

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

WASTE LICENCE
PROPOSED DECISION

Waste Licence:	145-1
Applicant:	Gleneden Trading Limited
Location of Facility:	Unit 9, Raffeen Industrial Estate, Raffeen, Monkstown, Cork.

INTRODUCTION

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

This licence relates to a healthcare waste treatment facility to be located 16km south east of Cork City at Raffeen, Monkstown. The facility proposes to treat up to 1,600 tonnes of healthcare waste per annum from the Southern Health Board region. The following types of healthcare waste permitted to be accepted at the facility; Used Sharp instruments, Infected or potentially hazardous health care risk waste, autoclaved laboratory waste and potentially offensive material which is not assessed as infectious. Recognisable body parts, animal tissue, pharmaceutical waste, hazardous chemical waste and domestic waste are not to be accepted at the site for treatment.

Treatment of healthcare waste will be by means of a heat disinfection unit. Waste will be shredded prior to entry into a heated auger where disinfection of the waste will be achieved at temperatures in excess of 106°C. The treated waste will then be transferred to a compactor and transported for disposal to landfill. Rigorous microbiological testing will be undertaken on commissioning of the plant and on a continuous basis to assure the efficacy of the process. The Southern Health Board holds a waste licence for the system (Reg. No. 38-1) which operated in the grounds of Cork University Hospital up until August 8 2001. Gleneden Trading Limited have proposed, following decommissioning of the system at Cork University Hospital, to transfer and re-commission the existing and additional equipment and to operate the system at Monkstown.

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DECISION & REASONS FOR THE DECISION

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

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

Part I Activities Licensed

In pursuance of the powers conferred on it by the Waste Management Act, 1996, the Environmental Protection Agency (the Agency) proposes, under Section 40(1) of the said Act to grant this Waste Licence to Gleneden Trading Limited to carry on the waste activity/activities listed below at Unit 9, Raffeen Industrial Estate, Raffeen, Monkstown, Cork subject to conditions, with the reasons therefor and the associated schedules attached thereto set out in the licence.

Licensed Waste Disposal Activities, in accordance with the Third Schedule of the Waste Management Act 1996

Class 7.	Physico-chemical treatment not referred to elsewhere in this Schedule (including evaporation, drying and calcination) which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1. to 10. of this Schedule. Class 7 is the principal activity and refers to the heat disinfection of the following types of healthcare waste at the facility; (a) used sharp instruments;(b) infected or potentially hazardous health care risk waste; (c) autoclaved laboratory waste and (d) potentially offensive material as outlined in the waste licence application. The process is to treat the above healthcare waste to produce disinfected solid waste suitable for landfill.
Class 12.	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule. This activity is limited to the repackaging of unprocessed or processed healthcare waste types listed under Class 7 above.
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 was produced. This activity is limited to the storage of unprocessed or processed healthcare waste types listed under Class 7 above.

INTERPRETATION

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

Adequate lighting	20 lux measured at ground level.
Agreement	Agreement in writing.
Annually	At approximately twelve monthly intervals.
Attachment	Any reference to Attachments in this licence refers to attachments submitted as part of the waste licence application.
Application	The application by the licensee for this waste licence.
Appropriate facility	A waste management facility, duly authorised under relevant law and technically suitable.
Bi-annually	All or part of a period of six consecutive months.
Condition	A condition of this licence.
Consignment Note	All movements of hazardous waste within Ireland must be accompanied by a “C1” consignment note issued by a local authority under the Waste Management (Movement of Hazardous Waste) Regulations (SI No. 147 of 1998). Transfrontier shipment notification and movement/tracking form numbers are required for all exports of waste from, into or through the state under the Waste Management (Transfrontier Shipment of Waste) Regulations (SI No. 149 of 1998).
Containment boom	A boom which can contain spillages and prevent them from entering drains or watercourses.
Daytime	8.00 a.m. to 10.00 p.m.
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.
Emergency	Those occurrences defined in Condition 9.6
Emission Limits	Those limits, including concentration limits and deposition levels established in <i>Schedule C Emission Limits</i> of this licence.
European Waste Catalogue (EWC)	A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 94/3/EC and any subsequent amendment published in the Official Journal of the European Community.
Foul water	Sewage and drainage from cart washing operations.
HDS	Heat Disinfection System
Hours of Operation	The hours during which the facility is authorised to be operational. The

hours of operation of a facility are usually longer than the hours of waste acceptance to facilitate preparatory and completion works.

Hours of Waste Acceptance	The hours during which the facility is authorised to accept waste.
Licence	A Waste Licence issued in accordance with the Act.
Licensee	Gleneden Trading Limited.
Maintain	Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to adequately perform its function.
Monthly	A minimum of 12 times per year, at approximately monthly intervals.
Night-time	10.00 p.m. to 8.00 a.m.
Noise Sensitive Location (NSL)	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels.
Process Effluent	Liquid effluent generated in the condensing of vapours extracted from the process.
Quarterly	At approximately three monthly intervals.
Sample(s)	Unless the context of this licence indicates to the contrary, samples shall include measurements by electronic instruments.
Specified Emissions	Those emissions listed in <i>Schedule C: Emission Limits</i> of this licence.
Specified Engineering Works	Those engineering works listed in <i>Schedule B: Specified Engineering Works</i> of this licence.
Trigger Level	A parameter value specified in the licence, the achievement or exceedance of which requires certain actions to be taken by the licensee.
Weekly	During all weeks of plant operation, and in the case of emissions, when emissions are taking place; with no more than one measurement in any one week.
EPA Working Day	Refers to the following hours; 9.00 a.m. to 5.30 p.m. Monday to Friday inclusive.

PART II CONDITIONS

CONDITION 1 SCOPE OF THE LICENCE

- 1.1. Waste activities at the facility shall be restricted to those listed and described in Part I: Activities Licensed and authorised by this licence.
- 1.2. For the purposes of this licence, the facility is the area of land outlined in red on Figure 3 of the application. Any reference in this licence to “facility” shall mean the area thus outlined in red.
- 1.3. This licence is for the purposes of waste licensing under the Waste Management Act 1996 only and nothing in this licence shall be construed as negating the licensee’s statutory obligations or requirements under any other enactments or regulations.
- 1.4. The maximum tonnage to be accepted at the facility shall not exceed 1,600 tonnes per annum.
- 1.5. The maximum tonnage to be processed shall not exceed 7 tonnes per day unless subject to the prior written agreement of the Agency.
- 1.6. The maximum tonnage of untreated waste present on-site at any one time shall not exceed 70 tonnes.
- 1.7. Only those waste categories and quantities listed in *Schedule A: Waste Acceptance* of this licence, shall be accepted at the facility.
- 1.8. The following health care waste only shall be accepted at the facility
 - (a) used sharp instruments;
 - (b) infected or potentially hazardous health care risk waste;
 - (c) autoclaved laboratory waste and
 - (d) potentially offensive material as outlined in the waste licence application.
 - (e) waste from dental surgeries affiliated to Cork University with the prior written agreement of the Agency.
- 1.9. Waste Acceptance Hours and Hours of Operation
 - 1.9.1. Waste shall only be accepted at the facility between the hours of 7.00am to 9.00pm Monday to Saturday.
 - 1.9.2. The facility shall only be operated during the hours of 7.00am to 10.00pm Monday to Saturday.
 - 1.9.3. Waste shall not be accepted at the facility on Sundays or on Bank Holidays.
- 1.10. The following shall constitute an incident for the purposes of this licence: an emergency;
 - a) any emission which does not comply with the requirements of this licence;
 - b) any exceedance of the daily duty capacity of the waste handling equipment;
 - c) any trigger level specified in this licence which is attained or exceeded;

- d) any indication that environmental pollution has, or may have, taken place;
- e) any test failures of waste samples taken (microbiological and temperature strips);
- f) any malfunction of any abatement equipment; and
- g) the acceptance of any waste which is unsuitable for treatment by the HDS.

1.11. Where the Agency considers that a non-compliance with any condition of this licence has occurred, it may serve a notice on the licensee specifying:

1.11.1. That only those wastes as specified, if any, in the notice are to be accepted at the facility after the date set down in the notice;

1.11.2. That the licensee shall undertake the works stipulated in the notice, and/or otherwise comply with the requirements of the notice as set down therein, within the time-scale contained in the notice; and

1.11.3. That the licensee shall carry out any other requirement specified in the notice.

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

1.12. Every plan, programme or proposal submitted to the Agency for its agreement pursuant to any Condition of this licence shall include a proposed timescale for its implementation. The Agency may modify or alter any such plan, programme or proposal in so far as it considers such modification or alteration to be necessary and shall notify the licensee in writing of any such modification or alteration. Every such plan, programme or proposal shall be carried out within the timescale fixed by the Agency but shall not be undertaken without the agreement of the Agency. Every such plan, programme or proposal agreed by the Agency shall be covered by the conditions of this licence

<p>Reason: <i>To clarify the scope of this licence.</i></p>
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CONDITION 2 MANAGEMENT OF THE FACILITY

2.1 Facility Management

- 2.1.1 The licensee shall employ a suitably qualified and experienced facility manager who shall be designated as the person in charge. The facility manager or a nominated, suitably qualified and experienced, deputy shall be present on the facility at all times during its operation.
- 2.1.2 Both the facility manager and deputy, and any replacement manager or deputy, shall successfully complete a waste management training programme to be agreed in advance with the Agency and associated on site assessment appraisal prior to acceptance of waste at the site.
- 2.1.3 The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and experience, as required and shall be aware of the requirements of this licence.

2.2 Management Structure

- 2.2.1 Prior to the commencement of waste activities, the licensee shall submit written details of the management structure of the facility to the Agency. Any proposed replacement in the management structure shall be notified in advance in writing to the Agency. Written details of the management structure shall include the following information
 - a) the names of all persons who are to provide the management and supervision of the waste activities authorised by the licence, in particular the name of the facility manager and any nominated deputies;
 - b) details of the responsibilities for each individual named under a) above; and
 - c) details of the relevant education, training and experience held by each of the persons nominated under a) above.

2.3 Environmental Management System (EMS)

- 2.3.1 The licensee shall establish and maintain an EMS. Within nine months from the date of grant of this licence, the licensee shall submit to the Agency for its agreement a proposal for a documented Environmental Management System (EMS) for the facility. Following the agreement of the Agency, the licensee shall establish and maintain such a system. The EMS shall be updated on an annual basis with amendments being submitted to the Agency for its agreement.
- 2.3.2 The EMS shall include as a minimum the following elements:

2.3.2.1 Schedule of Environmental Objectives and Targets

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

2.3.2.2 Environmental Management Plan (EMP)

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

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

2.3.2.3 Corrective Action Procedures

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

2.3.2.4 Awareness and Training Programme

The licensee shall, prior to the acceptance of waste, submit to the Agency for its agreement Awareness and Training Procedures for identifying training needs and for providing appropriate training for all personnel whose work is related to the licensed facility. Written records of training shall be maintained.

2.4 Communications Programme

- 2.4.1 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. This shall be established within six months of the date of grant of this licence.

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

CONDITION 3 FACILITY INFRASTRUCTURE

- 3.1 The licensee shall establish all infrastructure referred to in this licence prior to the commencement of the licensed activities or as required by the conditions of this licence.

3.2 Specified Engineering Works

- 3.2.1 The licensee shall submit proposals for all Specified Engineering Works, as defined in *Schedule B Specified Engineering Works* of this licence, to the Agency for its agreement at least two months prior to the intended date of commencement of any such works. No such works shall be carried out without the prior agreement of the Agency.
- 3.2.2 All specified engineering works shall be supervised by a competent person(s) and that person, or persons, shall be present at all times during which relevant works are being undertaken.
- 3.2.3 Following the completion of all specified engineering works, the licensee shall complete a construction quality assurance validation. The validation report shall be made available to the Agency on request. The report shall include the following information;
 - a) a description of the works;
 - b) as-built drawings of the works;
 - c) records and results of all tests carried out (including failures);

- d) drawings and sections showing the location of all samples and tests carried out;
- e) daily record sheets/diary;
- f) name(s) of contractor(s)/individual(s) responsible for undertaking the specified engineering works;
- g) name(s) of individual(s) responsible for supervision of works and for quality assurance validation of works;
- h) records of any problems and the remedial works carried out to resolve those problems; and
- i) any other information requested in writing by the Agency.

3.3 Facility Notice Board

3.3.1 The licensee shall provide and maintain a Facility Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the board shall be 1200 mm by 750 mm.

3.3.2 The board shall clearly show:

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

3.4 Facility Security

3.4.1 Security and gates shall be installed and maintained at the facility.

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

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

3.5 Facility Roads and Hardstanding

3.5.1 Effective site roads shall be provided and maintained to ensure the safe movement of vehicles within the facility.

3.5.2 The licensee shall provide, and maintain an impermeable hardstanding surface in the areas of the facility shown on Figure 10 of supplementary information for Article 12 compliance dated 8 June 2001. In addition, the floor of the buildings and hardstanding areas at the facility shall be concreted and constructed to British Standard 8110.

3.6 Facility Office

3.6.1 The licensee shall provide and maintain an office at the facility. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation.

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

3.7 Waste Inspection and Quarantine Areas

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

3.7.2 These areas shall be constructed and maintained in a manner suitable, and be of a size appropriate, for the inspection of waste and subsequent quarantine if required. The waste inspection area and the waste quarantine area shall be clearly identified and segregated from each other.

3.7.3 Drainage from these banded areas shall be directed to the process effluent holding tank.

3.8 Weighbridge

3.8.1 The licensee shall provide and maintain a weighbridge at the facility.

3.9 Waste handling, ventilation and processing plant

3.9.1 Items of plant deemed critical to the efficient and adequate processing of waste at the facility (including shredders, compactors and bin lifting equipment) shall be provided on the following basis:

- 100% duty capacity;
- 50% standby capacity available on a routine basis;
- Provision of contingency arrangements and/or back up and spares in the case of breakdown of critical equipment.

3.9.2 Prior to the commencement of waste activities, the licensee shall provide a report for the agreement of the Agency detailing the duty and standby capacity in tonnes per day, of all waste handling and processing equipment to be used at the facility. These capacities shall be based on the licensed waste intake, as per *Schedule A Waste Acceptance* of this licence.

3.9.3 The quantity of waste to be accepted at the facility on a daily basis shall not exceed the duty capacity of the equipment at the facility. Any exceedance of this intake shall be treated as an incident.

3.10 Waste Water Treatment Plant

3.10.1 The licensee shall provide and maintain a waste water treatment plant at the facility for the treatment of foul water arising on-site. The specification of the treatment plant shall be agreed in advance with the Agency. Any percolation area shall satisfy the criteria set out in the Wastewater Treatment Manual, *Treatment Systems for Single Houses*, published by the Environmental Protection Agency.

3.10.2 Prior to the acceptance of waste at the facility a report shall be submitted to the Agency, detailing the treatment capability and capacity of the wastewater treatment plant.

3.11 Tank and Drum Storage Areas

3.11.1 All tank and drum storage areas shall be rendered impervious to the materials stored therein.

3.11.2 All tank and drum storage areas shall, as a minimum, be banded, either locally or remotely, to a volume not less than the greater of the following:

- (a) 110% of the capacity of the largest tank or drum within the banded area; or

(b) 25% of the total volume of substance which could be stored within the bunded area.

3.11.3 All drainage from bunded areas shall be diverted for collection and safe disposal.

3.11.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.

3.11.5 The integrity and water tightness of all the bunds and their resistance to penetration by water or other materials stored therein shall be confirmed by the licensee and shall be reported to the Agency following its installation and prior to its use as a storage area. This confirmation shall be repeated at least once every three years thereafter and reported to the Agency on each occasion.

3.12 The licence shall provide a mechanism to ensure that water from the mains supply used in the process, shall not re-enter the mains water system.

3.13 Drainage system

3.13.1 All surface water run-off shall be collected and disposed of to a percolation area. The percolation area shall satisfy the criteria set out in the Wastewater Treatment Manual, *Treatment Systems for Single Houses*, published by the Environmental Protection Agency.

3.14 Monitoring Infrastructure

3.14.1 Replacement of Infrastructure

- (i) Monitoring infrastructure which is damaged or proves to be unsuitable for its purpose shall be replaced within three months of it being damaged or recognised as being unsuitable.

REASON: *To provide appropriate infrastructure for the protection of the environment.*

CONDITION 4 RESTORATION AND AFTERCARE

4.1. A proposal for a Decommissioning and Aftercare Plan for the facility shall be submitted to the Agency within twelve months of the date of grant of this licence. The licensee shall update these schemes when required by the Agency.

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

CONDITION 5 FACILITY OPERATIONS

5.1 All waste processing and storage shall be carried out inside the facility building.

5.2 Waste Acceptance and Characterisation Procedures

5.2.1 Prior to the commencement of waste acceptance at the facility, the licensee shall establish and maintain detailed written procedures for the acceptance and handling of wastes.

5.2.2 The facility will only process healthcare waste which is stored in wheeled carts containing UN compliant marked and tagged bags and sharps in appropriate canisters unless otherwise agreed with the Agency.

- 5.2.3 Treated and untreated healthcare waste shall only be stored on-site within the designated banded areas.
- 5.2.4 After inspection all waste shall be shredded and treated as detailed in Attachment D2 of the waste licence application. Any waste deemed unsuitable and/or in contravention of this Waste Licence shall be immediately separated and at the earliest possible time removed for disposal or recovery at an appropriate alternative facility. Temporary storage of such wastes shall be in a designated Waste Quarantine Area. Waste shall be stored under appropriate conditions in the quarantine area to avoid putrefaction, odour generation, the attraction of vermin and any other nuisance or objectionable condition.
- 5.2.5 The procedure for the diversion of unacceptable health care waste shall be as outlined in Attachment E4 of the waste licence application.
- 5.2.6 All treated waste shall be placed in a dedicated compacting unit and will be held on-site until test results confirm its successful treatment.
- 5.2.7 Waste shall only be accepted at the facility from known customers, or new customers subject to initial waste profiling and waste characterisation off-site and the prior agreement of the Agency. The written records of this off-site waste profiling and characterisation shall be retained by the licensee for all active customers and for a two year period following termination of licensee/customer agreements. There shall be no casual public access to the facility

5.3 Plant Commissioning

- 5.3.1 Initial efficacy tests shall be carried out on surrogate loads that accurately reflect the nature of the waste to be treated. Tests shall include the following;
 - (i) a minimum of three surrogate loads per day which differ in the concentrations of fluid to solid components; and
 - (ii) a surrogate load equal to the systems maximum daily treatment capacity
- 5.3.2 Bacillus spores shall be used as biological indicators in initial daily efficacy tests. The scope of these tests shall be agreed in advance with the Agency but shall include as a minimum;
 - (i) a suitable carrier for biological indicators
 - (ii) introduction of biological indicators in dry form and of a moisture content that accurately reflects the moisture content of the waste
 - (iii) use of at least two commercially available spore test kits; and
 - (iv) temperature indicator strips
- 5.3.3 Successful test results for four consecutive days shall be achieved in initial efficacy tests prior to the acceptance of waste for treatment and subject to the agreement of the Agency.
- 5.3.4 A report on the commissioning tests shall be submitted for agreement 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.

5.3.5 Other than for commissioning, healthcare risk waste shall not be processed at the facility until the Agency has confirmed its satisfaction, in writing, with the commissioning tests as reported upon. All healthcare risk waste processed during commissioning shall be exported for disposal.

5.3.6 The parameter settings which control residence time and temperature shall be tamper proof and, once established during the commissioning tests, shall be subsequently modified only with the prior agreement of the Agency.

5.4 Operational Controls

5.4.1 The time, auger speed and temperature parameters required to maintain destruction of the test organisms shall be recorded at the end of the commissioning trials, and subject to the Agency's agreement the plant shall be set to operate accordingly.

5.4.2 The plant shall automatically shut down when the temperature is outside the range agreed with the Agency following the commissioning trials. An alarm shall sound and reprocessing of waste shall not re-start until the correct temperature is achieved. The temperature monitoring locations on the holofite/HDS shall be agreed in advance with the Agency.

5.4.3 The performance of the HDS shall be evaluated as follows: (a) by determining residence time in the heat processor, (b) by use of thermal indicator strips, (c) by performing challenge tests against vegetative and spore forming bacteria and (d) by the representative sampling of the processed waste residue in accordance with Schedule D.6 of this licence.

5.4.4 The HDS shall be operated such that viable micro-organisms specified in Schedule D.6 are not present in the processed waste.

5.4.5 A minimum of three carriers (each containing biological indicators) shall be passed through the holofite to satisfy monitoring specified in Schedule D.6.

5.4.6 The HDS shall be operated such that there is a 6 log reduction of *Enterococcus faecalis* and a 6 log reduction of *Bacillus subtilis* spores in challenge tests.

5.4.7 All testing of waste samples and indicator organisms shall be carried out by a testing laboratory agreed in advance by the Agency.

5.4.8 Processed waste shall be rendered visually unrecognisable as healthcare waste. Daily testing shall be carried out as detailed in Attachment D.2 (vi) of Article 12 response dated 28 March 2001.

5.4.9 Should any of the samples taken for the purposes of Condition 5.4 indicate test failure:

- (a) the batch of processed waste being held shall be further processed and retested;
- (b) all methods of sampling and testing specified in Schedule D.6 shall be carried out daily for the next four consecutive working days;
- (c) should this additional sampling and testing show the continued presence of the relevant microorganisms, the acceptance and processing of health care risk waste shall cease until written notice from the Agency agreeing to the resumption is received;
- (d) a written report shall be submitted to the Agency within five working days of the availability of the test results referred to in (b) above.

- 5.4.10 Loads containing primarily sharps waste shall pass through a secondary shredder. A record shall be kept of the quantity of sharps passed through the secondary shredder.
- 5.4.11 A plant operator shall sign a temperature log before leaving the facility at night to certify that the midpoint temperature in the holoflite is below 100°C.
- 5.4.12 A controlled contamination area separating the untreated waste loading area from the rest of the plant shall be maintained at the facility.
- 5.4.13 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
- 5.4.14 Fuels shall only be stored at appropriately banded locations on the facility.
- 5.4.15 All tanks and drums shall be labelled to clearly indicate their contents.
- 5.4.16 No smoking shall be allowed on the facility (other than in the facility office)
- 5.5 Off-site Disposal and Recovery
 - 5.5.1 Waste sent off-site for recovery or disposal shall only be conveyed by a waste contractor agreed by the Agency;
 - 5.5.2 All waste transferred from the facility shall only be transferred to an appropriate facility agreed by the Agency;
 - 5.5.3 All wastes removed off-site for recovery or disposal shall be transported from the facility to the consignee in a manner which will not adversely affect the environment.
 - 5.5.4 All processed healthcare waste removed off site shall be accompanied by a consignment note and shall be certified by a technically competent person from the testing laboratory that the waste has been processed (microbiologically tested) in accordance with this licence. The testing laboratory to be employed during operation of the facility shall be agreed in advance with the Agency.
- 5.6 Process Effluent Management
 - 5.6.1 Unless otherwise agreed with the Agency, process effluent generated on-site shall be tankered off-site in fully enclosed road tankers to a treatment facility to be agreed in advance with the Agency.
- 5.7 Maintenance
 - 5.7.1 Maintenance of the HDS shall be in accordance with the information supplied in Attachment D.2 of the waste licence application.
 - 5.7.2 All treatment/abatement and emission control equipment shall be calibrated and maintained, in accordance with the instructions issued by the manufacturer/supplier or installer. Written records of the calibrations and maintenance shall be made and kept by the licensee.
 - 5.7.3 The licensee shall maintain and clearly label and name all sampling and monitoring locations.
 - 5.7.4 The licensee shall maintain the compactor and shredder in accordance with the manufacturers instructions.

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

CONDITION 6 EMISSIONS

- 6.1. No specified emission from the facility shall exceed the emission limit values set out in *Schedule C Emission Limits* of this licence. There shall be no other emissions of environmental significance.
- 6.2. The licensee shall ensure that the activities shall be carried out in a manner such that emissions do not result in significant impairment of, or significant interference with the environment beyond the facility boundary.
- 6.3. Emission limits for emissions to atmosphere in this licence shall be interpreted in the following way:-
- 6.3.1. Non-Continuous Monitoring
- (i) For any parameter where, due to sampling/analytical limitations, a 30 minute sample is inappropriate, a suitable sampling period should be employed and the value obtained therein shall not exceed the emission limit value.
- (ii) For all other parameters, no 30 minute mean value shall exceed the emission limit value.
- (iii) For flow, no hourly or daily mean value shall exceed the emission limit value.
- 6.4. The concentration limits for emissions to atmosphere specified in this licence shall be based on gas volumes under standard conditions of :
- Temperature 273K, Pressure 101.3 kPa (no correction for oxygen or water content).
- 6.5. Emissions to Atmosphere
- 6.5.1. All equipment, including backup equipment, specified in Schedule D.5 Abatement/Treatment Control of this licence shall be provided on-site. All treatment/abatement, control and monitoring equipment shall be calibrated and maintained when in use, in accordance with the information submitted in D2 of the waste licence application or as otherwise approved by the Agency under the Environmental Management Programme.
- 6.6. Disposal of Foul Water
- 6.6.1. No foul water shall be discharged to surface water.
- 6.7. There shall be no direct emissions to groundwater
- 6.8. There shall be no clearly audible tonal component or impulsive component in the noise emissions from the activity at the noise sensitive locations.

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

CONDITION 7 NUISANCE CONTROL

- 7.1 The licensee shall ensure that vermin, birds, flies, mud, dust, litter and odours do not give rise to nuisance at the facility or in the immediate area of the facility. Any method used by the licensee to control any such nuisance shall not cause environmental pollution.
- 7.2 The licensee shall ensure that all vehicles delivering waste to or removing waste from the facility are fully enclosed and clean and shall not give rise to offensive odours or other nuisance.
- 7.3 The road network in the vicinity of the facility shall be kept free from any debris caused by vehicles entering or leaving the facility. Any such debris or deposited materials shall be removed without delay.
- 7.4 Prior to the date of commencement of the waste activities at the facility, the licensee shall install and provide adequate measures for the control of odours and dust emissions, including fugitive dust emissions, from the facility. Such measures shall at a minimum include the following;
- 7.4.1 Installation and maintenance of integrity and negative pressure through the shredders to ensure no significant escape of odours or dust.
- 7.4.2 Installation of odour management system
- 7.4.3 Provision of 100% duty capacity and 50% stand by capacity, back ups and spares must be provided for the air handling, ventilation and abatement plant.

REASON: *To provide for the control of nuisances*

CONDITION 8 MONITORING

- 8.1. The licensee shall carry out such monitoring and at such locations and frequencies as set out in Schedule D: Monitoring and as specified in this licence.
- 8.2. The licensee shall amend the frequency, locations, methods and scope of monitoring as required by this licence only upon the written instruction of the Agency and shall provide such information concerning such amendments as may be requested in writing by the Agency. Such alterations shall be carried out within any timescale nominated by the Agency.
- 8.3. Monitoring and analysis equipment shall be operated and maintained in accordance with the manufacturers' instructions (if any) so that all monitoring results accurately reflect any emission, discharge or environmental parameter.
- 8.4. The licensee shall provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency.
- 8.5. The licensee shall maintain all sampling and monitoring points, and clearly label and name all sampling and monitoring locations, so that they may be used for representative sampling and monitoring.
- 8.6. The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.

- 8.7. Prior to the commencement of waste activities at this facility, the following information shall be submitted to the Agency for its agreement: the names, qualifications and a summary of relevant experience of all persons that will carry out all sampling and monitoring as required by this licence and who carry out the interpretation of the results of such sampling and monitoring. Any proposed changes to the above shall be submitted in writing to the Agency for its agreement.
- 8.8. All automatic monitors and samplers shall be functioning at all times when the activity is being carried on, unless alternative sampling or monitoring has been agreed, in writing, by the Agency. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable and alternative sampling and monitoring facilities shall be put in place. Prior written agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.
- 8.9. Nuisance Monitoring
- 8.9.1. The licensee shall, at a minimum of one-week intervals, inspect the facility and its immediate surrounds for nuisances caused by litter, vermin, birds, flies, mud, dust and odours.

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

CONDITION 9 CONTINGENCY ARRANGEMENTS

- 9.1. In the event of an incident the licensee shall immediately:
- a) identify the date, time and place of the incident;
 - b) carry out an immediate investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
 - c) isolate the source of any such emission;
 - d) evaluate the environmental pollution, if any, caused by the incident;
 - e) identify and execute measures to minimise the emissions/malfunction and the effects thereof;
 - f) provide a proposal to the Agency for its agreement within one month of the incident occurring to:
 - i) identify and put in place measures to avoid reoccurrence of the incident;
 - and
 - ii) identify and put in place any other appropriate remedial action.
- 9.2. The licensee shall, prior to commencement of waste activities, submit a written Emergency Response Procedure (ERP) to the Agency for its agreement. The ERP shall address any emergency situations, which may originate on the facility and shall include provision for minimising the effects of any emergency on the environment. This shall include a risk assessment to determine the requirements at the facility for fire fighting and fire water retention facilities. The Fire Authority shall be consulted by the licensee during this assessment.

- 9.3. Contingency arrangements for the facility shall be as detailed in Attachment K of the waste licence application.
- 9.4. The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the facility. Once used the absorbent material shall be disposed of at an appropriate facility.
- 9.5. In the event of the holoflite reaching temperatures in excess of 130°C when the plant is shut the alarm shall be directly linked to an emergency contact number.
- 9.6. Emergencies
- 9.6.1. Breakdown of the plant shall be treated as an emergency. In the case of a breakdown, the operator shall close down operations as soon as practicable until normal operations can be restored. The licensee shall;
- 9.6.1.1 Provide sufficient refrigerated storage for waste in the event of plant breakdown.
- 9.6.1.2 Agree emergency unloading procedures for the shredder with the Agency, which shall include in-situ disinfection of the untreated waste.
- 9.6.2. All significant spillages occurring at the facility shall be treated as an emergency and immediately cleaned up and dealt with so as to alleviate their effects;
- 9.6.3. No waste shall be burnt within the boundaries of the facility. A fire at the facility shall be treated as an emergency and immediate action shall be taken to extinguish it and notify the appropriate authorities;

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

CONDITION 10 RECORDS

- 10.1 The licensee shall keep the following documents at the facility office.
- a) the current waste licence relating to the facility;
 - b) the current EMS for the facility;
 - c) the previous year's AER for the facility;
 - d) all written procedures produced by the licensee which relate to the licensed activities.
- 10.2 The licensee shall maintain a written record for each load of waste arriving at and departing from the facility. The licensee shall record the following:
- a) the date;
 - b) the name of the carrier (including if appropriate, the waste carrier registration details);
 - c) the vehicle registration number;
 - d) the name of the producer(s)/collector(s) of the waste as appropriate;
 - e) the name of the waste facility (if appropriate) from which the load originated including the waste licence or waste permit register number;
 - f) a description of the waste including the associated EWC codes;
 - g) the quantity of the waste, recorded in tonnes

- h) the name of the person checking the load; and,
- i) where loads or wastes are removed or rejected, details of the date of occurrence, the types of waste and the facility to which they were removed,
- j) where applicable a consignment note number (including transfrontier shipment notification and movement/tracking form numbers, as appropriate).

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

- (a) Midpoint and exit waste temperature from Holoflite
- (b) Holoflite rotation speed
- (c) Temperature of heat transfer fluid
- (d) The mode of operation (automatic or maintenance)

These records shall be held on site for four weeks and they shall be made available to the Agency by the licensee at all reasonable times.

10.4 Written Records

The following written records shall be maintained by the licensee:

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

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

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

10.6 A written record shall be kept of each consignment of process effluent removed from the facility. The record shall include the following:

- a) the name of the carrier;
- b) the date and time of removal of process effluent from the facility;
- c) the volume of process effluent, in cubic metres, removed from the facility on each occasion;
- d) the name and address of the treatment facility to which the process effluent was transported;
- e) any incidents or spillages of process effluent during its removal or transportation.

- 10.7 The licensee shall maintain a written record of residual waste that failed the test procedures outlined in Schedule D.6 and the procedures followed thereafter.
- 10.8 Unless otherwise agreed in writing with the Agency, copies of all written records, reports and other documents referred to in this licence shall be maintained in the plant office shown in Figure 9 Revision C of supplementary information for Article 12 compliance dated 8 June 2001 and shall be made available to the Agency at all reasonable times.
- 10.9 Unless otherwise agreed in advance in writing with the Agency, all written records, reports and other documents required to be maintained under this licence shall be retained by the licensee until the licensee receives notice from the Agency in accordance with Section 48(8) of the Waste Management Act, 1996. The licensee shall then transfer documentation specified by the Agency, or copies of it, to the Agency within a time and in the manner specified in writing by the Agency.

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

CONDITION 11 REPORTS AND NOTIFICATIONS

- 11.1 Unless otherwise agreed by the Agency, all reports and notifications submitted to the Agency shall:
- (a) be sent to the Agency's Regional Inspectorate at Inniscarra, Co. Cork
 - (b) comprise one original and three copies;
 - (c) be formatted in accordance with any written instruction or guidance issued by the Agency;
 - (d) include whatever information as is specified in writing by the Agency;
 - (e) be identified by a unique code, indicate any modification or amendment, and be correctly dated to reflect any such modification or amendment;
 - (f) be submitted in accordance with the relevant reporting frequencies specified by this licence, such as in *Schedule E Recording and Reporting to the Agency* of this licence;
 - (g) be accompanied by a written interpretation setting out their significance in the case of all monitoring data; and
 - (h) be transferred electronically to the Agency's computer system if required by the Agency.
- 11.2 All written records, reports and other documents submitted to the Agency shall be certified accurate and representative by the licensee.
- 11.3 In the event of an incident occurring on the facility, the licensee shall:
- a) notify the Agency as soon as practicable and in any case not later than 10.00 am the following working day after the occurrence of any incident;
 - b) submit a written record of the incident, including all aspects described in Condition 9.1(a-e), to the Agency as soon as practicable and in any case within five working days after the occurrence of any incident;
 - c) in the event of any incident which relates to discharges to surface water, notify South Western Regional Fisheries Board and Cork County Council as soon as practicable and in any case not later than 10:00am on the following working day after such an incident; and

- d) should any further actions be taken as a result of an incident occurring, the licensee shall forward a written report of those actions to the Agency as soon as practicable and no later than ten days after the initiation of those actions.
- 11.4 Unless otherwise agreed in advance in writing with the Agency, the licensee must give at least fourteen days notice to the Agency of the following events:
- a) the cessation of waste disposal activities at the facility for a period in excess of twenty-eight days;
 - b) the re-commencement of waste disposal activities at the facility following a period of cessation referred to at a) above.
- 11.5 The licensee shall prior to the acceptance of waste at the facility submit to the Agency for agreement a procedure for dealing with the handling and reprocessing of waste in the event of test failures.
- 11.6 Within six months of the date of grant of the licence an efficacy test shall be carried out using *Mycobacterium* spp. as a biological Indicator.
- 11.7 The licensee shall prior to acceptance of waste at the facility submit an independent report on the combustion efficiency of the boiler. The licensee shall implement any recommendations made in the report, within a timeframe to be agreed with the Agency.
- 11.8 Within six months of the date of grant of the licence, the licensee shall submit to the Agency for agreement, a report examining provisions for the recovery of metal from sharps waste.
- 11.9 The licensee shall submit within six months of the date of grant of this licence a survey detailing the noise sources on-site. The licensee shall consult with the Agency on the timing, nature and extent of the survey and shall develop a survey programme to the satisfaction of the Agency.
- 11.10 Monitoring Locations
- 11.10.1 Within three months of the date of grant of this licence, the licensee shall submit to the Agency an appropriately scaled drawing(s) showing all the monitoring locations that are stipulated in this licence. The drawing(s) shall include the reference code of each monitoring point.
- 11.11 Annual Environmental Report
- 11.11.1 The licensee shall submit to the Agency for its agreement, within thirteen months from the date of grant of this licence, and one month after the end of each calendar year thereafter, an Annual Environmental Report (AER).
 - 11.11.2 The AER shall include as a minimum the information specified in *Schedule F Content of the Annual Environmental Report* of this licence and shall be prepared in accordance with any relevant written guidance issued by the Agency.

REASON: *To provide for proper reporting and notification of the Agency.*

CONDITION 12 CHARGES AND FINANCIAL PROVISIONS

12.1 Agency Charges

12.1.1 The licensee shall pay to the Agency an annual contribution of £8,821 / €11,201 or such sum as the Agency from time to time determines, towards the cost of monitoring the activity or otherwise in performing any functions in relation to the activity, as the Agency considers necessary for the performance of its functions under the Waste Management Act, 1996. The licensee shall in 2002 and subsequent years, not later than January 31 of each year, pay to the Agency this amount updated in accordance with changes in the Public Sector Average Earnings Index from the date of the licence to the renewal date. The updated amount shall be notified to the licensee by the Agency. For 2001, the licensee shall pay a pro rata amount from the date of this licence to 31st December. This amount shall be paid to the Agency within one month of the date of grant of this licence.

12.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased the licensee shall contribute such sums as determined by the Agency to defraying its costs.

12.2 Environmental Liabilities

12.2.1 The licensee shall arrange for the completion of a comprehensive and fully costed Environmental Liabilities Risk Assessment for the facility which shall address liabilities arising from the carrying on of the activities to which this licence relates or in consequence of ceasing to carry on those activities. A report on this assessment shall be agreed by the Agency prior to the acceptance of waste at the facility.

12.2.2 Prior to the acceptance of waste at the facility the licensee shall make a Proposal for Financial Provisions to the Agency for its agreement to cover any liabilities incurred by the licensee in carrying on the activities to which this licence relates or in consequence of ceasing to carry on those activities. Such provision shall be maintained unless otherwise agreed in writing by the Agency. No waste shall be accepted at the facility until the agreed proposal for financial provisions is in place.

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

12.2.4 The licensee shall within two weeks of purchase, renewal or revision of the financial provision required under Condition 12.2.2, forward to the Agency written proof of such indemnity.

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

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

Where:

Cost = Revised restoration and aftercare cost

ECOST = Existing restoration and aftercare cost

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

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

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

SCHEDULE A : Waste Acceptance

A.1 Waste Acceptance

Table A.1 Waste Categories and Quantities

WASTE TYPE	MAXIMUM (TONNES PER ANNUM)
Used sharp instruments	365
Infected or potentially hazardous health care risk waste	625
Autoclaved laboratory waste ^{Note 1}	240
Potentially offensive material as outlined in the waste licence application	320
Healthcare waste from dental practices ^{Note 2}	50
TOTAL	1600

Note 1: Laboratory waste eg; cultures and clinical samples may only be accepted at the facility following prior autoclaving

Note 2: Dental waste shall only be accepted subject to the prior written agreement of the Agency

A.2 Wastes for Disposal / Recovery

Waste Materials	On-Site Reuse ^{Note1}	Method of Disposal/Recovery ^{Note 2}
Processed Waste Residue	None	Agreed waste disposal contractor.
Spent Filters	None	Agreed hazardous waste recovery contractor ^{Note 3}
Utilities Waste Oils	None	Agreed hazardous waste recovery contractor.
Other ^{Note 4}		

Note 1: The licensee may treat, reuse, recycle or recover waste subject to the prior written agreement of the Agency.

Note 2: Any variation from those contractors named in the Waste Licence application, or subsequent agreements, must have the prior written agreement of the Agency. In cases where a previously agreed waste contractor is considered by the Agency not to exercise due care in respect of the transport and disposal of the licensee's waste, the Agency may at any time instruct a licensee to stop using this contractor.

Note 3: Treatment of spent filters within the HDS shall be agreed in advance with the Agency.

Note 4: No other waste shall be disposed of/recovered off-site or on site without prior notice to, and prior written agreement of the Agency

SCHEDULE B : Specified Engineering Works

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

SCHEDULE C :Emission Limits

C.1 Wastewater Treatment Plant Emissions

Emission Point Reference No: Discharge point from treatment plant

Parameter	Emission Limit Value Grab Sample (mg/l)
BOD	25
Suspended solids	35
pH	6-9
Fats Oils Greases	No visible traces
Ammonical Nitrogen	10

C.2 Noise Emissions: (Measured at the monitoring point N3).

Day dB(A) L _{Aeq} (30 minutes)	Night dB(A) L _{Aeq} (30 minutes)
55	45

C.3 Emissions to Atmosphere

Emission Point Reference No. EP1
 Name of Emission Point: Process Flue Shaft
 Grid Reference No. 174892E 064567N
 Maximum Volume to be emitted: 530m³/hr

Parameter	Emission Limit Value ^(Note 1)
Total Amines	10 mg/m ³ (at mass flows > 0.1kg/hr)
TA Luft Organics Class II	100 mg/m ³ (at mass flows > 2kg/hr)
TA Luft Organics Class III	150 mg/m ³ (at mass flows > 3kg/hr)
Particulates	50 mg/m ³

Note 1: Where organic substances of both classes are emitted simultaneously, in addition to the above individual limits, the sum of the concentrations of Classes II and III shall not exceed the Class III limits.

SCHEDULE D : Monitoring

Monitoring to be carried out as specified below.

D.1 Monitoring Locations

Monitoring locations shall be those as set out in Table D.1.1 and Figure 13 of Article 12 response dated 28 March 2001.

Table D.1.1 Monitoring Locations

<u>Holo-lite Temperature Stations</u>	Noise Stations	Air Emission Point	Waste Water Treatment Plant Effluent
Inlet-point, mid-point and exit-point ^{Note 1}	N1, N2, N3	EP1	WWTP Discharge point

Note 1: Locations to be agreed with the Agency

D.2 Effluent Emissions

Table D.2.1 Foul water Monitoring Frequency and Techniques

Parameter	Monitoring Frequency	Analysis Method/Technique
pH	Quarterly	Electrometry
Biological Oxygen Demand	Quarterly	Standard Methods ^{Note 1}
Suspended Solids	Quarterly	Standard Methods ^{Note 1}
Volume	Quarterly	Method to be agreed with the Agency
Total coliform/100ml	Biannually	Standard Methods ^{Note 1}
Faecal coliform/100ml	Biannually	Standard Methods ^{Note 1}
Faecal streptococci/100ml	Biannually	Standard Methods ^{Note 1}
<i>Pseudomonas aeruginosa</i> /100ml	Biannually	Standard Methods ^{Note 1}
<i>Staphylococcus aureus</i> /100ml	Biannually	Standard Methods ^{Note 1}

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

D.3 Noise

Table D.3.1 Noise Monitoring Frequency and Technique

Parameter	Monitoring Frequency	Analysis Method/Technique
L(A) _{EQ} [30 minutes]	Annual	Standard ^{Note 1}
L(A) ₁₀ [30 minutes]	Annual	Standard ^{Note 1}
L(A) ₉₀ [30 minutes]	Annual	Standard ^{Note 1}
Frequency Analysis(1/3 Octave band analysis)	Annual	Standard ^{Note 1}

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

D.4 Emissions to Atmosphere

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

Parameter	Monitoring Frequency	Analysis Method/ Technique (Note 1)
Total Amines	Biannually	NIOSH Method 2010
TA Luft Organics Class II	Biannually	Adsorption / Desorption, GCMS
TA Luft Organics Class III	Biannually	Adsorption / Desorption, GCMS
Particulates	Annually	Isokinetic/Gravimetric

Note 1: or equivalent method acceptable to Agency

D.5 Abatement/Treatment Control

Abatement Equipment: Process Flue Shaft

Monitoring:

Monitoring to be carried out	Monitoring	Monitoring Equipment
Set point pressure levels Filter Integrity Filter Integrity	Daily check on pressure Daily "sniff test" Visual Weekly Check	Magnahelic gauges Not applicable Not applicable

Equipment:

Equipment	Equipment Maintenance	Equipment backup
Air Filters - 3 Stage	See Note 1	Spares held on site

Note 1: Preventative maintenance as per manufacturers instructions

D.6 Monitoring of Process Control / Processed Waste

Parameter	Frequency^(Note1)	Analysis Method /Technique ^(Note 1)
Residence Time	Each batch	To be agreed with the Agency
Temperature	Twice daily	Temperature indicator strips (Note 2)
Processed Waste (size particle dimensions)	Daily	<ul style="list-style-type: none"> • Visual Inspection to ensure shredder functionality • Also see Note 3
Processed Waste	Monthly	Test for Salmonella and Shigella (Note 4)
Indicator Organisms	Daily	Challenge Test against <i>Enterococcus faecalis</i> (Note 4,5)
Indicator Organisms	Three times per week	Challenge Test against <i>Bacillus subtilis</i> (Note 4,5)

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

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

Note 3: Visual examination of processed waste in accordance with Condition 5.4.8.

Note 4: Test method to be agreed in advance with the Agency

Note 5: Positive and negative controls to be included with all samples taken for Challenge Tests.

SCHEDULE E :Recording and Reporting to the Agency

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

Note 1: Unless altered at the request of the Agency

SCHEDULE F :Content of the Annual Environmental Report

Annual Environmental Report Content ^{Note 1}

Reporting Period.

Waste activities carried out at the facility.

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

Summary report on emissions

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

Resource and energy consumption summary.

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

Schedule of Environmental Objectives and Targets for the forthcoming year.

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

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

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

Reported Incidents and Complaints summaries.

Review of Nuisance Controls.

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

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

Volume of foul water treated on-site.

Volume of process effluent transported off-site.

Any other items specified by the Agency.

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

Signed on behalf of the said Agency
on the 2nd day of October, 2001

Breda Sheehan

Authorised Person