set out by the JWMB (see JWMB).

**Bund** A structure to provide containment for any loss of liquid from a storage tank and

associated pipework.

**BOD** 5 day Biochemical Oxygen Demand.

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

**cfu** Colony Forming Units.

**COD** Chemical Oxygen Demand.

**Challenge test** The introduction into the system of known microbiological indicators to provide

an assessment of the effectiveness of the disinfection process.

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).

**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: Emission Limits, of this licence.

**Environmental Damage** 

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

**EPA** Environmental Protection Agency.

European Waste Catalogue (EWC) 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.

**FIBC** Flexible Intermediate Bulk Container.

**Regional Fisheries** 

**Board** 

Eastern Regional Fisheries Board.

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

GC/MS Gas Chromatography/Mass Spectroscopy.

**Genetically Modified** 

**Organism** 

As Defined in "Genetically modified organisms (contained use) Regulations" -

S.I. No 73 of 2001.

**Hazardous** As defined in Section 4(2) of the Acts.

**Health Board Region** South West Area Health Services Executive.

**Healthcare Risk** 

Waste

As defined by the JWMB in "Specification for the transportation, treatment and disposal of clinical/healthcare risk waste throughout the island of Ireland", prepared on behalf of the Department of Health and Social Services, Northern Ireland, the Central Supplies Agency, Northern Ireland and Department of

Health, Dublin.

**Hours of Operation** The hours during which the facility is authorised to be operational.

**IBC** Intermediate Bulk Container.

**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.

**IPPC** Integrated Pollution Prevention & Control.

JWMB Joint Waste Management Board – the contracting authority for the

transportation, treatment and disposal of clinical/healthcare risk waste throughout the island of Ireland. Reference to the JWMB specification is to the specification for the aforementioned contract, (see Healthcare Risk Waste

above).

K Kelvin.

kPa Kilo Pascals.

**Leq** Equivalent continuous sound level.

**Licensee** Sterile Technologies Ireland Limited.

**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** South Dublin 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.

substance which can be emitted per unit time.

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

Night-time 2200 hrs to 0800 hrs.

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

January, April, July or October.

**Sanitary Authority** South Dublin 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.

Standard Method A National, European or internationally recognised procedure (e.g., 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 as may be agreed by the Agency.

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

**The Agency** Environmental Protection Agency.

**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.

VOC Volatile Organic Compounds.

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.

# 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 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.

No objection having been received to the Proposed Decision, the licence is granted in accordance with the terms of the Proposed Decision and the reasons therefor.

# 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), under Section 46(8)(a) of the said Acts hereby grants this Waste Licence to Sterile Technologies Ireland Limited to carry on the waste activities listed below at Units 420 - 430 Beech Road, Western Industrial Estate, Naas Road, Dublin 12 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 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

| Class 2.  | Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes).  |
|-----------|---|
| Class 3.  | Recycling or reclamation of metals and metal compounds.   |
| Class 4.  | Recycling or reclamation of other inorganic materials.  |
| Class 9.  | Use of any waste principally as a fuel or other means to generate energy.   |
| Class 13. | Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced. |

# Part II 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*, of this licence.
- 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 is the area of land outlined in red on Figure B.2 F1, *Site Plan* of the Article 14(2)(b)(ii) response, received 8<sup>th</sup> March 2005. Any reference in this licence to "facility" shall mean the area thus outlined in red
- 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.

- Only those waste categories and quantities listed in *Schedule A: Limitations*, of this licence shall be accepted at the facility.
- 1.7 Notwithstanding the generality of the waste types specified in *Schedule A: Limitations*, of the licence,
  - (i) the following wastes shall be specifically excluded from treatment at the facility without the prior agreement of the Agency and subject to the requirements of Condition 8.15:
    - (a) processed blood products;
    - (b) infectious Brucellosis-type waste;
    - (c) waste loads with fluid content greater than 30% by weight, and
    - (d) laboratory waste containing genetically modified organisms.
  - (ii) the following wastes shall not be treated at the facility and may only be accepted for transfer operations, (i.e. storage and repackaging), prior to onward shipment for appropriate disposal:

- (a) recognisable anatomical waste (animal & human), and
- (b) cytotoxic/pharmaceutical waste.
- 1.8 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.
- 1.9 This licence is being granted in substitution for the waste licence granted to the licensee on 14<sup>th</sup> December 1999 and bearing Waste Licence Register No: 55-1. The previous waste licence (Register No: 55-1) 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 FÁS waste management training programme or equivalent agreed by the Agency.
- 2.2 Environmental Management System (EMS)
  - 2.2.1 The licensee shall maintain an Environmental Management System (EMS). 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 maintain 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 operate and maintain an agreed 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:

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

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 maintain 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 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 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 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.
- 3.2.2 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 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
- 3.4 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.
- 3.5 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 Agency use.
- 3.6 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.
- 3.7 Facility Office
  - 3.7.1 The licensee shall maintain an office at the facility. The office shall be constructed and maintained in a manner suitable for the processing and storage of documentation.
  - 3.7.2 The licensee shall maintain a working telephone and a method for the electronic transfer of information at the facility.
- 3.8 Site Surfaces

The licensee shall maintain an impermeable surface in all areas of the facility associated with the movement, processing, storage and handling of waste and emissions. The surfaces shall be concreted and constructed to British Standard 8110 or an alternative as agreed by the Agency.

- 3.9 Facility Security
  - 3.9.1 Security fencing and gates shall be installed as described in Attachment D.1.a and Fig. D.1 F2 *Site Services* of the Article 14(2)(b)(ii) response, received 8th March 2005.
  - 3.9.2 The licensee shall remedy any defect of the gates and/or fencing as follows:
    - (a) a temporary repair shall be made by the end of the working day,
    - (b) a repair to the standard of the original gates and/or fencing shall be undertaken within three working days or as otherwise agreed in writing by the Agency.
  - 3.9.3 Gates shall be kept locked shut when the facility is unsupervised.
  - 3.9.4 The licensee shall maintain the security measures including fencing and gates at the facility.

### 3.10 Bunding

- 3.10.1 All waste and chemical storage areas shall be rendered impervious to the materials stored therein.
- 3.10.2 Hazardous wastes and fuels shall be stored only at appropriately bunded locations on the facility.
- 3.10.3 Bunds should be designed in accordance with CIRIA Report 163 (1997), The Construction of Bunds for Oil Storage Tanks, which incorporates BS 8007: 1987 Code of Practice for design of Concrete Structures for Retaining Aqueous Liquids.
- 3.10.4 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:-
  - (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.
- 3.10.5 All drainage from bunded areas, including processed material storage areas, shall be diverted for collection and safe disposal.
- 3.10.6 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.10.7 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.
- 3.10.8 All tanks and containers shall be labelled to clearly indicate their contents.
- 3.11 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 at least once every five years and reported to the Agency on each occasion as part of the AER. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.
- 3.12 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.

### 3.13 Silt Traps and Oil Separators

The licensee shall, within six months, install and maintain silt traps and oil separator at the facility to ensure that all storm water discharges from the facility pass through a silt trap and oil separator prior to discharge. The separator shall be a Class I full retention separator and the silt traps and separator shall be in accordance with I.S. EN 858-2:2003 (separator systems for light liquids).

### 3.14 Firewater Retention

- 3.14.1 The licensee shall carry out a risk assessment, including Unit 420, to determine if the activity should have a fire-water retention facility. The licensee shall submit the assessment and a report to the Agency on the findings and recommendations of the assessment within six months from the date of grant of this licence.
- 3.14.2 In the event that a significant risk exists for the release of contaminated firewater, the licensee shall, based on the findings of the risk assessment, prepare and implement, with the agreement of the Agency, a suitable risk

- management programme. The risk management programme shall be fully implemented within three months from date of notification by the Agency.
- 3.14.3 In the event of a fire or a spillage to storm water, the site storm water shall be diverted to the containment pond. The licensee shall examine as part of the response programme in Condition 3.13.3 above the provision of automatic diversion of storm water to the containment pond. The licensee shall have regard to any guidelines issued by the Agency with regard to firewater retention.
- 3.14.4 The licensee shall have regard to the Environmental Protection Agency Draft Guidance Note to Industry on the Requirements for Fire-Water Retention Facilities when implementing Conditions 3.13.2 and 3.13.3 above.
- 3.15 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).
- 3.16 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.
- 3.17 All foul sewer gullies, 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.
- 3.18 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.
- 3.19 Waste Quarantine Areas
  - 3.19.1 The Quarantine Area in Unit 430 shall be maintained. A separate Quarantine Area shall be provided in Unit 420, as illustrated in Fig. D.1 F1 *Site Layout* (page 1 of 5), of the Article 14(2)(b)(ii) response, received 8<sup>th</sup> March 2005.
  - 3.19.2 Quarantine areas shall be constructed and maintained in a manner suitable, and be of a size appropriate, for the quarantine of waste. Each area shall be equipped with a freezer cabinet for the storage of anatomical waste or other wastes that are liable to putrefy. The quarantine areas shall be clearly identified and access shall be strictly controlled.
- 3.20 Weighing Device

An appropriate device for accurately weighing all incoming waste shall be maintained in Unit 430. A separate weighing device shall be installed in Unit 420.

- 3.21 Waste handling, ventilation and processing plant
  - 3.21.1 Items of plant deemed critical to the efficient and adequate processing of waste at the facility (including *inter alia* bin hoists, forklift and shredders) 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.

- 3.21.2 The licensee shall maintain on site a record 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.
- 3.21.3 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.
- 3.21.4 Parametric monitoring equipment shall:
  - (a) have tamper-proof controls or automatic factory-set controllers;
  - (b) be integrated with the treatment unit so as to automatically shut down or no longer accept or expel waste if treatment conditions are not maintained at specified performance level;
  - (c) be calibrated periodically as specified by the monitoring device's manufacturer; and
  - (d) provide a tamper-proof recording of all critical operating parameters, as specified in Condition 6.8.

### 3.22 Specified Engineering Works

- 3.22.1 The licensee shall submit written proposals for all Specified Engineering Works as defined in *Schedule D: Specified Engieering Works*, of this licence to the Agency for its agreement prior to any such works being carried out. 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) agreed in advance by the Agency 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 submit to the Agency updated site drawings of the facility and any other information as may be required by the Agency.

### 3.23 Monitoring Infrastructure

Monitoring infrastructure that is damaged or proves unsuitable for its purpose shall be replaced within three months of its 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.
- (iv) Mass flow thresholds refer to a rate of discharge expressed in units of kg/h, above which the concentration emission limit value applies. Mass flow threshold rates shall be determined on the basis of a single 30 minute measurement (i.e. the concentration determined as a 30 minute average shall be multiplied by an appropriate measurement of flow and the result shall be expressed in units of kg/h).
- (v) Mass flow limits shall be calculated on the basis of the concentration, determined as an average over the specified period, multiplied by an appropriate measurement of flow. No value, so determined, shall exceed the mass flow 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:-

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

- 4.3 Emission limit values for emissions to sewer in this licence shall be interpreted in the following way:-
  - 4.3.1 Continuous monitoring:
    - (i) No flow value shall exceed the specified limit.
    - (ii) No pH value shall deviate from the specified range.
    - (iii) No temperature value shall exceed the limit value.
  - 4.3.2 Composite Sampling:
    - (i) No pH value shall deviate from the specified range.
    - (ii) For parameters other than pH and flow, eight out of ten consecutive composite results, based on flow proportional composite sampling, shall not exceed the emission limit value. No individual result similarly calculated shall exceed 1.2 times the emission limit value.
  - 4.3.3 Discrete Sampling

For parameters other than pH and temperature, no grab sample value shall exceed 1.2 times the emission limit value.

- 4.4 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.
- 4.5 Noise

The licensee shall ensure that the activities shall be carried out in a manner such that noise does not result in significant impairment of, or significant interference with, amenities or the environment beyond the facility boundary. There shall be no clearly

audible tonal or impulsive component in the noise emissions from the facility at the facility boundary.

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 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.
- Emissions to atmosphere shall only be made at the following locations, as illustrated on Figure E.1 F1, *Site Plan showing location of emissions points to air*, (Attachment E of Article 14(2)(b)(ii) response, received 8<sup>th</sup> March 2005): A2-1, A2-2, A2-3, A2-4, A2-5 and A2-6. The location of the emission point from Rotary Drier A2-6 shall be agreed by the Agency, prior to the commencement of the materials recovery process.
- 5.5 Except as otherwise agreed by the Agency, emissions made at emission point A2-1 and A2-3 shall be passed through a high efficiency particulate air (HEPA) filter prior to discharge to the atmosphere.
- 5.6 Except as otherwise agreed by the Agency, emissions made at emission point A2-2 shall be passed through a condenser, coalescing unit and carbon filter prior to discharge to the atmosphere.
- 5.7 The component parts of the total VOC emissions for each of the emission points A2-1, A2-2 and A2-3 shall be characterised annually, or as otherwise agreed by the Agency. The results shall be assessed, having regard to the Danish C-values for trichloromethane and 1,2-dichloroethane, and a report shall be submitted as part of the AER.
- 5.8 The efficiency of the gas fired packaged steam boiler, emission point A2-4, shall be tested annually.
- 5.9 There shall be no emissions to groundwater.
- 5.10 No substance shall be discharged in a manner, or at a concentration which, following initial dilution, causes tainting of fish or shellfish.
- 5.11 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.
- 5.12 The licensee shall, at least weekly, inspect the facility and its immediate surrounds for nuisances caused by vermin and odours. Written records shall be maintained of all inspections and any actions taken as a result of these inspections.

- 5.13 All loose litter accumulated within the facility and its environs shall be collected, passed through the waste treatment unit and appropriately disposed of, on a daily basis.
- 5.14 Emissions to Sewer

Emissions to sewer shall be subject to the following conditions:

- 5.14.1 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 process effluent, and to take samples of the process effluent.
- 5.14.2 The licensee shall at no time discharge or permit to be discharged into the sewer any liquid matter or thing which is or may be liable to set or congeal at average sewer temperature or is capable of giving off any inflammable or explosive gas or any acid, alkali or other substance in sufficient concentration to cause corrosion to sewer pipes, penstock and sewer fittings or the general integrity of the sewer.
- 5.14.3 Trade effluent shall be screened prior to discharge to remove gross solids and avoid blockages in the sewer.
- 5.14.4 The trade effluent shall not contain active viruses, pathogens and/or unsterilised body fluids.
- 5.14.5 No discharge or emission to sewer shall take place, which gives rise to any reaction within the sewer or to the liberation of by-products, which may be of environmental significance.
- 5.14.6 Non-trade effluent wastewater (e.g. firewater, accidental spillages), which occurs on site, shall not be discharged to the sewer without the prior authorisation of the Sanitary Authority.
- 5.14.7 The licensee shall ensure that the discharge shall not contain dissolved methane, petroleum spirits or organic solvents (including chlorinated solvents) at concentrations which would give rise to flammable or explosive vapours in the sewer.
- 5.14.8 Prior to the commencement of the discharge of trade effluent to emission point reference no. SE-2 (at rear of Unit 420 Beech Road), the licensee shall submit to the Sanitary Authority and the Agency a set of completed asconstructed drawings of the drainage layout on site. The drainage on site shall be approved by the Sanitary Authority prior to the discharge of any trade effluent to SE-2.

Reason: To provide for the protection of the environment by way of control and limitation of emissions and to provide for the requirements of the Sanitary Authority in accordance with Section 52 of the Waste Management Acts 1996 to 2005.

# 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: Control & Monitoring*, 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, discharge or other environmental parameter.
- 6.4 All treatment/abatement and emission control equipment shall be calibrated and maintained, in accordance with the instructions issued by the manufacturer/supplier or installer.
- 6.5 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.
- 6.6 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.
- 6.7 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.
- 6.8 Parametric Monitoring

During operation of the treatment process, the process shall be continuously monitored to ensure that the operating parameters are being maintained within established limits. Continuous records shall be kept of the following parameters:

- (a) chamber temperatures inside each of the lower and upper sections of the processing unit;
- (b) the rotating speed of the conveying screw (auger);
- (c) the input temperature and pressure at the steam jacket; and
- (d) the residence time of waste within the processing unit.

The records shall be held on site and made available for inspection by the Agency or other party at all reasonable times. Electronic records of these parameters shall be maintained for a minimum period of twelve months. The waste temperature and the residence time calculation shall be mechanically verified monthly, or at a frequency to be agreed by the Agency, and reported as part of the AER.

### 6.9 Storm water

- 6.9.1 A visual examination of the storm water discharge shall be carried out daily. A log of such inspections shall be maintained.
- 6.9.2 The drainage 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.

### 6.10 Noise

The licensee shall carry out a noise survey of the site operations within twelve months and thereafter as required by the Agency. The survey programme shall be undertaken in accordance with the methodology specified in the 'Environmental Noise Survey Guidance Document' as published by the Agency.

6.11 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.

### 6.12 Test Programme

- 6.12.1 The licensee shall prepare, to the satisfaction of the Agency, a test programme for abatement equipment installed at A2-6. This programme shall be submitted to the Agency, prior to implementation.
- 6.12.2 This programme, following agreement by the Agency, shall be completed within three months of the commencement of operation of the abatement equipment.
- 6.13 The test programme shall include as a minimum, the following:
  - 6.13.1 Establish all criteria for operation, control and management of the abatement equipment to ensure compliance with the emission limit values specified in this licence.
  - 6.13.2 Assess the performance of any monitors on the abatement system and establish a maintenance and calibration programme for each monitor.
  - 6.13.3 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 and to provide for the requirements of the Sanitary Authority in accordance with Section 52 of the Waste Management Acts 1996 to 2005.

# 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 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.
- 8.2 Waste sent off-site for recovery or disposal shall be transported only by an authorised waste contractor. The 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.
- 8.3 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.
- 8.4 All containers accepted at this 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 that will not adversely affect the environment.
- 8.5 All spillages of healthcare waste shall be cleaned up so as to prevent spilled fluid draining to sewer, surface water or ground, and so as not to adversely affect the environment.
- 8.6 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.
- 8.7 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.
- 8.8 The ultimate recovery or disposal facility for processed healthcare risk waste shall be agreed in advance by the Agency.
- 8.9 Waste for disposal/recovery off-site shall be analysed in accordance with *Schedule C: Control & Monitoring*, of this licence.
- 8.10 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.
- 8.11 Waste Acceptance and Characterisation
  - 8.11.1 The procedure for waste acceptance shall be as submitted in Appendix 7 of the Application form, *Procedures Manual OP-03 Waste Acceptance*, unless otherwise agreed by the Agency.
  - 8.11.2 Waste shall only be accepted at the facility from known customers or new customers subject to initial 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.

8.11.3 Prior to the acceptance of any waste at the transfer station facility, the licensee shall modify the existing waste tracking system to cater for all materials being accepted at the facility. The modified tracking system shall be submitted to the Agency for its agreement. Any further modifications to the tracking system shall be submitted to the Agency for its agreement.

#### 8.12 Hazardous Waste Transfer Station

- 8.12.1 Unless otherwise agreed by the Agency, only those waste types listed in *Schedule A.2* shall be accepted at the facility.
- 8.12.2 No waste shall be stored at the facility in areas other than the area of Unit 420 labelled 'Special Waste Transfer' as shown in Figure D.1 F1 *Site Layout* (page 2 of 5) of the Article 14(2)(b)(ii) response.
- 8.12.3 No waste shall be stored at the facility for longer than three months.
- 8.12.4 All waste shall be stored indoors in such a manner as will not cause environmental pollution. All containers shall be readily identifiable as to their contents and any associated hazards.

### 8.13 Quarantined Waste

- 8.13.1 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 the designated Waste Quarantine Areas.
- 8.13.2 The quarantine areas shall be kept locked at all times except during movement of waste into or out of the store.
- 8.13.3 Waste shall be stored under appropriate conditions in the quarantine areas to avoid putrefaction, odour generation, the attraction of vermin and any other nuisance or objectionable condition.
- 8.13.4 The use of the quarantine areas shall be reported on in the AER or otherwise as requested by the Agency.

### 8.14 Treatment of Healthcare Risk Waste

- 8.14.1 Unless otherwise agreed by the Agency, only those waste types listed in *Schedule A.2* shall be accepted for treatment at the facility.
- 8.14.2 Waste shall be processed at a maximum rate of 2.5 tonnes per hour, subject to Agency approval, following commissioning and efficacy testing.
- 8.14.3 Healthcare risk waste shall only be accepted at the facility in bins owned and controlled by the licensee. Each bin accepted at the facility shall be uniquely identifiable by visual and electronic means. Each bin shall be electronically tracked such that its location, whether at or away from the facility, may be determined at all times.
- 8.14.4 Each bin shall be cleaned inside and out after each use as detailed in *OP-Operating and Cleaning of the Binwash*, (Appendix 7, *Procedures Manual* of Application Form). The cleaning process shall be verified monthly.
- 8.14.5 All waste accepted at the facility shall be treated as detailed in Attachment D.2, *Waste Treatment*, of the Article 14(2)(b)(ii) response, received 8<sup>th</sup> March 2005.

- 8.14.6 No unprocessed waste, other than that stored in the quarantine areas or the transfer station, shall be stored at the facility for longer than 60 hours.
- 8.14.7 No unprocessed or partially processed waste shall be left in the processing units for longer than 24 hours.
- 8.14.8 The licensee shall develop a procedure to clearly outline actions to be undertaken prior to the release of an FIBC of processed waste for disposal to landfill. This procedure shall include the steps to be followed upon receipt of laboratory test results and/or the examination and assessment of parametric monitoring records. The procedure shall address responsibilities and actions to be undertaken in the event of positive or anomalous results. The procedure shall be submitted for approval by the Agency within three months of date of grant of this licence. The frequency of microbiological challenge testing, as per *Schedule C.4*, may be adjusted or amended upon agreement of this procedure.
- 8.14.9 Should analysis of any samples taken for the purposes of (process efficacy testing) Condition 8.17.1 or assessment of parametric monitoring records required under Condition 8.14.8 indicate test failure, the following actions shall be taken:
  - (a) the batch of processed waste being held shall be further processed and analysed;
  - (b) all of the process sampling, monitoring and analyses specified in *Schedule C.4* shall be carried out daily for the next four consecutive working days;
  - (c) should this sampling and analysis indicate the continued presence of the relevant micro-organisms, the acceptance and processing of healthcare risk waste shall cease until written notice from the Agency, agreeing to its resumption, is received; and
  - (d) a written report on the test failures shall be submitted to the Agency within three days of the availability of analytical results.
- 8.14.10 All processed healthcare risk 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 microbiologically tested and/or processed within established parametric limits, as per the procedure agreed by the Agency in fulfilment of Condition 8.14.8.

### 8.15 Treatment of Other Wastes

- 8.15.1 The treatment of each of the excluded waste types listed in Condition 1.7(i) 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);
  - 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 modelling) 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; and
- (ix) any other information requested by the Agency.
- 8.15.2 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.
- 8.16 Commissioning Tests for Healthcare Risk Waste Processing
  - 8.16.1 The licensee shall carry out commissioning tests to prove the efficacy of the process and to determine its operating parameters with respect to residence time and operating temperature, at the increased rate of throughput of 2.5 tonnes per hour.
  - 8.16.2 A report of the commissioning test shall be submitted to the Agency. The report shall:
    - (a) describe the programme as carried out;
    - (b) provide *all* analytical results obtained;
    - (c) concisely interpret those results; and
    - (d) detail the parameter settings by which the process will be operated.
  - 8.16.3 Subject to Condition 8.17.2, 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.
- 8.17 Process Efficacy
  - 8.17.1 The process shall be operated so as to achieve microbiological inactivation and disintegration of waste as follows:
    - (a) inactivation of vegetative bacteria, fungi, lipophilic/hydrophilic viruses, parasites and mycobacteria at 6 log<sub>10</sub> reduction or greater;
    - (b) inactivation of *Bacillus [Geobacillus] stearothermophilus* spores or *Bacillus subtilis* spores or *Bacillus atrophaeus* spores at 6 log<sub>10</sub> reduction or greater;
    - (c) the disinfection of contaminated sharps; and
    - (d) the disintegration of waste. Sharps shall be destroyed such that particles no larger in any dimension than 15mm exist after shredding. For other wastes no particle of a dimension exceeding 25mm shall remain after shredding.
  - 8.17.2 The process efficacy at the requested waste throughput of 1.5 tonnes per hour on the second ("new") treatment line shall be proved within two months of commissioning tests commencing and a report shall be submitted to the Agency within five days of all analytical results being obtained. The report shall at least satisfy Condition 8.16.2 (a), (b) and (c).

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 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 ensure that a documented Emergency Response Procedure is in place, which shall address any emergency situation which may originate on-site. 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 by the Agency to:-
  - (vii) identify and put in place measures to avoid reoccurrence of the incident; and
  - (viii) identify and put in place any other appropriate remedial action.
- 9.4 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.
- 9.5 No waste shall be burned within the boundaries of the facility. A fire at the facility shall be treated as an emergency. Immediate action shall be taken to extinguish it and the appropriate authorities notified.

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.
  - 10.3.4 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 by both telephone and either facsimile or electronic mail, if available, to the Agency's Regional Inspectorate in McCumiskey House, Richview, Clonskeagh Road, Dublin 14 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:
  - 11.1.1 Any release of environmental significance to atmosphere from any potential emission point including bypasses.
  - 11.1.2 Any emission which does not comply with the requirements of this licence.
  - 11.1.3 Any malfunction or breakdown of key control equipment or monitoring equipment set out in *Schedule C: Control & Monitoring*, of this licence which is likely to lead to loss of control of the abatement system.
  - 11.1.4 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.

- 11.1.5 Any test failures of waste samples taken.
- 11.1.6 Any indication that contamination has taken place.

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.

- Unless otherwise agreed in advance by 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, and
  - b) the re-commencement of waste disposal activities at the facility following a period of cessation referred to at a) above.
- 11.3 In the event of any incident which relates to discharges to sewer, having taken place, the licensee shall notify the Agency and the Local and Sanitary Authorities as soon as practicable, after such an incident.
- 11.4 In the case of any incident which relates to discharges to water, the licensee shall notify the Local Authority and the Regional Fisheries Board as soon as practicable after such an incident.
- 11.5 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.
- 11.6 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.
- 11.7 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.
- 11.8 Unless otherwise agreed by the Agency, a written record shall be kept of the names, qualifications and a summary of relevant experience of all persons who carry out any sampling and monitoring as required by this licence and who carry out the interpretation of the results of such sampling and monitoring.
- 11.9 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) a declaration by each waste producer using the facility that they have been made aware of the conditions of this licence and in particular Condition 1.7;
- and this documentation shall be available to the Agency for inspection at all reasonable times.
- 11.10 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: Specified Engineering Works*, of this licence and shall be prepared in accordance with any relevant guidelines issued by the Agency.
- 11.11 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 as a minimum contain details of the following:
  - (i) the time and date of arrival or departure of each load arriving at or leaving the facility;
  - (ii) a description of the waste load, including weights and EWC Code for the waste materials imported and/or sent off-site for disposal/recovery;
  - (iii) 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);
  - (iv) for incoming loads, the name of the producers and collectors of the waste as appropriate;
  - (v) the identification of each bin or other container contained in the load;
  - (vi) the name of the person checking the load;
  - (vii) where incoming/outgoing loads or parts thereof are removed or rejected, details of the date of occurrence, the types of waste and the facility to which they were removed;
  - (viii) 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;
  - (ix) a consignment note number (including transfrontier shipment notification and movement/tracking form numbers), as appropriate;
  - (x) written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site;
  - (xi) 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;
  - (xii) details of any approved waste mixing;
  - (xiii) the results of any waste analyses required under *Schedule C: Control & Monitoring*, of this licence; and
  - (xiv) any other information which might be required by the Agency.
- 11.12 The licensee shall prepare a Process Verification Report on an annual basis and submit it as part of the AER. The report shall refer to process efficacy monitoring for the previous calendar year and shall as a minimum include:
  - (a) a description of the monitoring programme carried out;
  - (b) the results of *all* analytical testing carried out;

- (c) a concise interpretation of those results;
- (d) *all* parametric monitoring records; highlighting any automatic shut-downs that occurred, the reason why they occurred and the corrective action taken;
- (e) evidence of the adequacy, suitability and competency of both external and in-house laboratories to undertake efficacy testing, including details of the quality system operated by the laboratories and the training of staff. This may require an independent audit of the testing laboratories; and
- (f) any other information which might be required by the Agency.
- 11.13 The licensee shall submit monitoring results in respect of discharges to sewer to the Sanitary Authority on an annual basis. Results of the microbiological screening programme specified in *Schedule C: Control & Monitoring*, of this licence shall be reported to the Sanitary Authority on a quarterly basis.

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 €13,774, 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 Sanitary Authority Charges

- 12.2.1 The licensee shall pay to the Sanitary Authority such sum as may be determined from time to time, having regard to the variations in the cost of providing drainage and the variation in effluent reception and treatment costs. Payment to be made quarterly on demand. The charge rate for the collection, transport and disposal of trade effluent arising on site shall be in accordance with the South Dublin County Council Consolidated Water Charges Policy.
- 12.2.2 The licensee shall pay an annual charge of €3,600 to the Sanitary Authority towards the cost of monitoring the trade effluent. This amount will be revised from time to time. Payment to be made on demand.

### 12.3 Environmental Liabilities

12.3.1 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.
- 12.3.2 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. The assessment shall include those liabilities and costs identified in Condition 10 for execution of the RMP. 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.
- 12.3.3 As part of the measures identified in Condition 12.3.1, the licensee shall, to the satisfaction of the Agency, make financial provision to cover any liabilities identified in Condition 12.3.2. 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 12.3.1.

Reason: To provide for adequate financing for monitoring and financial provisions for measures to protect the environment and to provide for the requirements of the Sanitary Authority in accordance with Section 52 of the Waste Management Acts 1996 to 2005.

# **SCHEDULE A:** Limitations

### **A.1** The following waste related processes are authorised:

- i. Shredding of waste
- ii. Sterilisation of waste
- iii. Repackaging processes
- iv. Storage of waste
- v. Recovery of paper, plastics, glass, textiles & metals from treated waste

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



## A.2 Waste Acceptance

Table A.2 Waste Categories and Quantities

| WASTE TYPE Note 1                    | EWC Code Note 2   | MAXIMUM (TONNES<br>PER ANNUM) Note 3 |
|--------------------------------------|---|--------------------------------------|
| Hazardous Waste for<br>Treatment     | 180101 180102 <sup>Note 4</sup> 180103* 180104, 180201 180202* 180203                             | 15,000                               |
| Hazardous Waste for<br>Transfer Only | 180102 180103*<br>180106* 180107<br>180108* 180109<br>180202* 180205*<br>180206 180207*<br>180208 | 2,000                                |
| Non-hazardous Waste                  | 150102  | 1,000                                |
| TOTAL                                | -   | 18,000                               |

- **Note 1:** Any proposals to accept other compatible waste streams must be agreed in advance by the Agency and the total amount of waste must be within that specified.
- **Note 2:** Any waste marked with an asterisk (\*) is considered as a hazardous waste pursuant to Directive 91/689/EEC on hazardous waste, and subject to the provisions of that Directive unless Article 1(5) of that Directive applies.
- **Note 3:** 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 4:** Condition 1.7 specifically excludes some of the wastes described in EWC code 180102.



# **SCHEDULE B:** Emission Limits

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

**Emission Point Reference No.:** A2-1

**Location:** Waste Shredder

**Volume to be emitted:** Maximum in any one day: 11,200 m<sup>3</sup>

Maximum rate per hour: 700 m<sup>3</sup>

Minimum discharge height: 7 m above ground

| Parameter                              | Emission Limit Value     |
|--|--------------------------|
| Total volatile organic compounds (VOC) | 0.1kg/hour               |
| Indicator micro-organisms              | 2,000 cfu/m <sup>3</sup> |
|  |                          |



**Emission Point Reference No.:** A2-2

**Location:** Steam Exhaust from both treatment lines

**Volume to be emitted:** Maximum in any one day: 8,000 m<sup>3</sup>

Maximum rate per hour: 500 m<sup>3</sup>

**Minimum discharge height:** 6 m above ground

| Parameter                              | Emission Limit Value     |
|--|--------------------------|
| Total volatile organic compounds (VOC) | 0.1kg/hour               |
| Indicator micro-organisms              | 2,000 cfu/m <sup>3</sup> |
|  |                          |

**Emission Point Reference No.:** A2-3

**Location:** Waste Shredder (new treatment line)

**Volume to be emitted:** Maximum in any one day: 11,200 m<sup>3</sup>

Maximum rate per hour: 700 m<sup>3</sup>

**Minimum discharge height:** 7 m above ground

| Parameter                              | Emission Limit Value     |  |
|--|--------------------------|--|
| Total volatile organic compounds (VOC) | 0.1kg/hour               |  |
| Indicator micro-organisms              | 2,000 cfu/m <sup>3</sup> |  |
|  |                          |  |



**Emission Point Reference No.:** A2-6

**Location:** Rotary Drier – Recovery Process

**Volume to be emitted:**To be agreed by the Agency

Minimum discharge height: To be agreed by the Agency

| Parameter                              | <b>Emission Limit Value</b> |  |
|--|-----------------------------|--|
| Total volatile organic compounds (VOC) | 0.1kg/hour                  |  |
| Indicator micro-organisms              | 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

**Emission Point Reference No.:** SE-1 (formerly monitoring point ref. TEM at rear of Unit 430)

**Location:** E309179, N231393

**Volume to be emitted:** Maximum in any one day: 20 m<sup>3</sup>

Maximum rate per hour: 5 m<sup>3</sup>

| Parameter            | Emission Limit Value   |        |      |
|----------------------|--|--------|------|
| Temperature          | 42°C (max.)  |        |      |
| pН                   |  | 6 - 10 |      |
|                      | mg/l Daily mean Daily mean concentration loading mg/l kg/day |        |      |
| BOD                  | 1,000  | 800    | 16.0 |
| COD                  | 3,000  | 2,400  | 48.0 |
| Suspended Solids     | 500 400 8.0  |        |      |
| Detergents (as MBAS) | 100 100 2.0  |        |      |
| Fats, Oils, Grease   | 100  | 100    | 2.0  |



**Emission Point Reference No.:** SE-2 (at rear of Unit 420)

**Location:** E309156, N231415

**Volume to be emitted:** Maximum in any one day: 20 m<sup>3</sup>

Maximum rate per hour: 5 m<sup>3</sup>

| Parameter        | Emission Limit Value   |     |      |
|------------------|--|-----|------|
| Temperature      | 42°C (max.)  |     |      |
| pH               | 6 - 10   |     |      |
|                  | mg/l Daily mean Daily mean concentration loading mg/l kg/day |     |      |
| BOD              | 1,000  | 800 | 16.0 |
| COD              | 3,000 2,400 48.0   |     |      |
| Suspended Solids | 500 400 8.0  |     |      |



# **SCHEDULE C:** Control & Monitoring

## C.1.1 Control of Emissions to Air

**Emission Point Reference No.:** A2-1 & A2-3 (shredders)

**Description of Treatment:** HEPA Filter

| Control Parameter                | Monitoring                                   | Key Equipment <sup>Note 1</sup>                         |
|----------------------------------|--|---|
| Pressure drop across HEPA filter | Continuous pressure differential with alarm  | Magnahelic gauges, calibrated at least every six months |
| Filter Integrity                 | Daily "sniff" test (at entrance to Unit 430) | Not applicable  |
| Filter integrity                 | Weekly visual check                          | Not applicable  |
| Bacterial loading of filter      | Monthly swab test of filter                  | Accredited laboratory                                   |

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



**Emission Point Reference No.:** A2-2 (steam exhaust)

**Description of Treatment:** Condenser, Coalescing Unit & Carbon Filter

| Control Parameter                     | Monitoring                                   | Key Equipment <sup>Note 1</sup>                         |  |
|---------------------------------------|--|---|--|
| Pressure drop across<br>Carbon filter | Continuous pressure differential with alarm  | Magnahelic gauges, calibrated at least every six months |  |
| Filter Integrity                      | Daily "sniff" test (at entrance to Unit 430) | Not applicable  |  |
| Filter integrity                      | Visual weekly check                          | Not applicable  |  |

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

## C.1.2 Monitoring of Emissions to Air

Emission Point Reference No.: A2-1, A2-2, A2-3 and A2-6 (when installed)

| Parameter                              | Monitoring Frequency | Analysis Method/Technique  |
|--|----------------------|--|
| Indicator microorganisms               | Biannually           | Biotest Air Sample (as detailed in Procedure MP 03, submitted in Appendix 7 of Application Form) |
| Total volatile organic compounds (VOC) | Biannually           | Adsorption/Desorption, GC/MS   |

**Emission Point Reference No.:** A2-5 (Bin washer Exhaust)

| Parameter                | Monitoring Frequency | Analysis Method/Technique  |
|--------------------------|----------------------|--|
| Indicator microorganisms | Biannually           | Biotest Air Sample (as detailed in<br>Procedure MP 03, submitted in<br>Appendix 7 of Application Form- |



# 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.3.1 Control of Emissions to Sewer

Emission Point Reference No.: SE-1 (formerly monitoring point ref. TEM at rear of Unit 430)

& SE-2 (at rear of Unit 420)

**Description of Treatment:** Solids sieve

## C.3.2 Monitoring of Emissions to Sewer

**Emission Point Reference No.:** SE-1 (formerly monitoring point ref. TEM at rear of Unit 430)

| Parameter                        | <b>Monitoring Frequency</b> | Analysis Method/Technique               |
|----------------------------------|-----------------------------|---|
| Flow                             | Quarterly                   | -                                       |
| Temperature                      | Continuous                  | On-line temperature probe and recorder  |
| рН                               | Continuous                  | On-line pH electrode/meter and recorder |
| Chemical Oxygen Demand           | Monthly Note 1              | Standard Method                         |
| <b>Biochemical Oxygen Demand</b> | Monthly Note 1              | Standard Method                         |
| Suspended Solids                 | Monthly <sup>Note 1</sup>   | Gravimetric                             |
| Fats, Oils, Grease               | Monthly <sup>Note 1</sup>   | Standard Method                         |
| Detergents (as MBAS)             | Monthly <sup>Note 1</sup>   | Standard Method                         |
| Total Coliforms/100ml            | Monthly <sup>Note 2</sup>   | Standard Method                         |
| Faecal Coliforms/100ml           | Monthly Note 2              | Standard Method                         |
| Faecal Streptococci/100ml        | Monthly Note 2              | Standard Method                         |
| Pseudomonas aeruginosa/100ml     | Monthly Note 2              | Standard Method                         |
| Staphyloccus aureus/100ml        | Monthly Note 2              | Standard Method                         |
| Culturable Enteroviruses/l       | Monthly Note 2              | Standard Method                         |

**Note 1:** All samples shall be collected on a 24 hour flow proportional composite sampling basis.

Note 2: Grab samples to be taken on a monthly basis.

**Emission Point Reference No.:** SE-2 (at rear of Unit 420)

| Parameter                    | <b>Monitoring Frequency</b>          | Analysis Method/Technique               |  |
|------------------------------|--------------------------------------|---|--|
| Flow                         | Quarterly                            | -                                       |  |
| Temperature                  | Continuous On-line temperature probe |   |  |
| рН                           | Continuous                           | On-line pH electrode/meter and recorder |  |
| Chemical Oxygen Demand       | Monthly Note 1                       | Standard Method                         |  |
| Biochemical Oxygen Demand    | Monthly Note 1                       | Standard Method                         |  |
| Suspended Solids             | Monthly <sup>Note 1</sup>            | Gravimetric                             |  |
| Total Coliforms/100ml        | Monthly <sup>Note 2</sup>            | Standard Method                         |  |
| Faecal Coliforms/100ml       | Monthly Note 2                       | Standard Method                         |  |
| Faecal Streptococci/100ml    | Monthly Note 2                       | Standard Method                         |  |
| Pseudomonas aeruginosa/100ml | Monthly Note 2                       | Standard Method                         |  |
| Staphyloccus aureus/100ml    | Monthly Note 2                       | Standard Method                         |  |
| Culturable Enteroviruses/l   | Monthly Note 2                       | Standard Method                         |  |

Note 1: All samples shall be collected on a 24 hour flow proportional composite sampling basis.

Note 2: Grab samples to be taken on a monthly basis.



## C.4 Monitoring of Processed Waste and Process Efficacy Testing

| Monitoring Location                        | Frequency                          | Parameter  | Method   |
|--|------------------------------------|--|--|
| Processed waste                            | Monthly random grab sample         | Staphylococcus aureus, Streptococcus [Enterococcus] faecalis & Salmonella typhimurium                        | Procedure MP 02<br>(Appendix 7 of<br>Application Form) |
| Challenge test for spore forming organisms | Minimum<br>daily <sup>Note 2</sup> | Bacillus [Geobacillus]<br>stearothermophilus spores or<br>Bacillus subtilis spores or<br>Bacillus atrophaeus | Procedure MP 05<br>(Appendix 7 of<br>Application Form) |
| Parametric Monitoring                      | Continuous                         | As per Condition 6.8   | As per Condition 3.21.4                                |
| <b>Process Verification</b>                | Annually                           | Process efficacy monitoring  | As per Condition 11.12                                 |
| Waste within treatment units               | Monthly <sup>Note 3</sup>          | Temperature & residence time   | Data-logger  |
| Other Note 1                               |                                    |  |  |

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

**Note 2:** The frequency of challenge testing may be reduced to three times a week, in-house, with monthly verification by an external laboratory, subject to agreement by the Agency and in accordance with Condition 8.14.8.

**Note 3:** Or as otherwise agreed by the Agency.



### C.5 Noise Monitoring

| Location   | Grid Reference                             | Measurement  | Frequency  |
|--|--|--|--|
| B1 (front of Unit 430)<br>B2 (rear of Unit 430)<br>B3 (front of Unit 420)<br>B4 (rear of Unit 420) | 309162, 231352<br>309174, 231431<br>*<br>* | L <sub>Aeq</sub> (30 mins) L <sub>10</sub> (30 mins) L <sub>90</sub> (30 mins) Frequency analysis (1/3 octave band analysis) | Within twelve months of the date of grant of licence, and thereafter as requested by the Agency.  Monitoring shall be carried out whilst the plant is operating at maximum throughput. |

<sup>\*</sup> The location of suitable noise monitoring points shall be as agreed in advance by the Agency.



# **SCHEDULE D:** Specified Engineering Works

## **Specified Engineering Works**

Installation of Materials Recovery Process Infrastructure.

Any other works notified in writing by the Agency.

# **SCHEDULE E:** Reporting

Completed reports shall be submitted to:

The Environmental Protection Agency Office of Environmental Enforcement Regional Inspectorate McCumiskey House Richview Clonskeagh Road

Dublin 14 <u>or</u> Any other address as may be specified by the Agency

Reports are required to be forwarded as required in the licence and as may be set out below:

| Report   | Reporting<br>Frequency Note1 | Report Submission Date   |
|--|------------------------------|--|
| Annual Environment Report (AER)  | Annually                     | By 31 <sup>st</sup> March of each year.  |
| Record of incidents  | As they occur                | Within five days of the incident.  |
| Specified Engineering Works reports  | As they arise                | Prior to the works commencing.   |
| Bund, tank and container integrity assessment  | 3 yearly                     | One month after end of the year being reported on.   |
| Underground pipe and tank integrity assessment   | 5 yearly                     | One month after end of the year being reported on.   |
| Monitoring of Processed Waste & Challenge Tests  | Quarterly                    | Ten days after end of the quarter being reported on.   |
| Monitoring of Sewer Discharge  | Quarterly                    | Ten days after end of the quarter being reported on.   |
| Monitoring of Air Emissions  | Bi-annually                  | Ten days after end of the period being reported on.  |
| A procedure to clearly outline actions to be undertaken prior to the release of an FIBC of processed waste for disposal to landfill. | -                            | Within three months of the date of grant of licence, in accordance with Condition 8.14.8.  |
| Report on Commissioning Tests & Process Efficacy   | -                            | Within 5 days of all analytical results being obtained, following a period of not greater than 2 months since commissioning tests commenced. |
| Drawing showing all monitoring locations   | -                            | Prior to commencement of any materials recovery operations   |
| Risk Assessment, Fire-fighting and Fire-water retention study  | -                            | Prior to commencement of any materials recovery operations   |

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

# **SCHEDULE F:** Annual Environmental Report

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

Reporting period.

Waste activities carried out at the facility.

Quantity and composition of waste received, disposed of and recovered during the reporting period and each previous year. Summary report on emissions from the facility.

Summary of results and interpretations of environmental monitoring, including plans of all monitoring locations including 12 digit grid references.

Resource and energy consumption summary.

Development / infrastructural works summary (completed in previous year or prepared for current year), including timescale of such development.

Reported incidents and complaints summary.

Schedule of environmental objectives and targets for the forthcoming year.

Report on the progress towards achievement of the environmental objectives and targets contained in the previous year's report.

Environmental management programme – report for previous year.

Environmental management programme – proposal for current year.

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

Noise monitoring report summary.

Tank, pipeline and bund testing and inspection report.

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

Boiler efficiency test results.

Use of quarantine areas for rejected waste.

Process Verification Report.

Results of monitoring of emissions and processed healthcare risk waste.

Review of residuals management plan.

Statement of measures in relation to prevention of environmental damage and remedial actions (Environmental Liabilities).

Environmental Liabilities Risk Assessment Review (every three years or more frequently as dictated by relevant on site change including financial provisions).

Any other items specified by the Agency.

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

# Sealed by the seal of the Agency on this the 24<sup>th</sup> day of January, 2006

PRESENT when the seal of the Agency was affixed hereto:

Padraic Larkin, Director/Authorised Person