This licence was amended on 15th January 2013 under Section 42B(1)(c) of the Waste Management Acts, 1996 to 2011. The details of Amendment A must be read in conjunction with this licence. The amendment document is entitled "Technical Amendment A"



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

WASTE LICENCE

Waste Licence 64 -1

Register Number:

Licensee: Leitrim County Council

Location of Facility: Carrick-on-Shannon Landfill, Ballynamoney,

Carrick-on-Shannon, Co. Leitrim.

Table of Contents

· ·	Page No.
REASONS FOR THE DECISION	1
PART I ACTIVITIES LICENSED	1
INTERPRETATION	2
PART II CONDITIONS	5
CONDITION 1SCOPE	5
CONDITION 2MANAGEMENT OF THE ACTIVITY	6
CONDITION 3NOTIFICATION AND RECORD KEEPING	7
CONDITION 4SITE INFRASTRUCTURE	9
CONDITION 5WASTE MANAGEMENT	12
CONDITION 6ENVIRONMENTAL NUISANCES	13
CONDITION 7EMISSIONS AND ENVIRONMENTAL IMPACTS	15
CONDITION 8RESTORATION AND AFTERCARE	16
CONDITION 9ENVIRONMENTAL MONITORING	16
CONDITION 10 CONTINGENCY ARRANGEMENTS	18
CONDITION 11 CHARGES AND FINANCIAL PROVISIONS	18
SCHEDULE A: Content of the Annual Environmental Report	20
SCHEDULE B: Recording and Reporting to the Agency	21
SCHEDULE C: Specified Engineering Works	22
SCHEDULE D: Monitoring	23
SCHEDULE E: Emission Limits	28
PART III ACTIVITIES REFUSED	29
REASONS FOR THE DECISION	29

Reasons for the Decision

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

In reaching this decision the Agency has considered the application and supporting documentation received from the applicant, all submissions and objections received from other parties 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 40(1) of the said Act hereby grants this Waste Licence to Leitrim County Council to carry on the waste activities listed below at Ballynamoney, Carrick-on-Shannon, Co. Leitrim, subject to eleven conditions, with the reasons therefor and the associated schedules attached thereto set out in the licence.

Licensed waste recovery activities, in accordance with the Fourth Schedule of the Waste Management Act, 1996

Class 4: Recycling or reclamation of other inorganic materials.

This activity is limited to the recovery of inert Construction and Demolition waste for use as on-site cover and capping material.

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 inert fill for use as on-site cover and capping material and the provision of a Civic Waste Facility.

INTERPRETATION

Act The Waste Management Act, 1996 (No. 10 of 1996).

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

Adequate lighting 20 lux measured at ground level.

Agreement Agreement in writing.

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, including any other

material submitted to the Agency in writing by the licensee between the date

of the application and the date of grant of this licence.

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

technically suitable.

Biodegradable

waste

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

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

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

Condition A condition of this licence. In any case where this licence refers to a

numbered condition, the reference shall be taken to mean the condition and any sub-condition therein which the context of the reference requires that

reference is made to.

Containment boom A boom which can contain spillages and prevent these from entering drains

or watercourses.

Cover material Bricks, crushed concrete, tarmac, earth, soil, sub-soil, stone, rock or other

similar natural materials; or

other cover material the use of which has been agreed with the Agency.

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.

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

Emission Limit

Value

Those limits, including concentration limits and deposition levels established

in Schedule E.

Environmental

Pollution

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

European Waste Catalogue (EWC)

The EWC is 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.

Facility That area or areas defined under Condition 1.2

Green waste Waste wood, plant matter and other vegetation.

Hazardous Waste As defined in Section 4 (2) of the Act.

Household 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.

Incident Any reference to an incident in this licence means an incident as defined in

Condition 3.1.

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

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

Landfill Gas Gases generated from the landfilled waste.

Leachate Any liquid percolating through the deposited waste and emitted from or

contained within a landfill as defined in Section 5 (1) of the Act.

LEL (Lower Explosive Limit)

The lowest percentage concentration by volume of a mixture of flammable gas with air which will propagate a flame at 25°C and atmospheric pressure.

Licence A Waste Licence issued in accordance with the Act.

Licensee Leitrim County Council

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

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

Maintain Keep in a fit state, including such regular inspection, servicing 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 At least 12 times per year, at approximately monthly intervals.

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

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

Non-hazardous Waste is any waste which is not a hazardous waste as defined

in the Act. waste

Quarterly A period of three calendar months.

Recovery As defined in Section 4 (4) of the Act.

The accumulation of solids resulting from chemical coagulation, flocculation Sludge

and/or sedimentation after water or wastewater treatment with between 2%

and 14% dry matter.

Specified Emissions Those emissions listed in Schedule E: Emission Limits of this licence.

Specified Engineering Works

Those engineering works listed in Schedule C: Specified Engineering Works

of this licence.

Submit Unless the context of this licence indicates otherwise, submit in writing to the

Agency for its agreement.

Treated Sludge Sludge which has undergone biological, chemical or heat treatment, long-

term storage or any other appropriate process so as significantly to reduce its

fermentability and the health hazards resulting from its use.

A parameter value which when achieved or exceeded requires certain actions **Trigger Level**

to be taken.

Waste As defined in Section 4(1) of the Act.

Waste acceptance

area

Includes the active tipping face, Civic Waste Facility any areas designated for

waste inspection or waste storage.

Waste disposal

activity

Includes the activities referred to in Section 4 of the Act and listed in the

Third Schedule thereto.

Waste recovery

activity

Includes the activities referred to in Section 4 of the Act and listed in the

Fourth Schedule thereto.

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

Working Day 8.00 a.m. to 5.30 p.m. Monday to Friday and 8.00 a.m. to 1.30 p.m. on

Saturday.

Working Face The area of the site in which waste other than cover material or material for

the purposes of the construction of specified engineering works is being

deposited.

Part II CONDITIONS

CONDITION 1 SCOPE

- 1.1 Waste activities at the facility shall be restricted to those listed and described in Part 1 *Activities Licensed* and required by the licence.
- 1.2 Waste activities shall be restricted to the area of land outlined in red on Drawing No. 2101026 (B2.1) of the application. Any reference in this licence to "facility" shall mean the area thus outlined in red.
- 1.3 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. Every 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.
- 1.4 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.
- 1.5 Where the Agency considers that a non-compliance with the Conditions 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;
 - 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 confirmation is received from the Agency that the notice is withdrawn.

Reason: To clarify the scope of this licence.

CONDITION 2 MANAGEMENT OF THE ACTIVITY

2.1 Environmental Management System

- 2.1.1 The licensee shall within twelve months from the date of grant of this licence, submit to the Agency for its agreement a proposal for a documented Environmental Management System (EMS) for the restoration and aftercare of 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.
- 2.1.2 The EMS shall include as a minimum the following elements:
 - a) Environmental Management Programme;
 - b) Corrective Action, to ensure that corrective action is taken should specified requirements to this licence not be fulfilled;
 - c) Awareness and Training, for identifying training needs and for providing appropriate training for personnel whose work is related to the licensed facility. Written records of training shall be maintained.

2.2 Management Structure

- 2.2.1 Within one month from the date of grant of this licence, the licensee shall submit written details of the management structure of the facility for the agreement of the Agency. Any proposed changes in the management structure shall be submitted in writing to the Agency for its agreement.
- 2.2.2 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 suitably qualified and experienced deputy, shall be present at all times during the operation of the facility.

2.3 Communications

2.3.1 Within three months from the date of grant of this licence, the licensee shall submit to the Agency for its agreement a Communications Programme to ensure that members of the public can obtain information concerning the environmental performance of the facility at all reasonable times.

2.4 Annual Environmental Report

- 2.4.1 The licensee shall submit to the Agency for its agreement, within thirteen months from the date of grant of this licence, and within one month of the end of each year thereafter, an Annual Environmental Report (AER).
- 2.4.2 The AER shall include as a minimum the information specified in Schedule A: Content of Annual Environmental Report and shall be prepared in accordance with any relevant written guidance issued by the Agency.
- 2.5 The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and/or experience, as required and shall be aware of the requirements of this licence.

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

CONDITION 3 NOTIFICATION AND RECORD KEEPING

- 3.1 The licensee shall make written records of the following incidents:
 - a) any nuisance caused by the activity
 - b) any emission which does not comply with the requirements of this licence;
 - 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; and
 - e) any emergency.
- 3.2 The written record shall include all aspects described in Condition 10.6(a-e).
- 3.3 Unless otherwise instructed in writing by the Agency, 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 the written record required by this condition to the Agency as soon as practicable and in any case within five working days after the occurrence of any incident; and
 - c) in the event of any incident which relates to discharges to surface water, notify the Shannon Regional Fisheries Board as soon as practicable and in any case not later than 10.00 am on the following working day after such an incident.
- 3.4 Should any further actions be taken after the date of written notification, 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.
- 3.5 Unless otherwise agreed by the Agency, all documentation submitted to the Agency shall:
 - a) be sent to the Agency's headquarters;
 - 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;
 - be submitted in accordance with the relevant reporting frequencies specified by this licence; and
 - g) in the case of results of any environmental monitoring, be accompanied by a written interpretation setting out their significance.
- 3.6 Copies of all environmental monitoring data obtained by the licensee which relates to the facility shall be forwarded to the Agency at the frequencies set out in Schedule B: Recording and Reporting to the Agency of this licence.

- 3.7 Unless otherwise agreed with the Agency, all documentation and records required to be made under this licence, shall be retained by the licensee.
- 3.8 The licensee shall provide additional copies of any documentation and records referred to in this licence to the Agency upon written request, within the time specified in writing by the Agency.
- 3.9 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.
- 3.10 The licensee shall maintain a written record for each load of waste arriving at the facility. The licensee shall record the following:
 - a) the name of the carrier;
 - b) the vehicle registration number;
 - c) the source of the waste;
 - d) the quantity of the waste, recorded in tonnes (estimated, in the absence of a weighbridge);
 - e) the name of the person checking the load; and,
 - f) 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.
- 3.11 The licensee shall maintain a written record of the type and quantity, recorded in tonnes, of all wastes recovered or used for restoration at the facility.
- 3.12 A written record shall be kept of each consignment of leachate removed from the facility. The record shall include the following:
 - a) the name of the carrier;
 - b) the date and time of removal of leachate from the facility;
 - c) the volume of leachate, in cubic metres, removed from the facility on each occasion;
 - d) the name and address of the Waste Water Treatment Plant to which the leachate was transported;
 - e) any incidents or spillages of leachate during its removal or transportation.
- 3.13 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.

Reason: To provide for the notification of incidents, to update information on the activity and to provide for the keeping of records.

CONDITION 4 SITE INFRASTRUCTURE

4.1 The licensee shall establish all infrastructure referred to in this licence or as instructed by the Agency.

4.2. Site Notice Board

- 4.2.1 The licensee shall provide and maintain a Site Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the identification board shall be 1200 mm by 750 mm.
- 4.2.2 The board shall clearly show:
 - a) the name and telephone number of the facility;
 - b) the normal hours of opening;
 - c) the name, address and telephone number of the licence holder;
 - d) an emergency out of hours contact telephone number;
 - e) the name, address and telephone number of the operator of the facility;
 - f) the licence reference number;
 - g) where and when environmental monitoring information relating to the facility can be obtained.

4.3 Site Security

- 4.3.1 Within six months of the date of grant of the licence the licensee shall install security and stockproof fencing and gates around the facility. In addition the licensee shall install security fencing and gates between the road works depot as indicated on Drawing No. 601 Rev. A (July 2000) and the waste acceptance area(s). The base of the fencing shall be set in the ground.
- 4.3.2 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 or as otherwise agreed with the Agency.
- 4.3.3 Gates to the waste acceptance area(s) shall only be opened when the facility is supervised.
- 4.4 Within one month of the date of grant of the licence the licensee shall maintain an office on the facility, at the location to be agreed in advance with the Agency. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation.
- 4.5 The licensee shall put in place measures which ensure that the facility manager or a suitably qualified and experienced deputy shall be contactable at all times during the operation of the facility.
- 4.6 Inspection
 - 4.6.1 The licensee shall provide and maintain a Waste Quarantine Area at the facility.

- 4.6.2 Drainage from this area shall be directed to the leachate collection network.
- 4.7 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
- 4.8 Waste Water
 - 4.8.1 Any septic tank and percolation area from toilet facilities on the facility shall satisfy the criteria set out in SR6 Septic Tank Systems (NSAI 1991).

4.9 Storage Areas

- 4.9.1 All tank and drum storage areas within the facility boundary shall be rendered impervious to the materials stored therein. In addition, 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
- 4.9.2 All drainage from bunded areas shall be diverted for collection and safe disposal.
- 4.9.3 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 4.9.4 The integrity and water tightness of all the bunds, tanks and containers and their resistance to penetration by water or other materials stored therein shall be tested and demonstrated by the licensee and shall be reported to the Agency within nine months of the date of grant of this licence. This testing shall be carried out by the licensee at least once every three years thereafter and reported to the Agency on each occasion. The licensee shall also submit to the Agency for its agreement in each case a written report on the storage of fuels at the facility. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.
- 4.9.5 All tanks and containers shall be labelled to clearly indicate their contents.
- 4.10 Specified Engineering Works
 - 4.10.1 The licensee shall submit written proposals for all Specified Engineering Works, as defined in Schedule C: Specified Engineering Works, 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.
 - 4.10.2 All specified engineering works shall be supervised by a competent person(s) agreed in advance by the Agency and that person, or persons, shall be present at all times during which relevant works are being undertaken.
 - 4.10.3 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) where relevant a drawing and sections showing the location of all samples and tests carried out:

- e) where relevant daily records sheets/diary;
- f) name(s) of contractor(s)/individual(s) responsible for undertaking the 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; and
- i) any other information requested in writing by the Agency.

4.11 Leachate Management

- 4.11.1 Within nine months of the date of grant of this licence, the licensee shall install leachate management controls at the facility. These shall include the isolation of the perimeter drain, which will become the leachate containment facility, from all surface water drains as referred to in the Article 16 information received by the Agency on 07/07/00.
- 4.11.2 All leachate and waste waters collected at the facility shall be contained and tankered off site for treatment at a treatment plant to be agreed with the Agency. The frequency of removal from the leachate containment facility by tanker shall be such that a minimum freeboard of 0.5m shall be maintained in the leachate containment area at all times.
- 4.11.3 Recirculation of leachate or other contaminated water shall not be undertaken.

4.12 Landfill Gas Management:

- 4.12.1 Within six months of the date of grant of this licence, the licensee shall submit a report to the Agency on the quantities/levels of landfill gas which are likely to be generated at the facility and its suitability for flaring. Subject to the agreement of this report, the licensee shall either install (i) a landfill gas extraction system, collection network and landfill gas flare or (ii) a network of passive vents.
- 4.12.2 Subject to Condition 4.12.1, landfill gas shall be collected and flared (using an enclosed flare unit) within 14 months of date of grant of this licence, unless otherwise agreed with the Agency.
- 4.12.3 Subject to Condition 4.12.1, the Landfill Gas Flare efficiency shall be tested within three months of installation and once every three years thereafter
- 4.12.4 The licensee shall maintain all gas wells, pipework, valves, pumps, flares and other infrastructure that form part of the landfill gas management scheme in a safe and fully operational manner.
- 4.12.5 All buildings constructed on the facility shall have regard to the guidance given in the Department of Environments 1994 publication "Protection of New Buildings and Occupants from Landfill Gas" and any subsequent revisions.

4.13 Capping

- 4.13.1 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 1×10^{-4} 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.

4.14 Surface Water Management

- 4.14.1 The diversion of surface water streams as outlined in Article 16 information received by the Agency on 7/7/00 shall be completed within nine months of the date of grant of this licence. These works shall include an ongoing management programme for the control of surface water run off from the facility during construction, operation and restoration.
- 4.15 Within six months of the date of grant of this licence, the licensee shall submit to the Agency a proposal for the provision of a civic waste facility at the site.

Reason: To provide for the protection of the environment

CONDITION 5 WASTE MANAGEMENT

- 5.1 No wastes shall be disposed of at the facility.
- 5.2 Only inert construction and demolition wastes shall be used for restoration of the facility.
- 5.3 The quantity of waste to be accepted at the facility for recovery shall not exceed 10,000 tonnes per annum unless otherwise agreed in advance with the Agency.
- 5.4 Waste Acceptance Procedures
 - (i) Within one month of the date of grant of this licence, the licensee shall provide written procedures for the acceptance and handling of all wastes. These procedures shall be in accordance with the requirements of the Landfill Directive (1999/31/EC)
- 5.5 A record of all inspections shall be maintained. All wastes shall be checked to ensure that they comply with the requirements of the licence. Any wastes deemed to be in contravention of this licence and/or unsuitable for recovery at this facility shall be removed for recovery or disposal at an appropriate alternative facility. Such waste shall be stored in the Waste Quarantine facility only.
- 5.6 Scavenging shall not be permitted at the facility.
- 5.7 Waste shall only be accepted at the facility between the hours of 8:00am to 5:00pm Monday to Friday and 8:00am to 1:00pm on Saturdays with the exclusion of Bank Holidays unless otherwise agreed in advance with the Agency.
- 5.8 Any cover material at any location within the facility which is eroded, washed off or otherwise removed shall be replaced by the end of the working day. Within three months of the date of grant of this licence, cover material shall be placed across the whole landfill so that no waste other than cover material or material suitable for specified engineering works is exposed.
- 5.9 Wastes once deposited and covered shall not be excavated, disturbed or otherwise picked over with the exception of works associated with the construction and installation of the gas or leachate collection systems or during final contouring of the site.
- 5.10 No smoking shall be allowed on the facility.

- 5.11 Waste sent off-site for recovery or disposal shall only be conveyed to a waste contractor, as agreed by the Agency. The ultimate recovery or disposal facility for all wastes shall be agreed in advance with the Agency. All wastes removed off-site for recovery or disposal shall be transported from the facility to the consignee in a manner which will not adversely affect the environment.
- 5.12 Subject to Condition 4.15, the following conditions shall apply at the Civic Waste Facility:
 - (i) The type of wastes to be accepted at the Civic Waste Facility shall be agreed in advance with the Agency.
 - (ii) 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.
 - (iii) All tipping of waste will be into receptacles, or in the case where inspection is required, into a designated inspection area.
 - (iv) All waste accepted at the Civic Waste Facility for disposal off-site shall be removed within 24 hours unless otherwise agreed in writing with the Agency.
 - (v) At the end of the working day the floor of the Civic Waste Facility shall be cleaned of all waste.

Reason: To provide for the acceptance and management of wastes authorised under this waste licence.

CONDITION 6 ENVIRONMENTAL NUISANCES

- 6.1 The licensee shall, at a minimum of one month intervals, inspect the facility and its immediate surrounds for nuisances caused by vermin, birds, flies, mud, dust and odours. Written records shall be made of all inspections and any actions taken as a result of these inspections.
- 6.2 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.
- 6.3 Litter Control
 - 6.3.1 All loose litter accumulated within the facility and its environs shall be removed subject to the agreement of the landowners and appropriately disposed of on a daily basis.
- Any waste placed on or in the vicinity of the facility, other than in accordance with the requirements of this licence, shall be removed by the licensee immediately and in any event by 10.00 am of the next working day, after such waste is discovered. Such waste shall be recovered or disposed of at an appropriate facility.
- 6.5 The licensee shall ensure that all vehicles delivering waste to and removing waste and materials from the facility are appropriately covered.
- 6.6 Dust Control

- 6.6.1 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.
- 6.7 The licensee shall ensure that vermin, birds, flies, mud, dust and odours do not give rise to nuisance at the facility or the immediate area of the facility. Any method used by the licensee to control any such nuisance shall not cause environmental pollution or contravene any national statutory protection granted in respect of protected species.
- 6.8 The licensee shall apply the vermin and fly control measures outlined in Attachment F7 of the application. In the case that such measures do not eliminate vermin and fly activity to the satisfaction of the Agency the licensee shall implement additional control measures as agreed with the Agency. Such measures should include plans for vermin and fly control during closure and remediation phase.

Reason: To provide for the control of nuisance.

CONDITION 7 EMISSIONS AND ENVIRONMENTAL IMPACTS

- 7.1 No specified emission from the facility shall exceed the emission limit values set out in Schedule E: Emission Limits of this licence. There shall be no other emissions of environmental significance.
- 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.
- 7.3 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.
- 7.4 Landfill Gas
 - 7.4.1 The following are the trigger levels for landfill gas emissions from the facility measured in any service 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; and
 - b) Carbon dioxide, greater than or equal to 1.5% v/v.
 - 7.4.2 The concentration limits for emissions to atmosphere specified in this licence shall be achieved without the introduction of dilution air and shall be based on gas volumes under standard conditions of:
 - a) in the case of landfill gas flare (where relevant):

Temperature 273 K, pressure 101.3 kPa, dry gas at 3% oxygen.

- 7.4.3 Emission limits for emissions to atmosphere in this licence shall be interpreted in the following way:-
 - 7.4.3.1 Continuous monitoring
 - a) No 24 hour mean value shall exceed the emission limit value.
 - b) 97% of all 30 minute mean values taken continuously over an annual period shall not exceed 1.2 times the emission limit value.
 - c) No 30 minute mean value shall exceed twice the emission limit value.
 - 7.4.3.2 Non-Continuous Monitoring
 - a) For any parameter where, due to sampling/analytical limitations, 30 minute samples are inappropriate, a suitable sampling period should be employed and the value obtained therein shall not exceed the emission limit value.
 - b) For all other parameters, no 30 minute mean value shall exceed the emission limit value.

- c) For flow, no hourly or daily mean value shall exceed the emission limit
- 7.5 Emissions to Surface Water
 - 7.5.1 No substance shall be discharged in a manner, or at a concentration which, following initial dilution causes tainting of fish or shellfish.
- 7.6 Disposal of Leachate
 - 7.6.1 Any leachate or other contaminated water removed from the facility shall be transported to a wastewater treatment plant whose name and location has been agreed in advance by the Agency
 - 7.6.2 Leachate shall not be discharged to any surface waters.

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

CONDITION 8 RESTORATION AND AFTERCARE

- 8.1 The Restoration and Aftercare Plans for the facility shall be based on the plan submitted as part of Article 16 response received by the Agency on 7/7/00.
- 8.2 The facility shall be fully restored within three years of the date of grant of this licence.
- 8.3 The existing hedgerow network which forms the boundary of the facility shall be retained by the licensee.
- Unless otherwise agreed in advance or instructed by the Agency, the final profile of the facility shall be as shown in Drawing No. FMLC0009 601 Rev. A.
- 8.5 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.
- 8.6 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.
- 8.7 Where tree planting is proposed to be carried out above waste-filled areas, a synthetic barrier shall be used to augment the clay cap. Topsoil and subsoil depths shall be a minimum of 1m unless otherwise agreed in advance with the Agency.
- 8.8 Unless otherwise agreed in advance with the Agency, landscaping as described in the Article 16 response received by the Agency on 7/7/00 shall be undertaken. Such landscaping shall be carried out within a timeframe to be agreed with the Agency.

Reason: To provide for the restoration and aftercare of the facility.

CONDITION 9 ENVIRONMENTAL MONITORING

9.1 The licensee shall carry out such monitoring and at such locations and frequencies as set out in Schedule D: Monitoring and as specified in the Conditions of this licence.

- 9.2 Within three months from the date of grant of this licence, the licensee shall submit to the Agency for its agreement;
 - a) monitoring proposals to detect off-site migration of landfill gas.
 - b) details of the permanent gas monitoring system to be installed in the site office and any other enclosed structures at the facility.
- 9.3 The licensee shall within nine months of the date of grant of this licence provide one additional groundwater monitoring borehole in the groundwater outflow region from the site which shall extend into the bedrock aquifer at a location to be agreed by the Agency.
- 9.4 The licensee shall provide safe and permanent access to all on-site sampling and monitoring points and off-site points as required by the Agency. All ditches and drains located around the perimeter of the facility are to be kept clear such that monitoring can be carried out successfully.
- 9.5 The licensee shall maintain all sampling and monitoring points, and clearly label and name (including national grid number) all sampling and monitoring locations, so that they may be used for representative sampling and monitoring.
- 9.6 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 or discharge or environmental parameter.
- 9.7 The licensee shall amend the frequency, locations, methods and scope of monitoring, sampling, analyses and investigations 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.
- 9.8 Unless otherwise agreed with the Agency, a written record shall be kept of the names, qualifications and a summary of relevant experience 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.
- 9.9 Unless otherwise specified by this licence or agreed by the Agency, all environmental monitoring shall commence no later than two months after the date of grant of this licence.
- 9.10 Unless otherwise agreed in advance with the Agency, monitoring infrastructure which proves to be unsuitable for its purpose shall be replaced within three months of monitoring results indicating that the monitoring infrastructure is damaged or unsuitable.
- 9.11 All landfill gas monitoring equipment used for monitoring landfill gas under the requirements of this licence shall be certified as being intrinsically safe.
- 9.12 Within three months of the date of grant of this licence, the licensee shall submit to the Agency an updated appropriately scaled drawing(s) showing the location of all the monitoring locations that are stipulated in this licence.

Reason: To ensure compliance with the requirements of other conditions of this licence by provision of a satisfactory system of measurement and monitoring of emissions.

CONDITION 10 CONTINGENCY ARRANGEMENTS

- 10.1 The licensee shall, within six months of the date of grant of this licence, 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.
- 10.2 Unless otherwise agreed with the Agency, Contingency Arrangements for the facility shall be as detailed in Section K of the waste licence application and the Article 16 response as received by the Agency on July 7th 2000.
- 10.3 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.
- 10.4 All significant spillages occurring at the facility shall be treated as an emergency and immediately cleaned up and dealt with so as to alleviate their effects.
- 10.5 No waste shall be burnt within the boundaries of the facility. A fire at the facility shall be treated as an emergency. Immediate action shall be taken to extinguish it and the appropriate authorities notified.
- 10.6 Unless otherwise notified in writing by the Agency, in the event that any monitoring, sampling, complaints or observations indicate that an incident has, or may have, taken place, 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;
 - c) isolate the source of the 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 to:
 - i) identify and put in place measures to avoid recurrence of the incident; and
 - ii) identify and put in place any other appropriate remedial action.

Reason: To provide for the protection of the environment.

CONDITION 11 CHARGES AND FINANCIAL PROVISIONS

11.1 Agency Charges

11.1.1 The licensee shall pay to the Agency an annual contribution of €7,513 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 2003 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 2002, the licensee shall pay a pro rata amount from the date of this licence to 31st December 2002. This amount shall be paid to the Agency within one month of the date of grant of this licence.

- 11.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased or decreased the licensee shall contribute such sums as determined by the Agency to defraying its costs.
- 11.2 Financial Provision for Closure, Restoration and Aftercare
 - 11.2.1 The licensee shall from a date to be set by the Agency establish and maintain a fund, or other form of written guarantee, that is adequate to assure the Agency that the licensee is at all times financially capable of implementing the Restoration and Aftercare Plan required by Condition 8.1.
 - 11.2.2 The fund shall be maintained in an amount always sufficient to underwrite the current Restoration and Aftercare Plan.
 - 11.2.3 The licensee shall revise the cost of restoration and aftercare annually and any details of the necessary adjustments to the fund must, within two weeks of the revision, be forwarded to the Agency for its agreement. Any adjustment agreed by the Agency shall be effected within four weeks of said written agreement.
 - 11.2.4 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 :Content of the Annual Environmental Report

Annual Environmental Report Content Note1

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.

Calculated remaining capacity of the facility and year in which final capacity is expected to be reached.

Methods of deposition of waste.

Summary report on emissions.

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

Resource and energy consumption summary.

Proposed development of the facility and timescale of such development.

Volume of leachate produced and volume of leachate transported/discharged off-site.

Report on development works undertaken during the reporting period, and a timescale for those proposed during the coming year.

Report on restoration.

Site survey showing existing levels of the facility at the end of the reporting period.

Estimated annual and cumulative quantities of landfill gas emitted from the facility.

Estimated annual and cumulative quantity of indirect emissions to groundwater.

Monthly water balance calculation and interpretation.

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

Tank, 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.

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.

SCHEDULE B :Recording and Reporting to the Agency

Table B.1 Recurring Reports

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 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 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.	
Meteorological Monitoring	Annually	One month after end of the year 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.	
Any other monitoring	As they occur	Within ten days of obtaining results.	

Note 1: Unless altered at the request of the Agency

SCHEDULE C : Specified Engineering Works

Specified Engineering Works

Landfill cap installation, including temporary and intermediate capping, installation and all other containment works (including any containment works relating to leachate control).

Fencing and site security works, including security fencing to be installed between road works depot and waste acceptance area(s).

Bunding of fuel and oil storage areas.

Installation of waste inspection and waste quarantine areas.

Installation of landfill gas management and monitoring systems.

Installation of leachate management, detection, storage, treatment, monitoring and control systems.

Installation of groundwater control and/or monitoring systems.

Surface water management works, including all associated works.

Restoration and Aftercare Works.

Nuisance control measures.

Any other works notified in writing by the Agency.

SCHEDULE D: Monitoring

Monitoring to be carried out as specified below.

D.1 Landfill Gas

Landfill gas monitoring locations shall be those as set out in Table D.1.1 and Drawing J1.0 Revision 2 Drawing No. 2101026 and any other locations as agreed following the installation of the Gas collection network.

Table D.1.1 Perimeter Monitoring Locations

STATION
GP01
GP02
GP03
GP04
GP06
GP07
GP08
L2
L3

Table D.1.2 Landfill Gas Monitoring Frequency and Technique

Parameter	Monitoring Frequency		Analysis Method ^{Note1} /Technique ^{Note2}
	Gas Boreholes/ Vents/Wells	Site Office	
Methane (CH ₄) % v/v	Monthly	Weekly	Infrared analyser/flame ionisation detector
Carbon dioxide (CO ₂)%v/v	Monthly	Weekly	Infrared analyser/ flame ionisation detector
Oxygen(O ₂) %v/v	Monthly	Weekly	Electrochemical cell
Atmospheric Pressure	Monthly	Weekly	Standard
Temperature	Monthly	Weekly	Standard

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

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

D.2 Dust

Dust monitoring locations shall be those as set out in Table D.2.1 and in Appendix 1 of Report L024-D

Table D.2.1 Dust Monitoring Locations

STATION	
DM-01	
DM-02	
DM-03	
DM-04	

Table D.2.2 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.

D.3 Noise

Noise monitoring locations shall be those as set out in Table D.3.1 and Drawing J1.0 Revision 2 Drawing No. 2101026

Table D.3.1 Noise Monitoring Locations

STATION
N1
N2
N3
N4
N5

Table D.3.2 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 Surface Water, Groundwater and Leachate

Surface water monitoring locations shall be those as set out in Table D.4.1 and Drawing J1.0 Revision 2 Drawing No. 2101026 and of the parameters and frequencies outlined in Table D.4.4.

Note 2: Twice during the period May to September, or as otherwise specified in writing by the Agency. With the agreement of the Agency monitoring can cease once landfill restoration is complete.

Table D.4.1 Surface Water Monitoring Locations

STATION
SW-1(B)
SW-5
SW-6
SW-7
SW-8

Additional monitoring points to be included subject to Condition 4.11, Condition 4.14 (Diversion of surface water streams). At minimum, diverted surface water/groundwater shall be monitored monthly (unless flow in that month does not allow such monitoring) for parameters denoted by Note 5 in Table D.4.4, at a monitoring location(s) to be agreed with the Agency.

Groundwater monitoring locations shall be those as set out in Table D.4.2 and Drawing J1.0 Revision 2 Drawing No. 2101026 and of the parameters and frequencies outlined in Table D.4.4.

Table D.4.2 Groundwater Monitoring Locations

STATION
WS9
WS4
MW-07
MW-09
GW1 ^{Note 1}

Note 1: Additional monitoring boreholes to be provided subject to Condition 9.3

Leachate monitoring locations shall be those as set out in Table D.4.3 and Drawing J1.0 Revision 2 Drawing No. 2101026 and of the parameters and frequencies outlined in Table D.4.4.

Table D.4.3 Leachate Monitoring Locations

LEACHATE INSPECTION MANHOLES
L.1, L2 and L3

Table D.4.4 Water and Leachate - Parameters /Frequency

Parameter Note 1	SURFACE WATER	GROUNDWATER	LEACHATE
	Monitoring Frequency	Monitoring Frequency	Monitoring Frequency
Visual Inspection/Odour Note 2	Weekly	Quarterly	Quarterly
Groundwater Level	Not Applicable	Monthly	Not Applicable
Leachate Level	Not Applicable	Not Applicable	Weekly
Ammoniacal Nitrogen	Quarterly Note 5	Monthly	Quarterly
BOD	Quarterly Note 5	Not Applicable	Quarterly
СОР	Quarterly	Not Applicable	Quarterly
Chloride	Quarterly	Quarterly	Quarterly
Dissolved Oxygen	Quarterly	Quarterly	Not Applicable
Electrical Conductivity	Quarterly Note 5	Monthly	Quarterly
рН	Quarterly Note 5	Monthly	Quarterly
Total Suspended Solids	Quarterly Note 5	Not Applicable	Not Applicable
Temperature	Quarterly Note 5	Monthly	Quarterly
Boron	Not Applicable	Annually	Annually
Cadmium	Annually	Annually	Annually
Calcium	Annually	Annually	Annually
Chromium (Total)	Annually	Annually	Annually
Copper	Annually	Annually	Annually
Cyanide (Total)	Not Applicable	Annually	Annually
Fluoride	Not Applicable	Annually	Annually
Iron	Annually	Annually	Quarterly
Lead	Annually	Annually	Annually
List I/II organic substances Note 3	Note 6	Annually	Note 7
Magnesium	Annually	Annually	Annually
Manganese	Annually	Annually	Annually
Mercury	Annually	Annually	Annually
Potassium	Annually	Quarterly	Quarterly
Sulphate	Annually	Annually	Annually
Sodium	Annually	Quarterly	Quarterly
Total Alkalinity	Annually	Annually	Not Applicable
Total Phosphorus / orthophosphate	Annually Note 5	Annually	Annually
Total Oxidised Nitrogen	Annually	Quarterly	Quarterly
Total Organic Carbon	Not Applicable	Quarterly	Not Applicable
Residue on evaporation	Not Applicable	Annually	Not Applicable
Zinc	Annually	Annually	Annually
Phenols	Not Applicable	Quarterly	Not Applicable
Faecal Coliforms Note 4	Not Applicable	Annually	Annually
Total Coliforms Note 4	Not Applicable	Annually	Annually

Note 1: All the analysis shall be carried out by a competent laboratory using standard and internationally accepted procedures. The testing laboratory and the testing procedures shall be agreed with the Agency in advance.

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

Note 3: 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 4:** 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 5:** Discharge of diverted surface water/groundwater, at a monitoring location(s) to be agreed with the Agency, shall be monitored on a monthly basis for these parameters unless flow in that month does not allow such monitoring.
- Note 6: Once off for List I/II organic substances at SW-5 and thereafter as required by the Agency.
- Note 7: Once off for List I/II organic substances and thereafter as required by the Agency.

D.5 Meteorological Monitoring

Table D.5.1 Meteorological Monitoring:

Data to be obtained from Claremorris Meteorological Station unless otherwise agreed with the Agency.

Parameter	Monitoring Frequency	Analysis Method/Technique
Precipitation Volume	Daily	Standard
Temperature (min/max)	Daily	Standard
Wind Force and Direction	Daily	Standard
Evaporation	Daily	Standard
Evapotranspiration	Daily	Standard
Humidity	Daily	Standard
Atmospheric Pressure	Daily	Standard

D.6 Landfill Gas Flare Unit

Monitoring to be obtained at locations to be agreed with the Agency prior to operation of the flare.

Parameter	Monitoring Frequency	Analysis Method ^{Note1} /Technique ^{Note2}
Inlet		
Methane (CH ₄) % v/v	Weekly	Infrared analyser/flame ionisation detector
Carbon dioxide (CO ₂)%v/v	Weekly	Infrared analyser/ flame ionisation detector
Oxygen (O ₂) %v/v	Weekly	Infrared analyser
Outlet		
Volumetric Flow rate	Biannually	Pitot Tube Method
SO ₂	Biannually	Flue gas analyser
NOx	Biannually	Flue gas analyser
СО	Biannually	Flue gas analyser
Particulates	Annually	Isokinetic/Gravimetric
TA Luft Class I, II, III organics	Annually	Adsorption/Desorption / GC /GCMS (Note 3)
Hydrochloric acid	Annually	Impinger / Ion Chromatography
Hydrogen fluoride	Annually	Impinger / Ion Chromatography

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

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

Note 3: Test methods should be capable of detecting acetonitrile, dichloromethane, tetrachlorethylene and vinyl chloride as a minimum.

SCHEDULE E: Emission Limits

E.1 Noise Emissions: (Measured at the monitoring points indicated in Table D.3.1).

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

E.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

E.3 Dust Deposition Limits: (Measured at the monitoring points in Table D.2.1).

Level (mg/m²/day) ^{Note 1}		
350		

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

E.4 Emission Limit Values for Landfill Gas Flare Unit

Emission Point reference nos: (to be agreed with the Agency)

Location: Landfill Gas flarestack Volume to be emitted: 800m³/hr Note 2 Minimum discharge height: 5m Note 2

Parameter	Emission Limit Value
Nitrogen oxides as (NO ₂)	150 mg/m ³
СО	50 mg/m ³
Particulates	130 mg/m ³
TA Luft Organics Class I (Note 1)	20 mg/m ³
	(at mass flows > 0.1 kg/hr)
TA Luft Organics Class II (Note 1)	100 mg/m ³
	(at mass flows > 2 kg/hr)
TA Luft Organics Class III (Note 1)	150 mg/m ³
	(at mass flows > 3kg/hr)
Hydrogen Chloride	50 mg/m ³
	(at mass flows > 0.3 kg/h)
Hydrogen Fluoride	5 mg/m ³
	(at mass flows > 0.05 kg/h)

Note 1: In addition to the above individual limits, the sum of the concentrations of Class I, II and III shall not exceed the Class III limits.

Note 2: Unless otherwise agreed with the Agency.

Part III Activities Refused

Reasons for the Decision

The Agency is not satisfied, on the basis of information available, that emissions from the activity will comply with and not contravene any of the requirements of Section 40(4) of the Waste Management Act, 1996.

In reaching this decision the Agency has considered the application and supporting documentation received from the applicant, all submissions and objections received from other parties and the report of its inspector.

In pursuance of the powers conferred on it by the Waste Management Act, 1996, the Environmental Protection Agency (the Agency), under Section 40(1) of the said Act hereby refuses to grant a Waste Licence to Leitrim County Council, Governor House, Carrick-on-Shannon, Co. Leitrim to carry out the following waste activities as listed below at Ballynamony, Carrick-on-Shannon, Co.Leitrim.

Waste disposal activities, in accordance with the Third Schedule of the Waste Management Act, 1996 for which a waste licence is refused.

- Class 1: Deposit on, in or under land (including landfill).
- Class 4: Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons.
- Class 13: Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.

Waste recovery activities, in accordance with the Fourth Schedule of the Waste Management Act, 1996 for which a waste licence is refused

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.

The activity refused is the temporary storage of refrigerators, the temporary storage of cars and the temporary storage of glass bottles.

Sealed by the seal of the Agency on this the 24th day of May, 2002

PRESENT when the seal of the Agency was affixed hereto:

Iain Maclean Director/Authorised Person