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**WASTE LICENCE  
Recommended Decision**

<b>Licence Register Number:</b>	<b>W0141-02</b>
<b>Applicant/Licensee:</b>	<b>Cork City Council</b>
<b>Location of Facility:</b>	<b>Beaumont Quarry, Churchyard Lane, Ballinlough / Ballintemple, Cork City.</b>

## ***INTRODUCTION***

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

**Beaumont Quarry, Churchyard Lane, Ballinlough / Ballintemple, Cork City is a disused limestone quarry and is located between the residential areas of Ballintemple and Ballinlough in Cork City. In its unremediated state the quarry represents an environmental risk in terms of its groundwater vulnerability rating and unlicensed disposal of waste. The site covers approximately 3.5 ha and will require ca. 250,00 tonnes to infill and restore the site to beneficial use, with this process taking 2–3 years to complete. The quarry is bounded on three sides by vertical or near vertical rock faces. Inert waste is to be the only class of waste to be landfilled and will comprise uncontaminated Construction and Demolition (C&D) waste, with the express purpose of restoring the site to beneficial use as a public amenity.**

The licence sets out in detail the conditions under which Cork City Council, City Hall, Cork City will operate and manage this facility.

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## ***Glossary of Terms***

All terms in this licence should be interpreted in accordance with the definitions in the Environmental Protection Agency Acts 1992 to 2007 / Waste Management Acts 1996 to 2008, unless otherwise defined in the section.

<b>Adequate lighting</b>	20 lux measured at ground level.
<b>AER</b>	Annual Environmental Report.
<b>Aerosol</b>	<b>A suspension of solid or liquid particles in a gaseous medium.</b>
<b>Agreement</b>	Agreement in writing.
<b>Annually</b>	At approximately twelve-monthly intervals.
<b>Application</b>	The application by the licensee for this licence.
<b>Appropriate Facility</b>	A waste management facility, duly authorised under relevant law and technically suitable.
<b>Attachment</b>	Any reference to Attachments in this licence refers to attachments submitted as part of this licence application.
<b>BAT</b>	Best Available Techniques.
<b>Biannually</b>	All or part of a period of six consecutive months.
<b>Biennially</b>	Once every two years.
<b>BOD</b>	5 day Biochemical Oxygen Demand (without nitrification suppression).
<b>CEN</b>	Comité Européen De Normalisation – European Committee for Standardisation.
<b>COD</b>	Chemical Oxygen Demand.
<b>Construction and demolition (C&amp;D) waste</b>	<b>Wastes that arise from construction, renovation and demolition activities: Chapter 17 of the EWC or as otherwise may be agreed.</b>
<b>Containment boom</b>	A boom that can contain spillages and prevent them from entering drains or watercourses or from further contaminating watercourses.
<b>Cover Material</b>	Bricks, crushed concrete, tarmac, earth, soil, sub-soil, stone, rock or other similar natural materials or other cover material, the use of which has been agreed with the Agency.

<b>Daily</b>	During all days of plant operation and, in the case of emissions, when emissions are taking place; with at least one measurement on any one day.
<b>Daily Cover</b>	Is the term 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 of the day and subsequently reused as much as possible.
<b>Day</b>	Any 24 hour period.
<b>Daytime</b>	0800 hrs to 2200 hrs.
<b>dB(A)</b>	Decibels (A weighted).
<b>DO</b>	Dissolved oxygen.
<b>Documentation</b>	Any report, record, results, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this licence.
<b>Drawing</b>	Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this licence.
<b>EMP</b>	Environmental Management Programme.
<b>Emission limits</b>	Those limits, including concentration limits and deposition rates, established in <i>Schedule B: Emission Limits</i> of this licence.
<b>Environmental damage</b>	As defined in Directive 2004/35/EC.
<b>EPA</b>	Environmental Protection Agency.
<b>European Waste Catalogue (EWC)</b>	A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 2000/532/EC and any subsequent amendment published in the Official Journal of the European Community.
<b>Facility</b>	Any site or premises used for the purpose of the recovery or disposal of waste.
<b>Fortnightly</b>	A minimum of 24 times per year, at approximately two week intervals.
<b>GC/MS</b>	Gas chromatography/mass spectroscopy.
<b>Green Waste</b>	Waste wood (excluding timber), plant matter such as grass cuttings, and other vegetation.

<b>ha</b>	Hectare
<b>Heavy metals</b>	This term is to be interpreted as set out in "Parameters of Water Quality, Interpretation and Standards" published by the Agency in 2001. ISBN 1-84095-015-3.
<b>Hours of operation</b>	The hours during which the facility is authorised to be operational
<b>Hours of waste acceptance</b>	<b>The hours during which the facility is authorised to accept waste.</b>
<b>ICP</b>	Inductively coupled plasma spectroscopy.
<b>Incident</b>	The following shall constitute as incident for the purposes of this licence: <ul style="list-style-type: none"><li>(i) an emergency;</li><li>(ii) any emission which does not comply with the requirements of this licence;</li><li>(iii) <b>any exceedance of the daily duty capacity of the waste handling equipment;</b></li><li>(iv) any trigger level specified in this licence which is attained or exceeded; and,</li><li>(v) any indication that environmental pollution has, or may have, taken place.</li></ul>
<b>Industrial waste</b>	<b>As defined in Section 5(1) of the Waste Management Acts 1996 to 2008.</b>
<b>Inert waste</b>	Waste that does not undergo any significant physical, chemical or biological transformations. Inert waste will not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm human health. The total leachability and pollutant content of the waste and the ecotoxicity of the leachate must be insignificant, and in particular not endanger the quality of surface water and/or groundwater.
<b>Initial development works</b>	Such works, actions or constructions as may be specified, which for the purposes of environmental protection and safe construction and operation of the facility, have to be carried out in the initial stages of site development, and in any case in advance of the commencement of construction of the landfill cells.
<b>Intermediate Cover</b>	Refers to placement of suitable, adequate and stable material (minimum of 300mm if soil is used) over deposited waste for a period of time prior to temporary capping in uncapped areas other than daily cover.
<b>IPPC</b>	Integrated Pollution Prevention & Control.
<b>K</b>	Kelvin.
<b>kPa</b>	Kilopascals.

<b>Landfill Directive</b>	<b>Council Directive 1999/31/EC.</b>
<b>Landfill footprint</b>	The area of the facility where waste is deposited.
<b>LEMP</b>	Landfill Environmental Management Plan
<b>L<sub>eq</sub></b>	Equivalent continuous sound level.
<b>Licensee</b>	<b>Cork City Council.</b>
<b>Liquid waste</b>	<b>Any waste in liquid form and containing less than 2% dry matter.</b>
<b>List I</b>	As listed in the EC Directives 2006/11/EC and 80/68/EEC and amendments.
<b>List II</b>	As listed in the EC Directives 2006/11/EC and 80/68/EEC and amendments.
<b>Local Authority</b>	Cork City Council.
<b>Maintain</b>	Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to perform its function adequately.
<b>Monthly</b>	A minimum of 12 times per year, at intervals of approximately one month.
<b>Night-time</b>	<b>2200 hrs to 0800 hrs.</b>
<b>Noise-sensitive location (NSL)</b>	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels.
<b>Oil separator</b>	<b>Device installed according to the International Standard I.S. EN 858-2:2003 (Separator system for light liquids, (e.g. oil and petrol) – Part 2: Selection of normal size, installation, operation and maintenance).</b>
<b>OMP</b>	Odour Management Plan
<b>PRTR</b>	Pollutant Release and Transfer Register.
<b>Quarterly</b>	At approximately three – monthly intervals. All or part of a period of three consecutive months beginning on the first day of January, April, July or October.
<b>Regional Fisheries Board</b>	South Western Regional Fisheries Board.

<b>Sample(s)</b>	Unless the context of this licence indicates to the contrary, the term samples shall include measurements taken by electronic instruments.
<b>Sanitary effluent</b>	Wastewater from facility toilet, washroom and canteen facilities.
<b>SOP</b>	Standard operating procedure.
<b>Specified emissions</b>	Those emissions listed in <i>Schedule B: Emission Limits</i> of this licence.
<b>Standard method</b>	A National, European or internationally recognised procedure (e.g. I.S. EN, ISO, CEN, BS or equivalent); or an in-house documented procedure based on the above references; a procedure as detailed in the current edition of "Standard Methods for the Examination of Water and Wastewater" (prepared and published jointly by A.P.H.A., A.W.W.A. & W.E.F.), American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005, USA; or an alternative method as may be agreed by the Agency.
<b>Storm water</b>	Rain water run-off from roof and non-process areas.
<b>Temporary Capping</b>	Refers to provision of a temporary capping system, of at least 0.5m thick and including a gas barrier membrane, to allow for settlement prior to the installation of the final capping system. A sacrificial gas barrier membrane should also be laid on the interfaces between the cell being capped and future cells. [The application of the sub-soil/top soil layers to such interfaces is not considered necessary by the Agency].
<b>The Agency</b>	Environmental Protection Agency.
<b>TOC</b>	Total organic carbon.
<b>Trade effluent</b>	Trade effluent has the meaning given in the Water Services Act, 2007.
<b>Trigger level</b>	A parameter value, the achievement or exceedance of which requires certain actions to be taken by the licensee.
<b>Water Services Authority</b>	Cork City County Council.
<b>Weekly</b>	During all weeks of plant operation and, in the case of emissions, when emissions are taking place; with at least one measurement in any one week.
<b>Working Face</b>	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.
<b>WWTP</b>	Waste water treatment plant.



## ***Decision & Reasons for the Decision***

The Environmental Protection Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of this licence, any emissions from the activity will comply with and will not contravene any of the requirements of Section 83(5) of the Section 40(4) of the Waste Management Acts 1996 to 2008.

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

## ***Part I Schedule of Activities Licensed***

In pursuance of the powers conferred on it by the Waste Management Acts 1996 to 2008, the Environmental Protection Agency (the Agency) proposes, under Section 40(1) of the said Acts to grant this Waste Licence to **Cork City Council, City Hall, Cork City** to carry on the waste activities listed below at **Beaumont Quarry, Churchyard Lane, Ballinlough / Ballintemple, Cork City** subject to conditions, with the reasons therefor and the associated schedules attached thereto set out in the licence For the purpose of Article 48 of the Waste Management Licensing Regulations 2004 (S.I. No 395) this facility is classed as an inert waste landfill.

### **Licensed Waste Disposal Activities, in accordance with the Third Schedule of the Waste Management Acts 1996 to 2008**

<b>Class 1.</b>	<b>Deposit on, in or under land (including landfill):</b>
<b>Class 4.</b>	<b>Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons:</b>
<b>Class 5.</b>	<b>Specially engineered landfill, including placement into lined discrete cells which are capped and isolated from on another and the environment. [PRINCIPAL ACTIVITY]</b>

## ***Part II Schedule of Activities Refused***

*None of the proposed activities as set out in the licence application have been refused.*

## ***Part III Conditions***

### **Condition 1. Scope**

- 1.1 Waste activities at this facility shall be restricted to those listed and described in *Part I Schedule of Activities Licensed*, and shall be as set out in the licence application or as modified under Condition 1.4 of this licence and subject to the conditions of this licence.
- 1.2 Activities at this facility shall be limited as set out in *Schedule A: Limitations* of this licence.
- 1.3 For the purposes of this licence, the facility authorised by this licence is the area of land outlined in red on **Drawing No. 2006-011-09-Fig.4** of the application. Any reference in this licence to "facility" shall mean the area thus outlined in red. The licensed activity shall be carried on only within the area outlined.
- 1.4 No alteration to, or reconstruction in respect of, the activity, or any part thereof, that would, or is likely to, result in
- (i) a material change or increase in:
    - the nature or quantity of any emission;
    - the abatement/treatment or recovery systems;
    - the range of processes to be carried out;
    - the fuels, raw materials, intermediates, products or wastes generated, or
  - (ii) any changes in:
    - site management, infrastructure or control with adverse environmental significance;
- shall be carried out or commenced without prior notice to, and without the agreement of, the Agency.
- 1.5 The facility shall be controlled, operated and maintained, and emissions shall take place as set out in the licence. All programmes required to be carried out under the terms of this licence become part of this licence.
- 1.6 **This licence is for purposes of waste licensing under the Waste Management Acts 1996 to 2008 only and nothing in this licence shall be construed as negating the licensee's statutory obligations, or requirements under any other enactments or regulations.**
- 1.7 Having regard to the nature of the activity and arrangements necessary to be made or made in connection with the carrying on of the activity, the specified period for the purposes of **Section 49(1) of the Waste Management Acts 1996 to 2008, is 6 years.**
- 1.8 **Waste Acceptance Hours and Hours of Operation**
- 1.8.1 Waste may enter and depart the facility only between the hours of 0800 and 1800 Monday to Friday inclusive (Public Holidays excluded) and 0800 and 1430 on Saturdays.
  - 1.8.2 The facility shall be operated only between the hours of 0730 and 1900 Monday to Friday inclusive (Public Holidays excluded) and 0730 and 1530 on Saturdays, unless otherwise agreed by the Agency.
  - 1.8.3 The hours of operation during the site development phase, as outlined in the application, shall be between the hours of 0800 and 1900 Monday to Friday inclusive (Public Holidays excluded).

**Reason:** *To clarify the scope of this licence.*



## Condition 2. Management of the Facility

### 2.1 Facility Management

2.1.1 The licensee shall employ a suitable qualified and experienced facility manager who shall be designated as the person in charge. The facility manager or a nominated, suitably qualified and experienced deputy shall be present on the facility at all times during its operation or as otherwise required by the Agency.

2.1.2 The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and experience as required and shall be aware of the requirements of this licence. **In addition, the facility manager and his/her deputy shall successfully complete FAS waste management training programme or equivalent agreed by the Agency.**

### 2.2 Environmental Management System (EMS)

2.2.1 The licensee shall **establish and maintain** an Environmental Management System (EMS) **in advance of the commencement of the activity**. The EMS shall be updated on an annual basis.

2.2.2 The EMS shall include, as a minimum, the following elements:

#### 2.2.2.1 Management and Reporting Structure.

The licensee shall maintain onsite written details of the management structure of the facility. Any proposed replacement in the management structure from that submitted in the application shall be notified in advance in writing to the Agency. Written details of the management structure shall include the following information:

- a) The names of all persons who are to provide the management and supervision of the waste activities authorised by the licence, in particular the name of the facility manager and any nominated deputies;
- b) Details of the responsibilities for each individual named under a) above; and
- c) Details of the relevant education, training and experience held by each of the persons nominated under a) above.

#### 2.2.2.2 Schedule of Environmental Objectives and Targets

The licensee shall prepare and maintain a Schedule of Environmental Objectives and Targets. The schedule shall, as a minimum, provide for a review of all operations and processes, including an evaluation of practicable options, for energy and resource efficiency, the use of cleaner technology (including emissions prevention/reduction), and the beneficial re-use (recovery) of waste in landfill engineering operations. The schedule shall include time frames for the achievement of set targets and shall address a five-year period as a minimum. The schedule shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER).

#### 2.2.2.3 Landfill Environmental Management Programme (LEMP)

Within 12 months from the date of grant of this licence, the licensee shall prepare and maintain a LEMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2.2.2. The LEMP shall have regard to the guidance set out in the EPA Manual on

*Landfill Operational Practices.* The LEMP shall replace any existing EMP and shall include:

- designation of responsibility for targets;
- the means by which they may be achieved; and
- the time within which they may be achieved.

The LEMP shall be reviewed annually and take into account operational experiences at the facility, the stage of development of the facility (active, closure, aftercare), evolving legislative and BAT requirements, as well as any Agency instructions that may issue. Amendments shall be notified to the Agency for agreement as part of the Annual Environmental Report (AER).

A report on the programme, including the success in meeting agreed targets, shall be prepared and submitted to the Agency as part of the AER. Such reports shall be retained on-site for a period of not less than seven years and shall be available for inspection by authorised persons of the Agency.

#### 2.2.2.4 Documentation

- (i) The licensee shall **establish and maintain** an environmental management documentation system which shall be to the satisfaction of the Agency.
- (ii) The licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.

#### 2.2.2.5 Corrective Action

The licensee shall establish procedures to ensure that corrective action is taken should the specified requirements of this licence not be fulfilled. The responsibility and authority for persons initiating further investigation and corrective action in the event of a reported non-conformity with this licence shall be defined.

#### 2.2.2.6 Awareness and Training

The licensee shall **establish and maintain** procedures for identifying training needs, and for providing appropriate training, for all personnel whose work can have a significant effect upon the environment. Appropriate records of training shall be maintained.

#### 2.2.2.7 Communications Programme

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

#### 2.2.2.8 Maintenance Programme

The licensee shall **establish and maintain** a programme for maintenance of all plant and equipment based on the instructions issued by the manufacturer/supplier or installer of the equipment. Appropriate record keeping and diagnostic testing shall support this maintenance programme. The licensee shall clearly allocate responsibility for the planning, management and execution of all aspects of this programme to appropriate personnel (see Condition 2.1 above).

#### 2.2.2.9 Efficient Process Control

The licensee shall **establish and maintain** a programme to ensure there is adequate control of processes under all modes of operation. The programme shall identify the key indicator parameters for process control performance, as well as identifying methods for measuring and controlling these parameters. Abnormal process operating conditions shall be documented, and analysed to identify any necessary corrective action.

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

### Condition 3. Infrastructure and Operation

- 3.1 The licensee shall establish all infrastructure referred to in this licence, to the design set out in the Application documentation or as may be otherwise specified or varied by the conditions of this licence.
- 3.2 Facility Notice Board
- 3.2.1 The licensee shall, within one month of the date of grant of this licence, provide an Facility Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the board shall be 1200 mm by 750 mm. The notice board shall be maintained thereafter.
- 3.2.2 The board shall clearly show:
- (i) the name and telephone number of the facility;
  - (ii) the normal hours of opening/operation;
  - (iii) the name of the licence holder;
  - (iv) an emergency out of hours contact telephone number;
  - (v) the licence reference number; and
  - (vi) where environmental information relating to the facility can be obtained.
- 3.2.3 A plan of the facility clearly identifying the location of each storage and treatment area shall be displayed as close as is possible to the entrance to the facility. The plan shall be displayed on a durable material such that is legible at all times. The plan shall be replaced as material changes to the facility are made.
- 3.3 Facility Roads and Hardstanding
- 3.3.1 Effective site roads shall be provided and maintained to ensure the safe movement of vehicles within the facility.
- 3.3.2 The facility entrance and hardstanding areas shall be appropriately paved and maintained in a fit and clean condition.
- 3.4 The landfill footprint (maximum lateral extent of landfilling) shall be as indicated in **Drawing Number 2006-011-09-Fig 2.1 Rev. A** of the application.
- 3.5 The landfill liner shall comprise the following: Base and side wall mineral layer of a minimum thickness of 1m with a hydraulic conductivity less than or equal to  $1.0 \times 10^{-7}$  m/s.
- 3.6 The liner detailed design and its construction shall be in accordance with the guidelines provided in the Agency's Landfill Manual, *Landfill Site Design*.
- 3.7 Wastes shall not be deposited in any new cell without the prior agreement of the Agency.
- 3.8 Specified Engineering Works (SEW)
- 3.8.1 The licensee shall submit proposals for any Specified Engineering Works, as defined in *Schedule D: Specified Engineering Works*, of this licence, to the Agency for its agreement at least two months in advance of the intended date of commencement of any such works. No such works shall be carried out without the prior agreement of the Agency.

- 3.8.2 All specified engineering works shall be supervised by an appropriately qualified person, and that person, or persons, shall be present at all times during which relevant works are being undertaken.
- 3.8.3 Following the completion of any 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:
  - (i) A description of the works;
  - (ii) As-built drawings of the works;
  - (iii) Records and results of all tests carried out (including failures);
  - (iv) Drawings and sections showing the location of all samples and tests carried out;
  - (v) Name(s) of contractor(s)/individual(s) responsible for undertaking the specified engineering works;
  - (vi) Records of any problems and the remedial works carried out to resolve those problems; and
  - (vii) Any other information requested in writing by the Agency.

3.9 Facility Security

- 3.9.1 Security and stockproof fencing and gates shall be installed and maintained. 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.
- 3.9.2 Gates shall be locked shut when the facility is unsupervised
- 3.9.3 The licensee shall remedy any defect in the gates and/or fencing as follows:
  - (i) A temporary repair shall be made by the end of the working day; and
  - (ii) A repair to the standard of the original gates and/or fencing shall be undertaken within three working days.

3.10 Construction & Demolition Waste Storage Area

In advance of commencement of landfill construction activities involving approved imported recovered Construction & Demolition waste streams, the licensee shall provide and maintain a construction and demolition waste storage area. This infrastructure shall at a minimum comprise the following:

- (i) An impermeable concrete slab; and
- (ii) Collection and disposal infrastructure for all run-off.

3.11 Waste Inspection and Quarantine Areas

- 3.11.1 A Waste Inspection Area and a Waste Quarantine Area shall be provided and maintained at the facility.
- 3.11.2 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.
- 3.11.3 Drainage from these areas shall be directed to the **storm water management system**.



- 3.12 Weighbridge and Wheel Cleaner
- 3.12.1 The licensee shall provide and maintain a weighbridge and wheel cleaners at the facility.
- 3.12.2 The wheel cleaners shall be used by all vehicles leaving the facility as required to ensure that no process water or waste is carried off-site. Any water arising from the wheel cleaning area shall be directed to the **storm water management system**.
- 3.13 Groundwater
- 3.13.1 All wells & boreholes as shown on **Drawing Number 2006-011-09-Fig 2.8 Rev. B** of the licence application shall be adequately sealed to prevent surface contamination and, as may be appropriate, decommissioned according to the UK Environment Agency guidelines "Decommissioning Redundant Boreholes and Wells" (or as otherwise may be agreed by the Agency).
- 3.13.2 Groundwater monitoring wells shall be constructed having regard to the guidance given in the Agency's landfill manual "Landfill Monitoring".
- 3.14 Facility Office
- 3.14.1 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.
- 3.14.2 The licensee shall provide and maintain a working telephone and a method for electronic transfer of information at the facility.
- 3.15 The licensee shall have regard to the guidance given in the Environmental Protection Agency Landfill Manuals (Site Design, Operational Practices, Monitoring, Site Investigations, and Restoration and Aftercare), as may be relevant, in the development, operation and closure of the facility.
- 3.16 The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.
- 3.17 In the case of composite sampling of aqueous emissions from the operation of the facility, a separate composite sample or homogeneous sub-sample (of sufficient volume as advised) shall be refrigerated immediately after collection and retained as required for EPA use.
- 3.18 The licensee shall clearly label and provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency. The requirement with regard to off-site points is subject to the prior agreement of the landowner(s) concerned.
- 3.19 Tank, Container and Drum Storage Areas
- 3.19.1 All tank, container and drum storage areas shall be rendered impervious to the materials stored therein. Bunds shall be designed having regard to Agency guidelines 'Storage and Transfer of Materials for Scheduled Activities' (2004).
- 3.19.2 All tank and drum storage areas shall, as a minimum, be bunded, either locally or remotely, to a volume not less than the greater of the following:
- (i) 110% of the capacity of the largest tank or drum within the bunded area; or
  - (ii) 25% of the total volume of substance that could be stored within the bunded area.
- 3.19.3 All drainage from bunded areas shall be treated as hazardous waste unless it can be demonstrated to be otherwise. All drainage from bunded areas shall be diverted for collection and safe disposal.
- 3.19.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.

- 3.19.5 All tanks, containers and drums shall be labelled to clearly indicate their contents.
- 3.20 The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the facility. Once used, the absorbent material shall be disposed of at an appropriate facility.
- 3.21 **Silt Traps and Oil Separators**  
  
The licensee shall as necessary to meet emission limit values install and maintain silt traps and oil separators at the facility to ensure that all storm water discharges from the facility pass through a silt trap and oil separator in advance of discharge. Any separator shall be a Class I full retention separator and the silt traps and separator shall be in accordance with I.S. EN-858-2: 2003 (separator systems for light liquids).
- 3.22 The licensee shall, prior to discharging water to sewer, install a hydrobrake limiting the discharge to the limit specified in Schedule B of this licence, with the specifications of the hydrobrake, balancing tank and any other necessary abatement equipment to be agreed by the Agency in consultation with the Water Services Authority.
- 3.23 **No fuels or oils shall be stored on the site and any refuelling operations shall only take place in designated impermeable areas, serviced by the oil interceptor and grit trap. The licensee shall also maintain an adequate supply of spill kits in the designated refuelling area and in close proximity to where plant is operating.**
- 3.24 **Landfilling operations are not permitted to commence until the temporary noise abatement as outlined in Section 3.3 of the EIS accompanying the application, is in place to satisfaction of the Agency.**

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

## **Condition 4. Interpretation**

- 4.1 Emission limit values for emissions to sewer/waters in this licence shall be interpreted in the following way:
  - 4.1.1 **Composite Sampling**  
For parameters other than flow, eight out of ten consecutive composite results, based on flow proportional composite sampling, shall not exceed the emission limit value. No individual results similarly calculated shall exceed 1.2 times the emission limit value.
  - 4.1.2 **Discrete Sampling**  
For parameters other than pH and temperature, no grab sample value shall exceed 1.2 times the emission limit value.
- 4.2 Where the ability to measure a parameter is affected by mixing before emission, then, with agreement from the Agency, the parameter may be assessed before mixing takes place.
- 4.3 **Noise**  
Noise from the facility shall not give rise to sound pressure levels (Leq, T) measured at any NSLs which exceed the limit value(s).

- 4.4 **Dust and Particulate Matter**  
Dust and particulate matters from the activity shall not give rise to deposition levels which exceed the limit value(s).

**Reason:** *To clarify the interpretation of limit values fixed under the licence.*

## **Condition 5. Emissions**

- 5.1 No specified emission from the facility shall exceed the emission limit values set out in *Schedule B: Emission Limits* of this licence. There shall be no other emissions of environmental significance.
- 5.2 No emissions, including odours, from the activities carried on at the site shall result in an impairment of, or an interference with amenities or the environment beyond the facility boundary or any other legitimate uses of the environment beyond the facility boundary.
- 5.3 The licensee shall ensure that all or any of the following:
- Vermin
  - Birds
  - Flies
  - Mud
  - Dust
  - Litter

associated with the activity do not result in an impairment of, or an interference with, amenities or the environment at the facility or beyond the facility boundary or any other legitimate uses of the environment beyond the facility boundary. Any method used by the licensee to control or prevent any such impairment/interference shall not cause environmental pollution.

- 5.4 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.
- 5.5 **Emissions to Sewer**

The licensee shall at no time discharge or permit to be discharged into the sewer any liquid matter or thing that is or may be liable to set or congeal at average sewer temperature or is capable of giving off any inflammable or explosive gas or any acid, alkali or other substance in sufficient concentration to cause corrosion to sewer pipes, penstock and sewer fittings or the general integrity of the sewer.

**Reason:** *To provide for the protection of the environment by way of control and limitation of emissions and to provide for the requirements of the Water Services Authority in accordance with Section 52 of the Waste Management Acts 1996 to 2008.*

## **Condition 6. Control and Monitoring**

- 6.1 **Test Programme**
- 6.1.1 The licensee shall prepare to the satisfaction of the Agency, a test programme for abatement equipment installed to abate emissions to atmosphere. This programme shall be submitted to the Agency in advance of implementation.

- 6.1.2 The programme, following agreement with the Agency, shall be completed within three months of the commencement of operation of the abatement equipment.
  - 6.1.3 The criteria for the operation of the abatement equipment as determined by the test programme, shall be incorporated into the standard operating procedures.
  - 6.1.4 The test programme shall as a minimum:
    - (i) establish all criteria for operation, control and management of the abatement equipment to ensure compliance with the emission limit values specified in this licence; and
    - (ii) assess the performance of any monitors on the abatement system and establish a maintenance and calibration programme for each monitor.
  - 6.1.5 A report on the test programme shall be submitted to the Agency within one month of completion.
  - 6.2 The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as set out below and as in accordance with *Schedule C: Control & Monitoring* of this licence.
    - 6.2.1 Analyses shall be undertaken by competent staff in accordance with documented operating procedures.
    - 6.2.2 Such procedures shall be assessed for their suitability for the test matrix and performance characteristics shall be determined.
    - 6.2.3 Such procedures shall be subject to a programme of Analytical Quality Control using control standards with evaluation of test responses.
    - 6.2.4 Where any analysis is sub-contracted it shall be to a competent laboratory.
  - 6.3 The licensee shall ensure that:
    - (i) sampling and analysis for all parameters listed in the Schedules to this licence; and
    - (ii) any reference measurements for the calibration of automated measurement systems;
- shall be carried out by competent laboratories in accordance with CEN-standards. If CEN standards are not available, ISO, national or international standards or alternative methods shall apply with the agreement of the Agency.
- 6.4 All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been agreed in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. The use of alternative equipment, other than in emergency situations, shall be as agreed by the Agency.
  - 6.5 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission/discharge (or ambient conditions where that is the monitoring objective).
  - 6.6 The licensee shall ensure that groundwater monitoring well sampling equipment is available/installed on-site and is fit for purpose at all times. The sampling equipment shall be to Agency specifications.
  - 6.7 All treatment/abatement and emission control equipment shall be calibrated and maintained in accordance with the instructions issued by the manufacturer/supplier or installer.

- 6.8 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended with the agreement of the Agency following evaluation of test results.
- 6.9 The licensee shall prepare a programme, to the satisfaction of the Agency, for the identification and reduction of fugitive emissions using an appropriate combination of best available techniques. This programme shall be included in the Environmental Management Programme.
- 6.10 The integrity and water tightness of all underground pipes, tanks, bunding structures and containers and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the licensee prior to use. This testing shall be carried out by the licensee at least once every three years thereafter and reported to the Agency on each occasion. This testing shall be carried out in accordance with any guidance published by the Agency. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.
- 6.11 The drainage system (i.e., gullies, manholes, any visible drainage conduits and such other aspects as may be agreed) and bunds, silt traps and oil separators shall be inspected weekly and desludged as necessary. All sludge and drainage from these operations shall be collected for safe disposal. The drainage system, bunds, silt traps and oil interceptors shall be properly maintained at all times.
- 6.12 Noise  
The licensee shall carry out a noise survey of the site operations biannually. The survey programme shall be undertaken in accordance with the methodology specified in the 'Environmental Noise Survey Guidance Document' as published by the Agency.
- 6.13 Pollutant Release and Transfer Register (PRTR)  
The licensee shall prepare and report a PRTR for the site. The substance and/or wastes to be included in the PRTR shall be as agreed by the Agency each year by reference to EC Regulations No. 166/2006 concerning the establishment of the European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC. The PRTR shall be prepared in accordance with any relevant guidelines issued by the Agency and shall be submitted electronically in specified format and as part of the AER.
- 6.14 Operational Controls
- 6.14.1 There shall be no public access to the facility.
- 6.14.2 Scavenging shall not be permitted at the facility.
- 6.14.3 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
- 6.14.4 No smoking shall be allowed at the facility.
- 6.14.5 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 necessary infrastructure or otherwise only with the prior agreement of the Agency.
- 6.14.6 All loose litter or other waste, placed on or in the vicinity of the facility, other than in accordance with the requirements of this licence, shall be removed, subject to the agreement of the landowners, immediately and in any event by 10.00am of the next working day after such waste is discovered.

- 6.15 Groundwater Management
- 6.15.1 Within three months of the date of grant of the date of commencement of waste activities, the licensee shall submit to the Agency for its agreement, groundwater monitoring trigger levels in accordance with the requirements of Directive 1999/31/EC.
- 6.15.2 The trigger levels as specified in Condition 6.15.1 for groundwater shall be measured at monitoring boreholes, **with monitoring locations to be agreed by the Agency.**
- 6.16 Topographical Monitoring
- A topographical survey shall be carried out within twelve months of the date of commencement of waste deposition at the facility and shall be repeated annually thereafter. The survey shall be in accordance with any written instructions issued by the Agency and shall include a measurement of the remaining available void space following the commencement of waste disposal.
- 6.17 Stability Assessment
- The licensee shall carry out a stability assessment of the facility annually. The results of this assessment shall be reported as part of the Annual Environmental Report (AER).
- 6.18 Dust Control
- 6.18.1 In dry weather, site roads and any other areas used by vehicles shall be sprayed with water as and when required to minimise airborne dust nuisance.
- 6.18.2 In advance of exiting the facility, all waste vehicles shall use the wheelwash.
- 6.19 The licensee shall, within six months of the date of grant of this licence, develop and establish a Data Management System for collation, archiving, assessing and graphically presenting the monitoring data generated as a result of this licence.
- 6.20 The licensee shall permit authorised persons of the Agency and Water Services Authority, to inspect, examine and test, at all reasonable times, any works and apparatus installed in connection with the site effluent and to take samples of the site effluent.

**Reason:** *To provide for the protection of the environment by way of treatment and monitoring of emissions and to provide for the requirements of the Water Services Authority in accordance with Section 52 of the Waste Management Acts 1996 to 2008.*

## **Condition 7. Resource Use and Energy Efficiency**

- 7.1 The licensee shall carry out an audit of the energy efficiency of the site within one year of the date of grant of this licence. The audit shall be carried out in accordance with the guidance published by the Agency, "Guidance Note on Energy Efficiency Auditing". The energy efficiency audit shall be repeated at intervals as required by the Agency.
- 7.2 The audit shall identify all practicable opportunities for energy use reduction and efficiency and the recommendations of the audit will be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2 above.
- 7.3 The licensee shall identify opportunities for reduction in the quantity of water used on site including recycling and reuse initiatives, wherever possible. Reductions in water usage shall be incorporated into Schedule of Environmental Objectives and Targets.

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

## **Condition 8. Materials Handling**

- 8.1 Disposal or recovery of waste on-site shall only take place in accordance with the conditions of this licence and in accordance with the appropriate National and European legislation and protocols.
- 8.2 Waste sent off-site for recovery or disposal shall be transported only by an authorised waste contractor. The waste shall be transported from the site of the activity to the site of recovery/disposal only in a manner that will not adversely affect the environment and in accordance with the appropriate National and European legislation and protocols.
- 8.3 The licensee shall ensure that, in advance of transfer to another person, waste shall be classified, packaged and labelled in accordance with National, European and any other standards which are in force in relation to such labelling.
- 8.4 The loading and unloading of materials shall be carried out in designated areas protected against spillage and leachate run-off.
- 8.5 Waste shall be stored in designated areas, protected as may be appropriate against spillage and leachate run-off. The waste shall be clearly labelled and appropriately segregated.
- 8.6 No waste classified as green list waste in accordance with the EU Shipment of Waste Regulations (Council Regulation EEC No. 1013/2006, as may be amended) shall be consigned for recovery without the agreement of the Agency.
- 8.7 Waste for disposal/recovery off-site shall be analysed in accordance with *Schedule C: Control & Monitoring* of this licence.
- 8.8 Unless approved in writing, in advance, by the Agency the licensee is prohibited from mixing a hazardous waste of one category with a hazardous waste of another category or with any other non-hazardous waste.
- 8.9 **Waste Acceptance and Characterisation Procedures**
- Prior to the commencement of waste acceptance at the facility, the licensee shall submit to the Agency for its agreement written procedures for the acceptance and handling of all wastes. The procedures shall have regard to Council Decision (2003/33/EC) and shall as a minimum include the requirements of Schedule A: Waste Acceptance, of this licence.
- 8.10 All wastes shall be checked at the working face. Any waste deemed unsuitable for acceptance at the facility and/or in contravention of this licence shall be immediately separated and removed from the facility at the earliest possible time. Temporary storage of such wastes shall be in a designated Waste Quarantine Area. Waste shall be stored under appropriate conditions in the quarantine area to avoid putrefaction, odour generation, the attraction of vermin and any other nuisance or objectionable condition.
- 8.11 The licensee shall neither import waste into the State nor export waste out of the State except in accordance with the relevant provisions of Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14th June 2006 on shipments of waste and associated national regulations.

**Reason:** *To provide for the appropriate handling of material and the protection of the environment.*

## Condition 9. Accident Prevention and Emergency Response

- 9.1 The licensee shall, in advance of the commencement of the activity, ensure that a documented Accident Prevention Procedure is in place that addresses the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.2 The licensee shall, in advance of the date of commencement of the activity, ensure that a documented Emergency Response Procedure is in place, that addresses any emergency situation which may originate on-site. This procedure shall include provision for minimising the effects of any emergency on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.3 Incidents
- 9.3.1 In the event of an incident the licensee shall immediately:
- (i) carry out an investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
  - (ii) isolate the source of any such emission;
  - (iii) evaluate the environmental pollution, if any, caused by the incident;
  - (iv) identify and execute measures to minimise the emissions/malfunction and the effects thereof;
  - (v) identify the date, time and place of the incident;
  - (vi) notify the Agency and other relevant authorities.
- 9.3.2 The licensee shall provide a proposal to the Agency for its agreement within one month of the incident occurring or as otherwise agreed by the Agency, to:
- (i) identify and put in place measures to avoid recurrence of the incident; and
  - (ii) identify and put in place any other appropriate remedial actions.

**Reason:** *To provide for the protection of the environment.*

## Condition 10. Decommissioning & Residuals Management

- 10.1 Finished Levels/Profile
- 1.0.1.1 Landscaping of the facility shall be as described in Section 2.9 of Environmental Impact Statement accompanying the Application documentation.
  - 1.0.1.2 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.
  - 1.0.1.3 Final contours and landscaping should be such that the finished slopes of the facility are structurally stable, resistant to erosion, and protective of pollution control and monitoring infrastructure.
- 10.2 Final Capping
- Unless otherwise agreed by the Agency, the final capping, shall consist of the following:
- (i) Top soil (150–300 mm);



- (ii) Subsoils, such that total thickness of top soil and subsoils is at least 1m.
- 10.3 No material or object that is incompatible with the proposed restoration of the facility shall be present within 1m of the final soil surface levels.
- 10.4 All soils shall be stored to preserve the soil structure for future use.
- 10.5 Closure, Restoration & Aftercare Management Plan (CRAMP)
  - (i) In advance of the acceptance for waste for disposal at the site, the licensee shall prepare for agreement by the Agency, a fully detailed and costed plan for the closure, restoration and long-term aftercare of the site or part thereof. This plan shall have regard to the commitments given in the application documentation for **Licence Register W0141-02** (as may be varied herein, or otherwise amended as notified in the AER and approved in writing by the Agency).
  - (ii) The plan shall be maintained and reviewed annually and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the prior agreement of the Agency.
- 10.6 The CRAMP shall include as a minimum, the following:
  - (i) A scope statement for the plan.
  - (ii) The criteria, including those specified in this licence, which define the successful closure and restoration of the facility or part thereof, and which ensure minimum impact to the environment.
  - (iii) A programme to achieve the stated criteria.
  - (iv) Where relevant, a test programme to demonstrate the successful implementation of the plan.
  - (v) Details of the long-term supervision, monitoring, control, maintenance and reporting requirements for the restored facility.
  - (vi) Details of the costings for the plan and the financial provisions to underwrite those costs.
- 10.7 A final validation report to include a certificate of completion for the CRAMP, for all or part of the site as necessary, shall be submitted to the Agency within three months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.
- 10.8 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the site in the licensed activity, the licensee shall, to the satisfaction of the Agency, decommission, render safe or remove for disposal/recovery any soil, subsoil, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.

**Reason:** *To make provision for the proper closure of the activity ensuring protection of the environment.*

## Condition 11. Notification, Records and Reports

- 11.1 The licensee shall notify the Agency, in writing, one month in advance of the intended date of commencement of acceptance of waste for Scheduled Disposal/Recovery activities at the facility (waste used in the facility construction excepted).

- 11.2 The licence shall notify the Agency by both telephone and facsimile, if available, to the Agency's headquarters in Wexford, or to such other Agency office as may be specified by the Agency, as soon as practicable after the occurrence of any of the following:
- (i) any release of environmental significance to atmosphere from any potential emissions point;
  - (ii) any emission that does not comply with the requirements of this licence;
  - (iii) any malfunction or breakdown of key control equipment or monitoring equipment set out in *Schedule C: Control and Monitoring* which is likely to lead to loss of control of the abatement system; and
  - (iv) any incident with the potential for environmental contamination of surface water or groundwater, or posing an environment threat to air or land, or requiring an emergency response by the Local Authority.
- The licensee shall include as part of the notification, date and time of the incident, summary details of the occurrence, and where available, the steps taken to minimise any emissions.
- 11.3 In the event of any incident which relates to discharges to sewer having taken place, the licensee shall notify the Local and Water Services Authority as soon as practicable after such an incident.
- 11.4 In the case of any incident relating to discharges to water, the licensee shall notify the Local and Water Services Authority and the Regional Fisheries Board as soon as practicable after such an incident.
- 11.5 The licensee shall make a record of any incident. This record shall include details of the nature, extent, and impact of, and circumstances giving rise to, the incident. The record shall include all corrective actions taken to manage the incident, minimise wastes generated and the effect on the environment, and avoid recurrence. The licensee shall, as soon as practicable following incident notification, submit to the Agency the incident record.
- 11.6 The licensee shall maintain a written record for each load of waste arriving at the facility. The licensee shall record the following:
- (i) the date and time;
  - (ii) the name of the carrier (including if appropriate, the waste carrier registration details);
  - (iii) the vehicle registration number;
  - (iv) the trailer, skip or other container unique identification number (where relevant);
  - (v) the name of the producer(s)/collector(s) of the waste as appropriate;
  - (vi) the name of the waste facility (if appropriate) from which the load originated including the waste licence or waste permit register number;
  - (vii) a description of the waste including the associated EWC/HWL codes;
  - (viii) the quantity of the waste, recorded in tonnes;
  - (ix) details of the treatment(s) to which the waste has been subjected;
  - (x) the name of the person checking the load; and
  - (xi) where loads or wastes are removed or rejected, details of the date of occurrence, the types of waste and the facility to which they were removed.
- 11.7 The licensee shall record all complaints of an environmental nature related to the operation of the activity. Each such record shall give details of the date and time of the complaint, the name of the complainant (if provided), and give details of the nature of the complaint. A record shall also be kept of the response made in the case of each complaint.
- 11.8 The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the facility.
- 11.9 The licensee shall as a minimum keep the following documents at the site:
- (i) the licences relating to the facility;

- (ii) the current EMS for the facility;
- (iii) the previous year's AER for the facility;
- (iv) records of all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the facility;
- (v) relevant correspondence with the Agency;
- (vi) up to date site drawings/plans showing the location of key process and environmental infrastructure, including monitoring locations and emission points;
- (vii) up to date Standard Operational Procedures for all processes, plant and equipment necessary to give effect to this licence or otherwise to ensure that standard operation of such processes, plant or equipment does not result in unauthorised emissions to the environment;
- (viii) the current Landfill Environmental Management Plan (LEMP); and
- (ix) any elements of the licence application or EIS documentation referenced in this licence.

This documentation shall be available to the Agency for inspection at all reasonable times.

- 11.10 The licensee shall submit to the Agency, by the 31<sup>st</sup> March of each year, an AER covering the previous calendar year. This report, which shall be to the satisfaction of the Agency, shall include as a minimum the information specified in *Schedule D: Annual Environmental Report* of this licence and shall be prepared in accordance with any relevant guidelines issued by the Agency.
- 11.11 A full record, which shall be open to inspection by authorised persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this site. This record shall be maintained on a monthly basis and shall as a minimum contain details of the following:
- (i) the tonnages and EWC Code for the waste materials imported and/or sent off-site for disposal/recovery;
  - (ii) the names of the agent and carrier of the waste, and their waste collection permit details, if required (to include issuing authority and vehicle registration number);
  - (iii) details of the ultimate disposal/recovery destination facility for the waste and its appropriateness to accept the consigned waste stream, to include its permit/licence details and issuing authority, if required;
  - (iv) written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site;
  - (v) details of all waste consigned abroad for Recovery and classified as 'Green' in accordance with the EU Shipment of Waste Regulations (Council Regulation EEC No. 1013/2006, as may be amended). The rationale for the classification must form part of the record;
  - (vi) details of any rejected consignments;
  - (vii) details of any approved waste mixing;
  - (viii) the results of any waste analyses required under *Schedule C: Control & Monitoring*, of this licence; and
  - (ix) the tonnage and EWC Code for the waste materials recovered/disposed on-site.
- 11.12 The licensee shall submit report(s) as required by the conditions of this licence to the Agency's Headquarters in Wexford, or to such other Agency office as may be specified by the Agency.
- 11.13 All reports shall be certified accurate and representative by the facility manager or a nominated, suitably qualified and experienced deputy.

**Reason:** To provide for the collection and reporting of adequate information on the activity.

## Condition 12. Financial Charges and Provisions

### 12.1 Agency Charges

12.1.1 The licensee shall pay to the Agency an annual contribution of €12,974, or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the Waste Management Acts 1996 to 2008. The first payment shall be a pro-rata amount for the period from the date of commencement of enforcement to the 31<sup>st</sup> day of December, and shall be paid to the Agency within one month from the date of grant of the licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Waste Management Acts 1996 to 2008, and all such payments shall be made within one month of the date upon which demanded by the Agency.

12.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased, the licensee shall contribute such sums as determined by the Agency to defray its costs in regard to items not covered by the said annual contribution.

### 12.2 Water Services Authority Charges

The licensee shall pay to the Water Services Authority such sum as may be determined from time to time, having regard to the variations in the cost of providing drainage and the variation in effluent reception and treatment costs. Payment to be made on demand.

### 12.3 Environmental Liabilities

12.3.1 The licensee shall as part of the AER, provide an annual statement as to the measures taken or adopted at the site in relation to the prevention of environmental damage, and the financial provisions in place in relation to the underwriting of costs for remedial actions following anticipated events, **including closure**, or accidents/incidents, as may be associated with the carrying on of the activity.

12.3.2 The licensee shall arrange for the completion, by an independent and appropriate qualified consultant, of a comprehensive and fully costed Environmental Liabilities Risk Assessment (ELRA) to address the liabilities from past and present activities. The assessment shall include those liabilities and costs identified in Condition 10 for execution of the CRAMP. A report on this assessment shall be submitted to the Agency for agreement within twelve months of date of grant of this licence. The ELRA shall be reviewed as necessary to reflect any significant change on site, and in any case every three years following initial agreement. The results of the review shall be notified as part of the AER.

12.3.3 As part of the measures identified in Condition 12.3.1, the licensee shall, to the satisfaction of the Agency, make financial provision to cover any liabilities identified in Condition 12.3.2. The amount of indemnity held shall be reviewed and revised as necessary, but at least annually. Proof of renewal or revision of such financial indemnity shall be included in the annual 'Statement of Measures' report identified in Condition 12.3.1.

12.3.4 The licensee shall have regard to the Environmental Protection Agency Guidance on Environmental Liability Risk Assessment, Decommissioning Management Plans and Financial Provision when implementing Conditions 12.3.2 and 12.3.3 above.

12.4 Cost of landfill of waste

In accordance with the provisions of Section 53A of the Waste Management Acts 1996 to 2008, the licensee shall ensure the costs involved in the setting up and operation of the facility, as well as the costs of closure and after-care (including cost of provision of financial security) for a period of at least 30 years (post closure) 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 and to provide for the requirements of the Water Services Authority in accordance with Section 52 of the Waste Management Acts 1996 to 2008.*

## SCHEDULE A: Limitations

### A.1

The following waste related processes are authorised:

Landfilling of inert waste

No additions to this process are permitted unless agreed in advance with the Agency.



### A.2 Waste Acceptance

Table A.1 Waste Categories and Quantities

#### A.2 Waste Accepted

Table A.1 Waste Categories and Quantities

EWC CODE	WASTE TYPE <small>Note 1, Note 2:</small>	MAXIMUM (TONNES PER ANNUM)
17 01 01 <small>Note 3</small>	Concrete	
17 01 02 <small>Note 3</small>	Bricks	
17 01 03 <small>Note 3</small>	Tiles and ceramics	
17 01 07 <small>Note 3</small>	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	
17 05 04 <small>Note 3</small>	Soil and stones other than those mentioned in 17 05 03 <small>Note 3</small>	
	<b>TOTAL</b>	

**Note 1:** Waste acceptance criteria are to be agreed by the Agency in accordance with Condition 8.9 of this licence.

**Note 2:** In the case of suspicion of contamination (either from visual inspection or from knowledge of the origin of the waste) testing in accordance with Council Decision 2003/33/EC should be applied or the waste should be refused.

**Note 3:** Waste for this EWC Code can be accepted at landfill without testing if from a single stream (only one source) of a single waste type, in accordance with Council Decision 2003/33/EC; and the waste characterisation criteria as agreed by the Agency in accordance with Condition 8.9 of this licence are satisfied.

Table A.2 Total Permitted Landfill Capacity

Total quantity of waste permitted to be placed at the landfill facility (over authorised life of facility)	Expressed in cubic metres and to be agreed by the Agency within 1 month of the date of grant of the licence, but to be restricted to delivering the aims of the quarry restoration plan as outlined in the application.
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## SCHEDULE B: Emission Limits

### B.1 Emissions to Air

#### Dust Deposition Limits:

Measured at the monitoring points A2-1, A2-2, A2-3 and A2-4 on Drawing Number 2006-011-09-Fig 2.8 Revision B.

Level (mg/m <sup>2</sup> /day) <sup>Note 1</sup>
350

Note 1: 30 day composite sample with the results expressed as mg/m<sup>2</sup>/day.

### B.2 Emissions to Water

There shall be no emissions to water of environmental significance.

### B.3 Emissions to Sewer

Emission Point Reference No:	SE1
Name of Receiving Waters:	Water Services Authority Sewer
Location:	170435 E, 711246N, (as shown on Drawing Number CE08-011-06-001)
Volume to be emitted:	Maximum in any one day: 173 m <sup>3</sup>
	Maximum rate per hour: 7.2 m <sup>3</sup>
	Maximum rate per second: 2 l

Parameter	Emission Limit Value	
	mg/l	kg/day
Suspended Solids	60	10.38
Total Hydrocarbons	100	17.28

### B.4 Noise Emissions

Daytime dB(A) L <sub>Aeq</sub> (30 minutes)	Night-time dB(A) L <sub>Aeq</sub> (30 minutes)
55 <sup>Note 1</sup>	45 <sup>Note 1</sup>

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

## SCHEDULE C: Control & Monitoring

### C.1.1. Control of Emissions to Air

There shall be no emissions to air of environmental significance.

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### C.1.2. Monitoring of Emissions to Air

There shall be no emissions to air of environmental significance.

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### C.2.1. Control of Emissions to Water

There shall be no emissions to water of environmental significance.

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### C.2.2. Monitoring of Emissions to Water

There shall be no emissions to water of environmental significance.

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### C.3.1. Control of Emissions to Sewer

Emission Point Reference No:	SE1
Monitoring Point Reference No:	SD1 (as shown on Drawing Number 2006-011-09-Fig 2.8 Revision B)
Description of Treatment:	Site Storm water Treatment
Equipment:	Temporary settlement ponds, attenuation tank, oil interceptor, and hydrobrake

Control Parameter	Monitoring	Key Equipment <sup>Note 1</sup>
Flow Rate	Check correct operation	Hydrobrake
Suspended Solids	Visual inspection of effluent <sup>Note 3</sup>	Temporary Settlement pond
Suspended Solids	Visual inspection of tank grit trap / effluent	Attenuation Tank
Total Hydrocarbons	Visual inspection of effluent <sup>Note 3</sup>	Oil Interceptor <sup>Note 2</sup>

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

**Note 2:** To be used as necessary to meet emission limit values during the construction and operational phase of the landfill only.

**Note 3:** Inspection to be carried out on each working day during the development phase of the landfill as outlined in the application.

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**C.3.2. Monitoring of Emissions to Sewer**

Emission Point Reference No: SE1

Parameter	Monitoring Frequency	Analysis Method /Technique
Flow	Quarterly	Check hydrobrake operational Note 2
Temperature	Continuous	On-line temperature probe with recorder
Suspended Solids	Quarterly <sup>Note 1</sup>	Standard Method
Total Hydrocarbons	Quarterly <sup>Note 1</sup>	Standard Method

Note 1: The licensee shall use a composite sampler with sample to be collected on a 24 hour flow proportional composite sampling basis.

Note 2: Methodology to demonstrate correct operation of Hydrobrake to be agreed by the Agency.



**C.4 Waste Monitoring**

Waste Class	Frequency	Parameter	Method
Other <sup>Note 1</sup>			

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



**C.5 Noise Monitoring**

Emission Point Reference No.: N1, N2, N3, N4, N5 and any noise sensitive locations as may be specified by the Agency

Location: Location of monitoring points as shown on Drawing Number 2006-011-09-Fig 2.8 Revision B, unless otherwise agreed by the Agency.

Parameter	Monitoring Frequency	Analysis Method/Technique
L(A) <sub>EQ</sub> [30 minutes]	Biannually	Standard <sup>Note 1</sup>
L(A) <sub>10</sub> [30 minutes]	Biannually	Standard <sup>Note 1</sup>
L(A) <sub>90</sub> [30 minutes]	Biannually	Standard <sup>Note 1</sup>
Frequency Analysis (1/3 Octave band analysis)	Biannually	Standard <sup>Note 1</sup>

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



**C.6 Ambient Monitoring**

**Ambient Monitoring**

**Air Monitoring**

**Emission Point Reference No.:**

A2-1, A2-2, A2-3, and A2-4,

**Location:**

Location of monitoring points as shown on Drawing Number 2006-011-09-Fig 2.8 Revision B, unless otherwise agreed by the Agency.

<b>Parameter</b>	<b>Monitoring Frequency</b>	<b>Analysis Method/Technique</b>
<b>Dust deposition</b>	Monthly	Bergerhoff



**Groundwater Monitoring**

**Monitoring Point Reference No.:**

**GW1, GW2, GW3 and GW4**

**Location:**

Location of monitoring points as shown on Drawing Number 2006-011-09-Fig 2.8 Revision B, unless otherwise agreed by the Agency.

<b>PARAMETER</b> <sup>Note 1</sup>	<b>GROUNDWATER Monitoring Frequency</b>
Visual Inspection/Odour	Quarterly
Groundwater Level	Quarterly
Ammoniacal Nitrogen	Quarterly
Chloride	Quarterly
Dissolved Oxygen	Quarterly
Electrical Conductivity	Quarterly
pH	Quarterly
Temperature	Quarterly
Boron	Annually
Cadmium	Annually
Calcium	Quarterly
Chromium (Total)	Annually
Copper	Annually
Cyanide (Total)	Annually
Fluoride	Annually
Iron	Quarterly
Lead	Annually
List I/II organic substances <sup>Note 2</sup>	Annually
Magnesium	Annually
Manganese	Quarterly
Mercury	Annually
Potassium	Quarterly
Sulphate	Quarterly
Sodium	Quarterly
Total Phosphorus / ortho- P	Annually
Total Oxidised Nitrogen	Quarterly
Total Organic Carbon	Quarterly
Residue on evaporation	Annually
Zinc	Annually
Phenols	Quarterly

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

**Note 2:** Samples screened for the presence of organic compounds using Gas Chromatography / Mass Spectrometry (GC/MS) or other appropriate techniques and using the list I/II Substances from EU Directive 76/464/EEC and 80/68/EEC as a guideline. Recommended analytical techniques include: volatiles (US Environmental Protection Agency method 524 or equivalent), semi-volatiles (US Environmental Protection Agency method 525 or equivalent, and pesticides (US Environmental Protection Agency method 608 or equivalent).

## ***SCHEDULE D Specified Engineering Works***

### **Specified Engineering Works**

Development of the facility including preparatory works and lining.

Installation of Surface Water Management Infrastructure.

Final capping.

Any other works notified in writing by the Agency.



## **SCHEDULE E Reporting**

Completed reports shall be submitted to:

The Environmental Protection Agency  
Office of Environmental Enforcement  
Regional Inspectorate  
Inniscarra  
Co. Cork

or Any other address as may be specified by the Agency Reports are required to be forwarded as required in the licence and as may be set out below:

<b>Report</b>	<b>Reporting Frequency<sup>Note 1</sup></b>	<b>Report Submission Date</b>
<b>Annual Environment Report (AER)</b>	Annually	By 31st March of each year.
<b>Record of incidents</b>	As they occur	Within five days of the incident.
<b>Specified Engineering Works reports</b>	As they arise	In advance of the works commencing.
<b>Drawing with monitoring locations</b>	Updates as necessary	In advance of commencement of waste disposal & any agreed amendments thereafter.
<b>Schedule of objectives &amp; targets</b>	-	3 months in advance of commencement of development.
<b>Phased Construction Plan &amp; updates</b>	-	In advance of commencement of development & any updates thereafter.
<b>Monitoring of groundwater quality</b>	Quarterly	Within ten days of obtaining results.
<b>Dust monitoring</b>	Monthly	Within ten days of obtaining results.
<b>Noise Monitoring</b>	biannually	As part of the AER.
<b>Any other monitoring<sup>Note 2</sup></b>	As they occur	Within ten days of obtaining results.

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

**Note 2:** Other than complaints/nuisance monitoring reports.

## **SCHEDULE F      Annual Environmental Report**

### Annual Environmental Report Content <sup>Note 1</sup>

- Emissions from the facility (to air, sewer, and noise).
- Waste Management Records for the year to include:
  - Quantity of waste accepted at the facility;
  - Quantity of waste disposed of in the landfill (for year and in total);
  - Quantity of recovered waste used in the development/operation of the landfill (for year and in total)
  - Quantity of waste removed off-site for recovery and disposal;
  - Statement on the achievement of the waste acceptance and pre-treatment obligations
- Total consented landfill void (m<sup>3</sup>) (based on design/licence limit/other restrictions).
- Total consented landfill void (m<sup>3</sup>) developed.
- Total consented landfill void (m<sup>3</sup>) used.
- Total consented residual landfill void (m<sup>3</sup>) .
- Average compaction/fill densities achieved.
- Topographical Survey (including comparison with previous years survey results)
- Updates to Landfill Environmental Management Plan (LEMP).
- Waste Recovery Report.
- Statement of compliance of facility with any update of the relevant Waste Management Plan
- Complaints summary.
- Reported incidents summary.
- Schedule of environmental objectives and targets.
- Environmental management programme – report for previous year.
- Environmental management programme – proposal for current year.
- Pollutant release and transfer register – report for previous year.
- Pollutant release and transfer register – proposal for current year.
- Waste analysis.
- Ambient monitoring summary (groundwater, dust, noise,).
- Current monitoring location reference drawing.
- Tank and pipeline testing and inspection report.
- Energy efficiency audit report summary.
- Resource consumption summary.
- Development/Infrastructural works summary (completed in previous year or prepared for current year).
- Report on management and staffing structure of the facility.
- Report on the programme for public information.
- Reports on financial provision made under this licence.
- Review of environmental liabilities.
- Any amendments to the CRAMP.
- Statement on the costs of landfill (including Landfill Levy).
- Any other items specified by the Agency.

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

**Signed on behalf of the said Agency** \_\_\_\_\_  
 On the xx day of xxxxx, 200X      xxxxxxxxxxxx      **Authorised Person**