

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

Historic Landfill Proposed Certificate of Authorisation

Certificate of Authorisation Number:	H0001-01
Certification of Authorisation Holder:	Cork County Council
Location of Facility:	Newmarket County Cork





HEADQUARTERS
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**WASTE MANAGEMENT (CERTIFICATION OF HISTORIC UNLICENSED
WASTE DISPOSAL AND RECOVERY ACTIVITY) REGULATIONS 2008**

HISTORIC LANDFILL

PROPOSED CERTIFICATE OF AUTHORISATION

Decision of Agency, under Regulation 7(5) of the Waste Management (Certification of
Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008

Reference number: **H0001-01**

In pursuance of the powers conferred on it by the Waste Management (Certification of
Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008, the
Environmental Protection Agency (the Agency) proposes, under Regulation 7(5) of the
said Regulations, to grant this Certificate of Authorisation to Cork County Council,
Inniscarra, County Cork in respect of the closed landfill at Newmarket, County Cork,
subject to conditions set out in the Certificate of Authorisation.

REPRESENTATIONS

The Local Authority may make representations to the proposed decision, in accordance
with Regulation 7(5) of the Waste Management (Certification of Historic Unlicensed
Waste Disposal and Recovery Activity) Regulations 2008 at any time no later than 5.00
pm on **22nd July 2011**. It is important to note that any representations to a proposed
decision must be received by the Agency before the appropriate period expires.

A representation must be made by sending the representation by prepaid post to the
Agency, or by leaving the representation with an employee of the Agency at the principal
offices of the Agency in Wexford during office hours, i.e. 9.00 a.m. to 5.00 p.m. Monday
to Friday.



A representation against the proposed decision must state in full the grounds of the representation. For the purposes of making a representation, the address of the principal office of the Agency is P.O. Box 3000, Johnstown Castle Estate, County Wexford.

In the event that;

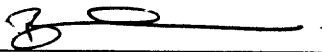
(a) no representation is taken against the proposed decision or

(b) a representation taken against the proposed decision is withdrawn,

the decision of the Agency will be in accordance with the proposed decision and will be issued as soon as may be after the appropriate period expires.

A copy of the Decision is attached.

Signed on behalf of the Agency:
On the 23rd day of June, 2011.



Brian Meaney, Authorised Person

INTRODUCTION

This introduction is not part of the Certificate of Authorisation and does not purport to be a legal interpretation of the certificate of authorisation.

This Certificate of Authorisation is for the remediation, restoration and aftercare of a closed landfill.

Newmarket historic landfill is located approximately 1km to the south west of Newmarket town. The site is accessed off a national tertiary road, which runs between Newmarket and Boherboy. The site occupies an area of approximately 0.29ha. It is bordered to the north by a drainage ditch, which separates it from a Cork County Council waste water treatment plant (WWTP) which serves the town of Newmarket. The River Dalua is west of the site. To the east and south the site is bounded by steeply sloping wooded lands.

It is estimated that waste disposal began at the site in the 1950s. A variety of wastes were known to have been deposited including Municipal Solid Waste and Construction and Demolition waste. It is suspected that waste water sludges from the WWTP and oil/barrels may have been deposited at the site. Local council staff report that fires occurred at the site, this being common practice at similar sites in the 1950s – 1970s. Due to access difficulties the site was not regularly used by the Council for the disposal of waste; however, it was used in emergencies. The site was open to the public between 14.00 and 16.00 on Fridays. The site is thought to have closed in 1984.

The surrounding land use is predominantly agricultural. Three houses were identified within 200m of the site. Prior to site investigations taking place much of the landfill area was covered with grass and large hedging plants, with trees along the southern margins.

From site investigations it has been estimated that approximately 4,000m³ of waste is deposited at the site. There is no evidence of any significant amounts of potentially hazardous waste, staining or odours. The waste has been characterised as inert.

This Certificate of Authorisation authorises the remediation, restoration and aftercare of the landfill by Cork County Council and includes requirements to manage and monitor the landfill to ensure it does not cause environmental pollution.

The Certificate of Authorisation sets out the conditions under which Cork County Council is to manage this facility. A validation report is to be prepared on completion of the necessary works to confirm satisfactory remediation has taken place.

Glossary of Terms

All terms in this Certificate of Authorisation should be interpreted in accordance with the definitions in the Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008 unless otherwise defined in the certificate of authorisation.

Agreement	Agreement in writing.
Annually	At approximately twelve-monthly intervals.
Application	The application by the certificate of authorisation holder for this certificate of authorisation.
Authorised Activities	Activities required by the risk assessment or by this certificate of authorisation.
Certificate of Authorisation	Includes this document, the risk assessment submitted with the application and additional information submitted on 7 April 2010, 20 July 2010 and 14 September 2010.
Certificate of Authorisation holder	Cork County Council
Closed landfill	As defined in the Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008.
Code of Practice	As defined in the Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008.
Biannually	At approximately six – monthly intervals.
Documentation	Any report, record, results, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this licence.
Drawing	Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this licence.
Environmental damage	As defined in Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage.
Environmental Pollution	As defined in the Waste Management Acts 1996 to 2011.
EPA	Environmental Protection Agency.

Incident	<p>The following shall constitute as incident for the purposes of this certificate of authorisation:</p> <ul style="list-style-type: none">(i) an emergency;(ii) any emission which does not comply with the requirements of this certificate of authorisation;(iii) any trigger level specified in this certificate of authorisation which is attained or exceeded; and(iv) any indication that environmental pollution has, or may have, taken place.
Inert waste	<p>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.</p>
Maintain	<p>Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to perform its function adequately.</p>
National Environmental Complaints Procedure	<p>As established under the National Environmental Enforcement Network.</p>
Necessary measures	<p>As defined in the Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008.</p>
Risk assessment	<p>As defined in the Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008.</p>
Sample(s)	<p>Unless the context of this document indicates to the contrary, the term sample or samples shall include measurements taken by electronic instruments.</p>
The Agency	<p>Environmental Protection Agency.</p>
The Regulations	<p>Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008 (S.I. No. 524 of 2008)</p>
Trigger level	<p>A parameter value the achievement or exceedance of which requires certain actions to be taken by the certificate of authorisation holder.</p>
Water Services Authority	<p>Cork County Council</p>
Webform	<p>An electronic form submitted to the Agency via the internet.</p>

Part I Authorisation of a closed landfill

In pursuance of the powers conferred on it by the Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008 (the Regulations), the Environmental Protection Agency (the Agency) proposes, under Regulation 7(5) of the said Regulations, to grant this Certificate of Authorisation to Cork County Council, Inniscarra, Co. Cork, in respect of the closed landfill at Newmarket, County Cork, subject to conditions set out in the Certificate of Authorisation.

Reasons for decision

In proposing to grant this Certificate of Authorisation, the Agency determines, in accordance with Regulation 7(7)(a) of the Regulations that the risk assessment submitted by Cork County Council as part of the application for a certificate of authorisation is adequate. In accordance with Regulation 7(7)(b) of the Regulations, to ensure appropriate protection for human health and the environment and to ensure conformity with the provisions of Council Directive 2006/12/EC and Council Directive 80/68/EC, the conditions set out in Part II of this Certificate of Authorisation are specified as further necessary measures in addition to those identified by the risk assessment.

Part II Conditions

Condition 1. Scope

1.1 Statutory Obligations

This Certificate of Authorisation is for the purposes of regulating a closed landfill under the Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008 only and nothing in this Certificate of Authorisation shall be construed as negating Cork County Council's statutory obligations or requirements under any other enactments or regulations.

1.2 For the purposes of this certificate of authorisation, the closed landfill authorised by this certificate of authorisation is the area of land highlighted by a hatched design and outlined in red on Drawing No. 23/N_CSM Revision 0 submitted with the application. Any reference in this licence to "closed landfill" shall mean the area thus outlined in red.

1.3 No waste shall be accepted for recovery or disposal at the closed landfill unless authorised by this certificate of authorisation. No waste shall be burned at the closed landfill. Waste may be accepted for utilisation at the closed landfill in accordance with the conditions of this certificate of authorisation.

- 1.4 No alteration to, or reconstruction in respect of, the closed landfill, 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;
- that does not already form part of this certificate of authorisation or the risk assessment 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 authorised by this certificate of authorisation. All programmes required to be carried out under the terms of this certificate of authorisation become part of this certificate of authorisation.
- 1.6 Nothing in this Certificate of Authorisation shall be construed as necessarily prohibiting any future beneficial uses of the site of the closed landfill that do not interfere with the integrity of the remediation measures adopted or put in place or cause environmental pollution to be caused as a result of the presence of the deposited waste.

Reason: To clarify the scope of this certificate of authorisation.

Condition 2. Notifications, Records and Reports

- 2.1 Cork County Council shall notify the Agency by webform or by any other means as may be specified by the Agency, as soon as practicable after the occurrence of any incident. Cork County Council shall include as part of the notification: the date and time of the incident, summary details of the occurrence and, where available, the steps taken to minimise any emissions or discharges. The incident notification shall be provided in a format as may be specified and in accordance with any relevant guidance issued by the Agency.
- 2.2 Cork County Council shall as a minimum keep the following documents at the headquarters of Cork County Council, an appropriate regional office of Cork County Council or such other office as may be agreed by the Agency:
- 2.2.1 the Certificate of Authorisation application and all associated documentation including the risk assessment;
- 2.2.2 this Certificate of Authorisation;

- 2.2.3 records of all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the risk assessment, this Certificate of Authorisation and/or guidance produced by the Agency;
- 2.2.4 records of incidents, including the nature, extent, and impact of, and circumstances giving rise to, the incident, and all corrective actions taken to manage the incident, to minimise the effect on the environment, and to avoid recurrence;
- 2.2.5 records of all complaints of an environmental nature related to the closed landfill in accordance with the national environmental complaints procedure. A record shall also be kept of the response and remediation action taken in the case of each complaint;
- 2.2.6 relevant correspondence with the Agency;
- 2.2.7 up to date drawings/plans showing the location of key process and environmental infrastructure, including monitoring locations and discharge points;
- 2.2.8 up to date operational procedures for all monitoring and control equipment necessary to give effect to this Certificate of Authorisation;
- 2.2.9 the verification report prepared on completion of the agreed remediation; and
- 2.2.10 other documentation required by this Certificate of Authorisation or as may be otherwise directed by the Agency.

This documentation shall be available to the Agency for inspection and to members of the public at all reasonable times and shall be provided to the Agency upon request.

- 2.3 All reports prepared in accordance with this Certificate of Authorisation shall be certified accurate and representative by the relevant Director of Services or a nominated, suitably qualified and experienced deputy.
- 2.4 Environmental Liabilities
No less than three years following grant of this certificate of authorisation, Cork County Council shall prepare, and update every three years, or five years if agreed with the Agency, a statement as to the measures taken or adopted in relation to the prevention of damage to the environment, and the financial provisions in place in relation to the underwriting of costs for remedial actions following anticipated events or accidents/incidents, as may be associated with discharges or emissions from the closed landfill. The statement of measures shall be prepared in accordance with any relevant guidance issued by the Agency.
- 2.5 Cork County Council shall pay to the Agency a contribution or such sum as the Agency from time to time determines having regard to variations in the extent of reporting, auditing, inspections, sampling and analysis or other functions carried out by the Agency as the Agency considers necessary for the performance of its functions under the Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008 in relation to the closed landfill regulated by this certificate of authorisation.

Reason: *To provide for the collection and reporting of adequate information on the activity. To provide for adequate financing for monitoring and financial provisions for measures to protect the environment.*

Condition 3. Management of the closed landfill

- 3.1 Having regard to the risk assessment carried out under Regulation 6(1) of the Regulations, Cork County Council shall implement the following measures within 12 months of the date of grant of this certificate of authorisation:
- a) The facility shall be restored in accordance with the recommended minimum soil depth requirements outlined in Table 4.3 of the *Landfill Restoration and Aftercare Manual* (EPA, 1999). The soil depth selected shall take into account the potential afteruse(s) for this facility. Any deviation from the recommended soil depths shall be justified and recorded as part of the validation report required in accordance with Condition 3.3.
 - b) Where the final restoration slope is steeper than 1:6 an analysis of cap stability shall be completed. The findings of this analysis shall be included in the validation report required in accordance with Condition 3.3.
 - c) Where a specific afteruse has been determined for the facility, restoration and aftercare measures outlined in Appendices A – Q of the manual referenced above shall be utilised where applicable. Any deviation from these recommended measures shall be justified and recorded as part of the validation report required in accordance with Condition 3.3.
- 3.2 Cork County Council shall manage the closed landfill to ensure that discharges and emissions from the closed landfill do not cause environmental pollution or deterioration in the status of the receiving surface water body or groundwater body.
- 3.3 Cork County Council shall compile a validation report in accordance with the requirements of chapters 7.3 and 8.2.4 of the Code of Practice. Unless otherwise agreed, the validation report shall be submitted to the Agency within 30 months of the date of grant of this certificate of authorisation unless otherwise agreed with the Agency.
- 3.4 Annual assessment
- 3.4.1 Cork County Council shall, as a minimum, annually assess the closed landfill and carry out analyses, on-site or through sampling for laboratory analysis, to confirm that the closed landfill has not, compared to earlier assessments, failed to achieve the objectives set for it in the risk assessment or this Certificate of Authorisation. The frequency of assessment may be amended by agreement with the Agency no less than two years following grant of this Certificate of Authorisation.

- 3.4.2 Unless otherwise agreed with the Agency, assessment shall include:
- a) a visual inspection of the landfill to ensure that:
 - (i) the condition of the site has not deteriorated,
 - (ii) there is no evidence of an incident having occurred,
 - (iii) there is no evidence of litter or fly tipping, and
 - (iv) any measures required by Condition 3.1 are effective and are being maintained as required;
 - b) monitoring to detect the presence of leachate in all available leachate monitoring boreholes (Note: monitoring shall only take place after periods of rainfall);
 - c) sampling, analysis and characterisation of leachate, if present, from at least two leachate monitoring boreholes;
 - d) monitoring to detect the presence and determine the character of landfill gas in all available monitoring boreholes;
 - e) sampling of surface water from the River Dalua upstream and downstream of the closed landfill, taking into consideration the potential effect of the discharge from Newmarket waste water treatment plant;
 - f) sampling, analysis and characterisation of groundwater from at least two available groundwater monitoring boreholes, one of which shall be downgradient of the closed landfill; and
 - g) comparison of monitoring results against trigger levels and/or standard reference values for relevant pollutants including environmental quality standards in the European Communities Environmental Objectives (Surface Waters) Regulations 2009.

3.4.3 Cork County Council shall develop and maintain groundwater and surface water monitoring and leachate and landfill gas trigger levels.

3.5 The location, frequency, methods and scope of monitoring, sampling and analyses, as set out in this Certificate of Authorisation, may be amended with the agreement of the Agency following evaluation of test results.

3.6 Any waste materials (such as soil, stone and recovered construction and demolition waste) imported for use in remedial, corrective or other engineering works at the closed landfill shall be:

- a) classified as inert waste according to Council Decision 2003/33/EC; and
- b) managed and utilised in a manner that does not cause environmental pollution.

Documented waste acceptance, storage/stockpiling and utilisation procedures, to include mitigation measures against environmental pollution, shall be in place and operational in advance of receipt of such materials. Records shall be maintained that demonstrate that waste utilisation at the facility complied with the requirements of this condition.

3.7 No emissions, including odours, noise and dust, from works 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.

3.8 Cork County Council shall ensure that all or any of the following:

- vermin
- birds
- flies
- mud
- dust
- litter

associated with the closed landfill 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 Cork County Council to control or prevent any such impairment/interference shall not cause environmental pollution.

The site shall be maintained in a good condition at all times. Any litter or fly tipped waste shall be removed by Cork County Council and transferred to an authorised waste facility for disposal/recovery.

Waste skips and litter currently at the facility shall be removed within three months of the date of grant of this certificate of authorisation.

3.9 Wells and boreholes

- a) All wells & boreholes 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”, unless otherwise agreed by the Agency.
- b) Groundwater monitoring wells shall be constructed having regard to the guidance given in the Agency’s landfill manual “Landfill Monitoring”.
- c) All wellheads shall be adequately protected to prevent contamination or physical damage.

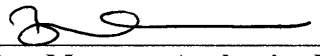
3.10 Cork County Council shall clearly label and provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the risk assessment or this Certificate of Authorisation. The requirement with regard to off-site points is subject to the prior agreement of the landowner(s) concerned.

3.11 Incidents

- a) In the event of an incident Cork County Council 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.
- b) Cork County Council 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.
- c) In the case of any incident relating to discharges to water, Cork County Council shall notify the Water Services Authority and Inland Fisheries Ireland as soon as practicable after such an incident.

Signed on behalf of the said Agency
On the 23rd day of June, 2011


Brian Meaney, Authorised Person