# ATTACHMENT B.3 ATTACHMENT B.3

Current Waste Licence

1996 to 2003

licence was amended on 28/10/2005 under Section 76(4) of the Waste Management Acts, 1996 to 2003. The details of the amendment must be read in conjunction with the licence. The amendment document is titled 77-2S76(4)AmendmentA.<Ioc.

This licence was amended under Section 428(1)(c) of the Waste Management Acts. 1996 to 2005. The details of Amendment B must be read in conjunction with this licence. The amendment is W0077-02S42B(1)AmendmentB.



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

# WASTE LICENCE LANDFILL FOR NON-HAZARDOUS WASTE

Waste Licence Register Number: Licensee:

77-2 Cavan County Council

Location of Facility:

Corranure Landfill, Lismagratty and Corranure Townlands, Cootehill Road, Cavan, County Cavan.

# **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 continued operation and expansion of a non-hazardous waste landfill, a civic amenity facility and a recycling building located at Corranure Landfill, Lismagratty & Corranure Townlands, Cootehill Road, Cavan, County Cavan. The facility boundary has been extended to allow for two new lined cells to be installed (Phase 3). The waste intake is limited to 90,000 tonnes per annum comprising of household waste, commercial waste, construction & demolition waste green waste, street cleaning residues and hazardous household waste.

The licence provides for the operation of a civic waste facility which allow for acceptance of waste aluminium and steel cans, cardboard and household hazardous waste types such as glass, such as fluorescent tubes, waste oils, oil waste batteries. Dry recyclables such as plastic and cardboard will be baled on-site prior to transfer off-site for recovery.

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 Cavan County this facility.

will operate and manage



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# **DECISION & REASONS FOR THE DECISION**

# Reasons for the Decision

On the basis of the information before the Environmental Protection Agency (the Agency) is for the reasons set out in the following Schedule of Activities Licensed, that the requirements of Section 40(4) of the Waste Management Acts, 1996 to 2003 have been complied with in respect of the application for a waste licence for the activities listed hereunder in Part I.

In reaching this decision the Agency has considered the application and supporting documentation received from the all submissions and objections received and the reports of its inspectors.

# **INTERPRETATION**

All terms in this licence should be interpreted in accordance with the definitions in the Waste Management Acts 1996 to 2003, (the Acts), unless otherwise defined in this section.

Adequate lighting	20 lux measured at ground level.		
Aerosol	A suspension of solid or liquid particles in a gaseous medium.		
Agreement	Agreement in writing. At approximately tweety entronthly intervals.		
Annually			
Application	The application by the licensee for this waste licence.		
Appropriate facility	A waste management facility, duly authorised under relevant law and technically suitable.		
Attachment	Any reference to attachments in this licence refers to attachments submitted as part of the waste licence review application.		
BAT	Best Available Techniques.		
Biodegradable waste	Any waste that is capable of undergoing anaerobic or aerobic decomposition, such as food, garden waste, sewage sludge, paper and paperboard.		
CEN	Comite De Nonnalisation - European Committee for Standardisation.		
Condition	A condition of this licence.		
Construction and Demolition Waste	All wastes which arise from construction, renovation and demolition activities.		
Commercial Waste	As defined in Section 5(1) of the Act.		
Containment boom	A boom which can contain spillages and prevent them from entering drains or watercourses.		
Cover material	Bricks, crushed concrete, tannac, earth, soil, sub-soil, stone, rock or other similar natural materials; or other cover material the use of which has been agreed by the Agency.		

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Daily Cover	Is the tenn used to describe material spread (about 150mm if soil cover is used) over deposited waste at the end of each day. Synthetic materials may also be used. Its objective is to minimise odour, the amount of litter generated and to control flies and access to the waste by birds and vermin. Where soils are used for daily cover, it is recommended that they be removed at the start		
	are used for daily cover, it is recommended that they be removed at the start of the day and subsequently reused as much as possible.		
Daytime	0800 hrs to 2200 hrs.		
Documentation	Any 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 this review application, unless otherwise specified in this licence.		
Emergency	Those occurrences defined in Condition 10.4.		
Emission Limits	Those limits, including limits and deposition levels established in <i>Schedule C: Emission Limits</i> , of this licence.		
European Waste Catalogue (EWe)	A hannonised, 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.		
Fortnightly	A minimum of 24 times per year, at approximately two week intervals.		
Green waste	Waste wood (excluding timber), plant matter such as grass cuttings, and other vegetation.		
Heavy Metals	vegetation. This tenn is to be interpreted as set out in "Parameters of Water Quality, Interpretation and Standards" published by the Agency in 2001. ISBN 1- 84095-015-5.		
Hours of Operation	The hours during which the facility is authorised to be operational. The hours of operation of a facility are usually longer than the hours of waste acceptance to facilitate preparatory and completion works.		
Hours of Waste Acceptance	The hours during which the facility is authorised to accept waste. Different activities within the facility, such as the landfill and the civic waste facility, may have different hours of waste acceptance.		
Incident	The following shall constitute an incident for the purposes of this licence:		
	a) an emergency;		
	b) any emission which does not comply with the requirements of this licence;		
	<li>c) any exceedance of the daily duty capacity of the waste handling equipment;</li>		
	<ul> <li>any trigger level specified in this licence which is attained or exceeded; and</li> </ul>		
	e) any indication that environmental pollution has, or may have, taken place.		
Inert waste	Waste as defined in S.I. No. 395 of 2004 Waste Management (Licensing) Regulations, 2004.		
Initial Development	Means such works, actions or constructions as may be specified, which for the purposes of environmental protection and safe construction and operation of		

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Works	the facility, have to be canied out in the initial stages of site and in any case prior to the commencement of construction of the landfill cells.		
Intermediate Cover	Refers to placement of material (minimum 300mm if soil is used) for a period of time prior to restoration or prior to further disposal of waste.		
LandfiU	Refers to the area of the facility where the waste is disposed of by placement on the ground or on other waste.		
Landfill Gas	Gases generated from the landfilled waste.		
LEL(Lower Explosive Limit)	The lowest percentage concentration by volume of a mixture of flammable gas with air which will propagate a flame at and atmospheric pressure.		
Licence	A waste licence issued in accordance with the Acts.		
Licensee	Cavan County CounciL		
List IIII Substances	Substances classified pursuant to EC Directives 76/464/EEC and 80/681EEC.		
Liquid Waste	Any waste in liquid form and containing less than 2% dry matter. Any waste tankered to the facility.		
Maintain	Keep in a fit state, including such regular inspection, servicing and repair as may be necessary to adequately perform is function.		
Mobile Plant	Self-propelled machinery used for the emplacement of wastes or for the construction of specified engineering works.		
Monthly	A minimum of 12 times per year, at approximately monthly intervals.		
Municipal waste	As defined in Section $S(1)$ of the Act		
Night-time	2200 hrs to 0800 hrs.		
Noise Sensitive Location	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or or any other facility or area of the amenity which for its proper enjoyment requires the absence of noise at nuisance levels.		
Recyclable Materials	Those waste types, such as batteries, gas cylinders, etc which 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.		
Sludge	The accumulation of solids resulting from chemical coagulation, flocculation and/or sedimentation after water or wastewater treatment with ) 2% dry matter.		
SOP	Standard Operating Procedure.		
Specified Emissions	Those emissions listed in Schedule C: Emission Limits. of this licence.		
Specified Engineering Works	Those engineering works listed in <i>Schedule B: Specified Engineering Works</i> . of this licence.		
ТОС	Total Organic Carbon.		

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- Treated Sludge Sludge which 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.
- Treatment Treatment means the physical, thermal, chemical or biological processes, including sorting, that change the characteristics of the waste in order to reduce its volume or hazardous nature, facilitate its handling or enhance recovery.
- 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 Contaminated water including water that been used, for washing, and/or flushing (including foul water).
- White Goods Refrigerators, cookers, ovens and other similar appliances.
- EPA Working Day Refers to the following hours: 0900 hrs to 1730 hrs Monday to Friday inclusive.
- 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.

Conserved copyright of the required for any other use.

# Part I: Schedule of Activities Licensed

On the basis of the information before it, the Agency, pursuant to its powers under Section 46(2) of the Waste Management Acts, 1996 to 2003 hereby grants this Waste Licence to Cavan County Council to carry on the waste activities, that are the subject of Waste Licence Application Register Number 77-2 listed below at Corranure Lismagratty & Corranure Townlands, Cootehill Cavan, County Cavan subject to with the reasons therefor and the associated schedules attached thereto set out in the licence.

Licensed Waste Disposal Activities, in accordance with the Third Schedule of the Waste Management Acts, 1996 to 2003

Oass 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 5	Specially engineered including placement into lined discrete cells which are capped and isolated from one another and the environment.
Class 7	Physico-chemical treatment not referred to elsewhere in this Schedule (including evaporation, drying and calcination) which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1 to 10 of this Schedule.
Class 11	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.
Class 12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule, of the second seco
Class 13	Storage prior to submission to any activity referred to in a preceding paragraph of this other transfermporary storage, pending collection, on the premises where the waste concerned is produced.
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Licensed Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Acts, 1996 to 2003

Class 2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).	
Class 3	Recycling or reclamation of metals and metal compounds.	
Class 4	Recycling or reclamation of other inorganic materials.	
Class 9	Use of any waste principally as a fuel or other means to generate energy.	
Class 11	Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.	
Class 12	Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.	
Class 13	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this other than temporary storage, pending collection, on the premises where such waste is produced.	

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# Part 11: Schedule of Activities Refused

On the basis of the infonnation before it, the Agency, pursuant to its powers under Section 46(2) of the Waste Management Acts, 1996 to 2003, hereby refuses the following classes of activity that are the :subject of Waste Licence Application Register No. 77-2.

Refused waste activities, in accordance with the Fourth Schedule of the Waste Management Acts, 1996 to 2003

Class 1	Solvent reclamation or regeneration:		
	Reason: The activity described by the licensee, recovery of solvents household waste at the civic waste facility, does not constitute a Class I Activity: instead the activities are included under Class 13 of the Fourth Schedule for which the licensee has also applied for.		
Class 10 The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system:			
Reason: The activity described by the licensee, use of recovered materials in the restoration of the facility, does not constitute a Class 10 Activity: instead the activit are included under Classes 4 and 11 of the Fourth Schedule for which the licensee l also applied for.			
also applied for.			

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# PARTIII CONDITIONS

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

- 1.1 Waste activities at the facility shall be restricted to those outlined in the licence review application and listed and described in Part I: Activities Licensed and authorised by this licence subject to the conditions of this licence.
- 1.2 For the purposes of this licence, the facility is the area of land outlined in red on Drawing No. Fig.
   2 Rev. D03 *Corranure Landfill Site Plan* of the application. Any reference in this licence to "facility" shall mean the area thus outlined in **red.**
- 1.3 This licence is for the purposes of waste licensing under the Waste Management Acts 1996 to 2003 only and nothing in this licence shall be construed as negating the licensee's statutory obligations or requirements under any other enactments or regulations.
- 1A Activities at this facility shall be limited as set out in *&hedule A: Waste Acceptance*, of this licence.
- 1.5 Waste Acceptance Hours and Hours of Operation
  - 1.5.1 Landfill
    - 1.5.1.1 Waste may be accepted at the facility for disposal at the landfill only between the hours of 8:30 to 16:30 Monday to Friday inclusive and 8:00 to 12:30 on Saturdays.
       1.5.1.2 The loc dollar inclusion of the second second
    - 1.5.1.2 The landfill at the factility may be operated only during the hours of 8:00 to 17:30 Monday to Friday inclusive and 8:00 to 13:00 on Saturdays.
    - 1.5.1.3 Waste shalling be accepted at the facility on Sundays and Bank Holidays, other than with the written agreement of the Agency.
  - 1.5.2 Civic Waste Facility
    - 1.5.2.1 Waste shall be accepted at the Civic Waste Facility only between the hours of 8:00 to 16:30 Monday to Friday inclusive and 8:00 to 12:30 on Saturdays, unless otherwise agreed by the Agency.
    - 1.5.2.2 The civic waste facility at the facility may be operated only during the hours of 8:00 to 17:30 Monday to Friday inclusive and 8:00 to 13:00 on Saturdays, unless otherwise agreed by the Agency.
- 1.6 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.
- 1.7 This licence is being granted in substitution for the waste licence granted to the licensee on 12<sup>th</sup> of June 2001 and bearing Waste Licence Register No: 77-1. The previous waste licence (Register No: 77-1) is superseded by this licence.

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### CONDITION 2 MANAGEMENT OF THE FACILITY

- 2.1 Facility Management
  - 2.L1 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 The Civic Waste Facility shall be supervised by an appropriately qualified and competent person at all times while waste be accepted.
  - 2.13 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 by the Agency) and associated on site assessment appraisal within twelve months of appointment.
  - 2.1.4 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

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 infonnation:-

- a) The names of all persons who are to provide the management and supervision of the waste activities authorised by the licence, in particular the name of the facility manager and any nominated deputies;
- b) Details of the responsibilities for each individual named under a) above; and
- c) Details of the relevant education, training and experience held by each of the persons nominated under a) above.
- 2.3 Environmental Management System (EMS)
  - 2.3.1 The licensee shall operate and maintain an EMS. Within six months from the date of grant of this licence, the licensee shall submit to the Agency for its agreement a proposal for the updating (where appropriate) of the documented Environmental Management System (EMS) for the facility. The EMS shall thereafter be updated on an annual basis with amendments being notified to the Agency, as part of the AER.
  - 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: -

- a} The items specified to be contained in an Environmental Management Plan in the Landfill Operational Practices Manual published by the Agency;
- b) Methods by which the objectives and targets will be achieved and the identification of those responsible for achieving those objectives and targets; and
- c) 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

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

REASON: To make provision for the proper management of the activity on a planned basis having regard of and reporting of maUers 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 Phased Construction Plan

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Three months prior to the commencement of any site development, the licensee shall submit to the Agency for its agreement a construction schedule, sequence and timescale (Construction Plan) incorporating the requirements of this licence. This Plan shall have regard to the following development phases: (i) Initial Development Works, (ii) Main infrastructure development works (pre acceptance of waste for disposal), and (iii) Future/planned works (in parallel with waste disposal, e.g. future cell development/phasing). The Construction Plan for cell development shall have regard to the sequencing necessary to provide medium and long term screening of the completed cells.

- 3.3 Specified Engineering Works
  - 3.3.1 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.
  - 3.3.2 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.

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- 3.3.3 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 as appropriate include the following information:
  - a) A description of the works;
  - b) As-built drawings of the works;
  - c) Records and results of all tests carried out (including failures);
  - d) Drawings and sections showing the location of all samples and tests carried out;
  - e) Daily record sheets/diary;
  - f) Name(s) of contractor(s)/individual(s) responsible for undertaking the specified engineering works;
  - g) Name(s) of individual(s) responsible for supervision of works and for quality assurance validation of works;
  - h) Records of any problems and the remedial works carried out to resolve those problems; and
  - i) Any other information requested in writing by the Agency.
- 3.4 Facility Notice Board
  - 3.4.1 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 by 750 mm.
  - 3.4.2 The board shall clearly show:
    - a) The name and telephone number of the facility;
    - b) The normal hours of opening;
    - c) The name of the licence holder;
    - d) An emergency out of hours contact telephone number;
    - e) The licence reference number; and
    - f) Where environmental information relating to the facility can be obtained.
- 3.5 Facility Security
  - 3.5.1 Security and stockproof fencing and gates shall be installed and maintained along the facility boundary. The base of the fencing shall be set in the ground. Subject to the implementation of the restoration and aftercare plan and to the agreement of the Agency, the requirement for such site security may be removed.
  - 3.5.2 The licensee shall remedy any defect in the gates and/or fencing as follows:
    - a) A temporary repair shall be made by the end of the working day; and
    - b) A repair to the standard of the original gates and/or fencing shall be undertaken within three working days.
- 3.6 Facility Roads and Site Surfaces
  - 3.6.1 Effective site roads shall be provided and maintained to ensure the safe movement of vehicles within the
  - 3.6.2 The facility entrance area, the access road to the Civic Waste Facility and the Civic Waste Facility itself shall be paved to ensure an impervious surface is maintained, unless otherwise agreed by the Agency.

- 3.7 Facility Office
  - 3.7.1 The licensee shall provide and maintain an office at the facility. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation.
  - 3.7.2 The licensee shall provide and maintain a working telephone and a method for electronic transfer of information at the facility.
- 3.8 Waste Inspection and Quarantine Areas
  - 3.8.1 A Waste Inspection Area and a separate Waste Quarantine Area shall be provided and maintained at the facility.
  - 3.8.2 These areas shall be constructed and maintained in a manner suitable, and be of a size appropriate, for the inspection of waste and subsequent quarantine if required. The waste inspection area and the waste quarantine area shall be clearly identified and segregated from each other.
  - 3.8.3 Drainage from these areas shall be directed to the leachate storage lagoon.
- 3.9 Weighbridge and Wheel Cleaner
  - 3.9.1 The licensee shall provide and maintain a weighbridge and a wheel cleaner at the facility.  $s^{e^{i}}$
  - 3.9.2 The wheel cleaner shall be used by all vehicles leaving the facility as required to ensure that no process water or waste is carried off-site. All water from the wheel cleaning area shall be directed to the leachate storage lagoon.
- 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 solume 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 following its installation and prior to its use as a storage area. This confirmation shall be repeated at least once every three years thereafter and reported to the Agency on each occasion.
- 3.11 Landfill Lining
  - 3.1 I.I Unless otherwise agreed by the Agency, the landfill liner at the proposed extension (Phase 3) shall comprise:
    - a) A composite liner consisting of a Im layer of compacted soil with a hydraulic conductivity of less than or equal to 1x10-9m/S, (or equivalent to be agreed by the Agency) overlain by a 2mm thick high density polyethylene (HDPE) layer;

- b) A geotextile layer placed over the HDPE layer;
- c) A 500mm thick drainage layer placed over the geotextile layer with a minimum hydraulic conductivity of  $1 \times 10^{-3}$  m/s, of uncrushed, rounded stone (16 32mm grain size) incorporating leachate collection drains; and
- d) The side walls shall be designed and constructed to achieve an equivalent protection.
- 3.112 The liner detailed design and its construction and the construction quality assurance testing shall be in accordance with the guidelines provided in the Agency's Landfill Manual, Landfill Site Design.
- 3.11.3 Unless otherwise agreed by the Agency, formation levels of Phase 3 shall be arranged such that sufficient thickness (at least 3m) of in-situ remains between base of facility and bedrock. Formation levels of Phases 1 and 2 shall be as shown on Drawing No. DGOO31-01 Rev. FOI *Fonnation Levels of Phase* 1 *and Phase* 2 of the Article 16 reply received on 30/8/04.
- 3.12 Buffer Zone

A Buffer in which no waste shall be landfilled, shall be provided and maintained within the facility. The Buffer Zone shall be located as shown on Drawing No. DGOO3O-01 Rev. FOI *Buffer Zone* & *Proposed* of the Article 16 reply received on 30/8/04.

- 3.13 Leachate Management Infrastructure
  - 3.13.1 Leachate management infrastructure shall be provided and maintained at the facility as described in Section 2.3.6 *Leachate Collection, Storage and Treatment* of the EIS submitted with the application and specified on Drawing No. 00-08 Rev. D03 *Corranure Landfill Leachate Menagement System.*
  - 3.13.2 Within twelve months of the date of grant of this licence the licensee shall provide and maintain the proposed extended leachate storage lagoon at the facility to facilitate the storage of leachate abstracted/collected from the waste. The lagoon lining shall be a composite liner equivalent to the landfiU liner and constructed using the same methods.
  - 3.13.3 A proposal detailing how leachate collection and storage will be managed at the facility during the construction of the proposed extended Jeachate storage lagoon shall be submitted to the Agency for agreement prior to construction of the proposed extended Jeachate storage lagoon.
  - 3.13.4 Within six months of the date of grant of this licence, the licensee shall submit to the Agency an assessment of the capacity of the existing rising main and of Cavan Waste Water Treatment Plant to treat the additionalleachate generated at the facility when the facility is extended
  - 3.13.5 All structures for the storage and/or treatment of leachate shall be fully enclosed except for inlet and outlet piping.
- 3.14 Landfill Gas Management
  - 3.14.1 Landfill gas management infrastructure at the remediated landfill shall be maintained at the facility as described in the Gas Management Plan and specified on Drawing No. 000033-01 Rev. FOI *Gas Management System* of the Article 14 reply received on 30/08/04, unless otherwise agreed by the Agency.
  - 3.14.2 Within six months of the date of grant of this licence, the licensee shall submit an updated plan for the landfill gas management detailing works carried out or proposed for the remediated landfill and the existing Phase I as well as works proposed for

Phases 2 and 3. The plan shall include an assessment of the efficiency of the landfill gas collection system and the need for additionallandfill gas abstraction wells.

- 3.14.3 An appropriately sized landfill gas flare(s) shall be provided and maintained at the facility. The flare(s) shall be of an enclosed type design.
- 3.14.4 Flare unit efficiency (residence time, bum temperature) shall be tested annually and reported as part of the AER.
- 3.14.5 Within twelve months of the date of grant of this licence, the licensee shall submit an updated assessment of whether the utilisation of landfill gas as an energy resource is feasible. If feasible such a system shall be installed within a timeframe agreed with the Agency.
- 3.14.6 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.
- 3.15 Surface Water Management
  - 3.15.1 Effective surface water management 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 prevention of contaminated water and Eachate discharges into surface water drains and courses; and
    - b) The collection/diversion of run of arising from capped and restored areas.
  - 3.15.2 Surface water run-off perimeter drains shall be installed and maintained at the facility as shown on Drawing No. 000030-02 Rev. FOI *Existing and Proposed Surface Water Drainage Layout* of the Article 14 reply received on 30/08/04, unless otherwise agreed by the Agency.
  - 3.15.3 The surface water run off from the facility discharged at the southern boundary shall be diverted to a silt trap and an oil interceptor prior to discharge from the facility. Surface water run-off from Phases 2 and 3 shall be diverted to a silt trap prior to discharge form the facility at the northern boundary.
    - 3.15.3.1 The interceptor shall be a Class I interceptor and the silt trap and interceptor shall be in accordance with I.S. EN 585-2:2003 (separator systems for light liquids). A manual shut-off valve shall be installed at the interceptor.
  - 3.15.4 The licensee shall submit a revised drawing to the Agency within twelve months of the date of grant of this licence, indicating all drainage arrangement at the site as detailed in this licence.
- 3.16 Groundwater Management
  - 3.16.1 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; and
    - b) The protection of surface waters and infrastructure, such as the liner, from any adverse effects caused by the groundwater.
  - 3.16.2 Groundwater monitoring wells shall be constructed having regard to the guidance given in the Agency's *Landfill Manual. Landfi/l Monitoring.* 2<sup>nd</sup> Edition.

- 3.16.3 Prior to commencement of lining works at Phase 3, the licensee shall submit a detailed groundwater management programme in the case of a high water table at the works phase to include a proposal monitoring of extracted grOIUldwater.
- 3.17 Civic Waste Facility
  - 3.17.1 The licensee shall maintain the Civic Waste Facility referred to in Attachment D.l.p. *Civic Amenity Facilities.*
  - 3.17.2 The licensee shall provide' and maintain appropriate receptacles at the Civic Waste Facility for the storage of various waste types.
- 3.18 Telemetry

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Within six months of the date of grant of this licence, a telemetry system shall be installed and maintained at the facility for recording of leachate levels in the lined cells and the existing/proposed lagoon. All facility operations linked to the telemetry system shall also have a manual control which will be reverted to in the event of break in power supply or during maintenance.

- 3.19 Monitoring Infrastructure
  - 3.19.1 Landfill Gas
    - a) Within six months of the date of grant of this licence, the licensee shall submit a proposal for the monitoring of landfill gas within the waste body at Phases I, 2 and 3 to include at least one landfill gas monitoring borehole per cell prior to the gas collection system being in place at these phases.
    - b) Within six months from date of grant of this licence, the licensee shall submit a proposal for the installation of additional perimeter landfill gas monitoring boreholes surrOlUlding the facility based on a detailed exposure and risk assessment of at the facility with potential pathways and receptors identified in accordance with the agency's *Landfill Manual*, *Landfill Monitoring*.  $2^{nd}$  *Edition*.
    - c) The licensee shall maintain an effective permanent gas monitoring system in the site office and any other enclosed structures at the facility.
  - 3.19.2 Groundwater
    - a) All wellheads shall be adequately sealed to prevent surface contamination within six months from the date of grant of this licence.
  - 3.19.3 Leachate
    - a) Within six months from the date of grant of this licence, the licensee shall submit a proposal for monitoring of leachate levels at Phases I and 2 as well as the proposed Phase 3 including the locations of these monitoring points.
  - 3.19.4 Replacement of Infrastructure
    - a) 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.

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### **CONDITION 4 RESTORATION AND AFTERCARE**

- 4.1 The licensee shall restore the facility on a phased basis. The Restoration and Aftercare Plans for the facility shall include the infonnation contained in Section 2.3.8 Closure and Aftercare of the EIS submitted as part of application and shall also include the currently remediated landfill area.
- 4.2 Within six months of the date of grant of this licence, the licensee shall submit results of an investigation assessment of the impacts on the Corranure and Lismagratty streams from the remediated landfill to include a full sediment and biological assessment. The protocol for the assessment shall be agreed by the Agency prior to the assessement being carried out. The assessment shall include a proposal for further remediation including surface water and groundwater control and abatment as is necessary to prevent pollution of the streams.
- 4.3 The final height of the facility shall not exceed I29.5mOD (Malin Head).
- 4.4 **Final Capping** 
  - 4.4.1 Unless otherwise agreed by the Agency, the permanent cap for a cell shall be constructed within twenty-four months of completion of filling in that cell.
  - 4.4.2 Unless otherwise agreed by the Agency, the final capping at Phases 1,2 and 3 shall consist of the following:-.
    - a) Top soil (150 -300mm);
    - 150. Subsoils, such that total thickness of top see and subsoils is at least Im; b)
    - c) Drainage layer of 0.5m thickness having a minimum hydraulic conductivity of Ix 10-4 rnls:
    - Compacted mineral layer of a minimum O.6m thickness with a penneability of less d) than IxIO-9 rnls or a geogynthetic material (e.g. GeL) or similar that provides equivalent protection;
    - Gas collection laver of natural material (minimum O.3m) or a geosynthetic layer. e)
- No material or object that is incompatible with the proposed restoration of the facility shall be 4.5 present within one metre of the final soil surface levels.
- Where tree planting is to be carried out above waste-filled areas, a synthetic barrier shall be used 4.6 to augment the clay cap. Combined topsoil and subsoil depths shall be a minimum of Im.
- 4.7 The restoration of each of the landfill extension cells (Phases I, 2 and 3), when filled, shall be undertaken within twelve months of the completion of installation of the pennanent cap.
- 4.8 Soil Storage
  - 4.8.1. All soils shall be stored to preserve the soil structure for future use.

REASON: To provide for the restoration of the facility.

### CONDITIONS FACILITY OPERATION AND WASTE MANAGEMENT

5.1 Wastes shall not be deposited in any cell or part of the landfill without the prior agreement of the Agency.

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- 5.2 Waste Acceptance and Characterisation Procedures
  - 5.2.1 Waste shall only be accepted at the facility, from Local Authority waste collection or transport vehicles or holders of waste permits, Wlless exempted or excluded, issued under the Waste Management (Collection Pennit) Regulations 2001. Copies of these waste collection pennits must be maintained at the facility.
  - 5.2.2 Whole used tyres (other than bicycle tyres tyres with an outside diameter greater than 1400mm) shall not be disposed of at the facility. Shredded tyres shall not be disposed of at the facility from 16 July 2006.
  - 5.2.3 No hazardous wastes or liquid wastes shalt be disposed of at the facility.
  - 5.2.4 The licensee shall ensure that inert waste accepted at the facility for disposal is subject to treatment where technically feasible.
  - 5.2.5 Within three months of the date of grant of this licence, the licensee shall submit to the Agency for its agreement updated written procedures (where appropriate) for the acceptance and handling of all wastes. These procedures shall include details of the pretreatment of all waste to be out prior to acceptance at the facility and shall also include methods for the characterisation of waste in order to distinguish between inert, nonhazardous and hazardous wastes. The random inspection of incoming waste loads should also be addressed in the procedures. The procedures shall have regard to the EU Decision (2003/33/EC) on establishing the criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex IT of Directive (1999/31/EC) on the landfill of waste.
- All wastes shall be checked at the working face wastes not suitable for acceptance shall be 5.3 removed for recovery or disposal at an appropriate alternative facility. Such waste shall be stored in the Waste Quarantine Area only. No waste shall be stored in the Waste Quarantine Area for the owner real more than three months.
- Working Face 5.4

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- prior agreement of the Agency is given, the following shall apply at the 5.4.1 Unless landfill:-
  - Only one working face shall exist at the landfill at anyone time for the deposit of a) waste other than cover or restoration materials; and
  - b) The working face of the landfiH shall be no more than 2.5 metres in height after compaction, no more than 25 metres wide and have a slope no greater than I in 3.
- 5.4.2 All waste deposited at the working face shall be compacted, using a steel wheeled compactor, and covered as soon as is practicable and at any rate prior to the end of the working day.
- 5.4.3 The working face, or faces, shall each day at the end of the day, be covered with suitable material.
- 5.5 Daily and Intennediate Cover
  - 5.5.1 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, appropriate cover material shall 5.5.2 be placed across the whole landfill so that no waste, other than the following is exposed:-
    - Waste suitable for specified engineering works; and a)

- b) Waste on the working face during the operational hours of the facility.
- 5.6 Landscaping
  - 5.6.1 Landscaping of the facility shall be carried out as described in *Landscape and Visual Assessment*, Appendix C, Volume III and specified on Fig. 7 *Landscape Layout* of the EIS submitted with the application, unless otherwise agreed by the Agency.
  - 5.6.2 Within three months of the date of grant of this license, the licensee shall submit a proposal for the installation of a screening berm as part of the proposed cell development works to reduce the visual impact of the proposed extension (Phase 3) as well as Phases I and 2.
  - 5.6.3 The existing hedgerow at the southern boundary along RI88 Regional Road of the facility shall be retained by the licensee as indicated in Section 3.11.3 *Existing Vegetation* of the EIS submitted with the application.
- 5.7 Operational Controls
  - 5.7.1 Phase 3 at the landfill shall be filled in accordance with the phase sequence outlined in Attachment D.2a *Construction Schedule and Sequence* and shown on Drawing No. DG-07 Rev. D03 *Corranure Landfill Phase 3 Layout & Sections.*
  - 5.7.2 All large hollow objects and other large articles deposited at the facility shall be crushed, broken up, flattened or otherwise treated.
  - 5.7.3 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 leachate and landfill gas collection system unless with the prior agreement from the Agency.
  - 5.7.4 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.
  - 5.7.5 Scavenging shall not be permitted at the facility.
  - 5.7.6 Gates shall be locked shut when the facility is unsupervised.
  - 5.7.7 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
  - 5.7.8 Fuels shall be stored only at appropriately bunded locations on the facility.
  - 5.7.9 All tanks and drums shall be labelled to clearly indicate their contents.
- 5.8 Waste Handling
  - 5.8.1 Inert Waste

Inert waste accepted at the facility for recovery shall comply with the standards established in *Schedule F: Criteria for the Acceptance of Inert Waste*, of this licence.

- 5.9 Off-site Disposal and Recovery
  - 5.9.1 Waste sent off-site for recovery or disposal shall be conveyed only by a waste contractor agreed by the Agency.
  - 5.9.2 All waste transferred from the facility shall be transferred only to an appropriate facility agreed by the Agency.
  - 5.9.3 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.
- 5.10 Civic Waste Facility
  - 5.10.1 The Civic Waste Facility shall be used only 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.

- 5.10.2 All waste deposited in the Civic Waste Facility shall be either:
  - a) Into a skip;
  - b) Into the hopper of the compactor for disposal;
  - c) Into a receptacle for recovery; and
  - d) In the case where inspection is required, into a inspection area.
- 5.10.3 The licensee shall assign and clearly label each container at the Civic Waste Facility to indicate their contents.
- 5.10.4 At the end of the working day the floor of the Civic Waste Facility shall be cleared of waste.
- 5.11 Leachate Management
  - 5.11.1 Leachate levels in the waste shall not exceed a level of 1.0m over the top of the liner at the base of the landfill.
  - 5.11.2 The frequency of leachate removal/discharge from the leachate lagoon shall be such that a minimum freeboard of 0.75m shall be maintained in the leachate lagoon at all times.
  - 5.11.3 Unless treated on the facility, leachate stored in the leachate storage lagoon shall be disposed of by tankering off-site to an Agency approved facility in fully enclosed road tankers.
  - 5.11.4 Recirculation of leachate or other contaminated water shall not be undertaken without the prior agreement of the Agency and in any case, shall be undertaken only within cells which have been lined to the satisfaction of the Agency.
- 5.12 Maintenance
  - 5.12.1 All treatment/abatement and elDISSIon 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.
  - 5.12.2 All lagoon structures on the facility shall be inspected and certified fit for purpose every three years by an independent and appropriately qualified chartered engineer.
  - 5.12.3 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 at the working face or to a skip.

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

6.3.1. In relation to landfill derived gases the following shall constitute a trigger level:

- a) Methane greater than 1% v/v; or,
- b) Carbon Dioxide greater than 1.5% v/v,

measured in any monitoring borehole, service duct, manhole or other point as may be specified, located external to the body of waste.

- 6.3.2 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:

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

b) In the case of landfill gas combustion plant:

Temperature 273 K., pressure 101.3 kPa, dry gas; 5% oxygen.

- 6.3.3. Emission limits for emissions from landfill gas flare/combustion plant to atmosphere in this licence shall be interpreted in the following way.
  - 6.3.3.1. 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; and

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c) No 30 minute mean value shall exceed twice the emission limit value.

6.3.3.2. Non-Continuous Monitoring

- a) For any parameter where, due to sampling/analytical limitations, a 30 number sample is inappropriate, a suitable sampling period should be employed and the value obtained therein shall not exceed the emission dimit value;
- b) For all other parameters, no 30 minute mean value shall exceed the emission limit value; and
- c) For flow, no hourly or daily mean value shall exceed the emission limit value.
- 6.4. Groundwater
  - 6.4.1 There shall be no direct emissions to groundwater from the lined landfill cells.
  - 6.4.2 Within three months of the date of grant of this licence, the licensee shall submit to the Agency for its agreement, groundwater monitoring trigger levels in accordance with the requirements of Directive 19991311EC.
  - 6.4.3 The trigger levels as specified in Condition 6.4.2 for groundwater shall be measured at monitoring boreholes GW-Ol, RCOl and GW-03.
- 6.5. Emissions to Surface Water
  - 6.5.1. No leachate from the lined landfill cells, wastewater or contaminated surface water run-off shall be discharged to surface water drains and courses.
  - 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.

- 6.5.3. Groundwater extracted during construction of Phase 3 shall be discharged to the surface water drainage network subject to Condition 3.16.3.
- 6.6. Disposal of Leachate
  - 6.6.1. In emergency situations alleachate or contaminated water tankered from the facility shall be transported to Cavan Waste Water Treatment Plant, or alternative facility agreed in advance by the Agency, and disposed of there.
- 6.7. Emissions to Sewer
  - 6.7.1. Unless otherwise agreed in advance by the Agency and the Sanitary Authority, the following shall apply for the discharge of leachate from the Leachate Lagoon to Cavan Wastewater Treatment Plant. There shall be no other discharge or emission to sewer of environmental significance.
  - 6.7.2. No substance shall be present in emissions to sewer in such concentrations as would constitute a danger to sewer maintenance personnel working in the sewerage system, or as would be damaging to the fabric of the sewer, or as would interfere with the biological functioning of a downstream wastewater treatment works.
  - 6.7.3. The licensee shall permit authorised persons of the Agency and the Sanitary Authority to inspect, examine and test, at all reasonable times, any works and apparatus in connection with the discharge or emission, and to take samples of the discharge or emission.
  - 6.7.4. No discharge or emission to sewer shall take place which rise to any reaction within the sewer or to the liberation of by-products which may be of environmental significance.
  - 6.7.5. The licensee shall ensure that the discharge shall not contain dissolved methane, petroleum spirits or organic solvents (including chlorinated organic solvents), at concentrations which would give rise to flammable or explosive vapours in the sewer.
  - 6.7.6. Non-trade effluent wastewater (e.g. firewater, accidental spillage) which occurs on-site shall not be discharged to the sewer without the prior authorisation of the Sanitary Authority.
  - 6.7.7. The licensee shall provide and maintain an inspection chamber in a suitable position in connection with each pipe through which a discharge or emission is being made. Each such inspection chamber or manhole shall be constructed and maintained by the licensee so as to permit the taking of samples of the discharge.
  - 6.7.8. Emission limit values for emissions to sewer/waters in this licence shall be interpreted in the following way:
    - a) Continuous monitoring.

No flow value shall exceed the specified limit.

b) Non-Continuous monitoring.

Eight out of ten consecutive results, calculated as daily mean concentration or mass emission values on the basis of flow proportional composite sampling shall not exceed 1.2 times the emission limit value.

c) No grab sample shall exceed 1.2 times the emission limit value.

REASON: To control emissions from the facility and prOVide for the protection of the environment and to provide for the requirements of the Sanitary Authority in accordance with Section 52 of the Waste Management Acts 1996 to 2003.

# CONDITION 7 NIIISANCE CONTROL

- 7.1 The licensee shall ensure that vennin, 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.
- 72 The road network in the vicinity of the facility shall be kept free from any debris caused by vehicles entering or leaving the facility. Any such debris or deposited materials shall be removed without delay.
- 7.3 Litter Control
  - 7.3.1 The measures and infrastructure as described in Section 4.1.6 Litter Control of the EIS submitted with the application shall be applied to control litter at the facility.
  - 73.2 Litter fencing shall be installed and maintained around the perimeter of the active tipping area to the specifications described in the Agency's Landfill Manual, Landfill Operational Practices prior to the disposal of any waste in any cell.
  - 733 All litter control infrastructure shall be inspected on a daily basis. The licensee shall remedy any defect in the litter netting as follows:-
    - A temporary repair shall be made by the end of the working day; and a)
    - A repair to the standard of the original wetting shall be undertaken within three b) 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, sim mediately and in any event by 10.00am of the next working day after such wasters 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. Consent of
- 7.4 Dust Control

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.

- 7.5 Prior to exiting the facility, all waste vehicles shall use the wheelwash.
- 7.6 Bird Control

Birds shall be prevented from gathering on and feeding at the facility by the use of birds of prey and/or other bird searing techniques. The birds of prey and/or other techniques shall be in place and shall be employed every day, from before dawn to after dark, until the waste activities cease and all the waste is capped to the written satisfaction of the Agency.

REASON: To provide for the control of nuisances.

### **RESOURCE USE AND ENERGY CONDITION 8 EFFICIENCY**

8.1 The licensee shall carry out an audit of the energy efficiency of the site within one year of the date of grant of this licence. The licensee shall consult with the Agency on the nature and extent of the audit and shall develop an audit programme to the satisfaction of the Agency. The audit programme shall be submitted to the Agency in writing at least one month before the audit is to be carried out. A copy of the audit report shall be available on-site for inspection by authorised persons of the Agency and a summary of the audit findings shall be submitted as part of the Annual Environmental Report. The energy efficiency audit shall be repeated at intervals as required by the Agency.

- 8.2 The audit shall identify all opportunities for energy use reduction and efficiency and the recommendations of the audit will be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2 above.
- 8.3 The licensee shall identify opportunities for reduction in the quantity of water used on site including recycling and reuse initiatives, wherever possible. Reductions in water usage shall be incorporated into Schedule of Environmental Objectives and Targets.
- 8.4 The licensee shall undertake an assessment of the efficiency of use of raw materials in all processes, having particular regard to the reduction in waste generated. The assessment should take account of best international practice for this type of activity. Where improvements are identified, these shall be incorporated into the Schedule of Environmental Objectives and Targets.

Reason: To provide for the efficient use of resources and energy in all site operations.

### CONDITION 9 MONITORING

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- 9.1 The licensee shall out such monitoring and as such locations and frequencies as set out in *Schedule D: Monitoring*, of this licence and as specified in this licence. Unless otherwise specified by licence, all environmental memory shall commence no later than two months after the date of grant of licence. The set of licence is the set of licence.
- 9.2 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.
- 9.3 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.
- 9.4 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.
- 9.5 The licensee shall maintain and clearly label and name all sampling and monitoring locations.
- 9.6 Within twelve months of the date of grant of this licence, the licensee shall submit to the Agency for its agreement an updated appropriately scaled drawing(s) showing all the monitoring locations that are stipulated in this licence including any noise sensitive locations and private wells to be monitored. The drawing shall include the eight-digit national grid reference of each monitoring point. Thereafter any amendments to this drawing should be notified as part of the AER.
- 9.7 Alllandfill gas monitoring equipment, other than permanent monitoring systems within buildings, shall be certified as being intrinsically safe.
- 9.8 The following information shall be maintained on site for inspection by Agency Officers: the names, qualifications and a summary of the 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.

### 9.9 Monitoring

Within three months of the date of grant of this licence, the licensee shall submit a proposal for agreement by the Agency outlining monitoring of groundwater in selected down-gradient wells within 500m of the facility.

9.10 Dust Monitoring

Prior to waste acceptance at the proposed Phase 3, the licensee shall submit an updated dust monitoring programme.

9.11 Noise Monitoring

> Prior to waste acceptance at the proposed Phase 3, the licensee shall submit an updated noise monitoring programme.

9.12 Meteorological Monitoring

The licensee shall maintain a meteorological station at the facility capable of monitoring the parameters listed in Schedule D.6: Meteorological of this licence.

9.13 Topographical Survey

A topographical survey shall be carried out annually (during landfiUing operations and installation of the final capping). The survey shall include a measurement of the remaining available void space. The survey shall be in accordance with any written instructions issued by the Agency and shall be reported annually as part of the AER.

9.14 Biological Assessment

A biological assessment of Corranure Stream and Lismagratty Stream at the locations specified on water & Sediment Monitoring Points of the Article 14 reply received 30/8/04 Fig. 3.6 shall be undertaken within six propths of the date of grant of this licence in accordance with Condition 4.2 and annually thereafter. This assessment shall use appropriate biological methods such as the EPA Q-rating system for the assessment of rivers and streams.

9.15 Archaeological Assessment

Prior to the development of any undisturbed area, the advice of The Heritage Section of the Department of the Environment, Heritage and Local Government (formerly Duchas) shall be sought. On completion of such development a report of the results of any archaeological monitoring shall be submitted to The Development Applications Section and to the Agency.

9.16 Stability Assessment

The licensee shall cany out a stability assessment of the side slopes of the facility annually and report the results as part of the AER.

- 9.17 Nuisance Monitoring
  - 9.17.1 The licensee shall, at a mlmmum of one week intervals, inspect the facility and its immediate surrounds for nuisances caused by litter, vermin, birds, flies, mud, dust and odours.
  - 9.17.2 Daily odour inspections shall be carried out at the designated area for storage of green waste accepted at the civic waste facility, unless otherwise agreed by the Agency.

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

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# **CONDITION 10 CONTINGENCYARRANGEMENTS**

- 10.1 In the event of an incident the licensee shall
  - a) Identify the date, time and place of the incident;
  - b) Carry out an 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; and
  - 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;
    - ii) identify and put in place any other appropriate remedial action.
- 10.2 The licensee shall maintain an Emergency Response Procedure (ERP). Within six months of the date of grant of this licence, the licensee shall submit to the Agency for its agreement, a proposal for updating (where appropriate) of the documented ERP for the facility.
- 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.
- lOA Emergencies
  - 1004.1 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.
  - 1004.2 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.
  - 10.4.3 In the event that monitoring of local wells indicates that the facility is having a significant adverse effect on the quantity and/or quality of the water supply this shall be treated as an emergency and the licensee shall provide an alternative supply of water to those affected.
  - 10.4.4 In the event that 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 11 RECORDS

- 11.1 The licensee shall keep the following documents at the facility office:
  - a) The current waste licence and specified attachments and drawings relating to the facility;
  - b) The current EMS for the facility;

- c) The previous year's AER for the facility;
- Records of all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the facility;
- e) An up-to-date site drawing/plan showing the locations of key process and environmental infrastructure, including monitoring locations and emission points;
- f) Relevant correspondence with the and
- g) All written procedures produced by the licensee which relate to the licensed activities.
- 11.2 The licensee shall maintain a record for each load of waste arriving at the facility, excluding those 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 collection pennit 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 pennit 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 details of the date of occurrence, the types of waste and the facility to which they were removed including the waste licence and waste pennit register number of these facilities as appropriate.
- 11.3 The following records shall be maintained by the licensee:
  - a) The types and quantities of waste recovered and disposed of 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 bonds and other structures and any maintenance or remedial work arising from them;
  - d) Details of all nuisance inspections and any actions taken as a result of these inspections; and
  - e) The names and qualifications of all persons who cany out all sampling and monitoring as required by this licence and who carry out the interpretation of the results of such sampling and monitoring.
- 11.4 The licensee shall maintain a record of all complaints relating to the operation of the facility. 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.

- 11.5 A record shall be kept of consignment of leachate removed from the facility. The record shall include the following:-
  - The name of the carrier; a)

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- 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; and
- Any incidents or spillages of leachate during its removal or transportation. e)
- 11.6 A record shall be kept for each load of waste departing from the Civic Waste facility. The following shall be recorded:-
  - The name of the carrier; a)
  - The vehicle registration number; b)
  - 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;
  - t) The name of the person checking the load; and
  - The time and date of departure. g)
- 11.7 A 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:-
  - The date and time during which spraving of insecticide is carried out; a) ection P
  - b) Contractor details;
  - ownet c) Contractor logs and site inspection reports;
  - d) Details of the rodenticide(s) and insecticide(s) used;
  - e) Operator training details;
  - t) Details of any infestations;
  - Mode, frequency, location and quantity of application; and g)
  - h) Measures to contain sprays within the facility boundary.

REASON: To provide for the ofproper records of the operation of the facility.

### **CONDITION 12 REPORTS AND NOTIFICATIONS**

- 12.1 Unless otherwise agreed by the Agency, all reports and notifications submitted to the Agency shall:
  - a) Be sent to the EPA's Office of Environmental Enforcement, John Moore Road, Castlebar, County Mayo;
  - b) Comprise one original and two 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;
- t) Be 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; and
- h) Be transferred electronically to the Agency's computer system ifrequired by the Agency.
- 12.2 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 1000 hrs the following working day after the occurrence of any incident;
  - b) Submit a written record of the incident, including all aspects described in Condition 1O.I(ae), to the Agency as soon as practicable and in any case within five working days after the occurrence of any incident;
  - c) In the event of any incident which relates to discharges to surface water, notify the Northern Regional Fisheries Board as soon as practicable and in any case not later than 1000 hrs on the following working day after such an incident; and
  - d) Should any further actions be taken as a result of an Sincident 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.
- 12.3 Waste Recovery Reports

The licensee shall as part of the AER report on the facility's contribution 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, going to landfills 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;
- e) The recovery of commercial waste, including cardboard;
- t) Inert waste to be used for cover/restoration material at the facility; and
- g) Proposals regarding the utilisation of energy from the gas utilisation plant.
- 12.4 Annual Environmental Report
  - 12.4.1 The licensee shall submit to the Agency for its agreement by 31<sup>st</sup> March of each thereafter, an Annual Environmental Report (AER) for the previous year.
  - 12.4.2 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 reports to and notifications to the Agency.

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### CONDITION 13 CHARGES AND FINANCIAL PROVISIONS

### 13.1 Agency Charges

- 13.1.1 The licensee shall pay to the Agency an annual contribution of €7,782 or such sum as the Agency from time to time detennines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity, as the Agency considers necessary for the perfonnance of its functions under the Waste Management Acts, 1996 to 2003. The first payment shall be a pro-rata amount for the period from the date of this licence to the 31st day of December, and shall be paid to the Agency within one month from the date of the licence. In subsequent years the licensee shall pay to the Agency such revised arulUal contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Waste Management Acts, 1996 to 2003, and all such payments shall be made within one month of the date upon which demanded by the Agency.
- 13.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased the licensee shall contribute such sums as determined by the Agency to defraying its costs in regard to items not covered by the said annual contribution.
- 13.2 Financial Provision for Closure, Restoration and Aftercare, S
  - 13.2.1 The licensee shall from a date to be set by the Agency establish and maintain a fund, or provide a 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 4. The type of fund established and means of its release/recovery shall be agreed by the Agency prior to its establishment.
  - 13.2.2 Any fund established shall be maintained in an amount always sufficient to underwrite the current Restoration and Aftercare Plan.
  - 13.2.3 The licensee shall revise the cost of restoration and aftercare annually and any details of the necessary adjustments to the fund or guarantee 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.
  - 13.2.4 Unless otherwise agreed any revision to the fund shaH be computed using the following fonnula:-

Cost = (ECOST x WPI) + CiCC

### Where:-

Cost	Revised restoration and aftercare cost
ECOST	Existing restoration and aftercare cost
WPI	Appropriate Wholesale Price Index [Capital Goods, Building & Construction (Le. 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.

### 13.3 Cost of landfill of waste

In accordance with the provisions of Section 53A of the Waste Management Acts 1996 to 2003, the licensee shall ensure the costs in the setting up, operation of, provision of fmancial security and closure and after-care for a period. of at least 30 years shall be covered by the price to be charged for the disposal of waste at the facility. The statement required under Section 53A(5) of said Acts is to be included as part of the AER.

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

Consent of convision on purposes only, any other use.

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# SCHEDULEA: Waste Acceptance

### A.I Waste Acceptance

The following waste related processes are authorised:

Crushing, baling, repackaging processes LandfiUing of inert waste Use of compost & inert waste in landfJII operation Storage of waste Use of waste as a fuel Recovery of dry recyclables

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

### Table A.I Waste Categories and Quantities

Household waste	50,000
Commercial waste	32,000
Construction and demolition wasteNoteJ	5,000 ther th
Green waste	2:00.00
Street cleaning residues	0505 1900
Hazardous Household wasteNote2	TI PUT COULT 100
TOTAL	Switch 90,000

Notel: The quantities of the mdividual waste types may be adjusted, only With the agreement of the Agency, subject to the total annual waste quantity remaining the same

Note 2: Hazardous waste types as listed in Table E.1.2 Hazardous Waste Types and Quantities of the Article 14 reply received 30/8/04, or as may otherwise be agreed in writing.

# SCHEDULEB: Specified Engineering Works

STEELEE MOUS			al e	<b>.</b>	8
Development of the facility including preparatory works and lining.					
Final capping.					
Installation of Landfill Gas Management Infrastructure.					
Installation of Leachate Management Infrastructure.					
Installation of Groundwater Control Infrastructure.					
Installation of Surface Water Management Infrastructure.					
Any other works notified in writing by the Agency.					

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Note 3: This limit does not apply to construction and demolition wastes imported to the site for use in the construction of the facility.

# **SCHEDULEC:** Emission Limits

### C.1 Noise Emissions:

(Measured at any noise sensitive locations).

Daviding Db(ex) L <sub>eval</sub> (S-minines).	Nghunno (Hay) Ly (15 minutes)
55 <sup>Note 1</sup>	45 <sup>Note 1</sup>

Note I: There shall be no clearly audible tonal component or impulsive component in the noise emission from the activity at any noise sensitive location.

### C.2 *Dust Deposition Limits:*

(Measured at the monitoring points indicated in *Table D.1.1*).

350						
Note I:	30 day composite	with the results expressed as mg/m <sup>2</sup> /day.				

C.3 Surface Water Discharge Limits: Measured at the surface discharge points \$ \$ 1 and SW-2 indicated in Table D.L1

evel Suspended Soluts mode
35
- Pectowne
FOLINIST

# C.4 Emission Limits Values for Landfill Gas Plant

Emission Point Reference numbers: to be agreed by Agency in advance. Minimum discharge height: Srn (unless results from modelling suggests otherwise)

Parenneree	Phire (an stored) Baitsston Linny Value <sup>Mire (</sup>	Enlishtion Plant E <u>mlishtor</u> Etmir Vatre <sup>s ver</sup>	
Nitrogen oxides (NOJ	lSOmg1m <sup>3</sup>	500mg1m <sup>3</sup>	
со	50mglm <sup>3</sup>	650mglm <sup>3</sup>	
Particulates	Not applicable	130mg1m <sup>3</sup>	
Total organic carbon (TOC)	lOmg1m <sup>3</sup>	Not applicable	

Note I: Dry gas referenced to 5% oxygen by volwne for utilisation plants and 3% oxygen by volwne for flares.

# SCHEDULED: Monitoring

### D.1 Monitoring Locations

Monitoring locations shall be those as set out in Table DJJ and Drawing No. DG0009 Rev. FOICorranure Landjill Locations afMonitoring Points of the<br/>otherwise indicated or agreed by the Agency.14 reply received 30/8/04, unless

TableD	D.I.t Monitoring Lo	cations					
E200 GAS W WANG E0000 E0000	s mit kroj	Dust Fepositio n colone	Nofsa	Stirkiçe Ventge	Granda Water	Leichin	
SPUT	IIIIS	Neimins	SEITITE	SELTONS	Shirons	SEITOIS	
With Waste G-0 G-0 G-0	nin NoteJ Notel 1 2 3	Note 4 DI D2 03 D4 OS	NoteS BI B2 B3 B4	Chemical Monitoring NOle7 SW-I SW-2 Note8 KI KI KJ KJ K4	GW-01 <sup>Note 18</sup> RC01 <sup>Note 19</sup> RC02 GW-03 <sup>Note 19</sup> SA1	Lagoon & CoUection Chambers	
Bound locati Note GO GO GO GO GO GO GO GO GO C	dary ons .z t <b>01</b> 2 3 3 4 6 0 3 22 2 2 2 2 2 2 2 2 2 2 2 2 2	For inspection of the section of the		Al Biological Assessment & Sediment Monitoring Note' Bi* B2* B3 B4 B5* A1* A2* A3 A4 A5*	Private Wells <sup>Nove II</sup>	Within WasteNOle (2 L/G-01 L/G-02 L/G-03 UG-04	
Note I: Note 2: Note 3: Note 4:	Location of landfill gas mon Condition 3.19.1. Additional perimeter wells to Condition 3.19.1. Location to be agreed by Additional dust monitoring p Condition 9.10.	o monitor for poten Agency.	tial off-site migrat	be agreed by the A			
NoteS: Note 6: Note 7:	Additional noise monitoring Condition 9.11. The licensee shall carry out r The surface water monitoring Sediment Monitoring Points monitored are outlined in Ta	noise monitoring at g points to be used of the Article 14 ro	any other noise se for chemical moni	ensitive location as m toring as shown on l	nay be specified by Fig. 3.6 <b>Surface</b> Wa	the Agency. ter <b>&amp;</b>	
Note 8: Note 9:	The location of the surface water discharge point to Lismagratty <b>stream</b> to be agreed by the Agency. The location of the biological assessment and sediment monitoring points as shown on Fig. 3.6 Surface Water & Sediment Monitoring Points of the Article 14 reply received on <i>30/8/04</i> . Sediment monitoring only to be carried out at monitoring points marked with an asterisk. The sediment shall be sampled for the following parameters: hydrocarbons, PeBs, phenol and heavy metals.						
Note 10: Note 11: Note 12:	Groundwater monitoring well Private wells to be monitored location of additionalleacher be agreed with the Agency in	l in accordance with the monitoring poin	h Condition 9.9. ts to be installed i		dition 6.4. Phases I, 2 and 3 at	the facility to	

TableD.I.t Monitoring Locations

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# D.2 Landfill Gas

T bl D21 L dfill GM't	100 million 100	≖ dT Frequency	hn' Analysis Method & Cermique
	Gas Borebolesl Venls1W <b>ells</b>	SileOffice	
Methane (CH4) % v/v	Monthly	Weekly	Infrared analyser/flame ionisation detector
Carbon dioxide (CO <sub>2</sub> ) % v/v	Monthly	Weekly	Infrared analyser/ flame ionisation detector
Oxygen(O <sub>2</sub> ) % v/v	Monthly	Weekly	Electrochemical cell
Atmospheric Pressure	Monthly	Weekly	Standard
Temperature	Monthly	Weekly	Standard

All monitoring **equipment** used should be intrinsically safe. **Or** other **methods** agreed in advance by lbe Agency. Note I: Note 2:

## D.3Dust

Note 1: Standa	rd method VD12119 (Measu	rement of Dustfall Determination of Dustfa	Il using Bergerhoff Instrument (Standard Method)
Dust		Three times a year Note 2	Standard Method Note 1
Pitening	iter (mymr <sup>2</sup> (ekyz)		<u>Xunitais</u> distinut/Technique
TableD.3.1	Dust Monitoring	Frequency and Technique	р. Э

German Engineering InstitUle). Any modifications fleetininate interference due 10 algae growth in the gauge should be reported 10 the Agency. Twice during the period May 10 September period in the period may be period may be period for the period may be period. ngineering Insti1Ule). Any modifications flethminate inlerfere ncy. ing the period May 10 September period May 10 September period May 10 September period with the period of the period

Note 2:

# D.4Noise

TableDA.1

L(A)EQ [30 minutes]	Annual	Standard Note I
L(A)lo [30 minutes]	Annual	Standard Note I
L(A)90 [30 minutes]	Annual	Standard Note t
Frequency Analysis <i>(lf3</i> Octave band analysis)	Annual	Standard <sup>Note</sup> 1

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

# D.5 Surface Water, Groundwater and Leachate

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PARAMINTER	SURDACE WATER Monitoring/Proquency	FIREDENDWALLER Monitorita Frequency	LE XERVES
Visual Inspection/Odour Note 2	Weekly	Quarterly	Quarterly
Groundwater Level	Not Applicable	MontWy	Not Applicable
Leachate Level	Not Applicable	Not Applicable	Continuous
Ammoniacal Nitrogen	Quarterly Note 8	Monthly	Annually
BOD	Quarterly Note 8	Not Applicable	Annually
COD	Quarterly	Not Applicable	Annually
Chloride	Quarterly	Quarterly	Annually
Dissolved Oxygen	Quarterly	Quarterly	Not Applicable
Electrical Conductivity	Quarterly Note 8	MontWy	Annually
PH	Quarterly Note 8	Monthly	Annually
Total Suspended Solids	Quarterly Note 8	Not Applicable	Not Applicable
Metals / non metals <sup>Note 3</sup>	Annually	Annually	Annually
Cyanide (Total)	Not Applicable	Annually Annually	Annually
Fluoride	Not Applicable	Annually	Annually
List IIII organic substances Note 4	Once off Note 5	Annually Note 5	Once offNote 5
Mercury	Angually	Annually	Annually
Sulphate	citon Annually	Annually	Annually
Total Alkalinity	Once of Notes Annually Annually Not Applicable	Annually	Not applicable
Total P/orthophosphate	Annually NoteS	Annually	Annually
Total Oxidised Nitrogen	Annually	Not Applicable	Annually
Total Organic Carbon	Not Applicable	Monthly	Not Applicable
on evaporation	Not Applicable	Annually	Not Applicable
Coliforms Note 10	Not Applicable	Annually	Not Applicable
Total Coliforms Note 10	Not Applicable	Annually	Not Applicable
Biological	Annually Note 6	Not Applicable	Not Applicable
Sediment	Once off Note 9	Not Applicable	Not Applicable

Note 2: Where there is evident gross contamination of leachate, additional samples should be analysed. Note 3: Metals and elements 10 be analysed by AA/ICP should include as a minimum: boron, cadmium, calcium, chromium (total),

iron, lead, magnesium, manganese, nickel, potassium, sodium and zinc.

Note 4: Samples screened for the presence of organic compounds using Gas Chromatography / Mass (GCIMS) or other appropriate techniques and using the list 1/11 Substances from EU Directive 76/464/EEC and 80/681EEC as a guideline. Recommended analytical techniques include: volatiles (US Environmental Protection Agency method 524 nr equivalent), serni-volatiles (USEPA method 525 or equivalent, and pesticides (USEPA method 608 or equivalent).

Note 5: 2 surface water locations, 3 groundwater locations and 2 leachate locations to be agreed by the Agency for these parameters.

Note 6: Appropriate biological methods (such as EPA Q-Rating System) to be used for the assessment of rivers and streams.

Note 7: Visual Inspection and Leachate Levels to be monitored at alleachate monitoring points specified in Table D.I.I. Leacbate composition to be monitored at the leachate lagoon and two locations within the waste body.

Note 8: Monitoring at discharge points SW-I and SW-2 shall be carried out monthly for these parameters.

Note 9: Appropriate methods to be used for the assessment of stream sediments and in accordance with the Agency's Landfil/ Manual. Landjill Monitoring. 2<sup>sd</sup> Edition.

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Note 10: In the case where groundwater is for drinking water, if there is evidence of bacterial contamination, the analysis at up and downgradient monitoring points shall include enumeration of total bacteria at 22°C and 37°C and faecal Streptococci,

# D.6 Meteorological Monitoring

## Table D.6.1 Meteorological Monitoring:

Data to be obtained from a location on the facility. However Evaporation, Evapotranspiration and Humidity may be obtained from the Clones weather Station.

Parameter	- Appring the transmy	Analysis Methods resonance
Precipitation Volume	Daily	Standard
Temperature (min/max.)	Daily	Standard
Wind Force and Direction	Daily	Standard
Evaporation	Daily	Standard
Evapotranspiration Note 1	Daily	Standard
Humidity	Daily	Standard
Atmospheric Pressure <sup>Note 1</sup>	Daily	Standard

Note 1: Monitoring frequency for these parameters may be decreased with the agreement of the Agency.

### Plant/Endosed Flage D. 7 Gas

D. 7 Gas Location: Utilisation plant	Plant/End	osed Flare the	
Table D.7.1 Landfill Gas	Utilisation PlantlEnclos	Rear Parameters an	nd Monitoring Frequency
	Fig. 10 - Control - Contro		N
			، <u>کھی</u> ہے۔ میں کی کی کی کے ا
Inlet	Conse		
Methane (CH4) % v/v	Continuous	Weekly	Infrared analyser/flame ionisation detector/thermal conductivity
Carbon dioxide $(CO_z) \% v/v$	Continuous	Weekly	Infrared analyser/thermal conductivity
Oxygen (Oz) %v/v	Continuous	Weekly	Electroehemicallthermal conductivity
Total Sulphur	Annually	Annually	Ion chromatography
Process Parameters			
Combustion Temperature	Continuous	Quarterly	Temperature Probeldatalogger
Outlet			
Carbon monoxide (CO)	Continuous	Continuous	Flue gas analyser/datalogger
Nitrogen Oxides (Nox)	Annually	Annually	Flue gas analyser
Sulphur dioxide	Annually	Annually	Flue gas analyser

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- ( <b>SO</b> .)			
Particulates	Not applicable	Annually	Isokinetic/Gravimetric
2.13 <sup>6</sup>	Annually	Not applicable	Flame ionisation
Note 1: All moniloring equi	menl used should be intrinsical	llv safe	Į

Note 1: All moniforing equipment used should be intrinsically s

Note 2: Or olber methods agreed in advance by the Agency.

# SCHEDULEE: Recording and Reporting to the Agency

Environmental Management System Updates	Annually	Submit as part of AER.
Annual Environment Report (AER)	Annually	By 31 <sub>st</sub> March of each year.
Record of incidents	As they occur	Within five days of the incident.
Specified Engineering Works reports	<b>As</b> they arise	Prior to the works commencing.
Monitoring of landfiU gas	Quarterly	Ten dy's after end of the quarter being reported on.
Monitoring of Surface Water Quality	Quarterly of	Ten days after end of the quarter being reported on.
Monitoring of Groundwater Quality	Quarterlycuit	Ten days after end of the quarter being reported on.
Monitoring of Leachate	11 Quarterly	Ten days after end of the quarter being reported on.
Meteorological Monitoring	Annually	Submit as part of AER.
Dust Monitoring	Three times a year	Submit as part of AER.
Noise Monitoring	Annually	Submit as part of AER.
Biological Monitoring	Annually	Within six months from the date of grant of this licence <b>in</b> accordance with Condition 4.2 and every year thereafter as part of the AER.
Sediment Assessment	-	Within six months from the date of grant of this licence in accordance with Condition 4.2.
Any other monitoring	As they occur	Within ten days of obtaining results.

Note 1: Unless allered al the request of the Agency,

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# SCHEDULEF: Criteria for the Acceptance of Inert Waste

# F.] Acceptable Wastefor Recovery

Only the wastes listed below are acceptable for recovery at the facility, unless otherwise agreed by the <u>Agency</u>. These wastes should be in such a condition as to not represent a risk of causing environmental It ti

Topsoil	Solid Road Planings, Solid Tannacadam, Solid Asphalt
Subsoil	Brickwork:
Stone, Rock and Slate	Natural Sand
Clay, Pottery and China	Concrete

Consent of copyright owner required for any other use.

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# **Content of the Annual SCHEDULEG: Environmental Report**

# Anniell Environmentent 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.

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 interpretation of environmental monitoring.

Biological Monitoring summary report.

Meteorological summary report.

Resource and energy consumption summary.

Proposed development of the facility and timescale of such development.

Volume Qfleachate 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 when to the tot only and the coming year.

Report on restoration of completed cellsl phases.

Topographical Survey.

Slope stability monitoring report.

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

Estimated annual and cumulative quantity of emissions to groundwater.

Annual water balance calculation and interpretation.

Environmental Management System updates.

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

Schedule of Environmental Objectives and Targets for the forthcoming year.

Full title and a written summary of any 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.

Statement of charges and costs of landfill (Condition 12.3 and Section 53(A)5 of the Waste Management Acts 1996 to 2003.

Report on training of staff.

Any other items specified by the Agency.

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Sealed by the seal of the Agency on this the 10th day of May, lOOS

PRESENT when the seal of the Agency was affixed hereto:

Padraic Larkin, Director



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Our Ref: 02.EL2028	
Proj. Director Proj. Director Proj. dei egger Rectorent Rectorent Stobhom Rectorent Rectorent MGEOOIS	An Bord Pleaná
Siobhan Aheme RPS-MCOS Ltd., The Grainstore, Abbeygate Street Lower, The Grainstore, Abbeygate Street Lower, The Grainstore, The Grains	
Galway.	
2 1 JUN 2004	
Re: Corranure Landfill Extension	
Dear SirlMadam,	
_ An order has been made An Bord detennining the above-mentioned ) case. A copy of the order is enclosed.	
In accordance with section 146(3) of the Planning and Development Act, 2000 the Board will make available for inspection and purchase at its offices the documents relating to the decision within 3 working days following its decision. In addition, the Board will also make available the Inspector's Report and the Board Direction on the decision on its website (www.pleanalaie). This information is nonnally made available on the list of decided cases on the website on the Wednesday following the week in which the decision is made.	
If you have any queries in relation to the matter please contact the undersigned officer of the Board.	
Please quote the above-mentioned An Bord reference number in any correspondence or telephone contact with the Board.	
Yours faithfully,	
) Sieran Ste	
Siobhan White Executive Officer	
Encl:	
	Sr.iid t.
	Tel: (01) 858 8100 LoCall: 1890 275 175 Fax: (11 11 872 2684 Weh.http://www.plcanala.ic email:bord@plcanala.ie

# An Bord Pleanála



# PLANNING AND DEVELOPMENT ACTS 2000 TO 2002

# Cavan County Council

APPLICATION by Cavan County Council for approval under section 175 of the Planning and Development Act, 2000 in accordance with plans and particulars, including an environmental impact statement, lodged with the Board on the 8<sup>th</sup> 2003.

PROPOSED DEVELOPMENT: Landfill extension at Corranure Lanrlfill, located in the townlands of Corranure and Lismagratty.

# DECISION

GRANT approval for the above proposed development in accordance with the said plans and particulars based on the reasons and considerations nnder and snbject to the conditions set out below to the said plane and below to the conditions are said below. The conditions are said below to the conditit

# REASONS AND CONSIDERATIONS

Having regard to:

- (i) the existing use of lands for landfilling at this location
- (ii) the pattern of development in the area
- (iii) the nature and extent of the mitigation measures proposed
- (iv) the necessity to obtain a waste licence in order to operate the facility

it is considered that, subject to compliance with the conditions set out below, the proposed development would be a reasonable extension to an existing landfill facility, and a necessary public utility, would be acceptable in tenns of traffic safety and convenience, would not be prejudicial to public health, would not cause undue injury. to the amenities of the area or of property in the vicinity, and would be in accordance with the proper planning and sustainable development of the area, and would not result in significant adverse effects on the environment.

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# CONDITIONS

1. Landfilling operations shall cease within 5 years of the date on which cell 3 commences to receive waste, unless approval for continuation beyond that period has been granted.

Reason: In order to clarify the period to which this approval relates in the interest of the amenity of the area, and to meet the requirements of the short teim waste disposal policy as set out in the North East Region Waste Management Plan 1999-2004.

2. There shall be no expansion of landfilling activities on the site until such time as the following road works are completed. hnprovement of the junction with the Ni88 to create a dedicated right turning lane and to improve the sightlines from the Coothill direction. Junction improvements shall be in accordance with figure 7/4 (paragraphs 7.20-7.48) of TD 42/95. Geometric Design of MajorlMinor Priority Junctions, National Roads Authority Road Geometry Handbook, December 2000.

Reason: In the interest of road safety.

3. All initial excavations and ground disturbance works associated with the proposed development including any re-grading on re-alignment of streams and excavations required for road. improvement works shall be monitored by a qualified archaeologist. A report on the monitoring shall be prepared by the archaeologist. The report shall be made available for public inspection the offices of the local authority.

Reason: To protect the archaeological heritage of the area.

Member of An Bord Pleanála duly authorised to-authenticate the seal of Dated this J Drday of 2004.

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Drawing of Location of Site Notice

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CAVAN COUNTY COUNCIL Comhairle Chontae An Chabhain

# PUBLIC NOTICE

#### Application to the Environmental Protection Agency for the Review of a Waste Licence larratas ar an nGnfomhaireacht um ChaomhntJ Comhshaoil Chun go nDeanfar CeadtJnas а

AthbheithnitJ

Notice is thereby given in accordance with the provisions of the Waste Management Act, 1996 to 2008 and Articles 5 and 7 of the Waste Management (Licensing) Regulations, 2004 (S.1. No. 395 of 2004) that Cavan County Council, The Courthouse, Cavan will apply to the Environmental Protection Agency for the Review of the Waste Ucence in respect of Corranure landfill, located in the townlands of Corranure and lismagratty.

#### National Grid Reference 244297E, 307793N

The Classes of Waste Disposal Activities in accordance with the Third Schedule of the Waste Management Act, 1996 to 2008 as amended are as follows:

The principle activity carried out on the site is Class 5 of the Third Schedule.

Activities carried out are:

Third Schedule

- Class 1 -
- edule Deposit on, in, or under land (including landfill). Specially engineered landfill, including placement into lined discrete cells which are capped and isolated from one another and the environment Class 5 ownerre tionP from one another and the environment.

The Waste Licence Review Application will be submitted to the Agency within two weeks of the publication of this notice.

A copy of the application for the Review of the Waste licence and such further information relating to the application as may be furnished to the Agency in the course of the Agency's consideration of the application will, as soon as is practicable after receipt by the Agency, be available for inspection and purchase, at the Headquarters of the Environmental Protection Agency, Johnstown Castle Estate, Wexford and also at the offices of Cavan County Council, Courthouse, Cavan.

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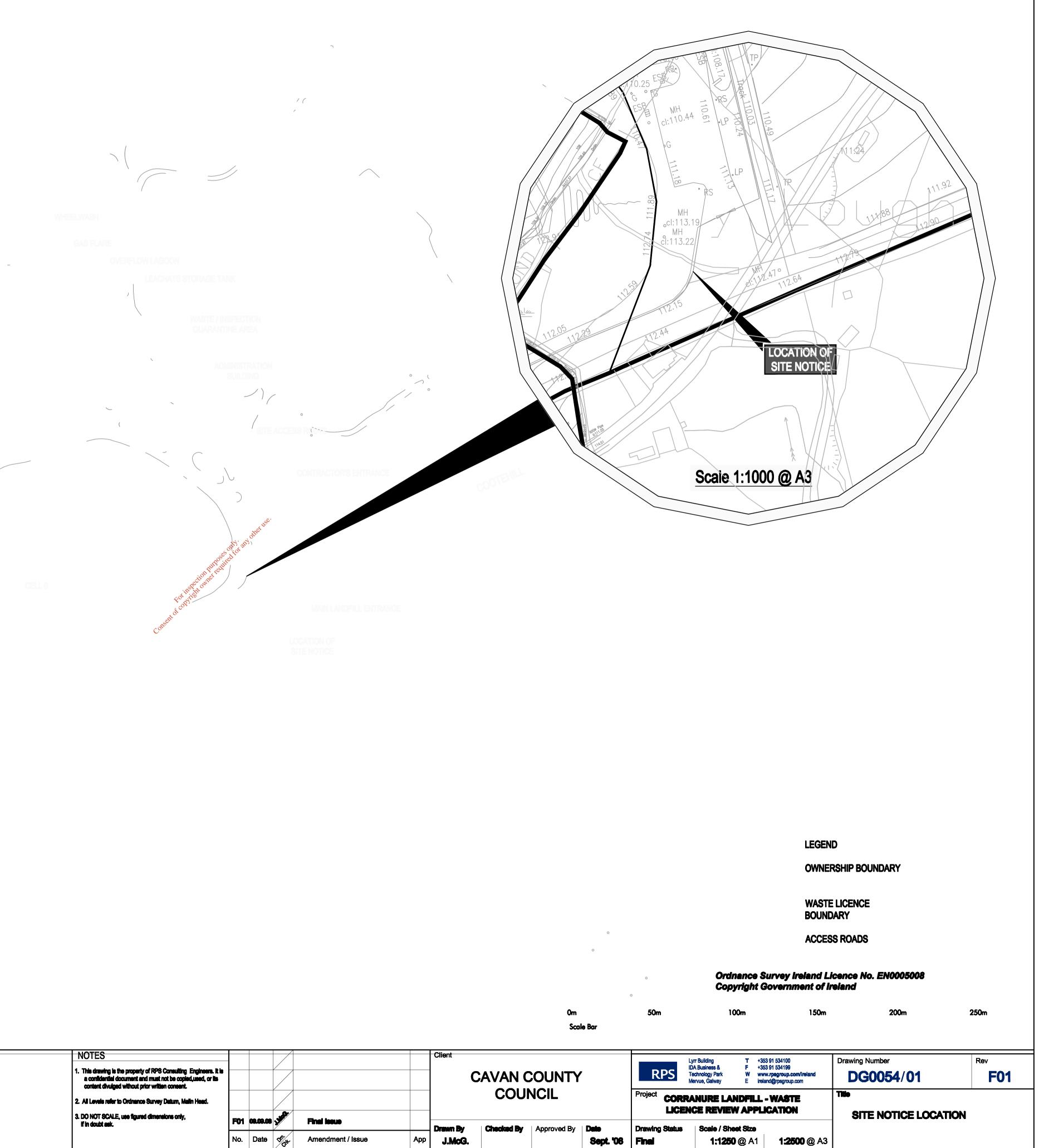
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Cavan County Council Comhairle Chontae an Chabháin

F. Gibbons Director of Services, Cavan County Council Courthouse, Cavan. Tel: (049) 4331799 Fax: (049) 4361516





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		No.	Date	DIL	Amendment / Issue	Арр	J.McG.		Sept. '08	Final

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