LICENCE REG. NO. 53-2 HAS BEEN REVISED. Please note that licence Reg No. 53-2 was reviewed and replaced by the revised licence Reg No. W0053-03.



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

WASTE LICENCE

Waste Licence 53-2

Register Number:

Licensee: Noble Waste Disposal Limited

Location of Facility: Fassaroe, Bray, County Wicklow

INTRODUCTION

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

This licence is for the operation of a non-hazardous waste transfer station located at Fassaroe, Bray, County Wicklow. The waste intake is limited to 129,500 tonnes per annum of non-hazardous waste and 2 tonnes per annum of hazardous waste (machinery batteries). The waste types to be accepted at the facility include household, commercial and construction & demolition waste. The licence does not allow for the acceptance of hazardous (except machinery batteries) or liquid waste.

Landfilling of waste no longer takes place at the facility and the licence requires the landfill to be reclaimed and restored.

The licence allows waste processing to take place inside the transfer station as well as out-doors. The out-door activities are limited to wood chipping, in-vessel trial composting of biodegradable waste and green waste and segregating and shredding of construction and demolition waste as well as non-putrescible commercial/industrial waste. The licence requires the processing of construction and demolition waste and non-putrescible commercial/industrial waste to be moved indoors once the proposed new transfer station phase II has been constructed.

The licence allows trial composting of biodegradable waste and green waste. The annual tonnage to be composted is limited to 2,000 tonnes of waste per year.

The licence provides for the installation and operation of a civic waste facility.

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

The licence sets out in detail the conditions under which Noble Waste Disposal Limited is required to operate and manage this facility.

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DECISION & REASONS FOR THE 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, a submission and objection received and the reports of its inspectors.

Part I Activities Licensed

In pursuance of the powers conferred on it by the Waste Management Act, 1996, the Environmental Protection Agency (the Agency), under Section 46(2) of the said Act hereby grants this Waste Licence to Noble Waste Disposal Limited to carry on the waste activities listed below at Fassoroe, Bray, County Wicklow 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 11.	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule:
	This activity is limited to the mixing of household and commercial/industrial wastes prior to compaction.
Class 12.	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule:
	This activity is limited to the compaction of waste prior to the removal off site to landfill.
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 commercial/industrial and domestic waste prior to disposal at an appropriate landfill facility.

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

Act 1996

Class 2.	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes):
	This activity is limited to the composting of biodegradable waste and green waste, chipping of wood and green waste, recycling of plastics and baling of cardboard.
Class 3.	Recycling or reclamation of metals and metal compounds:
	This activity is limited to receipt, holding and collection of metals and wire found in incoming waste streams and aluminium cans.
Class 4.	Recycling or reclamation of other inorganic materials:
	This activity is limited to receipt, holding and reusing inert construction and demolition as well as recovery of glass.
Class 11.	Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule:
	This activity is limited to use of inert construction and demolition waste to reclaim and restore the partially infilled areas of the site.

Class 12. Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule: This activity is limited to the exchange of waste for submission to recovery activities other than the temporary storage of waste. 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: This activity is limited to the storage of waste, prior to recovery.

INTERPRETATION

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

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

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.

BATNEEC Best Available Technology Not Entailing Excessive Cost as defined in

Section 5(2) of the Act.

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

waste

Biodegradable

Any waste that is capable of undergoing anaerobic or aerobic decomposition,

such as food, garden waste, sewage sludge, paper and paperboard.

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).

Construction and Demolition Waste All wastes which arise from construction, renovation and demolition

activities.

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 9.4.

Emission Limits Those limits, including concentration limits and deposition levels established

in Schedule C: Emission Limits 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 2000/532/EC and any subsequent amendment published in the Official Journal of the European

Community.

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

vegetation.

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, such as the removal and laying of daily cover. Different activities within the facility, such as the civic waste

facility, may have different hours of waste acceptance.

Hours of Waste Acceptance

The hours during which the facility is authorised to accept waste. Different activities within the facility, such as the civic waste facility, may have

different hours of waste acceptance.

Industrial Waste As defined in Section 5(1) of the Act.

Inert waste Waste that does not undergo any significant physical, chemical or biological

> transformations. Inert waste will not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm human health. The total leachability and pollutant content of the waste and the ecotoxicity of the leachate must be insignificant, and in particular not

endanger the quality of surface water and/or groundwater.

Landfill Directive Council Directive 1999/31/EC

Landfill Gas Gas generated from the landfilled waste.

Licence A Waste Licence issued in accordance with the Act.

Licensee Noble Waste Disposal Limited

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

tankered to the facility.

List I/II Organics Substances classified pursuant to EC Directives 76/464/EEC and 80/68/EEC.

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

and repair as may be necessary to adequately perform its function.

Mobile Plant Self-propelled machinery used for the emplacement of wastes or for the

construction of specified engineering works.

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

Municipal waste As defined in Section 5(1) of the Act.

Night-time 10.00 p.m. to 8.00 a.m.

Noise Sensitive Any dwelling house, hotel or hostel, health building, educational Location (NSL) 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.

Device installed according to the draft European Standard prEN 858 Oil Separator

(Installations for the consection of light liquids a good and natural)

(Installations for the separation of light liquids, e.g. oil and petrol).

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

Materials may be recycled

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 *Schedule C: Emission Limits* of this licence.

Specified Those engineering works listed in *Schedule B: Specified Engineering Works*

Engineering Works 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.

Wastewater Water from floor wash in transfer station(s) and vehicle wash as well as water

from canteen and toilets.

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.

White Goods Refrigerators, cookers, ovens and other similar appliances.

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 blue on Drawing No. B1.0 Ownership Plan of the application. Any reference in this licence to "facility" shall mean the area thus outlined in blue.
- 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 Only those waste categories and quantities listed in *Schedule A: Waste Acceptance* of this licence, shall be accepted at the facility.
- 1.5 No hazardous wastes (except machinery batteries) or liquid wastes shall be accepted at the facility.
- 1.6 Waste Acceptance Hours and Hours of Operation
 - 1.6.1 Waste shall only be accepted and transferred from the facility between the hours of 7:30 19:00 Monday to Saturday inclusive.
 - 1.6.2 The facility shall only be operated during the hours of 7:30 21:00 Monday to Saturday inclusive.
 - 1.6.3 Waste shall not be accepted at the facility on Bank Holidays.
- 1.7 The following shall constitute an incident for the purposes of this licence:
 - a) An emergency.
 - b) Any emission which does not comply with the requirements of this licence.
 - c) Any exceedance of the daily duty capacity of the waste handling equipment.
 - d) Any trigger level specified in this licence which is attained or exceeded.
 - e) Any indication that environmental pollution has, or may have, taken place.
- 1.8 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:
 - a) 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.
 - b) 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
 - c) 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.

- 1.9 Every plan, programme or proposal submitted to the Agency for its agreement pursuant to any Condition of this licence shall include a proposed timescale for its implementation. The Agency may modify or alter any such plan, programme or proposal in so far as it considers such modification or alteration to be necessary and shall notify the licensee in writing of any such modification or alteration. Every such plan, programme or proposal shall be carried out within the timescale fixed by the Agency but shall not be undertaken without the agreement of the Agency. Every such plan, programme or proposal agreed by the Agency shall be covered by the conditions of this licence.
- 1.10 The licence is being granted in substitution for the waste licence granted to the licensee on 22 December 1999 and bearing Register Number 53-1. The previous waste licence (Reg. No. 53-1) is replaced by this revised 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.
- 2.1.2 Both the facility manager and deputy, and any replacement manager or deputy, shall successfully complete both the FAS waste management training programme (or equivalent agreed with the Agency) and associated on site assessment appraisal within twelve months of appointment.
- 2.1.3 The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and experience, as required and shall be aware of the requirements of this licence.

2.2 Management Structure

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

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

2.3.2.1 Schedule of Environmental Objectives and Targets

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

2.3.2.2 Environmental Management Plan (EMP)

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

- Methods by which the objectives and targets will be achieved and the identification of those responsible for achieving those objectives and targets.
- b) 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 Awareness and Training Programme shall identify training needs, for personnel who work in or have responsibility for the licensed facility.

2.4 Communications Programme

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

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

CONDITION 3 FACILITY INFRASTRUCTURE

- 3.1 The licensee shall establish all infrastructure referred to in this licence 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.
- 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.
 - f) Where environmental information relating to the facility can be obtained.

3.4 Facility Security

- 3.4.1 Security and stockproof fencing and gates shall be maintained around the circumference of the facility so that the facility is adequately secured.
- 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.
 - b) A repair to the standard of the original gates and/or fencing shall be undertaken within three working days.
- 3.4.3 Closed Circuit Television (CCTV) shall be strategically located and maintained through out the site to monitor unauthorised entries and any fly tipping that may occur.
- 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 All waste processing/storage areas, the truck washing area and the fuel storage area shall be impermeable hardstand. 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 a 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 separate 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 the waste inspection area shall be directed to the proposed wastewater treatment system.
 - 3.7.4 Within five months of the date of grant of this licence, the waste quarantine area shall be secured, bunded and surfaced to deal with spillages.
- 3.8 Weighbridge and Wheel Cleaning
 - 3.8.1 The licensee shall provide and maintain two weighbridges and a wheelwash 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 *inter alia* waste loading vehicles and ejector trailers) 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 Within three months from the date of grant of this licence, the licensee shall provide a report for the agreement of the Agency detailing the duty and standby capacity in tonnes per day, of all waste handling and processing equipment to be used at the facility. These capacities shall be based on the licensed waste intake, as per *Schedule A: Waste Acceptance* of this licence.
 - 3.9.3 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 Tank and Drum Storage Areas
 - 3.10.1 All tank and drum storage areas shall be rendered impervious to the materials stored therein.
 - 3.10.2 All tank and drum storage areas shall, as a minimum, be bunded, either locally or remotely, to a volume not less than the greater of the following:
 - a) 110% of the capacity of the largest tank or drum within the bunded area; or
 - b) 25% of the total volume of substance which could be stored within the bunded area.

- 3.10.3 All drainage from bunded areas shall be diverted for collection and safe disposal.
- 3.10.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.10.5 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 within three months of the date of grant of this licence.

This confirmation shall be repeated at least once every three years thereafter and reported to the Agency on each occasion.

- 3.11 Surface Water Management and Drainage Arrangement
 - 3.11.1 Effective surface water management infrastructure shall be provided and maintained at the facility during construction, operation, restoration and aftercare of the facility. As a minimum, the infrastructure shall be capable of the following:-
 - The prevention of contaminated water and leachate discharges into surface water drains and courses.
 - b) The collection/diversion of run off arising from capped and restored areas.
 - 3.11.2 The drainage arrangement for surface water run-off and wastewater shall be installed and maintained at the facility as follows:
 - 3.11.2.1 Uncontaminated surface water run-off shall pass through silt traps and oil interceptors prior to discharge to soakways.
 - 3.11.2.2 Contaminated surface water run-off and vehicle wash and floor wash wastewater shall pass through silt traps and oil interceptors prior to discharge to the new proposed wastewater treatment system.
 - 3.11.2.3 The interceptors shall be a Class I interceptor and the silt traps and interceptors shall be in accordance with European Standard prEN 858 (installations for the separation of light liquids).
 - 3.11.2.4 Toilet and canteen wastewater shall be discharged to the existing wastewater treatment system connected to a new percolation area.
 - 3.11.3 The licensee shall provide and maintain the existing and proposed Wastewater Treatment Systems at the facility for the treatment of wastewater and contaminated surface water runoff from the site. The percolation areas associated with the two treatment systems shall satisfy the criteria set out in the Wastewater Treatment Manual, Treatment Systems for Single Houses, published by the Environmental Protection Agency.
 - 3.11.4 The licensee shall submit a revised drawing to the Agency within three months of the date of grant of this licence, indicating all drainage arrangement at the site as detailed in this licence.
 - 3.11.5 Within three months from the date of grant of this licence, all foul sewer gullies, drainage grids and manhole covers shall be painted with red squares whilst 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 during facility operation, and any identification designated in this licence (e.g. SW1) shall be inscribed on these manholes.
 - 3.11.6 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. A written record shall be kept of the inspections, desludging, cleaning, disposal of associated waste products, maintenance and performance of the interceptors, bunds and drains.

3.11.7 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 and shall be reported to the Agency following their installation and prior to their use. 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.

3.12 Landfill Gas Management

3.12.1 All buildings constructed on the facility shall have regard to the guidance given in the Department of Environment 1994 publication "Protection of New Buildings and Occupants from Landfill Gas" and any subsequent revisions.

3.13 Groundwater Management

- 3.13.1 Effective groundwater management infrastructure shall be provided and maintained at the facility during construction, operation, restoration and aftercare of the facility. As a minimum, the infrastructure shall be capable of the following:
 - a) The protection of the groundwater resources from pollution by the waste activities.
- 3.14 Construction and Demolition Waste Recovery Area.
 - 3.14.1 The construction and demolition waste recovery area shall be as specified in Drawing No. B7498-CO10-B *Civil Existing Operations Layout*, unless otherwise agreed with the Agency.
 - 3.14.2 This infrastructure shall at a minimum comprise the following:
 - a) An impermeable concrete slab.
 - b) Collection and disposal infrastructure for all run-off.
 - c) All stockpiles shall be adequately contained to minimise dust generation.
 - d) Within two months of the date of grant of this licence, the licensee shall review the measures in place to minimise dust generation at this facility and shall provide a report to the Agency for its agreement, making recommendations on the necessity of installing a sprinkling irrigation system for the control of dust nuisance from the facility. Any remedial works recommended in this report must be implemented within a time-scale to be agreed with the Agency.

3.15 Civic Waste Facility

- 3.15.1 The Civic Waste Facility shall be located as shown in Drawing No. B7498-CO12-C *Civil Site Layout Plan with Drainage*, unless otherwise agreed with the Agency.
- 3.15.2 The licensee shall submit to the Agency for its agreement a proposal detailing the layout and design of the Civic Waste Facility prior to commencement of waste activities at the Civic Waste Facility.

3.16 Compost facility

- 3.16.1 Appropriate infrastructure for the composting of waste shall be established and maintained at the facility prior to any waste being composted. This infrastructure shall at a minimum comprise the following:
 - 3.16.1.1 Trial Biodegradable Waste Composting
 - a) The licensee shall install and maintain an enclosed trial biodegradable waste composting unit and biofilter and associated infrastructure at the

- location shown on Drawing No. B7498-CO12-C *Civil Site Layout Plan with Drainage*, unless otherwise agreed with the Agency.
- b) All leachate generated from this activity shall be collected in a sump and recirculated through the composting unit.
- c) Emissions from the biofilter shall not exceed those ELV's as set out in *Schedule C: Emission Limits* of this licence.

3.17 Monitoring Infrastructure

3.17.1 Landfill Gas

- 3.17.1.1 Within three months of the date of grant of this licence, the licensee shall install five additional landfill gas monitoring boreholes located at the western and southern perimeter boundary of the facility, at locations to be agreed with the Agency.
- 3.17.1.2 Within three months of the date of grant of this licence, all boreholes monitored for landfill gas shall be fitted with gas sampling valves.
- 3.17.1.3 Within three months of the date of grant of this licence or at the time of construction, an effective permanent gas monitoring system shall be installed and maintained in all the existing and proposed enclosed structures on site.

3.17.2 Dust Monitoring

3.17.2.1 The licensee shall relocate the dust monitoring points DS-01, DS-03 and DS-04 to the proposed locations shown on Drawing J.1.0 Rev. B *Monitoring locations*.

3.17.3 Leachate Monitoring

3.17.3.1 Within three months from the date of grant of this licence, the licensee shall install an additional borehole to allow for the sampling and analyses of leachate from former landfill areas. The borehole shall be located downgradient of the existing leachate boreholes.

3.17.4 Trial Composting Monitoring

3.17.4.1 Prior to the commencement of waste activities at the trial composting unit the licensee shall provide a monitoring point.

3.17.5 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 The licensee shall restore the landfill on a phased basis. A Restoration and Aftercare Plan for the landfill shall be submitted to the Agency within six months of the date of grant of this licence which, inter alia, provides for the following:

- a) A landscaping proposal designed to blend the facility with the natural landscape of the area and which provides adequate aftercare for plants.
- b) A restoration plan of the facility based on the requirements of this licence.
- c) A timescaled phasing plan for the adjustment of the landfill side slopes and overall waste profiling and the placement of the final capping/restoration layer.
- 4.2 Examination of the extent of contaminated soil
 - 4.2.1 The licensee shall within six months of the date of grant of this licence submit a report to the Agency on the extent of hydrocarbon contamination around monitoring borehole BH-04. Any contaminated soil must be excavated to a depth agreed in advance by the Agency and removed from the site. The contaminated soils must be disposed of at an appropriate facility. The excavation must be infilled with appropriate inert material. The disposal facility and the inert material must be agreed in advance with the Agency.
- 4.3 The final profile of the facility shall be as shown in Drawing No. G. 1.0 Rev. B *Finished Restoration Profile incl. Building and Hardstanding*.
- 4.4 Capping.
 - 4.4.1 Within four months of the date of grant of this licence, the licensee shall submit a report on the extent of capping and landfilling at the site. This report shall include details on (i) waste types previously landfilled at the site, (ii) the areas landfilled, (iii) the areas that have been restored, (iv) the type of capping employed, (v) the condition of the restored areas and (vi) recommendations on final capping to be installed. Any recommendations arising from this report and a timetable for implementation shall be agreed with the Agency and implemented.
 - 4.4.2 Unless otherwise agreed with the Agency, final capping shall consist of the following:
 - a) Top soil (150 -300mm);
 - b) Subsoils, such that total thickness of top soil and subsoils is at least 1m;
 - c) Drainage layer of 0.5m thickness having a minimum hydraulic conductivity of 1x10⁻¹ m/s;
 - d) Compacted mineral layer of a minimum 0.6m thickness with a permeability of less than $1x10^{-9}$ m/s or a geosynthetic material (e.g. GCL) or similar that provides equivalent protection; and
 - e) Gas collection layer of natural material (minimum 0.3m) or a geosynthetic layer.
- 4.5 No material or object that is incompatible with the proposed restoration of the facility shall be present within one metre of the final soil surface levels.
- 4.6 Completed areas of the landfill shall be profiled so that no depressions exist in which water may accumulate. Any depressions arising after profiling shall be rectified by the emplacement of suitable capping or restoration materials.
- 4.7 Where tree planting is to be carried out above waste-filled areas, a synthetic barrier shall be used to augment the clay cap.
- 4.8 The restoration of the landfill facility shall be completed within three years of the date of grant of this licence.
- 4.9 Soil Storage.
 - 4.9.1 All soils shall be stored so as to preserve the soil structure for future use.

REASON: To provide for the restoration of the facility.

CONDITION 5 FACILITY OPERATIONS

- 5.1 All waste processing shall be carried out inside either the existing or the proposed waste transfer buildings, excluding (i) the trial composting of biodegradable waste and green waste, (ii) wood chipping and (iii) processing of C&D waste and non-putrescible commercial/industrial waste.
 - 5.1.1 The processing of C&D waste and non-putrescible commercial/industrial waste shall be processed indoors within 2 years of the date of this licence or when the proposed transfer station phase II has been constructed whichever is the earlier, unless otherwise agreed with the Agency.
- 5.2 Waste Acceptance and Characterisation Procedures
 - 5.2.1 Within six months of the date of grant of this licence, the licensee shall update the written procedures for the acceptance and handling of wastes to include all existing and proposed waste activities at the facility.
 - 5.2.2 Waste arriving at the facility shall be inspected at the point of entry to the facility and subject to this inspection, weighed, documented and directed to either the Waste Transfer Building or the designated waste inspection area at the tipping ramp of the construction and demolition recovery area. Each load of waste arriving at the Waste Transfer Building or tipping ramp shall be inspected upon tipping. Only after such inspections shall the waste be processed for disposal or recovery.
 - 5.2.3 Any waste deemed unsuitable for processing at the facility and/or in contravention of this licence shall be immediately separated and removed from the facility at the earliest possible time. Temporary storage of such wastes shall be in a designated Waste Quarantine Area. Waste shall be stored under appropriate conditions in the quarantine area to avoid putrefaction, odour generation, the attraction of vermin and any other nuisance or objectionable condition.
 - 5.2.4 A record of all inspections of incoming waste loads shall be maintained.
 - 5.2.5 Other than waste accepted at the civic waste facility, waste shall only be accepted from known customers or new customers subject to initial waste profiling and waste characterisation off-site. The written records of this off-site waste profiling and characterisation shall be retained by the licensee for all active customers and for a two year period following termination of licensee/customer agreements. There shall be no casual public access to the facility.

5.3 Operational Controls

- 5.3.1 The floor of the waste transfer building shall be washed down and cleared of all waste at the end of the working day. The floor of the storage bays for recovered wastes shall be washed down and cleaned on each occasion such bays are emptied.
- 5.3.2 Unless agreed in advance by the Agency, no waste shall be placed, or allowed to accumulate outside other than glass, wood and construction and demolition waste stored in designated waste storage areas and baled cardboard stored in fully enclosed trailers/containers pending removal from the site.
 - 5.3.2.1 Recyclable waste shall not be stored in stockpiles for periods greater than two months unless agreed in advance by the Agency.
- 5.3.3 The Shredder at the construction and demolition recovery area shall not be operated when wind speeds exceed 14m/sec (Force 7).
- 5.3.4 Wastes once deposited and covered shall not be excavated, disturbed or otherwise picked over unless with the prior agreement from the Agency.
- 5.3.5 Scavenging shall not be permitted at the facility.

- 5.3.6 Gates shall be locked shut when the facility is unsupervised.
- 5.3.7 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
- 5.3.8 Fuels shall only be stored at appropriately bunded locations on the facility.
- 5.3.9 All tanks and drums shall be labelled to clearly indicate their contents.
- 5.3.10 No smoking shall be allowed on the facility (other than in the offices as shown on Drawing No. B7498-CO10-B *Civil Existing Operations Layout*).

5.4 Waste Handling

5.4.1 Compost

- 5.4.1.1 The trial composting unit shall not process greater than 2000 tonnes of biodegradable and green waste per annum. Written records of the quantities and type of wastes composted must be maintained. Following completion of the composting trial the licensee shall submit to the Agency for review a report on the outcome of the trial. The report shall include as a minimum the scope of the trial, location, throughput, and the composting system employed.
- 5.4.1.2 Compost produced by the facility shall be analysed in accordance with the requirements of Schedule F: Standards for Compost Quality of this licence.
- 5.4.1.3 All contaminated surface water run-off from composting operations shall drain to the wastewater treatment system.

5.4.2 Wood

- 5.4.2.1 A wood chipper shall be installed at a location on the western boundary to be agreed with the Agency.
- 5.4.2.2 Prior to the use of the wood chipper the licensee shall:
 - a) Submit a programme to the Agency for its agreement for assessment of noise and dust emissions associated with the operation of a wood chipper on site, including a report with recommendation on the hours of operation of the wood chipper and appropriate noise and dust abatement control measures if required.
 - b) Implement necessary noise and dust control measures prior to the installation of the wood chipper on site.

5.4.3 Inert Waste

5.4.3.1 Only inert waste specified for restoration use in *Schedule A: Waste Acceptance*, *Table A.2 Waste for restoration on site*, of this licence, shall be used for the restoration of the on site landfill at the facility.

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 carrier agreed in advance with the Agency. Any request for such agreement of a waste carrier shall include the following;
 - (i) Copies of the waste carrier's permit(s) under the Waste Management (Collection Permit) Regulations 2001.

- (ii) Details of the waste types it is proposed the carrier will transfer from the facility.
- 5.5.2 All waste transferred from the facility for either recovery or disposal shall only be transferred to an appropriate facility agreed in advance with the Agency. Any request for agreement of such a facility shall include the following;
 - (i) In the case of a facility with a waste permit, a copy of the waste permit. In the case of a facility with a waste licence the waste licence reference number.
 - (ii) Details of the waste types it is proposed to transfer off site.
 - (iii) Details of agreements between the licensee and the facility including any limitations on waste types and quantities acceptable at the facility due to permit/licence conditions or otherwise.
- 5.5.3 All wastes removed off-site for recovery or disposal shall be transported directly from the facility to the facility agreed under Condition 5.5.2 in a manner which will not adversely affect the environment.
- 5.5.4 Requests for Agency agreement for the use of new waste facilities under this condition shall be forwarded to the Agency at least one month in advance of the intended use.

5.6 Civic Waste Facility

- 5.6.1 The Civic Waste Facility shall only be used by private vehicles. The facility shall not be used as a transfer station for disposal of waste by commercial waste disposal contractors or local authority waste collection vehicles.
- 5.6.2 Prior to commencement of waste activities at the civic waste facility, the licensee shall submit to the Agency for its agreement a proposal detailing the waste acceptance procedures and the types of waste proposed to be accepted at this facility.
- 5.7 Construction and Demolition Waste Recovery Area
 - 5.7.1 Construction and Demolition waste and non-putrescible commercial/industrial waste shall be accepted at this Area. Wastes which are capable of being recovered shall be separated and shall be stored temporarily in this area prior to being subjected to other recovery activities at the facility or transport off the facility.
 - 5.7.2 All stockpiles shall be maintained so as to minimise dust generation.

5.8 Maintenance

- 5.8.1 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.
- 5.8.2 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.
- 5.8.3 The wheel-wash shall be inspected on a daily basis and drained as required. Silt, stones and other accumulated material shall be removed as required from the wheel-wash and disposed of appropriately.
- 5.8.4 The licensee shall maintain all the compactor(s) and shredder(s) 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 Landfill Gas:
 - 6.3.1 The following are the trigger levels for landfill gas emissions from the facility measured in any service duct or manhole on, at or immediately adjacent to the facility and/or at any other point located outside the body of the waste:
 - a) Methane, greater than or equal to 1.0% v/v; or
 - b) Carbon dioxide, greater than or equal to 1.5% v/v.
- 6.4 Emissions to Groundwater.
 - 6.4.1 There shall be no direct emissions to groundwater.
- 6.5 Emissions to Surface Water
 - 6.5.1 No leachate, wastewater or contaminated surface water shall be discharged to the Glenmunder River.
 - 6.5.2 No substance shall be discharged in a manner, or at a concentration which, following initial dilution causes tainting of fish or shellfish.
- 6.6 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 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. The measures outlined in Attachment F.7 of the application shall be adopted.
- 7.3 Litter Control
 - 7.3.1 The measures and infrastructure as described in Attachment F.5 *Litter Control* of the application shall be applied to control litter at the facility.
 - 7.3.2 Litter fencing shall be maintained around the perimeter of the construction and demolition waste recovery area.
 - 7.3.3 All litter control infrastructure shall be inspected on a daily basis. The licensee shall remedy any defect in the litter netting 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 netting shall be undertaken within three working days.
- 7.3.4 All loose litter or other waste, placed on or in the vicinity of the facility, other than in accordance with the requirements of this licences, shall be removed, subject to the agreement of the landowners, immediately and in any event by 10.00 a.m. of the next working day after such waste is discovered.
- 7.3.5 The licensee shall ensure that all vehicles delivering waste to and removing waste and materials from the facility are appropriately covered.

7.4 Dust/Odour Control

- 7.4.1 All putrescible waste for disposal stored overnight at the facility, shall be stored in suitably covered and enclosed containers and shall be removed from the facility within forty-eight hours of its arrival at the facility except at Bank Holiday weekends. At Bank Holiday weekends, waste shall be removed from site within seventy-two hours of its arrival on site.
- 7.4.2 In dry weather, site roads and any other areas used by vehicles shall be sprayed with water as and when required to minimise airborne dust nuisance.
- 7.4.3 Within three months of the date of grant of this licence, 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:
 - 7.4.3.1 All doors in the waste transfer building shall be kept closed where possible.
 - 7.4.3.2 Installation of an odour management system.
 - 7.4.3.3 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.
- 7.4.4 An evaluation of the dust control measures implemented shall be completed and submitted as part of the AER
- 7.5 Prior to exiting the facility, all waste vehicles shall use the wheelwash.

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 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.
- 8.6 Within one month of the date of grant of this licence, 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.
- 8.7 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. Prior written agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.

8.8 Landfill Gas Monitoring

8.8.1 All landfill gas monitoring equipment, other than permanent monitoring systems within buildings, shall be certified as intrinsically safe.

8.9 Topographical Survey

8.9.1 A topographical survey of the landfilled areas shall be carried out within six months of the date of grant of this licence. The survey shall be repeated one month after the completion of the final capping layer. The survey shall be in accordance with any written instructions issued by the Agency.

8.10 Biological Assessment

8.10.1 A biological assessment of Glenmunder river shall be undertaken within six months of the date of grant of this licence and every two years thereafter until the site is fully restored and all construction and restoration work that can impact on the river has ceased. This assessment shall use appropriate biological methods such as the EPA Q-rating system for the assessment of rivers and streams. The location of monitoring points shall be agreed with the Agency.

8.11 Stability Assessment

- 8.11.1 Within six months of the date of grant of this licence, the licensee shall carry out a stability assessment of the side slopes of the facility.
- 8.12 Nuisance Monitoring
 - 8.12.1 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 within three months of the date of grant of this licence, submit an updated 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 The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the facility. Once used the absorbent material shall be disposed of at an appropriate facility.
- 9.4 Emergencies
 - 9.4.1 In the event of a complete breakdown of equipment or any other occurrence which results in the closure of the transfer station building, any waste arriving at or already collected at the facility shall be transferred directly to appropriate landfill sites or any other appropriate facility until such time as the transfer station building is returned to a fully operational status. Such a breakdown event will be treated as an emergency and rectified as soon as possible.
 - 9.4.2 All significant spillages occurring at the facility shall be treated as an emergency and immediately cleaned up and dealt with so as to alleviate their effects.

- 9.4.3 No waste shall be burnt within the boundaries of the facility. A fire at the facility shall be treated as an emergency and immediate action shall be taken to extinguish it and notify the appropriate authorities.
- 9.4.4 In the event that the monitoring of the side slopes of the facility indicate that there may be a risk of slope failure this will be treated as an emergency.

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.
 - e) Application(s) for a licence.
 - f) All correspondence between the Agency and the licensee.
- 10.2 The licensee shall maintain a written record for each load of waste arriving at and departing from the facility, including processed construction and demolition waste departing from the facility and excluding waste arriving at the Civic Waste Facility. The licensee shall record the following:
 - a) The date.
 - b) The name of the carrier (including if appropriate, the waste carrier permit 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, including waste licence and waste permit register number of these facilities as appropriate.
 - j) Where applicable a consignment note number (including transfrontier shipment notification and movement/tracking form numbers, as appropriate).

10.3 Written Records

The following written records shall be maintained by the licensee:

- a) The types and quantities of waste recovered at the facility each year. These records shall include the relevant EWC Codes.
- b) All training undertaken by facility staff.
- c) Results from all integrity tests of bunds and other structures and any maintenance or remedial work arising from them.

- d) Details of all nuisance inspections.
- e) 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.
- 10.4 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.
 - e) The response made to each complainant.
- 10.5 A written record shall be kept for each load of waste departing from the Civic Waste Facility. The following shall be recorded:
 - a) The name of the carrier.
 - b) The vehicle registration number.
 - c) The destination of the waste (facility name and waste licence/permit number as appropriate).
 - d) A description of the waste (if recovered or rejected waste, the specific nature of the waste).
 - e) The quantity of waste, recorded in tonnes.
 - f) The name of the person checking the load.
 - g) The time and date of departure.
- 10.6 A written record shall be kept at the facility of the programme for the control and eradication of vermin and fly infestations at the facility. These records shall include as a minimum the following:
 - a) The date and time during which spraying of insecticide is carried out.
 - b) Contractor details.
 - c) Contractor logs and site inspection reports.
 - d) Details of the rodenticide(s) and insecticide(s) used.
 - e) Operator training details.
 - f) Details of any infestations.
 - g) Mode, frequency, location and quantity of application.
 - h) Measures to contain sprays within the facility boundary.

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 headquarters.
 - b) Comprise one original and three copies unless additional copies are required.
 - 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) Is submitted in accordance to 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.
 - h) Be transferred electronically to the Agency's computer system if required by the Agency.
- 11.2 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 a.m. 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, which affects the interests of the local authority the license shall notify the Eastern Regional Fisheries Board and/or Wicklow County Council as soon as practicable and in any case not later than 10.00 a.m. on the following working day after such an incident.
 - 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.

11.3 Waste Recovery Reports

Within nine months of the date of grant of this licence, a report examining waste recovery options shall be submitted to the Agency for its agreement. This report shall address methods to contribute to the achievement of the recovery targets stated in national and European Union waste policies and shall include the following:

- a) Proposals for the contribution of the facility to the achievement of targets for the reduction of biodegradable waste to landfill as specified in the Landfill Directive.
- b) The separation of recyclable materials from the waste.
- c) The recovery of Construction and Demolition Waste.
- d) The recovery of metal waste and white goods including written procedures for the degassing of CFC's from refrigerators.
- e) The recovery of commercial waste, including cardboard.

- f) Composting of biodegradable or green waste at the facility having regard to good practice and sustainability.
- g) Inert waste to be used for cover/restoration material at the facility.

11.4 Vermin and Flies

11.4.1 Within three months of the date of this licence, the licensee shall submit to the Agency for its agreement a proposal for the control and eradication of vermin and fly infestations at the facility. This proposal should include as a minimum, operator training, details on the rodenticide(s) and insecticide(s) to be used, mode and frequency of application and measures to contain sprays within the facility boundary.

11.5 Monitoring Locations

11.5.1 Within four months of the date of grant of this licence, the licensee shall submit to the Agency an updated appropriately scaled drawing(s) showing all the monitoring locations that are stipulated in this licence, including any noise sensitive locations to be monitored. The drawing(s) shall include the eight-digit national grid reference of each monitoring point.

11.6 Annual Environmental Report

- 11.6.1 The licensee shall submit to the Agency for its agreement, within one year, and one month after the end of each calendar year thereafter, an Annual Environmental Report (AER).
- 11.6.2 The AER shall include as a minimum the information specified in *Schedule G: Content of 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 €20,257.00 or such sum as the Agency from time to time determines, towards the cost of monitoring the activity or otherwise in performing any functions in relation to the activity, as the Agency considers necessary for the performance of its functions under the Waste Management Act, 1996. The licensee shall in 2004 and subsequent years, not later than January 31 of each year, pay to the Agency this amount updated in accordance with changes in the Public Sector Average Earnings Index from the date of the licence to the renewal date. The updated amount shall be notified to the licensee by the Agency. For 2003, the licensee shall pay a pro rata amount from the date of this licence to 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 Financial Provision for Closure, Restoration and Aftercare

12.2.1 The licensee shall submit a revised Environmental Liabilities Risk Assessment for the facility which will address liabilities arising from the carrying on of the activities to which this licence relates. A report on this assessment shall be submitted to the Agency for its agreement within six months of date of grant of this licence.

- 12.2.2 Within nine months of the date of grant of this licence, the licensee shall make a Proposal for Financial Provision to the Agency for its agreement to cover any liabilities incurred by the licensee in carrying on the activities to which this licence relates. Such provision shall be maintained by the licensee unless otherwise agreed by the Agency.
- 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:

 $Cost = (ECOST \times WPI) + CiCC$

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)
Household waste	25,000
Commercial waste	69,500
Construction and Demolition waste	35,000 Note 1
Hazardous waste (machinery batteries)	2
TOTAL	129,502

Note 1: The quantity of Construction and Demolition Waste may be increased for the purpose of restoration of the landfill, with the agreement of the Agency, providing the total tonnage of 129,502 tonnes of waste accepted per annum is not exceeded.

A.2 Acceptable Waste for Restoration on Site

Only the inert wastes in Table A.2 are acceptable for restoration on site, unless otherwise agreed with the Agency.

Table A.2 Waste for Restoration on Site.

DESCRIPTION	RESTRICTIONS Note 2
Stones and Soil	Note 1
Topsoil	Note 1
Brick	Note 1
Natural Sand	Note 1
Concrete	Note 1

Note 1: These wastes can be accepted for restoration on site provided:

- The waste is a pure, single stream from a single source.
- Waste listed in Table A.2 may be accepted together provided they are from the same source.
- In the case of suspicion of contamination (either from visual inspection or from knowledge of the origin of the
 waste) the waste should not be accepted for restoration purposes on site unless tested in advance.

Note 2: Waste acceptance criteria and limit values for pollutant content must comply with those listed in the *Commission Decision* establishing criteria and procedures for the acceptance of waste at landfills of December 19th, 2002, unless otherwise instructed by the Agency.

SCHEDULE B: Specified Engineering Works

Specified Engineering Works

New transfer building (Phases I and II)

Trial composting area

Civic Amenity Facility

Final capping

Restoration and aftercare works

Any other works notified in writing by the Agency

SCHEDULE C: Emission Limits

C.1 Noise Emissions: (Measured at any noise sensitive location).

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

C.2 Landfill Gas Concentration Limits: (Measured in any building on or adjacent to the facility).

Methane	Carbon Dioxide
20% LEL (1% v/v)	1.5% v/v

C.3 Dust Deposition Limits: (Measured at the monitoring points indicated in <u>Table D.1.1</u>).

Level (mg/m² /day) ^{Note 1}	
350	

Note 1: 30 day composite sample with the results expressed as mg/m²/day.

C.4 Emission Limit Values to Air from Biodegradable Waste Composting

Emission Point Reference numbers: emission point from the Biodegradable waste composting unit to be agreed with the Agency in advance.

Parameter	Emission Limit Value	
Ammonia	50 (ppm v/v)	
Amines	5 (ppm v/v)	
Hydrogen Sulphide & Mercaptans	5 (ppm v/v)	

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 shown on Drawing No. J.1.0 Rev. B *Monitoring Locations*.

Table D.1.1 Monitoring Locations

Landfill Gas within Waste and Boundary Locations	Dust Deposition Odour	Noise	Surface Water	Ground Water	Leachate	Trial Composting unit
Stations	Stations	Stations	Stations Note 1	Stations	Stations	
GS-01 GS-02 GS-05 GS-06 BH-5 BH-6 BH-7 L01 L02 Five additional boundary boreholes Note 2	DS1 DS2 DS3 DS4	N1 N2 N3 N4	SW-1 SW-2 SW-3 SW-4	BH-02 BH-5 BH-6 BH-7	L-01 L-02 One additional borehole Note 3	Note 5
Within all enclosed buildings on site.		Any noise sensitive locations.	Biological assessment monitoring locations Note 4			

Note 1: The surface water monitoring points are shown on Drawing No. J.1.0 *Monitoring Locations* Rev. A of the application.

Note 2: Five additional landfill gas boreholes as required by Condition 3.17.1.1.

Note 3: One additional leachate borehole as required by Condition 3.17.3.1.

Note 4: Biological assessment monitoring locations to be agreed in advance with the Agency as required by Condition 8.10.1.

Note 5: Monitoring point for the trial composting unit as per Condition 3.17.4.1

D.2 Landfill Gas

Table D.2.1 Landfill Gas Monitoring Parameters, Frequency and Technique

Parameter	Monitoring Frequency		Analysis Method ^{Note 1} /Technique ^{Note 2}
	Gas Boreholes/ Vents/Wells	Site Office	
Methane (CH ₄) % v/v	Monthly	Continuous	Infrared analyser/flame ionisation detector
Carbon dioxide (CO ₂)%v/v	Monthly	Continuous	Infrared analyser/ flame ionisation detector
Oxygen(O ₂) %v/v	Monthly	Continuous	Electrochemical cell
Atmospheric Pressure	Monthly	Continuous	Standard
Temperature	Monthly	Continuous	Standard

Note 1: All monitoring equipment used should be intrinsically safe.

Note 2: Or other methods agreed in advance with the Agency.

D.3 Dust

Table D.3.1 Dust Monitoring Frequency and Technique

Parameter (mg/m²/day)	Monitoring Frequency	Analysis Method/Technique
Dust	Three times a year Note 2	Standard Method Note 1

Note 1: Standard method VDI2119 (Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method)
German Engineering Institute). A modification (not included in the standard) which 2 methoxy ethanol may be employed to
eliminate interference due to algae growth in the gauge.

Note 2: Twice during the period May to September.

D.4 Noise

Table D.4.1 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.5 Surface Water, Groundwater and Leachate

Table D.5.1 Surface Water, Ground Water and Leachate Parameters and Frequency

Parameter Note 1	SURFACE WATER	GROUNDWATER	LEACHATE
	Monitoring Frequency	Monitoring Frequency	Monitoring Frequency
Visual Inspection/Odour Note 2	Weekly	Quarterly	Note 3
Groundwater Level	Not Applicable	Quarterly	Not Applicable
Leachate Level	Not Applicable	Not Applicable	Monthly
Ammoniacal Nitrogen	Quarterly	Quarterly	Note 3
BOD	Quarterly	Not Applicable	Note 3
COD	Quarterly	Not Applicable	Note 3
Chloride	Quarterly	Quarterly	Note 3
Dissolved Oxygen	Quarterly	Quarterly	Not Applicable
Electrical Conductivity	Quarterly	Quarterly	Note 3
рН	Quarterly	Quarterly	Note 3
Total Suspended Solids	Quarterly	Not Applicable	Not Applicable
Temperature	Quarterly	Quarterly	Note 3
Metals/non metals Note 4	Annually	Annually	Note 3
Cyanide (Total)	Not Applicable	Annually	Note 3
Fluoride	Not Applicable	Annually	Note 3
List I/II organic substances Note 5	Once off Note 6	Annually Note 6	Once off Note 6
Mercury	Annually	Annually	Note 3
Sulphate	Annually	Annually	Note 3
Total Alkalinity	Annually	Annually	Not Applicable
Total P/orthophosphate	Annually	Annually	Note 3
Total Oxidised Nitrogen	Annually	Annually	Note 3
Total Organic Carbon	Not Applicable	Quarterly	Not Applicable
Residue on evaporation	Not Applicable	Annually	Not Applicable
Nitrite	Quarterly	Not Applicable	Not Applicable
Phenols	Quarterly	Annually	Not Applicable
Faecal Coliforms	Not Applicable	Annually Note 7	Note 3
Total Coliforms	Not Applicable	Annually Note 7	Note 3
Biological Assessment Note 1: All the analysis shall be carried out l	Biennial Note 8	Not applicable	Not applicable

Note 1: All the analysis shall be carried out by a competent laboratory using standard and internationally accepted procedures.

Note 2: Where there is evident gross contamination of leachate, additional samples should be analysed.

Note 3: Once off for all indicated parameters and thereafter as required by the Agency.

Note 4: Metals and elements to be analysed by AA/ICP should include as a minimum, boron, cadmium, calcium, chromium (total), copper, iron, lead, magnesium, manganese, nickel, potassium, sodium and zinc.

Note 5: Samples screened for the presence of organic compounds using Gas Chromatography / Mass Spectrometry (GC/MS) or other appropriate techniques and using the list I/II Substances from EU Directive 76/464/EEC and 80/68/EEC as a guideline. Recommended analytical techniques include: volatiles (US Environmental Protection Agency method 524 or equivalent), semi-volatiles (US Environmental Protection Agency method 525 or equivalent, and pesticides (US Environmental Protection Agency method 608 or equivalent).

Note 6: Two surface water locations, three groundwater locations and two leachate locations to be agreed with the Agency for these parameters.

- Note 7: In the case where groundwater is used for drinking water, if there is evidence of bacterial contamination, the analysis at up gradient and downgradient monitoring points should include enumeration of total bacteria at 22°C and 37°C and faecal streptococci.
- Note 8: Appropriate biological methods (such as EPA Q-Rating System to be used for the assessment of rivers and streams).

D.6 Odour and Air monitoring for Biodegradable Waste Composting Unit

Emission Point Reference number: The emission point from the biodegradable waste composting unit shall be agreed with the Agency in advance.

Description of Treatment: Biofilter(s)

Monitoring at the biodegradable waste composting unit shall be as set out below:

Control Parameter	Monitoring Required Note 3	Monitoring Equipment	
Biofilter			
Odour Assessment	Daily	Note 4	
Inlet and Outlet Gas			
Ammonia	Annually	Colorimetric Indicator Tubes	
Hydrogen sulphide	Annually	Colorimetric Indicator Tubes	
Mercaptans	Annually	Colorimetric Indicator Tubes	
Bed Media			
Depth of biofilter	Weekly		
Condition Note 2	Weekly		
Moisture content	Annually	Standard laboratory method	
pН	Annually	pH probe	
Ammonia	Annually	Standard laboratory method	
Total viable counts	Annually	Standard laboratory method Note 1	

All measurements shall be made at peak bed loading.

- Note 1: Or an equivalent method acceptable to the Agency.
- Note 2: The biofilter shall be examined to ensure that no channelling is evident. Turning, restructuring and the addition of supplementary bed materials, or total bed replacement shall be carried out, as required, subject to bed performance.
- Note 3: Records shall be kept at the facility of all monitoring and visual checks
- Note 4: Odour monitoring (subjective) shall be carried out daily by the operator for the first three months of operation of biodegradable composting unit and thereafter as required by the Agency.

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	Within one year of 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	Three 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 Landfill Gas	Quarterly	Ten days after end of the quarter being reported on.
Monitoring of Surface Water Quality	Quarterly	Ten days after end of the quarter being reported on.
Monitoring of Groundwater Quality	Quarterly	Ten days after end of the quarter being reported on.
Monitoring of Leachate	Quarterly	Ten days after end of the quarter being reported on.
Dust Monitoring	Three times a year	Ten days after the period being reported on.
Noise Monitoring	Annually	One month after end of the year being reported on.
Topographical survey	As directed	Within six months of the date of grant of this licence. Repeated one month after completion of the final capping layer.
Biological Assessment	Biennial	Within six months of the date of grant of this licence. Every two years thereafter.
Stability assessment	Once off	Within six months of the date of grant of this licence.
Any other monitoring	As they occur	Within ten days of obtaining results.

Note 1: Unless altered at the request of the Agency

SCHEDULE F: Standards for Compost Quality

Compost shall be deemed unsatisfactory if more than 25% of samples fail the criteria below. No sample shall exceed 1.2 times the quality limit values set.

The following criteria are deemed a quality standard for the use of compost as a soil improver and should not be deemed as criteria for fertiliser. In addition N, P, K, NH₄-N, NO₃-N, pH and dry matter content should also be measured.

1. Maturity

The state of the curing pile must be conducive to aerobic biological activity.

Compost shall be deemed to be mature if it meets two of the following groups of requirements:

- 1. Respiration activity after four days AT_4 is $\leq 10 \text{mg/O}_2/\text{g}$ dry matter or Dynamic Respiration Index is $\leq 1,000 \text{mgO}_2/\text{kg}$ VS/h.
- 2. Germination of cress (*Lepidium sativum*) seeds and of radish (*Raphanus sativus*) seeds in compost must be greater than 90 percent of the germination rate of the control sample, and the growth rate of plants grown in a mixture of compost and soil must not differ more than 50 percent in comparison with the control sample.

- 3. Compost must be cured for at least 21 days; and Compost will not reheat upon standing to greater than 20°C above ambient temperature.
- 4. If no other determination of maturity is made, the compost must be cured for a six month period. In addition, offensive odours from the compost shall be minimal for the compost to be deemed mature.
- 5. Or other maturity tests as may be agreed with the Agency.

2. Trace Elements Note 1

Maximum Trace Element Concentration Limits $^{\text{Note 2}}$

	Compost Quality Standards Note 3		Stabilised
Parameter (mg/kg, dry mass)	Class 1	Class 2	Biowaste
Cadmium (Cd)	0.7	1.5	5
Chromium (Cr)	100	150	600
Copper (Cu)	100	150	600
Mercury (Hg)	0.5	1	5
Nickel (Ni)	50	75	150
Lead (Pb)	100	150	500
Zinc (Zn)	200	400	1500
PolyChlorintated Biphenyls (PCB's)	-	-	0.4
Polynuclear Aromatic Hydrocarbons (PAH's)	-	-	3
Impurities >2mm Note 4	<0.5%	<0.5%	<3%
Gravel and Stones >5mm Note 4	<5%	<5%	-

Note 1: These limits apply to the compost just after the composting phase and prior to mixing with any other materials.

3. Pathogens

Pathogenic organism content must not exceed the following limits:

Salmonella sp.	Absent in 50g	n=5
Faecal Coliforms	≤ 1000 Most Probable Number (MPN) in 1g	n=5

Where: n = Number of samples to be tested.

4. Monitoring

The licensee shall monitor the compost product at least bi-annually. The licensee shall submit to the Agency for its agreement, prior to commencement of the composting operations, details of the sampling protocol, methods of analyses and sample numbers.

Note 2: The above alone should not be taken as an indication of suitability for addition to soil as the cumulative metal additions to soil should be first calculated.

Note 3: Normalised to 30% organic matter content.

Note 4: Compost must not contain any sharp foreign matter measuring over a 2 mm dimension that may cause damage or injury to humans, animals and plants during or resulting from its intended use.

SCHEDULE G: Content of the Annual Environmental Report

Annual Environmental Report Content

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 (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).

Restoration of the landfill.

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.

Training of staff.

Any other items specified by the Agency.

Dust control measures evaluation report

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

Sealed by the seal of the Agency on this the 3rd day of April 2003.

PRESENT when the seal of the Agency was affixed hereto:

lain Maclean, Director/Authorised Person