

ORIGINAL

For the Attention of

Our Ref.:

W0129-02/LOD/200808

Waste Licensing Section,

Office of Climate, Licensing and ResourCETAL PROTECTION
Use,
ENVIRONMENTAL PROTECTION

Direct Dial:

01 802 0523

AGENCY

Direct Fax:

01 802 0525

EPA,

PO Box 3000. 2.1 AUG 2008 086 8333724

Johnstown Castle Estate, County Wexford.

Mobile: e¹mail: Date:

louise.odonnell@pateltonra.com

20th August 2008

Dear Sir/Madam,

Waste Licence:	W0129-02 Hollywood Great
Re.:	Application for Transfer of Licence: Change of Company Name
	(Resubmission of Application previously submitted on 30 th July 2008)
Enclosed Docs:	 Transfer of Licence Application Form and Attachments (1 original and one copy, as advised by telecom with EPA 20/08/08)
	Transfer of Licence Application Form and Attachments (2 copies of all documentation on CD Rom Version)

An application was sent to the Agency on 30th July 2008 in relation to a company change of name. The application was returned (EPA letter dated 19/08/08) as not all sections were deemed to be confidential as noted on the original application. We hereby resubmit the application. Supplementary confidential information will be submitted under separate cover, as advised.

As a result of company re-structuring within Murphy Concrete Manufacturing Ltd, it is proposed that the name of the licence holder for W0129-02 be changed from 'Murphy Concrete Manufacturing Ltd' to 'Murphy Environmental Hollywood Limited'.

The proposed date of transfer is the 1st of September 2008 and it is anticipated that a complete changeover to the new company name, including all legal and other company documentation will take place on this date.

Please find enclosed the completed Transfer of Licence Application Form and required attachments. Please note that the required fee of €5,000 for a Waste Licence Transfer Application was remitted with the application submitted on 30th July 2008, and was retained by the Agency.

The content of the electronic files on the accompanying CD-ROM is a true copy of the original application form and attachments.

Should you require any further details, please do not hesitate to contact me.

Yours sincerely

on behalf of Murphy Environmental (division of Murphy Concrete Manufacturing Ltd.)

Louise O'Donnell

Director

Patel Tonra Ltd.

Consent of copyright owner required for any other use.



ENVIRONMENTAL PROTECTION AGENCY

2 1 AUG 2008



ORIGINAL

Licensing

Transfer of a Licence Application Form

This document does not purport to be and should not be considered a legal interpretation of the provisions and requirements of the Waste Management Acts, 1996 to 2003 / Environmental Protection Agency Acts 1992 & 2003.

Environmental Protection Agency

P.O. Box 3000, Johnstown Castle, County Wexford Telephone: 053-60600 Fax: 053-60699



Not withstanding the provisions of Section 47 of the Waste Management Acts 1996 to 2003 or Section 94 of Environmental Protection Agency Acts 1992 & 2003 the following should be completed when applying to the Agency for the transfer of a Waste or IPPC Licence.

Licence Register Number	W0129-02
Contact details for a contact person or persons in relation to the application to transfer.	Patricia Rooney, General Manager, Murphy Environmental Hollywood Limited, Hollywood Great, Nag's Head, Naul, County Dublin. 087 2539959 01 8433744
Location of activity to which the licence relates	Hollywood Great, Nag's Head, Naul, County Dublin.
Name address and contact details of current licence holder	Patricia Rooney, General Manager, Murphy Environmental (registered trading division of Murphy Concrete Manufacturing Limited) Hollywood Great, Nag's Head, Naul, County Dublin. 087 2539959 01 8433744
Name address and contact details of proposed transferee	Seamus Murphy, Managing Director, Murphy Environmental Hollywood Limited, Hollywood Great, Nag's Head, Naul, County Dublin. 087 2551616 01 8433744
When do the applicants want the transfer to take effect?	1st September, 2008



Classes / Nature of Activity	Licensed Waste Disposal Activities, in accordance with the Third Schedule of the Waste Management Acts 1996-2007
	Class 1: Deposit on, in or under land (including landfill)
	Class 5: Specially engineered landfill, including placement into lined discrete cells, which are capped and isolated from one another and the environment
	Class 13: Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced
	Licensed Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Acts 1996-2007
	Class 3:Recycling or reclamation of metals and metal compounds
	Class 4: Recycling or reclamation of other inorganic materials
	Class 13: Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced
	(Class 5: Disposal is the principal activity)
Attachment A: Licence	Please provide as Attachment A (as per Section 47(3) of the Waste Management Acts 1996 to 2003 / Section 94 (3) of the Protection of the Environment Acts 1992 and 2003) a copy of the licence you wish to transfer.
Attachment B:	Please provide as Attachment B the following as appropriate:
	 (a) Certified Copy of Certificate of Incorporation (b) Company's Number in Company's Registration Office and (c) Particulars of Registered Office of the Company
	Does the proposed transferee have a parent company? If so please provide details here. Does the proposed transferee have any subsidiaries involved in the industrial installation or waste facility management? If so please give details here.
	Not Applicable

Transfer of Licence Application Form

Attachment C: Fit and Proper Person

The following information is required (please provide the information below or separately as Attachment C):

1. Indicate whether the applicant or other relevant person has been convicted under the PoE Act, the Waste Management Act 1996, the Local Government (Water pollution) Acts 1977 and 1990 or the Air Pollution Act 1987.

NO

2. Provide details of the applicant's technical knowledge and/or qualifications, along with that of other relevant employees (see details below).

SEE ATTACHMENT C

3. Provide information to show that the person is likely to be in a position to meet any financial commitments or liabilities that may have been or will be entered into or incurred in carrying on the activity to which the application relates of in consequence of ceasing to carry out that activity.

SEE ATTACHMENT C.1

In relation to Question 2 above please give details here for each person who will or is likely to have responsibility for licensed activities, to include:

a) the names of all persons who are to provide the management and supervision of the activities authorised by the licence, in particular the name of the facility manager and any nominated deputies;

SEE ATTACHMENT C

b) details of the responsibilities for each individual named under a) above; and

SEE ATTACHMENT C

c) details of the relevant education, training and experience held by each of the persons nominated under a) above.

SEE ATTACHMENT C

Attachment D: Liabilities, requirements & obligations

Please provide a statement to show that the person to whom a licence is transferred has assumed and accepted all liabilities, requirements and obligations provided for in or arising under the licence, or revised licence, regardless of how and in respect of what period, including a period prior to the transfer of the licence or revised licence they may arise.

Murphy Environmental Hollywood Limited accepts all liabilities, requirements and obligations as required.

Please refer to Attachment C

Insurance details for Murphy Environmental Hollywood Limited are attached in Attachment C.2. **CONFIDENTIAL**

Attachment E: Transferee Licence details

Has the proposed transferee, their parent company or any 'relevant person' had an application for a licence granted? Please provide details here or separately as Attachment E.

Murphy Concrete Manufacturing Ltd. is the holder of EPA Waste Licence W0129-02 (previously W0129-01) (copy included in **Attachment** (a).

Murphy Concrete Manufacturing Ltd. is also the holder of EPA Waste Licence W0151-01 (Sarsfieldstown, Gormanston, Co. Meath) (Copy included in **Attachment E**.).

Has the proposed transferee, their parent company or any 'relevant person' had an application for a licence rejected; had a licence revoked; been refused as a transferee for a licence? Please provide details here or separately as Attachment E.

NO



Attachment F: Estimated Expenditure & Financial Provisions	Please provide, as attachment F, a plan showing the estimated expenditure for each phase of the activity/activities. The plan should include the likely costs of: (i) Abatement Installation, Control & Monitoring (ii) Closure & Remediation of the site (iii) Clean-up following a plausible accident/incident (iv) Long-term aftercare for residual environmental liabilities.
	The Plan should include a statement or details of provisions made for the underwriting of these costs/liabilities.
	Please find in Attachment F , correspondence with EPA regarding restoration costs in relation to Hollywood (W0129-01). Please note that this assessment will be reviewed and associated financial provision revised, where necessary, in compliance with W0129-02 licence conditions relating to CRAMP (Closure, Restoration and Aftercare Management Plan) and ELRA (Environmental Liabilities Risk Assessment). All proposed review and amendments will be made in consultation with the Office of Environmental Enforcement. Details on Restoration Fund and Liabilities Risk Fund are included in Attachment C.1 .
	Deston Per Jean
Application Fee	To ensure that your application is valid and can be processed please submit payment of one of the following amounts with your application to transfer the licence;
	Waste Licence Transfer Application -€5,000 IPPC Licence Transfer Application - €2,000



We, the undersigned, are applying to the Environmental Protection Agency, as per Section 47 of the Waste Management Acts 1996 to 2003 (Waste Transfer) for the transfer of licence no W0129-02 from Murphy Concrete Manufacturing Limited to Murphy Environmental Hollywood Limited. Signed: Signed: Licensee Proposed Transferee

Date:

Date:

30th July 2008 Consent of copyright owner required for any other use.

Company Seal

Company Seal





For its pection the required for any other use

Section 47 of the Waste Management Acts 1996 to 2003, Section 94 of The Environmental Protection Agency Acts 1992 & 2003 Transfer of a Waste Licence.

Attachment A:

Licence to be Transferred: Waste Licence W0129-02

Consent of convident owner required for any other use.



Patel Tonra Ltd. for Murphy Environmental Hollywood Limited, August 2008. Consent of copyright owner required for any other use.



Headquarters
P.O. Box 3000

Johnstown Castle Estate
County Wexford
Ireland

WASTE LICENCE

Licence Register Number:	W0129-02
Licensee:	Murphy Concrete Manufacturing Limited
Location of Facility:	Hollywood Great, Nags Head, The Naul, County Dublin



HEADQUARTERS
JOHNSTOWN CASTLE ESTATE
COUNTY WEXFORD, IRELAND
PHONE: +353-53-9160600

FAX: +353-53-9160699

WASTE MANAGEMENT ACTS, 1996 TO 2007

WASTE LICENCE

Decision of the Agency, under Section 46(8)(a) of the Waste Management Acts, 1996 to 2007

Waste Licence Register No: W0129-02

Further to notice dated the 27th day of November, 2007, the Agency in exercise of the powers conferred on it by the Waste Management Acts, 1996 to 2007, for the reasons hereinafter set out in the attached Decision, grants this revised waste beence to Murphy Concrete Manufacturing Limited, Hollywood, Naul, County Dublin, to carry on the waste activities set out below at Murphy Concrete Manufacturing Limited, Hollywood Great, Nags Head, The Naul, County Dublin subject to twelve Conditions, as set out in the schedules attached thereto.

A copy of the Decision is attached.

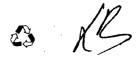
Licensed Waste Activities

Waste Disposal Activities in accordance with the Third Schedule of the Waste Management Acts, 1996 to 2007:

Class 1.	Deposit on, in or under land (including landfill).
Class 5.	Specially engineered landfill, including placement into lined discrete cells, which are capped and isolated from one another and the environment.
Class 13.	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.

Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Acts, 1996 to 2007:

Class 3.	Recycling or reclamation of metals and metal compounds.
Class 4.	Recycling or reclamation of other inorganic materials.
Class 13.	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.



Sealed by the seal of the Agency on this the 21st day of May 2008

PRESENT when the seal of the Agency was affixed hereto:

Laura Burke, Director/Authorised Person

S DOMANDA STATE OF THE STATE OF

Consent of copyright owner required for any other use.

INTRODUCTION

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

This licence is for the purpose of an inert landfill at Hollywood Great, Nags Head, The Naul, County Dublin. The site is an active shale and limestone quarry that has been in operation since the 1940's.

The landfill will accept not more than 500,000 tonnes per annum of inert waste arising from construction & demolition activities (e.g. soil & stones, concrete, bricks, tiles, etc.), to infill the quarry void.

The licence sets out in detail the conditions under which Murphy Concrete Manufacturing Limited will operate and manage this facility.

Consent of copyright owner required for any other use.

B

Table of Contents

Glossary of Terms			Page No
Decision & Reasons	for the Decision		5
Part I Schedule of Ac	ctivities Licensed	,	5
Part II Schedule of A	ctivities Refused		5
Part III Conditions			6
Condition 1	Scope		6
Condition 2	Management of the Facility		7
Condition 3	Infrastructure and Operation		8
Condition 4	Interpretation	•	12
Condition 5	Emissions		12
Condition 6	Control and Monitoring		13
Condition 7	Resource Use and Energy Efficiency		16
Condition 8	Materials Handling		16
Condition 9	Accident Prevention & Emergency Response		17
Condition 10	Restoration and Aftercare Management		18
Condition 11	Notifications, Records and Reports		19
Condition 12	Financial Charges and Provisions		21
SCHEDULE A:	Limitation		23
SCHEDULE B:	Emission Limits		28
SCHEDULE C:	Control & Monitoring		29
SCHEDULE D:	Recording and Reporting to the Agency		32
SCHEDULE E	Annual Environmental Report		. 32



Glossary of Terms

All terms in this licence should be interpreted in accordance with the definitions in the Environmental Protection Agency Acts 1992 and 2003/Waste Management Acts 1996 to 2007, unless otherwise defined in this section.

Adequate lighting	20 lux measured at ground level.
AER	Annual Environmental Report.
Aerosol	A suspension of solid or liquid particles in a gaseous medium.
Agency/EPA	Environmental Protection Agency.
Agreement	Agreement in writing.
Annually	At approximately twelve-monthly intervals.
Application	The application by the licensee for this licence.
Appropriate facility	A waste management facility, duly authorised under relevant law and technically suitable.
Attachment	Any reference to Attachments in this licence refers to attachments submitted as part of this licence application.
BAT	Best Available Techniques
Biannually	All or part of a period of six consecutive months.
Biennially	Once every two years.
BOD	5 day Biochemical Oxygen Demand.
CEN	Comité Européen De Normalisation – European Committee for Standardisation.
COD	Chemical Oxygen Demand.
Construction and demolition (C & D) waste	Wastes that arise from construction, renovation and demolition activities: Chapter 17 of the EWC or as otherwise may be agreed.
Containment boom	A boom that can contain spillages and prevent them from entering drains or watercourses or from further contaminating watercourses.
Daily	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.
Day	Any 24 hour period.
Daytime	0800 hrs to 2200 hrs.
dB(A)	Decibels (A weighted).
DO	Dissolved oxygen.



Documentation	Any report, record, result, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this licence.
Drawing	Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this licence.
ЕМР	Environmental Management Programme.
Emission limits	Those limits, including concentration limits and deposition rates, established in Schedule B: Emission Limits of this licence.
Environmental damage	Has the meaning given it in Directive 2004/35/EC.
EPA	Environmental Protection Agency.
European Waste Catalogue (EWC)	A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 2000/532/EC and any subsequent amendment published in the Official Journal of the European Community.
Facility	Any site or premises used for the purposes of the recovery or disposal of waste.
Fortnightly	A minimum of 24 times per year, at approximately two week intervals.
GC/MS	Gas chromatography/mass spectroscopy.
Green waste	Waste wood (excluding timber), plant matter such as grass cuttings, and other vegetation.
Heavy metals	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.
НГО	Heavy fuel oil.
Hours of operation	The hours during which the facility is authorised to be operational.
Hours of waste acceptance	The hours during which the facility is authorised to accept waste.
ICP	Inductively coupled plasma spectroscopy.
Incident	The following shall constitute an incident for the purposes of this licence: i. an emergency; ii. any emission which does not comply with the requirements of this licence; iii. any exceedance of the daily duty capacity of the waste handling equipment; iv. any trigger level specified in this licence which is attained or exceeded; and, v. any indication that environmental pollution has, or may have, taken place
Industrial waste	As defined in Section 5(1) of the Waste Management Acts 1996 to 2007.



Inert Waste	Waste that does not undergo any significant physical, chemical or biological transformations. Inert waste will not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm human health. The total leachability and pollutant content of the waste and the ecotoxicity of the leachate must be insignificant, and in particular not endanger the quality of surface water and/or groundwater.
IPPC	Integrated Pollution Prevention & Control.
Landfill Directive	Council Directive 1999/31/EC.
Landfill Footprint	The area of the facility where waste is deposited.
Landfill Gas	Gases generated from landfilled waste.
Leq	Equivalent continuous sound level.
Licensee	Murphy Concrete Manufacturing Limited, Hollywood Great, Nags Head, The Naul, County Dublin.
Liquid waste	Any waste in liquid form and containing less than 2% dry matter.
List I	As listed in the EC Directives 76/464/EEE and 80/68/EEC and amendments.
List II	As listed in the EC Directives 76/464/EEC and 80/68/EEC and amendments.
Local Authority	Fingal County Council. Of Party Council. Of Party Council Coun
Maintain	Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to adequately perform its function.
Mass flow limit	An emission limit value, which is expressed as the maximum mass of a substance that can be emitted per unit time.
Mass flow threshold	A mass flow rate above, which a concentration limit applies.
Monthly	A minimum of 12 times per year, at intervals of approximately one month.
Night-time	2200 hrs to 0800 hrs.
Noise-sensitive location (NSL)	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.
Oil separator	Device installed according to the International Standard I.S. EN 858-2:2003 (Separator systems for light liquids, (e.g. oil and petrol) - Part 2: Selection of nominal size, installation, operation and maintenance).
PRTR	Pollutant Release and Transfer Register.



Pre-treatment/ treatment	As per Article 6(a) of the Council Directive 1999/31/EC on the landfill of waste, only waste that has been subject to treatment is landfilled. This provision may not apply to inert waste for which treatment is not technically feasible, or to any other waste for which such treatment does not contribute to the objectives of the Council Directive 1999/31/EC on the landfill of waste, by reducing the quantity of waste or the hazards to human health or the environment.
Quarterly	All or part of a period of three consecutive months beginning on the first day of January, April, July or October.
Regional Fisheries Board	Eastern Regional Fisheries Board.
Water Services Authority	Fingal County Council.
Sanitary effluent	Wastewater from facility toilet, washroom and canteen facilities.
Sample(s)	Unless the context of this licence indicates to the contrary, samples shall include measurements by electronic instruments.
SOP	Standard operating procedure.
Source segregated waste	Waste, which is separated at source. Meaning that the waste is sorted at the point of generation into a recyclable fraction(s) for separate collection (e.g. paper, metal, glass, plastic, bulk dry recyclables, biodegradables, etc) and a residual fraction. And the expression separate at source shall be construed accordingly.
Specified emissions	Those emissions listed in Schedule B: Emission Limits of this licence.
Standard method	A National, European or internationally recognised procedure (eg, 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.
Storm water	Rain water run-off from roof and non-process areas.
тос	Total organic carbon.
Trade effluent	Trade effluent has the meaning given in the Water Pollution Acts 1977 and 1990.
Trigger level	A parameter value, the achievement or exceedance of which requires certain actions to be taken by the licensee.
Weekly	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.
WWTP	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 40(4) of the Waste Management Acts 1996 to 2007.

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

Part I Schedule of Activities Licensed

In pursuance of the powers conferred on it by the Waste Management Acts 1996 to 2007, the Environmental Protection Agency (the Agency), under Section 46(8)(a) of the said Act hereby grants this reviewed Waste Licence to Murphy Concrete Manufacturing Limited, Hollywood Great, Nags Head, The Naul, County Dublin, to carry on the waste activities listed below at Hollywood Great, Nags Head, The Naul, County Dublin, subject to conditions, with the reasons therefore and the associated schedules attached thereto set out in the licence. For the purposes of Article 48 of the Waste Management Licensing Regulations 2004 (SI 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 2007

Class 1.	Deposit on, in or under land (including landfill).
Class 5.	Specially engineered landfill including placement into lined discrete cells, which are capped and isolated from one another and the environment.
Class 13.	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.

Licensed Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Munagement Acts 1996 to 2007

Class 3.	Recycling or reclamation of metals and metal compounds.
Class 4.	Recycling or reclamation of other inorganic materials.
Class 13.	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.

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 1:*Schedule of Activities Licensed, and shall be as set out in the licence application or as modified under Condition 1.5 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 The facility shall be controlled, operated, and maintained and emissions shall take place as set out in this licence. All programmes required to be carried out under the terms of this licence, become part of this licence.
- 1.4 For the purposes of this licence, the facility is the area of land outlined in red on Drawing No. WLR9 (Proposed monitoring locations) of the application. Any reference in this licence to "facility" shall mean the area thus outlined in red. The licensed activities shall be carried on only within the area outlined.
- 1.5 No alteration to, or reconstruction in respect of, the activity or any part thereof which 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.

- This licence is for the purposes of waste licensing under the Waste Management Acts 1996 to 2007 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 This licence is being granted in substitution for the waste licence granted to the licensee on 4th December 2002 (Register No: W0129-01). The previous waste licence (Register No: W0129-01) is superseded by this licence.
- Only inert waste may be recovered and disposed of at the facility subject to the maximum quantities and other constraints listed in *Schedule A.1: Waste Acceptance* of this licence. No liquid wastes or sludges shall be accepted at the facility. No shredded mixed construction and demolition waste may be accepted at the facility.
- 1.9 Waste Acceptance Hours and Hours of Operation
 - 1.9.1 Waste may be accepted at the facility, for disposal at the landfill, only between the hours of 0800 and 1800 Monday to Friday inclusive and 0700 and 1600 on Saturdays.
 - 1.9.2 The facility may be operated only during the hours of 0700 to 1900 Monday to Friday, inclusive and 0700 to 1700 on Saturdays.
 - 1.9.3 Waste shall not be accepted at the landfill on Bank Holidays.

Reason: To clarify the scope of this licence.

25

Condition 2 Management of the Facility

2.1 Facility Management

- 2.1.1 The licensee shall employ a suitably qualified and experienced facility manager who shall be designated as the person in charge. The facility manager or a nominated, suitably qualified and experienced, deputy shall be present on the facility at all times during its operation or as otherwise required by the Agency.
- 2.1.2 Both the facility manager and deputy, and any replacement manager or deputy, shall successfully complete both the FAS Waste Management Training Programme (or equivalent agreed with the Agency) and associated site assessment appraisal within twelve months of appointment.
- 2.1.3 The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and experience, as required and shall be aware of the requirements of this licence. 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 maintain an Environmental Management System (EMS). 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.
 - 2.2.2.2 Schedule of Environmental Objectives and Targets

The licensee shall 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 as may be relevant to the licensed activity, for energy and resource efficiency, the use of cleaner technology, cleaner production, and the prevention, reduction and minimisation of waste, and shall include waste reduction targets. 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 Environmental Management Programme (EMP)

The licensee shall maintain an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2.2.2. Once agreed the EMP shall be maintained by the licensee. It shall include:

- (i) designation of responsibility for targets;
- (ii) the means by which they may be achieved;
- (iii) the time within which they may be achieved.

The EMP shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER) (Condition 11.7).

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 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 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 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 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 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 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 maintain a Facility Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the board shall be 1200 mm by 750 mm.
- 3.2.2 The board shall clearly show:
 - (i) the name and telephone number of the facility;
 - (ii) the normal hours of 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 it is legible at all times. The plan shall be replaced as material changes to the facility are made.

3.3 Specified Engineering Works (SEW)

- 3.3.1 The licensee shall submit proposals for any Specified Engineering Works, 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.
- 3.3.2 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.
- 3.3.3 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.

3.4 Tank, Container and Drum Storage Areas

- 3.4.1 All tank, container and drum storage areas shall be rendered impervious to the materials stored therein. Bunds should be designed having regard to Agency guidelines 'Storage and Transfer of Materials for Scheduled Activities' (2004).
- 3.4.2 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, which could be stored within the bunded area.



- 3.4.3 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.
- 3.4.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.4.5 All tanks, containers and drums shall be labelled to clearly indicate their contents.

3.5 Landfill Lining

- 3.5.1 The landfill footprint (maximum lateral extent of landfilling) shall be as indicated in Drawing Reference WLR3 ("Existing waste licence (W0129-01) boundary and proposed landfill footprint").
- 3.5.2 The landfill liner shall comprise of the following:

 Base and side wall:- A mineral layer of a minimum thickness of Im with a hydraulic conductivity less than or equal to 1.0 x 10⁻⁷ m/s, or similar with equivalent protection to the foregoing.
- 3.5.3 The liner detailed design and its construction shall be in accordance with the guidelines provided in the Agency's Landfill Manual, Landfill Site Design.
- 3.5.4 All boreholes located under the footprint of the landfill shall be adequately sealed prior to the emplacement of the liner.
- 3.5.5 The formation level of the basal liner prior to emplacement of compacted clay shall be constructed at least one metre above the water table and in any event the formation level of the liner shall be no lower than 104.5 mAOD Malin. Any excavations deeper than the formation level shall only be backfilled with granular materials quarried from the facility.

3.6 Facility Security

- 3.6.1 Security and stockproof fencing and gates shall be installed and maintained. The base of the fencing shalf 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.
- 3.6.2 Gates shall be looked shut when the facility is unsupervised.
- 3.6.3 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.

3.7 Facility Roads and Hardstanding

- 3.7.1 Effective site roads shall be provided and maintained to ensure the safe movement of vehicles within the facility.
- 3.7.2 The facility entrance and hardstanding areas shall be appropriately paved and maintained in a fit and clean condition.

3.8 Facility Office

- 3.8.1 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.
- 3.8.2 The licensee shall provide and maintain a working telephone and a method for electronic transfer of information at the facility.

3.9 Waste Inspection and Quarantine Areas

3.9.1 A Waste Inspection Area and a Waste Quarantine Area shall be provided and maintained at the facility.

de

- 3.9.2 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.
- 3.9.3 Drainage from these areas shall be directed to the leachate management system.

3.10 Weighbridge and Wheel Cleaner

- 3.10.1 The licensee shall provide and maintain a weighbridge and wheel cleaners at the facility.
- 3.10.2 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. All water from the wheel cleaning area shall be recycled.

3.11 Waste Water Treatment Plant

In the event that sanitary effluent is to be managed on-site, the licensee shall provide and maintain a Wastewater Treatment plant at the facility for the treatment of such sanitary effluents. Any percolation area shall satisfy the criteria set out in the Wastewater Treatment Manual, Treatment Systems for Single Houses, published by the Environmental Protection Agency.

- 3.12 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.
- 3.13 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) should be refrigerated immediately after collection and retained as required for EPA use.
- 3.14 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.
- 3.15 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.

3.16 Silt Traps and Oil Separators

The licensee shall install and maintain silt traps and oil separators at the facility to ensure that <u>all</u> storm water discharges from yard areas of the facility pass through a silt trap and oil separator in advance of discharge. The 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).

- 3.17 All pump sumps, storage tanks, lagoons or other treatment plant chambers from which spillage of environmentally significant materials might occur in such quantities as are likely to breach local or remote containment or separator, shall be fitted with high liquid level alarms (or oil detectors as appropriate) within 3 months from the date of grant of this licence.
- 3.18 The licensee shall maintain in a prominent location on the site a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.
- 3.19 The licensee shall provide a minimum of one leachate monitoring borehole (50mm bore) per two hectares of landfill. These boreholes shall be designed to also facilitate landfill gas monitoring.



- 3.20 All groundwater boreholes shall have their Top of Casing (TOC) elevations (mAOD Malin) marked on their respective casings. The licensee shall within three months of the date of grant of this licence submit to the Agency TOC and ground level elevations for all groundwater boreholes.
- 3.21 No hedgerows shall be removed or damaged unless otherwise agreed by 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 waters in this licence shall be interpreted in the following way:
 - 4.1.1 Continuous Monitoring
 - (i) No flow value shall exceed the specified limit.
 - (ii) No pH value shall deviate from the specified range.
 - (iii) No temperature value shall exceed the limit value.
 - 4.1.2 Composite Sampling
 - (i) No pH value shall deviate from the specified range.
 - (ii) For parameters other than pH and flow, eight out of ten consecutive composite results, based on flow proportional composite sampling, shall not exceed the emission limit value. No individual result similarly calculated shall exceed 1.2 times the emission limit value.
 - 4.1.3 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 the noise sensitive locations of the facility, which exceed the limit value(s).

4.4 Dust

Dust 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 No substance shall be discharged in a manner, or at a concentration, that, following initial dilution, causes tainting of fish or shellfish.
- 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 The licensee shall ensure that all or any of the following 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.
- 5.6 Groundwater Management
 - 5.6.1 There shall be no direct emissions of polluting matter to groundwater.
 - 5.6.2 Effective groundwater management infrastructure shall be maintained at the facility during construction, operation, restoration and aftercare of the facility. As a minimum, the infrastructure shall be capable of the following:
 - (i) The protection of the groundwater resources from pollution by the waste activities; and
 - (ii) The protection of other infrastructure, such as the liner, from any adverse effects caused by the groundwater.

Reason: To provide for the protection of the environment by way of control and limitation of emissions.

Condition 6 Control and Monitoring

- 6.1 The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as set out below and as in accordance with Schedule C. Monitoring & Control of this licence:
 - 6.1.1 Analysis shall be undertaken by competent staff in accordance with documented operating procedures;
 - 6.1.2 Such procedures shall be assessed for their suitability for the test matrix and performance characteristics determined;
 - 6.1.3 Such procedures shall be subject to a programme of Analytical Quality Control using control standards with evaluation of test responses;
 - 6.1.4 Where analysis is sub-contracted it shall be to a competent laboratory.
- 6.2 The licensee shall ensure that:
 - (i) sampling and analysis for all parameters listed in the Schedules to this licence, and
 - (ii) any reference measurement methods to calibrate automated measurement systems, shall be carried out in accordance with CEN-standards. If CEN standards are not available, ISO, national or international standards which will ensure the provision of data of an equivalent scientific quality shall apply.
- 6.3 Test Programme
 - 6.3.1 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.



- 6.3.2 This programme, following agreement with the Agency, shall be completed within three months of the commencement of operation of the abatement equipment.
- 6.3.3 The criteria for the operation of the abatement equipment as determined by the test programme, shall be incorporated into the standard operating procedures.
- 6.3.4 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.
 - (ii) Assess the performance of any monitors on the abatement system and establish a maintenance and calibration programme for each monitor.

A report on the test programme shall be submitted to the Agency within one month of completion.

- 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. Agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.
- 6.5 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission/discharge of ambient conditions.
- 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 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. 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.
- 6.10 The drainage system, bunds, silt traps and oil separators shall be inspected weekly, desludged as necessary and properly maintained at all times. All sludge and drainage from these operations shall be collected for safe disposal.
- 6.11 Storm Water

A visual examination of the storm water discharge shall be carried out daily. A log of such inspections shall be maintained.

6.12 Noise

The licensee shall carry out a noise survey of the site operations annually. 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 substances and/or waste to be included in the PRTR shall be agreed by the Agency each year by reference to EC Regulation 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 The licensee shall maintain a Data Management System for collation, archiving, assessing and graphically presenting the environmental monitoring data generated as a result of this licence.
- 6.15 In dry weather, stockpiles, site roads and any other areas used by vehicles shall be sprayed with water as and when required to minimise airborne dust nuisance.
- 6.16 Monitoring equipment, which is damaged or proves to be unsuitable for its purpose shall be replaced within three months of it being damaged or recognised as being unsuitable.

6.17 Operational Controls

- 6.17.1 The licensee shall ensure that inert waste is subject to pre-treatment off-site (see glossary) where technically feasible.
- 6.17.2 All large hollow objects and other large articles deposited at the facility shall be crushed, broken up, flattened or otherwise treated.
- 6.17.3 Wastes once deposited and covered shall not be excavated, disturbed or otherwise picked over, unless with the prior agreement of the Agency.
- 6.17.4 Completed areas of the landfill shall be profiled so that no depressions exist in which water may accumulate. Any depressions arising after profiling shall be rectified by the emplacement of suitable materials.
- 6.17.5 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.
- 6.17.6 There shall be no public access to the landfill.
- 6.17.7 Gates shall be locked shut when the facility is unsupervised.
- 6.17.8 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
- 6.17.9 No smoking shall be allowed at the facility.

6.18 Meteorological Monitoring

The licensee shall maintain a meteorological station at the facility capable of monitoring the parameters listed in *Schedule C.4: Meteorological Monitoring* of this licence, or the licensee shall make arrangements for representative meteorological date to be collaged for the facility to fulfil the requirements of *Schedule C.4: Meteorological Monitoring* of this licence.

6.19 Topographical Monitoring

A topographical survey shall be carried out on an annual basis. The survey shall include a measurement of the remaining available void space (broken down into actual available void space and any estimated void space which will be generated by future quarrying activities). The survey shall be in accordance with any written instructions issued by the Agency.



6.20 Stability Assessment

The licensee shall carryout a stability assessment of the side slopes of the facility annually. The results of this assessment shall be reported as part of the Annual Environmental Report (AER).

6.21 Archaeological Assessment

Prior to the development of any undisturbed area, the advice of the Department of the Environment, Heritage & Local Government, (National Monuments Section), shall be sought. On completion of such development a report of the results of any archaeological monitoring shall be submitted to Dúchas and to the Agency.

Reason: To provide for the protection of the environment by way of treatment and monitoring of emissions.

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 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 22 22 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.
- 7.4 The licensee shall undertake an assessment of the efficiency of use of raw materials in all processes, having particular regard to the reduction in waste generated. The assessment should take account of best international practice for this type of activity. Where improvements are identified, these shall be incorporated into the Schedule of Environmental Objectives and Targets.

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

Condition 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.
- 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 waste in advance of transfer to another person 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.
- Waste shall be stored in designated areas, protected as may be appropriate against spillage and leachate run-off. The waste is to be clearly labelled and appropriately segregated.
- No waste classified as green list waste in accordance with the EU Transfrontier Shipment of Waste Regulations (Council Regulation EEC No. 259/1993, as 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 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 & Characterisation Procedures.
 - 8.9.1 Waste shall only be accepted at the facility from Local Authority waste collection or transport vehicles or holders of waste permits, unless exempted or excluded, issued under the Waste Management (Collection Permit) Regulations, 2001, or as may be amended.
 - 8.9.2 No hazardous or liquid wastes shall be disposed of at the facility.
 - 8.9.3 The licensee shall maintain written procedures for the acceptance and handling of all wastes. These procedures shall include
 - (i) details of the pre-treatment of all waste to be carried out in advance of acceptance at the facility and shall also include methods for the characterisation of waste in order to distinguish between inert, non-hazardous wastes.
 - (ii) the requirements of Schedule A.1: Waste Acceptance, Schedule A.2: Acceptable Waste, Schedule A.3: Acceptance Criteria and Schedule A.4: Limit Values for Pollutant Content for there waste Landfills of this licence.

The procedures shall have regard to the EU Decision (2003/33/EC) on establishing the criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex IL of Directive (199/31/EC) on the landfill of waste.

- 8.9.4 Schedule A.3: Acceptance Criteria and Schedule A.4: Limit Values for Pollutant Content for Inert Waste Landfills of this licence will not apply to inert mineral extraction waste resulting form quarrying activities at the facility which are subsequently disposed of or recovered at the facility.
- 8.9.5 All inert waste accepted at the facility shall comply with the standards establishing in the EU Decision (2003/22/EC).

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

Condition 9 Accident Prevention & Emergency Response

9.1 The licensee shall, within six months of date of grant of this licence, ensure that a documented Accident Prevention Procedure is in place, which will address 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.

de

- 9.2 The licensee shall maintain a documented Emergency Response Procedure, which shall address 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 reoccurrence of the incident; and
 - (ii) identify and put in place any other appropriate remedial action.

Reason: To provide for the protection of the environment.

Condition 10 Restoration and Aftercare Management

- 10.1 The final profile of the facility shall tie in the facility to the surrounding land levels and shall be as shown on Figure 4.2 Phasing of Restoration of the Environmental Impact Statement (March 1999). The final height shall not exceed 149.0 mAOD Malin.
- 10.2 The facility shall be restored as described in Attachment G.1 Restoration Scheme of the application for W0129-01 and Section 4.7 Landscaping Plan of the Environmental Impact Statement (March 1999) subject to the following:
 - 10.2.1 The final capping shall consist of the following:
 - (i) Top soil (150-300mm); and,
 - (ii) Subsoils, such that total thickness of top soil and subsoils is at least 1m.
- 10.3 The licensee shall restore the facility on a phased basis as per Figure 4.2 *Phasing of Restoration* of the Environmental Impact Statement (March 1999). Unless otherwise agreed, filled cells shall be permanently capped within 24 months of the cells having been filled to the required level.
- 10.4 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, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.
- 10.5 No material or object that is incompatible with the proposed restoration of the facility shall be present within one metre of the final soil surface levels.
- 10.6 All waste activities at the facility shall cease upon the installation of the final capping unless agreed otherwise by the Agency.

S

- 10.7 All soils shall be stored to preserve the soil structure for future use.
- 10.8 Closure, Restoration & Aftercare Management Plan (CRAMP)
 - 10.8.1 The licensee shall prepare for agreement by the Agency, a fully detailed and costed plan for the closure, restoration and aftercare of the site or part thereof, including details of the final profile.
 - 10.8.2 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.
- 10.9 The National Parks and Wildlife Service shall be consulted as part of the preparation of the CRAMP regarding the presence of peregrine falcon nests at the site. The Agency shall be notified of the outcome of this consultation.
- 10.10 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 any proposed or required aftercare 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.
- 10.11 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.

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

Condition 11 Notifications, Records and Reports

- 11.1 The licensee shall notify the Agency by both telephone and facsimile, if available, to the Agency's Office of Environmental Enforcement, EPA, McCumiskey House, Richview, Clonskeagh Road, Dublin 14, 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 emission point including bypasses.
 - (ii) Any emission, which 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 & Monitoring which is likely to lead to loss of control of the abatement system.
 - (iv) Any incident with the potential for environmental contamination of surface water or groundwater, or posing an environmental threat to air or land, or requiring an emergency response by the Local Authority.

RB

- 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.
- 11.2 In the case of any incident which relates to discharges to water, the licensee shall notify the Local Authority and the Eastern Regional Fisheries Board as soon as practicable after such an incident.
- 11.3 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.
- 11.4 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.
- 11.5 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.
- 11.6 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) any elements of licence application or EIS documentation referenced in this licence (including that relating to W0129-01).

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

- 11.7 The licensee shall submit to the Agency, by the 31st 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 E: Annual Environmental Report of this licence and shall be prepared in accordance with any relevant guidelines issued by the Agency.
- 11.8 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 wastes consigned abroad for Recovery and classified as 'Green' in accordance with the EU Transfrontier Shipment of Waste Regulations (Council Regulation EEC No. 259/1993, as 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.
- (ix) The tonnages and EWC Code for the waste materials recovered/disposed on-site.
- 11.9 The licensee shall submit report(s) as required by the conditions of this licence to the Agency's Office of Environmental Enforcement, EPA, McCumiskey House, Richview, Clonskeagh Road, Dublin 14, or to such other Agency office as may be specified by the Agency.
- 11.10 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 €16,275, 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 2007. The first payment shall be a pro-rata amount for the period from the date of this licence to the 31st day of December, and shall be paid to the Agency within one month from the date of the licence. In subsequent years the licensee shall pay to the Agency such revised 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 2007, 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 defraying its costs in regard to items not covered by the said annual contribution.

12.2 Environmental Liabilities

12.2.1 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.



- 12.2.2 The licensee shall arrange for the completion, by an independent and appropriately qualified consultant, of a comprehensive and fully costed Environmental Liabilities Risk Assessment (ELRA), which addresses 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: review results are to be notified as part of the AER.
- 12.2.3 As part of the measures identified in Condition 12.2.1, the licensee shall, to the satisfaction of the Agency, make financial provision to cover any liabilities identified in Condition 12.2.2. 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 12.2.1.
- 12.2.4 Unless otherwise agreed, any revision to that part of the indemnity dealing with restoration and aftercare liabilities (refer Condition 10.8.1) shall be computed using the following formula:

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

Where:

Cost

Revised restoration and aftercare cost.

ECOST

= Existing restoration and aftercare cost.

WPI

Appropriate Wholesale Price Index [Capital Goods, Building & Construction (i.e., Materials & Wages) Index], as published by the Central Stanstics Office, for the year since last closure calculation/revision.

CiCC

Change in compliance costs as a result of change in site conditions, changes in law, regulations, regulatory authority charges, or other significant changes.

12.3 Cost of landfill of waste

In accordance with the provisions of Section 53A of the Waste management Acts 1996 to 2007, the licensee shall ensure the costs in the setting up, operation of, provisions of financial security and closure and after-care for a period of at least 30 years shall be covered by the price to be charged for the disposal of waste at the facility. The statement required under Section 53A(5) of said Acts is to be included as part of the AER.

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



Limitations **SCHEDULE A:**

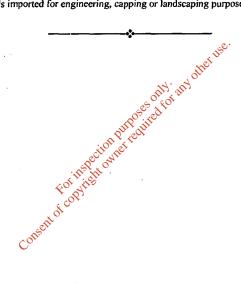
A.1 Waste Acceptance

Table A.1 Waste Categories and Quantities

WASTE TYPE Note:	MAXIMUM (TONNES PER ANNUM)
Inert Construction and Demolition Waste and inert dredging spoils.	500,000 Note 2
Inert mineral extraction wastes arising from quarrying activities at the facility.	No limit
TOTAL	500,000

Note 1: Any proposals to accept other compatible waste streams must be agreed in advance by the Agency and the total amount of waste must be within the amount specified.

Note 2: Excluding materials imported for engineering, capping or landscaping purposes.





A.2 Acceptable Waste

Only the inert wastes in Table A.2.1 and Table A.2.2 are acceptable for disposal and recovery respectively at the facility unless otherwise agreed with the Agency. In addition the waste in Table A.2.1 below, unless otherwise specified therein and subject to Conditions 8.9.3 and 8.9.4, must satisfy the criteria in Schedule A.3: Acceptance Criteria and Schedule A.4: Limit Values for Pollutant Content for Inert Waste Landfills of this licence.

Table A.2.1 Waste for Disposal

EWC	DESCRIPTION	RESTRICTIONS			
CODE	1	Maria de la compania			
	esulting from Quarrying and Physical Treat				
010102	Wastes from mineral non-metalliferous	Limited to such waste derived from on-site			
	excavation	quarrying activities			
010412	Tailings and other wastes from washing	Limited to such waste derived from on-site			
	and cleaning of minerals other than those	quarrying activities			
	mentioned in 010407 and 010411				
010409	Waste sand and clays				
		1			
010499	Wastes not otherwise specified	Subject to the prior agreement of the Agency and			
		limited to such inert waste derived from on-site			
		quarrying activities			
Construc	tion and Demolition Wastes				
170101	Concrete	Note 1			
170102	Bricks	Note 1			
170103	Tiles and ceramics	Note 1			
170107	Mixture of concrete, bricks, tiles and	Other than those mentioned in EWC 170106: Note 1			
	ceramics				
170202	Glass at Chilf	Note 1			
170302	Bituminous mixtures	Other than those mentioned in EWC 170301			
170504	Soil and stones	Other than those mentioned in EWC 170503: Note 2.			
170506	Dredging spoil	Other than those mentioned in EWC 170505			
170604	Insulation materials	other than those mentioned in EWC 170601 and 170603			
170904	Mixed construction and demolition wastes	Other than those mentioned in EWC 170901,			
	celle	170902 and 170903, and subject to the prior			
	Cours	agreement of the Agency.			
Other Inc	ert Wastes				
101006		Subject to the prior written agreement of the			
	Casting cores and moulds which	Agency.			
	have not undergone pouring.				
		the second of th			
190902	Sludges from water clarification	Subject to the prior written agreement of the			
170702	bidges noin water claimeation	Agency.			
190904	Spent Activated Carbon	Subject to the prior written agreement of the			
170704	Spent Activated Carbon	Agency.			
	hace uncles can be accented without Level for Level 2 tes				

Note 1: These wastes can be accepted without Level 1 or Level 2 testing (see A.3 below) provided

> The waste is a pure, single stream from a single source.

Different wastes denoted by Note 1 may be accepted together provided they are from the same source.

In the case of suspicion of contamination (either from visual inspection or from knowledge of the origin of the waste) testing should be applied or the waste should be refused.

Note 2: The terms of Note 1 apply to soil and stones other than topsoil and peat and soil or stones from contaminated sites.



Table A.2.2 Waste for Recovery

EWC CODE	DESCRIPTION	RESTRICTIONS Note I		
Waste Resu	lting from Quarrying and Physical Treat	ment of Minerals		
010102	Wastes from mineral non-metalliferous excavation	Limited to such waste derived from on-site quarrying activities		
010412	Tailings and other wastes from washing and cleaning of minerals other than those mentioned in 010407 and 010411	Limited to such waste derived from on-site quarrying activities		
010499	Wastes not otherwise specified	Subject to the prior agreement of the Agency and limited to such waste derived from on-site quarrying activities		
Constructio	n and Demolition Wastes			
170101	Concrete	For development works only.		
170102	Bricks	For development works only.		
170103	Tiles and ceramics	For development works only.		
170107	Mixture of concrete, bricks, tiles and ceramics	For development works only. Other than those mentioned in EWC 170106.		
170504	Soil and stones	Other than those mentioned in EWC 170503 and excluding peat.		

Note 1: In the case of suspicion of contamination (either from visual inspection or from knowledge of the origin of the waste) testing should be applied or the waste should be refused.

A.3 Acceptance Criteria

The general characterisation and testing must be based on the following three level hierarchy:

Level 1: Basic Characterisation

This constitutes a through determination, according to standardised analysis and behaviour testing methods, of the short and long-term leaching behaviour and/or characteristic properties of the waste.

Level 2: Compliance Testing

This constitutes periodical testing by simpler standard analysis and behaviour-testing methods to determine whether a waste complies with condition and /or specific reference criteria. The tests focus on key variables and behaviour identified by basic characterisation.

Level 3: On-site verification

This constitutes rapid check methods to confirm that a waste is the same as that which has been subjected to compliance testing and that which is described in any accompanying documents. It may merely consist of a visual inspection of a load of waste before and after unloading at the landfill site.

All waste loads must provide the following information (if available):

Waste owner	Amount of waste	
Source and origin of waste	Existing data on the waste	
Description of the waste	Physical form	
Waste Type and EWC code	Colour	
Type of process producing the waste	Odour	1.

All wastes accepted for disposal or recovery at the landfill shall undergo the Level 3: On-site verification at a minimum.

In addition to the above a representative load from every excavation/demolition/waste removal/dredging works is subjected to a comprehensive assessment which must satisfy Level 1 characterisation.



The comprehensive assessment must at a minimum include the following:

1. A chemical analysis of a representative sample. At least one sample per 1,500 tonnes or portion thereof must be taken for chemical analysis for each excavation or demolition works. However, if the comprehensive assessment is undertaken prior to the commencement of excavation or clearance activity, the licensee may reduce the number of samples for chemical analysis to one for each 7,500 tonnes or portion thereof. The sampling location must be identified on a sampling grid and enclosed in the comprehensive assessment.

2. An evaluation of the acceptability of the disposal of the waste at the landfill including observance of limits for total pollutants contents in Schedule A.4: Limit Values for Pollutant

Content for Inert Waste Landfills, of this licence.

A statement of any pre-treatment requirement (if any).

4. Evidence that the waste displays no hazardous properties upon disposal.

If as a result of examinations undertaken in the course of excavation or clearance activity, the suspicion of contamination should arise, the type and concentration of the contamination must be determined, and its extent established through additional sampling.

Wastes of unknown origin or with insufficient waste description must be subjected to a chemical analysis.

In addition to the assessment above, representative samples upon delivery of wastes must be taken for compliance testing purposes (Level 2). The tests shall focus on key variables and behaviour identified by the chemical analysis.

A representative sample shall be taken from one in every 100 loads of waste accepted at the facility. This sample shall be subjected to Level 2 testing. Part of this sample shall be retained at the facility for three months and be available for inspection/analysis by the Agency.

de

A.4 Limit Values for Pollutant Content for Inert Waste Landfills.

Unless otherwise instructed in writing by the Agency, the following leaching limit values apply for waste acceptable at landfills for inert waste. The leaching limit values are calculated at liquid to solid ratios (L/S) of 2 l/kg and 10 l/kg for total release and directly expressed in mg/l for C_o (the first eluate of percolation test at L/S = 0.1 l/kg).

Table A.4.1: Limit Values for Pollutant Content for Inert Waste Landfills.

Parameter	L/S = 2 1/kg	L/S = 10 l/kg	C ₀ (percolation test)	Total Pollutant Content
	mg/kg dry substance		mg/l	mg/kg dry substance
Arsenic (as As)	0.1	0.5	0.06	
Barium (as Ba)	7.0	20.0	4.0	
Cadmium (as Cd)	0.03	0.04	0.02	
Total Chromium (as Cr)	0.2	0.5	0.1	
Copper (as Cu)	0.9	2.0	0.6	
Mercury (as Hg)	0.003	0.01	0.002	
Molybdenum (as Mo)	0.3	0.5	0.2	
Nickel (as Ni)	0.2	0.4	√ 0.12	
Lead (as Pb)	0.2	0.5	0.15	
Antimony (as Sb)	0.02	0.06	0.10	
Selenium (as Se)	0.06	0.1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0.04	1
Zinc (as Zn)	2.0	400 xe0	1.2	
Chloride	550.0	800.0	460.0	
Fluoride	4.0	100 cl 0.0	2.5	
Sulphate Note I	560.0	§ 61000.0	1500.0	
Phenol index	0.50	1.0	0.3	
Dissolved Organic Carbon (DOC) Note 2	240.0	500.0	160.0	
Total Dissolved Solids (TDS) Note 3	2500.0	4000.0		
Total Organic Carbon (TOC) Note 4				30,000.0
BTEX Note 5				6.0
PCB (7 congeners)				1.0
Mineral Oil (C10 – C40) Total PAH Note 6				500.0
Total PAH Note 6				100.0

Note 1: If the waste does not meet these values for sulphate, it may still be considered as complying with the acceptance criteria if the leaching does not exceed either of the following values: 1500 mg/l as Co at US = 0.1 l/kg and 6000mg/kg at US = 10 l/kg. It will be necessary to use a percolation test to determine the limit value at L/S = 0.1 l/kg under initial equilibrium conditions, whereas the value at L/S = 10 l/kg may be determined either by a batch leaching test or by a percolation test under conditions approaching local equilibrium.

Note 2: If the waste does not meet these values for dissolved organic carbon (DOC) at its own pH value, it may alternatively be tested at L/S = 10 1/kg and a pH between 7.5 and 8.0. The waste may be considered as complying with the acceptance criteria for DOC, if the result of this determination does not exceed 500 mg/l. (A method based on CEN/TS 14429:2005 is available).

Note 3: The values for TDS (Total Dissolved Solids) can be used alternatively to the values for Sulphate and Chloride.

Note 4: The TOC limit value is complied with as long as the loss on ignition does not exceed 5% per weight. In the case of soils a higher limit value may be admitted by the Agency, provided the Dissolved Organic Carbon at pH 7 (DOC7) value of 500 mg/kg is achieved.

Note 5: Benzene, toluene, ethylbenzene, o-xylene, m-xylene and p-xylene.

Note 6: For determining the total of PAH, the following seventeen compounds must be added to a sum: Fluoranthene C16H10, Benzoic(a)pyrene C20H12, Benzoic(b)fluoranthene C20H12, Benzoic(g,h,i)perylene C22H12, I, Indenoic(1,2,3-c,d)pyrene C22H1, Napthalene, Acenapthylene, Acenapthene, Anthracene, Benzo(a)anthracene, Chrysene, Coronene, Dibenzo(a,h)anthracene, Phenanthrene, Pyrene.

Note 7: Any changes to limit values shall be by written agreement in advance with the Agency.



Sampling and Test Methods

Sampling and testing shall be carried out by independent and qualified persons and institutions. Laboratories shall have proven experience in waste testing and analysis and an efficient quality assurance system. The methods provided in the Council Decision 2003/33/EC establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex II of Council Directive 1999/31/EC on the landfill of waste shall be used.

SCHEDULE B: Emission Limits

B.1 Emissions to Air

There shall be no Emissions to Air of environmental significance.

B.2 Emissions to Surface Water



B.3 Emission to Sewer

There shall be no Process Effluent Emissions to Sewer.

B.4 Noise Emissions



Note 1: There shall be no clearly audible tonal component or impulsive component in the noise emission from the activity at any noise-sensitive location.

B.5 Dust Deposition Limits

(Measured at the monitoring points indicated in Table C.2.1)

Level (mg/m²/day) Note:

350

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



SCHEDULE C: Control & Monitoring

C.1.1 Control of Emissions to Air

There shall be no emissions to air of environmental significance.

C.1.2 Monitoring of Emissions to Air

There shall be no emissions to air of environmental significance.

C.2.1 Monitoring Locations

Table C.2.1: Environmental monitoring locations.

Surface Water	Groundwater	Leachate	Dust	Noise
SW1	BH4	LC1	D1	N4
SW2	BH5	LC2	D2	N5
SWD1*	ВН6	LC3	√S [©] ·D3a	N6
SWD2*	ВН9	14. 04 offi	D5	N7
SWD3*	BH10a	es official		N8
SWD4*	BH11a JURO	itred		
SWD5*	BH12 net le			
SWD6*	BHR3			
SWD7*	BH14			

^{*} SWD1-7 to be monitored when there is water flow at these locations.



C.2.2 Monitoring of Emissions to Surface Water, Ground Water and of Leachate

PARAMETER Note !	SURFACE WATER Monitoring	LEAGHATE Monitoring	GROUNDWATER
	Frequency	Frequency	Monitoring Frequency
Visual Inspection/Odour	Weekly	Six Monthly	Quarterly
Groundwater Level	Not Applicable	Not Applicable	Quarterly
Leachate Level	Not Applicable	Six Monthly	Not Applicable
Ammoniacal Nitrogen	Six Monthly	Six Monthly	Quarterly
BOD	As may be required	Not Applicable	Not Applicable
COD	Six Monthly	Six Monthly	Not Applicable
Chloride	Six Monthly	Six Monthly	Quarterly
Dissolved Oxygen	Six Monthly	Not Applicable	Quarterly
Electrical Conductivity	Six Monthly	Six Monthly	Quarterly
рĤ	Six Monthly	Six Monthly	Quarterly
Total Suspended Solids	Six Monthly	Not Applicable	Not Applicable
Temperature	Six Monthly	Not Applicable	Quarterly
Boron	Not Applicable	Not Applicable	Annually
Cadmium	As may be required	Not Applicable	Annually
Calcium	Annually	Not Applicable	Quarterly
Chromium (Total)	Not Applicable	Not-Applicable	Annually
Copper	Not Applicable	Not Applicable	Annually
Cyanide (Total)	Not Applicable	Not Applicable	Annually
Fluoride	Not Applicable	Not Applicable	Annually
Iron	Not Applicable Not Applicable	Not Applicable	Quarterly
Lead	Not Applicable	Not Applicable	Annually
List I/II organic substances Note 2	As may be required	Annually	Annually
Magnesium	Annually	Not Applicable	Annually
Manganese	Annually	Not Applicable	Quarterly
Mercury	Not Applicable	Not Applicable	Annually
	Not Applicable	Six Monthly	Quarterly
Sulphate Sodium	Annually	Six Monthly	Quarterly
Sodium	Annually	Six Monthly	Quarterly
Total Alkalinity	Annually	Not Applicable	Not Applicable
Total Phosphorus / ortho- P	Annually	Not Applicable	Annually
Total Oxidised Nitrogen	Not Applicable	Six Monthly	Quarterly
Total Organic Carbon	Not Applicable	Not Applicable	Quarterly
Residue on evaporation	Not Applicable	Not Applicable	Annually
Zinc	Not Applicable	Not Applicable	Annually
Phenois	Not Applicable	Six Monthly	Quarterly
Factal Coliforms Note 3	Not Applicable	Not Applicable	Annually
Total Coliforms Note 3	Not Applicable	Not Applicable	Annually

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 VII Substances from EU Directive 76/464/EEC and 80/68/EEC as a guideline. Recommended analytical techniques include: volatiles (US Environmental Protection Agency method 524 or equivalent), semi-volatiles (US Environmental Protection Agency method 525 or equivalent, and pesticides (US Environmental Protection Agency method 608 or equivalent).

Note 3: In the case where groundwater is extracted for drinking water and there is evidence of bacterial contamination, the analysis at monitoring points down-gradient of the landfill should include enumeration of total bacteria at 22°C and 37°C and faecal streptococci.



C.2.3. Noise Monitoring

Table C.2.3. Noise Monitoring Frequency & Technique

1.0000 0.2.01	8 1 9 1 1	
Parameter	Monitoring Frequency	Analysis/Method/Technique
L(A) _{EQ} [30 minutes]	Annually	Standard Note 1
L(A) ₁₀ [30 minutes]	Annually	Standard Note 1
L(A) ₉₀ [30 minutes]	Annually	Standard Note 1
Frequency Analysis (1/3 Octave band analysis)	Annually	Standard Note 1

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

C.2.4 Dust Monitoring

Table C.2.4. Dust Monitoring Frequency and Technique

Parameter	Monitoring Frequency	Analysis Method/Technique
Dust deposition (mg/m²/day)	Six-Monthly	Standard Method

C.3.1 Control of Emissions to Sewer

There shall be no process effluent emissions to sewer

C.3.2 Monitoring of Emissions to Sewer

There shall be no process effluent emissions to Sewer.

C.4 Meteorological Monitoring

Data to be obtained from a source agreed by the Agency.

Table C.4.1. Meteorological Monitoring

Table C.4.I. Meteorological Monitoring					
Parameter	Monitoring Frequency	Analysis/Method/Technique			
Precipitation Volume	Daily	Standard			
Temperature (min/max)	Daily	Standard			
Wind Force and Direction	Daily	Standard			
Evaporation	Daily	Standard			
Evapotranspiration	Daily	Standard			
Humidity	Daily	Standard			
Atmospheric Pressure	Daily	Standard			



SCHEDULE D: Recording and Reporting to the Agency

Completed reports shall be submitted to:

The Office of Environmental Enforcement, Environmental Protection Agency, McCumiskey House, Richview, Clonskeagh Road,

Dublin 14. 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:

Report -	Reporting Frequency	Report Submission Dates
Annual Environment Report (AER)	Annually	By 31st March of each year.
Record of incidents	As they occur	Within five days of the incident.
Specified Engineering Works reports	As they arise	In advance of the works commencing.
Monitoring of surface water quality	Six-Monthly	Within ten days of obtaining results.
Monitoring of groundwater quality	Six-Monthly of	Within ten days of obtaining results.
Monitoring of leachate	Six-Monthly	Within ten days of obtaining results.
Dust monitoring	Six-Monthly	Within ten days of obtaining results.
Noise Monitoring	Annually	As part of the AER.
Any other monitoring Note 2	As they occur	Within ten days of obtaining results.

Note 1: Unless altered at the

Unless altered at the request of the Agency.

Note 2:

Other than nuisance monitoring reports.



SCHEDULE E: Annual Environmental Report

Annual Environmental Report Content

Emissions from the facility.

Waste management record.

Waste recovery report.

Remaining void, projected completion date.

Resource consumption summary.

Complaints 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.

Noise monitoring report summary.

Dust monitoring report summary.

Meteorological data summary.

Current monitoring location reference drawing.

Tank and pipeline testing and inspection report.

Reported incidents summary.

Energy efficiency audit report summary.

Report on the assessment of the efficiency of use of raw materials in processes and the reduction in waste generated.

Development/Infrastructural works summary (completed in previous year or prepared for current year).

Reports on financial provision made under this licence, management and staffing structure of the facility, and a programme for public information.

Review of environmental liabilities.

Any amendments to the Closure, Restoration & Aftercare Management Plan.

Any other items specified by the Agency.

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

Sealed by the seal of the Agency on this the 21st day of May 2008.

PRESENT when the seal of the Agency

Was affixed hereto:

Laura Burke, Director/Authorised Person

Section 47 of the Waste Management Acts 1996 to 2003, Section 94 of The Environmental Protection Agency Acts 1992 & 2003 Transfer of a Waste Licence.

Attachment B:

- (a) Certified Copy of Certificate of Incorporation
- (b) Company's Number in Company's Registration Office

The Company Number is 448931, as shown on the Certificate of Incorporation

And

(C) Particulars of Registered Office of the Company



Patel Tonra Ltd. for Murphy Environmental Hollywood Limited, August 2008.

Number 448931

Certificate of Incorporation

I hereby certify that

MURPHY ENVIRONMENTAL HOLLYWOOD LIMITED

is this day incorporated under the Companies Acts 1963 to 2006, and that the company is limited.

Given under my hand at Dublin, this

Monday, the 12th day of November, 2007

for Registrar of Companies

WE HEREBY CERTIFY THAT THE WITHIN HAS BEEN COMPARED WITH AND IS A TRUE COPY OF THE ORIGINAL

Dated

72

day of July 2008

GOE & Griens

Solicitors

Cavendish House, Smithfield, Dublin 7.

WE MERLEY CERTIFY THAT THE WITHIN HAS BEET)
COMPARED WITH AND IS A TRUE COPY OF THE ORIGINAL
Dated

Politikaria Carcandeh Heura, jank Sold, Dublin Y.



COMPANY LIMITED BY SHARES

MEMORANDUM and ARTICLES OF ASSOCIATION of

MURPHY ENVIRONMENTAL HOLLYWOOD LIMITED

·			other use.
	ر چې	Sonly and	4
r <mark>ije</mark>	on Purply	ine	
For its per co			
Incorporated			

WE HEREBY CERTIFY THAT THE WITHIN HAS BEEN COMFARED WITH AND IS A TRUE COPY OF THE ORIGINAL

Dated

22

day of July 2008

Goe & Gnures

Solicitors

Cavendish House, Smithfield, Dublin 7.

GORE & GRIMES,

Solicitors, Cavendish House, Smithfield, Dublin, 7.

WE HERLEY CERTIFY THAT THE WITHIN HAS DEEN COMPARED WITH AND IS A YOUE COPY OF THE ORDCINAL.

Comment of the Comment basad

Cawcadich House, Califord, Parito Z.

COMPANIES ACTS, 1963 to 2006



COMPANY LIMITED BY SHARES

MEMORANDUM OF ASSOCIATION of MURPHY ENVIRONMENTAL HOLLYWOOD LIMITED

- 1. The name of the company is Murphy Environmental Hollywood Limited
- 2. The objects for which the Company is established are:-
 - (a) To carry on any or all of the businesses of commercial landfill, disposal, treatment or recovery of waste, waste transportation, waste recycling, waste handling and sorting and related sanitation activities, either on its own behalf or on behalf of others or through any subsidiary or subsidiaries of the Company from time to time and to purchase, operate and manufacture all types of machinery and equipment and other assets suitable and relevant to the said business.
 - (b) To carry on any other business (except the issuing of policies of insurance), which may seem to the Company capable of being conveniently carried on in connection with the above, or calculated directly or indirectly to enhance the value of or render profitable any of the Company's property or rights.
 - (c) Subject to all necessary statutory consents and authorisations, to invest any monies of the Company in such investments (other than shares in the Company) and in such manner as may from time to time be determined, and to hold, sell or deal with such investments and generally to purchase, take on lease or in exchange or otherwise acquire any real and personal property and rights or privileges.
 - (d) To subscribe for, take, purchase or otherwise acquire and hold shares or other interests in, or securities of any other company having objects altogether or in part similar to those of this Company or carrying on any business capable of being carried on so as, directly or indirectly, to benefit this Company.
 - (e) To develop and turn to account any land acquired by the Company or in which it is interested and in particular by laying out and preparing the same for building purposes, constructing, altering, pulling down, decorating, maintaining, fitting up and improving buildings and conveniences, and by planting, paving, draining, farming, cultivating, letting on building lease or building agreement and by advancing money to and entering into contracts and arrangements of all kinds with builders, tenants and others.

- (f) To acquire and undertake the whole or any part of the business, property, goodwill and assets of any person, firm or company carrying on or proposing to carry on any of the businesses which the Company is authorised to carry on, or which can be conveniently carried on in connection with the same, or may seem calculated directly or indirectly to benefit the Company.
- (g) To employ the funds of the Company in the development and expansion of the business of the Company and all or any of its subsidiary or associated companies and in any other company whether now existing or hereafter to be formed and engaged in any like business of the Company or any of its subsidiary or associated companies or of any other industry ancillary thereto or which can conveniently be carried on in connection therewith.
- (h) To lend money to such persons or companies either with or without security and upon such terms as may seem expedient.
- (i) To borrow or raise or secure the payment of money in such manner as the Company shall think fit, and in particular by the issue of debentures or debenture stock, perpetual or otherwise, charged upon all or any of the Company's property, both present and future, including its uncalled capital, and to purchase, redeem or pay off any such securities.
- (j) To adopt such means of making known the Company and its products and services as may seem expedient.
- (k) To sell, improve, manage, develop, exchange, lease, mortgage, enfranchise, dispose of, turn to account or otherwise deal with all or any part of the property, undertaking, rights or assets of the Company and for such consideration as the company might think fit. Generally to purchase, take on lease or in exchange or otherwise acquire any real and personal property and rights or privileges.
- (I) To acquire and carry on any business carried on by a subsidiary or a holding company of the Company or another subsidiary of a holding company of the Company.
- (m) To provide services of any kind including the carrying on of advisory, consultancy, brokerage and agency business of any kind.
- (n) To guarantee, grant indemnities in respect of, support or secure, whether by personal covenant or by mortgaging or charging all or any part of the undertaking, property and assets (present and future) and uncalled capital of the Company, or by both such methods, the performance of the contracts or obligations of and the repayment or payment of the principal amounts of and premiums, interest and dividends on any securities of any person, firm or company, including (without prejudice to the generality of the foregoing) any company which is for the time being the Company's holding company as defined by Section 155 of the Companies Act, 1963, or another subsidiary as defined by the said Section of the Company's holding company or

otherwise associated with the Company in business notwithstanding the fact that the Company may not receive any consideration, advantage or benefit, direct or indirect from entering into such quarantee or other arrangement or transaction contemplated herein.

- (o) To amalgamate with any other company.
- (p) To apply for, purchase or otherwise acquire any patents, brevets d'invention, licences, trade marks, technology and know-how and the like conferring any exclusive or non-exclusive or limited right to use or any secret or other information as to any invention or technology which may seem capable of being used, for any of the purposes of the company or the acquisition of which may seen calculated directly or indirectly to benefit the Company, and to use, exercise, develop or grant licences in respect of or otherwise turn to account the property rights or information so acquired.
- (q) To enter into partnership or into any arrangement for sharing profits, union of interests, co-operation, joint venture or otherwise with any person or company or engage in any business or transaction capable of being conducted so as directly or indirectly to benefit the Company.
- (r) To grant pensions, or gratuities (to include death benefits) to any officers or employees or ex-officers or ex-employees of the Company, or its predecessors in business or the relations, families or defendants of any such persons, and to establish or support any non-contributory or contributory pension or superannuation funds, any associations, institutions, clubs, buildings and housing schemes, funds and trusts which may be considered calculated to benefit any such persons or otherwise advance the interests of the Company or of its members.
- (s) To promote any company or companies for the purpose of acquiring all or any of the property and liabilities of this Company or for any other purpose which may seem directly or indirectly calculated to benefit this Company.
- (t) To remunerate any person or company for services rendered or to be rendered in placing or assisting to place or guaranteeing the placing of any of the shares in the Company's capital or any debentures, debenture stock or other securities of the Company, or in or about the formation or promotion of the Company or the conduct of its business.
- (u) To draw, make, accept, endorse, discounts execute and issue promissory notes, bills of exchange, bills of lading, warrants, debentures, letters of credit and other negotiable or transferable instruments.
- (v) To undertake and execute any trusts the undertaking whereof may seem desirable, whether gratuitously or otherwise.
- (w) To procure the Company to be registered or recognised in any country or place.

- (x) To promote freedom of contract and to counteract and discourage interference therewith, to join any trade or business federation, union or association, with a view to promoting the Company's business and safeguarding the same.
- (y) To do all or any of the above things in any part of the world as principal, agent, contractor, trustee or otherwise, and by or through trustees, agents or otherwise and either alone or in conjunction with others.
- (z) To distribute any of the property of the Company in specie among the members.
- (aa) To do all such other things as the Company may think incidental or conducive to the attainment of the above objects or any of them.
- NOTE 1: The objects specified in each paragraph of this clause shall, except where otherwise expressed in such paragraph, be in no way limited or restricted by reference to, or inference from, the terms of any other paragraph.
- NOTE 2: It is hereby declared that the word "company" in this clause (except where it refers to this Company) shall be deemed to include any partnership or other body of persons, whether or not incorporated and whether formed in Ireland or elsewhere.
- 3. The liability of the members is limited.
- 4. The share capital of the Company is €1,000,000 divided into 1,000,000 ordinary shares of €1 each.

We, the several persons whose names and addresses are subscribed, wish to be formed into a company in pursuance of this memorandum of association, and we agree to take the number of shares in the capital of the Company set opposite our respective names.

Names, Addresses and Descriptions of Subscribers

Number of shares taken by each Subscriber

Seamus Murphy Bower House Fancourt Balbriggan Co. Dublin

100

One Hundred.

Company Director

Consent of copyright owner reduced for any other use.

TOTAL SHARES TAKEN:100

Dated the 6 day of Name 2007

Witness to the above signatures:

Solicitér House

Dublin 7





COMPANY LIMITED BY SHARES

ARTICLES OF ASSOCIATION

of

MURPHY ENVIRONMENTAL HOLLYWOOD LIMITED

Preliminary

- 1. **Table A:** The regulations in Part II of Table A in the First Schedule to the 1963 Act (as amended by the Acts) will apply to the Company subject to the alterations herein contained and will, so far as not inconsistent with these presents, bind the Company and the shareholders-
- 2. **Definitions:** In these Articles, unless the context otherwise requires:

"the 1963 Act" means the Companies Act 1963;

"the 1983 Act" means the Companies (Amendment) Act, 1983;

"the 1990 Act" means the Companies Act, 1990;

"the Acts" means the Companies Acts, 1963 to 2006;

"the Auditors" means the auditors or auditor for the time being of the Company;

"Ireland" means the Republic of Ireland excluding Northern Ireland and all references in Table A to "the State" will be construed as meaning references to the Republic of Ireland;

"the Single-Member Company Regulations" means the European Communities (Single-Member Private Limited Companies) Regulations, 1994; and

"Table A" means Table A in the First Schedule to the 1963 Act.

3. Interpretation:-

- 3.1 All references in Table A to the Companies Acts, 1963 to 2006 will be construed as references to the Acts.
- 3.2 Unless the contrary is clearly stated, reference to any section of any of the Acts is to such section as same may be amended, extended or reenacted (whether before or after the date hereof) from time to time.

- 3.3 Reference to any legislation or document includes that legislation or document as amended or supplemented from time to time.
- 3.4 Unless the context otherwise requires, words importing the singular include the plural and vice versa, worlds importing the masculine include the feminine, and words importing persons include corporations.
- 3.5 Headings are inserted for convenience only and do not affect the construction of these Articles.

Share Capital

- 4. **Capital:** The capital of the company is €1,000,000 divided into 1,000,000 Ordinary Shares of €1 each.
- Directors' Authority to Allot Shares: The directors are generally and unconditionally authorised to exercise all powers of the Company to allot relevant securities (as defined for the purposes of section 20 of the 1983 Act) up to an amount equal to the authorised but as yet unissued share capital of the Company, and such authority will expire five years from the date of incorporation of the Company save that the Company may before such expiry make an offer or agreeing which would or might require relevant securities to be allotted after such expiry and the directors may allot relevant securities in pursuance of such offer or agreement as if the authority conferred hereby had not expired. Section 23(1) of the 1983 Act is hereby excluded in its application in relation to all allotments by the Company of equity securities as defined for the purposes of that section.
- 6. Purchase of Own Shares: Subject to and in accordance with the provisions or the Acts, the Company may purchase its own shares (including any redeemable shares).
- 7. **Financial Assistance:** The Company may give any form of financial assistance which is permitted by the Acts for the purpose of or in connection with a purchase or subscription made or to be made by any person of or for any shares in the Company or in the Company's holding company and Regulation 10 of Part I of Table A will be modified accordingly.

Transfer Of Shares

8. The instrument of transfer of a fully paid up share need not be signed by or on behalf of the transferee and Regulation 22 of Part I of Table A will be modified accordingly.

General Meetings

9. General Meetings Outside Ireland: Annual general meetings shall be held in Ireland unless in respect of any particular meeting either all the members entitled to attend and vote at such meeting consent in writing to its being held elsewhere or a resolution providing that it be held elsewhere has been passed at the preceding annual general meeting. Extraordinary general meetings may be held in or outside Ireland. Regulation 47 of Part I of Table

A will not apply and regulation 50 will be construed as if the words "within the State" were deleted therefrom.

10. Auditors' Requisition: An extraordinary general meeting shall be convened upon the requisition of the Auditors under the circumstances described in section 186 of the 1990 Act, as well as upon the requisition described in Regulation 50 of Part I of Table A.

Proceedings At General Meetings

- 11. **Proxies:** In regulation 70 of Part I of Table A the words "not less than 48 hours before the time for holding" and "not less than 48 hours before the time appointed for" will be deleted and there shall be substituted therefor the words "before the commencement of" on both occasions.
- 12. **Poll:** A poll may be demanded at any general meeting by any member present in person or by proxy who is entitled to vote thereat and Regulation 59 of Part I of Table A will be modified accordingly.

Votes Of Members

- 13. For so long as:
 - 13.1 the Company holds shares as treasury shares; or
 - 13.2 any subsidiary of the Company holds shares in the Company;

the Company or the subsidiary as the case may be shall not exercise any voting rights in respect of the shares and Regulations 63 to 73 of Part I of Table A will be modified accordingly.

Resolutions In Writing By Members

14. A resolution in writing made pursuant to regulation 6 of Part II of Table A may consist of one document or two or more documents to the same effect each signed by one or more members.

Single-Member Company

- 15. If at any time the Company has only one member, that is to say that all the issued shares of the Company are registered in the name of a sole person (whether a natural person or a body corporate), it will be a single-member company within the meaning of the Single-Member Company Regulations. If and so long as the Company is a single-member company, the following provisions will apply notwithstanding anything to the contrary in these Articles or Table A:
 - 15.1 Annual General Meetings: The sole member may decide to dispense with the holding of annual general meetings. Such decision will be effective for the year in which it is made and subsequent years, but nevertheless the sole member or the Auditors may require the holding of an annual general meeting in any such year in accordance with the procedure laid down in the Single-Member Company Regulations.

- 15.2 Where a decision to dispense with the holding of annual general meetings is in force, the accounts and the directors' and Auditors' reports that would otherwise be laid before an annual general meeting shall be sent to the sole member as provided in the Single-Member Company Regulations, and the provisions of the Acts with regard to the annual return and the accounts which apply by reference to the date of the annual general meeting will be construed as provided in the Single-Member Company Regulations.
- 15.3 **Quorum at General Meeting:** The sole member, present in person or by proxy, is a sufficient quorum at a general meeting.
- 15.4 **Resolutions of Shareholders:** All matters requiring a resolution of the Company in general meeting (except the removal of the Auditors from office) may be validly dealt with by a decision of the sole member. The sole member must provide the Company with a written record of any such decision or, if it is dealt with by a written resolution under Regulation 6 of Part II of Table A, with a copy of that resolution, and the decision or resolution shall be recorded and retained by the Company.
- 15.5 Contracts with Sole Member: Where the Company enters into a contract with the sole member which is not in the ordinary course of business and which is not in writing, and the sole member also represents the Company in the transaction (whether as a director or otherwise), the directors shall ensure that the terms of the contract are forthwith set out in a written memorandum or are recorded in the minutes of the next directors' meeting.
- 16. If and whenever the Company becomes a single-member company or ceases to be a single-member company, it shall notify the Registrar of Companies as provided in the Single-Member Company Regulations.

Directors

- 17. **No Share Qualification:** A director or alternate director will not be required to hold any shares in the Company by way of qualification, and Regulation 77 of Part I of Table A will not apply.
- 18. **Directors' Right to Attend Meetings:** A director who is not a member of the Company will nevertheless be entitled to receive notice of, attend and speak at any general meeting or separate meeting of the holders of any class of shares, and Regulation 136 of Part I of Table A will be modified accordingly.

Powers And Duties Of Directors

19. Powers to Borrow and Grant Security: The directors may exercise all the powers of the Company to borrow money and to mortgage or charge its undertaking, property and uncalled capital or any part thereof and, subject to section 20 of the 1983 Act, to issue debenture, debenture stock and other securities whether outright or as security for any debt, liability or obligation of the company or of any third party. Regulation 79 of Part I of Table A will not apply.

- 20. Interests in Contracts: The obligations of a director to disclose the nature of his interest in any contract or proposed contract with the Company will apply equally to any shadow director who shall declare his interest in the manner prescribed by Section 27(3) of the 1990 Act.
- 21. **Directors' Contracts:** No contract will be entered into by the Company for the employment of, or the provision of services by, a, director or a director of a holding company of the Company containing a term to which Section 28 of the 1990 Act applies without obtaining the approval provided for in that section, and Regulation 85 of Part I of Table A will be modified accordingly.

Disqualification Of Directors

- 22. The office of director will be ipso facto vacated if the director :-
 - 22.1 becomes prohibited from being a director of the Company by reason of any declaration or order made under Sections 150 or 160 of the 1990 Act; or
 - 22.2 is removed from office by notice in writing served upon him signed by all his co-directors, as well as under the circumstances described in regulation 91 of Part I of Table A.

Rotation And Re-Election

23. The directors will not retire by rotation, or require to be re-elected in general meeting following appointment by the directors. Regulations 92 to 100 inclusive of Part I of Table Awill be modified accordingly.

Proceedings Of Directors

- 24. Participation in Board Meetings by Telephone: Any director (including an alternate) or any member of a committee of directors may participate in a meeting of the directors or a committee of directors of which he is a member by means of a conference telephone or similar communicating equipment whereby all persons participating in the meeting can hear each other, and participation in a meeting in this manner will be deemed to constitute presence in person (or, as the case may be, by alternate) at such meeting but, for the purposes of determining whether the quorum for the transaction of business exists, any director or committee member in telephonic communication with a meeting of directors or of a committee as the case may be will not be counted in the quorum, and Regulation 102 of Part I of Table A will be modified accordingly.
- 25. **Committee of Directors:** The meetings and proceedings of any committee formed by the directors will be governed by the provisions of these articles regulating the meetings and proceedings of directors so far as the same are applicable and are not superseded by any regulations imposed on such committee by the directors.

Resolutions In Writing By Directors

26. A resolution in writing signed by each director (or his alternate director) will be as valid as if it had been passed at a meeting of the directors duly convened and held, and may consist of one document or two or more documents to the same effect each signed by one or more directors (or their alternates or substitutes), and regulation 109 of Part I of Table A will be modified accordingly.

Executive Directors

27. The directors may from time to time appoint one or more of themselves to be managing director or any other category of executive director for such period and on such terms as to remuneration or otherwise as they think fit, and, subject to the terms of any agreement entered into in any particular case, may revoke such appointment Regulations 110 and 111 of Part I of Table A will not apply and Regulation 112 will apply to all executive directors as it applies to a managing director.

Alternate Directors

- 28. Any director may from time to time appoint any person to be his alternate. The appointee, while he holds office as an alternate, will be entitled to notice of meetings of the directors and to attend and vote thereat as a director, but will not be entitled to be remunerated otherwise than out of the fees of the director appointing him. Any appointment under this Article shall be effected by notice in writing given by the appointee to the Secretary. Any appointment so made may be revoked at any time by the appointee by notice in writing given by the appointee to the Secretary, and an alternate's appointment will ipso facto come to an end if for any reason the director appointing him ceases to be a director.
- 29. An alternate may exercise all the powers, rights, duties and authorities of the director appointing him (other than the right to appoint an alternate hereunder).
- 30. A person may act as an alternate for more than one director and while he is so acting will be entitled to a separate vote for each director he is representing and, if he is himself a director, his vote or votes as an alternate will be in addition to his own vote. An alternate will be counted for the purpose of reckoning whether a quorum is present at any meeting attended by him at which he is entitled to vote, but where he is himself a director or is the alternate of more than one director he will only be counted once for such purpose.
- 31. Regulation 9 of Part II of Table A will not apply.

The Seal

32. An alternate who is not also a director will be entitled to sign or countersign an instrument to which the seal is affixed as if he were the director who appointed him, and Regulation 115 of Part I of Table A will be modified accordingly.

Accounts

33. The Company will comply with the provisions of the Acts and all other relevant legislation with regard to accounts, and Regulations 125 to 129 of Part I of Table A will be modified accordingly.

Capitalisation Of Profits

34. The reference in Regulation 130 to Section 64 of the 1963 Act will be construed as a reference to Section 207 of the 1990 Act.

Auditors

35. The Auditors will be appointed and removed and their rights and duties regulated in accordance with the Acts. The Auditors will be entitled to attend any general meeting and to receive all notices of, and other communications relating to, any general meeting which any member is entitled to receive, and to be heard on any part of the business which concerns them as auditors. Regulation 132 of Part I of Table A will not apply.

Indemnity

36. Subject to the Acts, every director, managing director, agent, auditor, secretary and other officer for the time being of the Company shall be indemnified out of the assets of the Company against any liability incurred by him in defending any proceedings, whether civil or criminal, in relation to his acts while acting in such office, in which judgement is given in his favour or in which he is acquitted or in connection with any application under section 391 of the 1963 Act in which relief is granted to him by the court. Regulation 138 of Part I of Table A will not apply.

Names, Addresses and Descriptions of Subscribers

Seamus Murphy Bower House Fancourt Balbriggan Co. Dublin

Company Director

S2 27 =

Consent of copyright owner required for any other use.

Dated the 6 day of New 2007

Witness to the above signatures:

Birn oleill Solicitor

Leverdish House

Smartich

Dublin 7.

Particulars of Registered Office of the Company

The Registered Office is as follows:

Murphy Environmental Hollywood Limited Hollywood Great, Nag's Head, Naul, Co. Dublin.

Section 47 of the Waste Management Acts 1996 to 2003, Section 94 of The Environmental Protection Agency Acts 1992 & 2003
Transfer of a Waste Licence.

Attachment C: Fit and Proper Person

Consent of copyright owner required for any other use.



Patel Tonra Ltd. for Murphy Environmental Hollywood Limited, August 2008.

Organisational Structure

Murphy Environmental (a registered trading division of Murphy Concrete Manufacturing Ltd.) has developed its management and staffing structures over the last number of years. The management team will transfer directly from Murphy Environmental (a registered trading division of Murphy Concrete Manufacturing Ltd.) to Murphy Environmental Hollywood Limited. All staff documented in the following table are skilled and existing staff members of Murphy Environmental (a registered trading division of Murphy Concrete Manufacturing Ltd.).

Seamus Murphy is the Managing Director of Murphy Environmental Hollywood Limited and Patricia Rooney is the General Manager. The Facility Manager at Hollywood is Ken Rooney. The Assistant Facility Manager is Kathryn Moonan. An office team, who have responsibility for operating the weighbridge and office and data management duties, and an operations team, who direct and control incoming vehicles in restoration areas, supports them.

The company is further supported by its consultant teams – Patel Tonra Ltd., Environmental Consultants, Golder Associates, Engineering Consultants, AWN (Air and Noise Consultants), Fingal Planning Consultants and Manahan & Associates (Planning Consultants).

The table below outlines the management team's responsibilities, technical knowledge and qualifications.

To summarise, the following staff have responsibilities at Hollywood and are listed as Murphy Environmental Hollywood Limited directors:

- Seamus Murphy
- Patricia Rooney
- Rory Murphy
- Emma Murphy

The following additional staff have responsibilities at Hollywood:

- Ken Roonev
- Kathryn Moonan

Management Team, Responsibilities and Experience / Qualifications

Name	Position	Duties and Responsibilities	Experience /Qualifications
Seamus Murphy	Managing Director & Company Director, Murphy Environmental Hollywood Limited.	 Company Development Strategic Planning Sales & Marketing Budgeting & Financial Provisions Commitment to environmental management Conformance Waste Licences W0129-02 & W0151-01 and IS014001 	 Over 30 years experience in management of quarries. Approx. 10 years experience in waste management Safe Pass
Patricia Rooney	General Manager & Company Director, Murphy Environmental Hollywood Limited.	 Business development and Strategic planning Sales & Marketing Company Advertising Budgeting & Financial Provisions Liaison with Landfill Managers Liaison with the Agency Liaison with Consultants Liaison with Neighbours and Public Conformance Waste Licences W0129-02 & W0151-01 and IS014001 	 Fas/Fetac Waste Management Training Programme Business Management qualifications and over 20 years management experience EMS Training Programme (Sligo IT) Safe Pass
Rory Murphy	Assistant Operations Manager & Company Director, Murphy Environmental Hollywood Limited.	 Assistant Operations Manager Traffic Management Overviewing cell construction and filling Environmental protection Waste Acceptance and inspections Nuisance control Site Security Conformance Waste Licences W0129-02 & W0151-01 and IS014001 	 9 Years Experience in Waste Management Role Safe Pass

Name	Position	Duties and Responsibilities	Experience / Qualifications
Emma Murphy	Emma Murphy Relief Facility Manager & Company Director, Murphy Environmental Hollywood Limited.	 The management, future development and implementation of all operational requirements for the facility Liaison with the EPA Implementation of Waste Licence W0151-01 and EMS The technical and operational management of the landfill Environmental protection Public and Client liaison Liaison with environmental consultants for the purpose of site monitoring and the 	 Fas/Fetac Waste Management Training Programme 7 Years Experience in Waste Management Role Safe Pass
	,	implementation of Environmental Management Systems Health & Safety Management	
	!	Emergency Response	
		• organing Co-ordinator	
		• & Maintenance of Site Records	
	C ^o	Waste acceptance and inspections	
	<u>. </u>	 Conformance Waste Licences W0129-02 & W0151-01 and IS014001 	

Name	Position	Duties and Responsibilities	Experience /Qualifications
Ken Rooney	Facility Manager, Murphy Environmental Hollywood Limited.	 The management, future development and implementation of all operational requirements for the facility Liaison with the EPA Implementation of Waste Licence W0129-02 and EMS The technical and operational management of the landfill Environmental protection Public and Client liaison Liaison with environmental consultants for the purpose of site monitoring and the implementation of Environmental Management Systems Health & Safety Management Envergency Response Training Co-ordinator Maintenance of Site Records Waste acceptance and inspections Conformance Waste Licences 	 Fas/Fetac Waste Management Training Programme NETS Training & Coaching Fetac Level 3 B.Eng in Polymer Engineering National Diploma in Plastics Engineering Masters in Industrial Engineering 4 Years Experience in Waste Management Role Safe Pass
		W0129-02 & W0151-01 and IS014001	-

Name	Position	Duties and Responsibilities	Experience /Qualifications
Kathryn Moonan	Assistant Facility Manager, Murphy Environmental Hollywood Ltd.	 The implementation of all operational requirements for the facility Conformance with Waste Licence W0129-02, EMS and ISO 14001 Implementation and maintenance of EMS for the site Environmental auditing and site inspections Liaison with environmental consultants for the purpose of site monitoring and the implementation of Environmental Management Systems EMS Auditing Waste acceptance, inspections and sampling. Management of site records Occupational First Aid Fire Marshal Conformance Waste Licences W0129-02 & W0151-01 and IS014001 	 BBS in Business Studies and HR Management Occupational First Aider Fire Marshal Fas/Fetac Waste Management Training Programme Safe Pass

Environmental Management System (EMS)

Murphy Environmental (a registered trading division of Murphy Concrete Manufacturing Ltd.) has put in place an Environmental Management System (EMS) at the site to help manage its environmental issues and records. A documented EMS is required under the Waste Licence (W0129-02); however, Murphy Environmental is going beyond these requirements and has developed the EMS in line with the international environmental standard, ISO14001:2004.

The process of implementing an EMS at the site commenced in 2003. Murphy Environmental reached a milestone in November 2004 when the system was verified as meeting all the requirements of the International Standard by an external independent body. Mr. Dick Roche, T.D., Minister for the Environment, Heritage & Local Government presented Murphy Environmental with the ISO 14001 Award, in April 2005. Ongoing internal audits and continual improvements are key requirements of the Standard, as well as an annual 'Compliance Audit' by independent assessors to confirm compliance to the standard.

The IS014001:2004 Certification will be transferred directly from Murphy Environmental (a registered trading division of Murphy Concrete Manufacturing Ltd.) to Murphy Environmental Hollywood Limited.

Section 47 of the Waste Management Acts 1996 to 2003, Section 94 of The Environmental Protection Agency Acts 1992 & 2003 Transfer of a Waste Licence.

Attachment C.1: Liabilities Risk Fund & Restoration Fund

Consent of copyright owner required for any other use.



Patel Tonra Ltd. for Murphy Environmental Hollywood Limited, August 2008.

Liabilities Risk Fund & Restoration Fund

Murphy Environmental (a registered trading division of Murphy Concrete Manufacturing Ltd.), in consultation with the EPA, has established a Liabilities Risk Account for the facility. The purpose of the fund is to cover any liabilities incurred by the licensee in carrying on the activities to which the licence relates or in consequence of ceasing to carry on the activities. Murphy Environmental has met with, and exceeded, these requirements.

Murphy Environmental (a registered trading division of Murphy Concrete Manufacturing Ltd.), in consultation with the EPA, has established a Restoration Fund linked to the volume of incoming waste. The duration of the fund shall be the life of the landfill plus 30 years and 6 months.

The funds will be transferred directly from Murphy Environmental (a registered trading division of Murphy Concrete Manufacturing Ltd.), to Murphy Environmental Hollywood Ltd.

Murphy Environmental Hollywood Ltd. will review and revise, where necessary, the provisions of these funds in line with W0129-02 and EPA requirements.

Please find attached overleaf:

- A copy of a letter from Murphy Concrete Manufacturing Ltd., outlining existing arrangements re Restoration Fund and Liabilities Risk Fund and the proposed accounts for Murphy Environmental Hollywood Ltd.
- Bank Statements for existing financial provision for Restoration and Liabilities Funds (currently combined for Hollywood (W0129-02) and Gormanston (W0151-01)).
- Copy of letter (Ref W0129-02/LOD/060907) submitted to the Agency as part of Waste Licence Review Application for Hollywood, to confirm existing bank account arrangements

Additional confidential information relating to Liabilities Risk Fund and Restoration Fund is provided as supplementary information submitted to the EPA under a separate cover.

**Confidential Information Fund is provided as supplementary information submitted to the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate cover.

**Extraplishing translation for the EPA under a separate co

EPA Export 26-07-2013:01:21:01



For the Attention of

Ms Suzanne Wylde

Inspector

Licensing Unit

Office of Climate Change, Licensing &

Resource Use

Environmental Protection Agency

Headquarters

PO Box 3000

Johnstown Castle Estate

Co Wexford

Our Ref.:

W0129-02/LOD/060907

Direct Dial:

01 802 0523

Direct Fax:

01 802 0525

Mobile:

086 8333724

e-mail:

louise.odonnell@pateltonra.com

Date:

6th September 2007

Dear Ms Wylde,

Waste Licence:	W0129-02 Hollywood Great
Re.:	Compliance with Article 12 of the Waste Management (Licensing) Regulations; your letter of 17 th August 2007
Condition(s):	Not Applicable
Enclosed Docs:	Restoration and aftercare fund (EPA correspondence and funds accrued)

In relation to my letter W0129-02/LOD/310807 (dated 31st August 2007), and specifically Appendix 12: Restoration and aftercare fund (EPA correspondence and funds accrued), Murphy Environmental wish to submit the attached information for the public file.

Should you require any further details, please do not hesitate to contact me.

Yours sincerely

on behalf of:

Patricia Rooney, General Manager,

Murphy Environmental (a diffision of Murphy Concrete Manufacturing Ltd.)

Louise O'Donnell

Senior Environmental Consultant

Patel Tonra Ltd.



Ms. Suzanne Wilde Licensing Section Environmental Protection Agency Johnstown Co. Wexford

AIB Bank

Financial Services Centre St. George's Square Balbriggan Co. Dublin

Telephone (01) 841 2128 Facsimile (01) 841 1357 www.aib.ie

6th September 2007

Re:- Hollywood Landfill WO129-1

Dear Ms. Wilde

I wish to confirm that Murphy Environmental maintain two deposit accounts at this branch for the purpose of providing funds to address the restoration or any liabilities arising at the licensed landfill in Hollywood, Co. Dublin.

Consent of copyright owner.

Yours sincerely

Gerry Hennigan OFA Relationship Manager

Allied Irish Banks, p.l.c. Registered Office: Bankcentre, Ballsbridge, Dublin 4. Registered in Ireland, No. 24173. AIB Bank is a tied insurance agent of Ark Life Assurance Company Limited for life assurance business.

Section 47 of the Waste Management Acts 1996 to 2003, Section 94 of The Environmental Protection Agency Acts 1992 & 2003
Transfer of a Waste Licence.

Attachment C.2:
Insurance Details
Confidential Information

Consent of convinding output required for any other in the convenience of the



Patel Tonra Ltd. *for* Murphy Environmental Hollywood Limited, August 2008.

Section 47 of the Waste Management Acts 1996 to 2003, Section 94 of The Environmental Protection Agency Acts 1992 & 2003 Transfer of a Waste Licence.

Attachment E:

Gormanston EPA Licence (W0151-01)

Consent of copyright owner required for any other use.



Patel Tonra Ltd. for Murphy Environmental Hollywood Limited, August 2008. Consent of copyright owner teels into the any other use.

Headquarters
P.O. Box 3000

Johnstown Castle Estate
County Wexford
Ireland

WASTE LICENCE
LANDFILL FOR INERT WASTE

Waste Licence

151-1

Register Number:

Licensee:

Murphy Concrete Manufacturing Limited

Location of Facility:

Sarsfieldstown, Gormanstown, County

Meath.

INTRODUCTION

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

This licence is for the operation of an inert landfill in a former sand and gravel quarry. Only inert construction and demolition waste shall be accepted up to a maximum annual tonnage of 750,000 tonnes and subject to strict waste acceptance criteria. The licence also allows for the recovery of inert construction and demolition waste – either for use at the landfill itself or for use as aggregate material.

Waste disposal shall be carried out in cells constructed from a low permeability mineral liner in accordance with the Landfill Directive, and the base of the cells shall be above the water table. A risk assessment is required to be undertaken to establish the environmental impact from wastes previously deposited at the facility.

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

The licence sets out in detail the conditions under which Murphy Concrete Manufacturing Limited will operate and manage this facility.

Table of Contents

	Page No.
REASONS FOR THE DECISION	1
PART I ACTIVITIES LICENSED	1
INTERPRETATION	2
CONDITION 1 SCOPE OF THE LICENCE	4
CONDITION 2 MANAGEMENT OF THE FACILITY	5
CONDITION 3 FACILITY INFRASTRUCTURE	6
CONDITION 4 RESTORATION AND AFTERCARE	11
CONDITION 5 FACILITY OPERATION AND WASTE MANAGEMENT	11
CONDITION 6 EMISSIONS	14
CONDITION 7 NUISANCE CONTROL	15
CONDITION 8 MONITORING	15
CONDITION 9 CONTINGENCY ARRANGEMENTS	16
CONDITION 10 RECORDS CHAPTER LEAD TO SELECTION TO SELECTI	17
CONDITION 11 REPORTS AND NOTIFICATIONS	19
CONDITION 12 CHARGES AND FINANCIAL PROVISIONS	20
SCHEDULE A: Waste Acceptance	22
SCHEDULE B: Specified Engineering Works	23
SCHEDULE C: Emission Limits	23
SCHEDULE D: Monitoring	24
SCHEDULE E: Recording and Reporting to the Agency	27
SCHEDIII F. F. Content of the Annual Environmental Penart	28

DECISION & REASONS FOR THE DECISION

Reasons for the Decision

The Environmental Protection Agency (the Agency) is satisfied, on the basis of the information available, that the requirements of Section 40(4) of the Waste Management Act, 1996 have been complied with in respect of the application for a waste licence for the activities listed hereunder in Part I.

In reaching this decision the Agency has considered the application and supporting documentation received from the applicant, all submissions received from other parties and the report of its inspector. No objection having been received to the Proposed Decision, the licence is granted in accordance with the terms of the Proposed Decision and reasons therfor.

Part I Activities Licensed

In pursuance of the powers conferred on it by the Waste Management Act, 1996, the Agency, under Section 40(1) of the said Act hereby grants this Waste Licence to Murphy Concrete Manufacturing Limited to carry on the waste activities listed below at Sarsfieldstown, Gormanstown, County Meath subject to conditions, with the reasons therefor and the associated schedules attached thereto set out in the licence.

Licensed Waste Disposal Activities, in accordance with the Third Schedule of the Waste Management Act 1996

Class 1	Deposit on, in or under land (including landfill):
	This activity is limited to the deposition of inert waste into cells constructed with a low permeability mineral layer and the possible collection/management of leachate and landfill gas arising at the tacility.
Class 13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced:
	This activity is limited to the storage of unacceptable wastes in the waste quarantine area pending their despatch to appropriate facilities.

Licensed Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Act 1996

Class 3	Recycling or reclamation of metals and metal compounds:	
	This activity is limited to the recovery of metal waste from Construction and Demolition waste arriving at the Construction and Demolition Waste Recovery Area.	
Class 4	Recycling or reclamation of other inorganic materials:	
	This activity is limited to the recovery of inert waste from Construction and Demolition waste arriving at the facility.	
Class 13	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, the premises where such waste is produced:	
	This activity is limited to the storage of recovered wastes (e.g. metal waste and aggregate material) and the storage of inert wastes which are destined for recovery at the facility. The latter includes the stockpiling of soils for use in restoration works onsite, and also the storage of inert waste at the Construction and Demolition Waste Recovery Area for future recovery activities.	

**INTERPRETATION

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

Adequate lighting

20 lux measured at ground level.

Agreement

Agreement in writing.

Annually

At approximately twelve monthly intervals.

Application

The application by the licensee for this waste licence.

Appropriate facility

A waste management facility, duly authorised under relevant law and

technically suitable.

Bi-annually

A minimum of 2 times per year, at approximately six-monthly intervals.

BTEX

Benzene, Toluene, Ethylbenzene and Xylene

Condition

A condition of this licence.

Construction and Demolition Waste

All wastes which arise from construction, renovation and demolition

activities.

Containment boom

A boom which can contain spillages and prevent them from entering drains

or watercourses.

Daily Cover

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.

Davtime

0800 hrs to 2200 hrs.

Documentation

Any report, record, result, data, drawing, proposal, interpretation or other

document in written or electronic form which is required by this licence.

Drawing

Any reference to a drawing or drawing number means a drawing or drawing

number contained in the application, unless otherwise specified in this

licence.

Emergency

Those occurrences defined in Condition 9.4.

Emission Limits

Those limits, including concentration limits and deposition levels established

in Schedule C: Emission Limits, of this licence.

EPA Working Day

Refers to the following hours: 0900 hrs to 1730 hrs Monday to Friday

inclusive.

European Waste Catalogue (EWC) A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 94/3/EC and any

subsequent amendment published in the Official Journal of the European

Community.

Inert waste

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

Environmental Protection Agency WLIReg. No. 151-1 Page 2 of 29

endanger the quality of surface water and/or groundwater.

Intermediate Cover Refers to placement of material (minimum 300mm if soil is used) for a

period of time prior to restoration or prior to further disposal of waste.

Landfill Refers to the area of the facility where the waste is disposed of by placement

on the ground or on other waste.

Landfill Gas Gases generated from the landfilled waste.

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

Licence A waste licence issued in accordance with the Act.

Licensee Murphy Concrete Manufacturing Limited.

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

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

tankered to the facility.

Maintain Keep in a fit state, including such regular inspection, servicing and repair as

may be necessary to adequately perform its function.

Monthly A minimum of 12 times per year, at approximately monthly intervals.

Night-time 2200 hrs to 0800 hrs.

Quarterly At approximately three monthly intervals.

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

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

Engineering Works of this licence.

Treatment Treatment means the physical, thermal, chemical or biological processes,

including sorting, that change the characteristics of the waste in order to reduce its volume or hazardous nature, facilitate its handling or enhance

recovery.

Trigger Level A parameter value specified in the licence, the achievement or exceedance of

which requires certain actions to be taken by the licensee.

Wastewater Water that has been used, as for washing, flushing or in a manufacturing

process.

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

the purposes of the construction of specified engineering works is being

deposited.

PART II CONDITIONS

CONDITION 1 SCOPE OF THE LICENCE

- 1.1. Waste activities at the facility shall be restricted to those listed and described in Part I: Activities Licensed and authorised by this licence.
- 1.2. For the purposes of this licence, the facility is the area of land outlined in red on Figure No. 1.2 of the application. Any reference in this licence to "facility" shall mean the area thus outlined in red
- 1.3. This licence is for the purposes of waste licensing under the Waste Management Act 1996 only, and nothing in this licence shall be construed as negating the licensee's statutory obligations or requirements under any other enactments or regulations.
- 1.4. Waste Acceptance
 - 1.4.1. Only Inert waste may be recovered or disposed of at the facility subject to the maximum quantities and other constraints listed in *Schedule A: Waste Acceptance*, of this licence.
 - 1.4.2. No hazardous wastes, liquid wastes, sludges or shredded waste shall be accepted at the facility.
 - 1.4.3. The licensee shall ensure that inert waste accepted at the facility is subject to pre-treatment where technically feasible.
- 1.5. Waste Acceptance Hours and Hours of Operation (unless otherwise agreed by the Agency)
 - 1.5.1. Waste may only be accepted at the facility between the hours of 7.30am and 7.30pm Monday to Friday inclusive and 7.30am to 4.30pm on Saturdays.
 - 1.5.2. The landfill and the waste recovery area at the facility may only be operated during the hours of 7.00am to 8.00pm Monday to Friday inclusive and 7.00am to 5.00pm on Saturdays.
 - 1.5.3. Waste shall not be accepted at the landfill on Bank Holidays.
- 1.6. The following shall constitute an incident for the purposes of this licence:
 - a) An emergency;
 - b) Any emission which does not comply with the requirements of this licence;
 - c) Any trigger level specified in this licence which is attained or exceeded; and
 - d) Any indication that environmental pollution has, or may have, taken place.
- 1.7. Where the Agency considers that a non-compliance with any condition of this licence has occurred, it may serve a notice on the licensee specifying:
 - 1.7.1. That only those wastes and quantities as specified, if any, in the notice are to be accepted at the facility after the date set down in the notice.
 - 1.7.2. That the licensee shall undertake the works stipulated in the notice, and/or otherwise comply with the requirements of the notice as set down therein, within the time-scale contained in the notice.

1.7.3. That the licensee shall carry out any other requirement specified in the notice.

When the notice has been complied with, the licensee shall provide written confirmation that the requirements of the notice have been carried out. No waste, other than that which is stipulated in the notice, shall be accepted at the facility until written permission is received from the Agency.

1.8. Every plan, programme or proposal submitted to the Agency for its agreement pursuant to any condition of this licence shall include a proposed timescale for its implementation. The Agency may modify or alter any such plan, programme or proposal in so far as it considers such modification or alteration to be necessary and shall notify the licensee in writing of any such modification or alteration. Every such plan, programme or proposal shall be carried out within the timescale fixed by the Agency but shall not be undertaken without the agreement of the Agency. Every such plan, programme or proposal agreed by the Agency shall be covered by the conditions of this licence.

REASON: To clarify the scope of this licence.

CONDITION 2 MANAGEMENT OF THE FACILITY

2.1 Facility Management

- 2.1.1 The licensee shall employ a suitably qualified and experienced facility manager who shall be designated as the person in charge. The facility manager or a nominated, suitably qualified and experienced, deputy shall be present on the facility at all times during its operation.
- 2.1.2 Both the facility manager and deputy, and any replacement manager or deputy, shall successfully complete both, the FAS Waste Management Training Programme (or equivalent agreed with the Agency) and associated on-site assessment appraisal within twelve months of appointment.
- 2.1.3 The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and experience, as required and shall be aware of the requirements of this licence.

2.2 Management Structure

- 2.2.1 Within three months of the date of grant of this licence, the licensee shall submit written details of the management structure of the facility to the Agency. Any proposed replacement in the management structure shall be notified in advance in writing to the Agency. Written details of the management structure shall include the following information:
 - a) The names of all persons who are to provide the management and supervision of the waste activities authorised by the licence, in particular the name of the facility manager and any nominated deputies;
 - b) Details of the responsibilities for each individual named under a) above; and
 - c) Details of the relevant education, training and experience held by each of the persons nominated under a) above.

2.3 Environmental Management System (EMS)

2.3.1 The licensee shall establish and maintain an EMS. Within twelve months from the date of grant of this licence, the licensee shall submit to the Agency for its agreement a proposal

for a documented Environmental Management System (EMS) for the facility. Following the agreement of the Agency, the licensee shall establish and maintain such a system. The EMS shall be updated on an annual basis with amendments being submitted to the Agency for its agreement.

- 2.3.2 The EMS shall include as a minimum the following elements.
 - 2.3.2.1 Schedule of Environmental Objectives and Targets

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

2.3.2.2 Environmental Management Plan (EMP)

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

- a) The items specified to be contained in an Environmental Management Plan in the Landfill Operational Practices Manual published by the Agency;
- b) Methods by which the objectives and targets will be achieved and the identification of those responsible for achieving those objectives and targets; and
- c) Any other items required by written guidance issued by the Agency.
- 2.3.2.3 Corrective Action Procedures

The Corrective Action Procedures shall detail the corrective actions to be taken should any of the procedures detailed in the EMS not be followed.

2.3.2.4 Awareness and Training Programme

The Awareness and Training Programme shall identify training needs, for personnel who work in or have responsibility for the licensed facility.

- 2.4 Communications Programme
 - 2.4.1 Within six months of the date of grant of this licence, the licensee shall establish and maintain a Communications Programme to inform and involve the local community and ensure that members of the public can obtain information at the facility, at all reasonable times, concerning the environmental performance of the facility.

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

CONDITION 3 FACILITY INFRASTRUCTURE

- 3.1 The licensee shall establish all infrastructure referred to in this licence prior to the commencement of the licensed activities or as required by the conditions of this licence.
- 3.2 Specified Engineering Works
 - 3.2.1 The licensee shall submit proposals for all Specified Engineering Works, as defined in Schedule B: Specified Engineering Works, of this licence, to the Agency for its agreement

- at least two months prior to the intended date of commencement of any such works. No such works shall be carried out without the prior agreement of the Agency.
- 3.2.2 All specified engineering works shall be supervised by a competent person(s) and that person, or persons, shall be present at all times during which relevant works are being undertaken.
- 3.2.3 Following the completion of all specified engineering works, the licensee shall complete a construction quality assurance validation. The validation report shall be made available to the Agency on request. The report shall include the following information:
 - a) A description of the works;
 - b) As-built drawings of the works;
 - c) Records and results of all tests carried out (including failures);
 - d) Drawings and sections showing the location of all samples and tests carried out;
 - e) Daily record sheets/diary;
 - f) Name(s) of contractor(s)/individual(s) responsible for undertaking the specified engineering works;
 - g) Name(s) of individual(s) responsible for supervision of works and for quality assurance validation of works;
 - h) Records of any problems and the remedial works carried out to resolve those problems; and
 - i) Any other information requested in writing by the Agency.

3.3 Facility Notice Board

- 3.3.1 The licensee shall provide and maintain a Facility Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the board shall be 1200 mm by 750 mm.
- 3.3.2 The board shall clearly show:
 - a) The name and telephone number of the facility;
 - b) The normal hours of opening;
 - c) The name of the licence holder;
 - d) An emergency out of hours contact telephone number;
 - e) The licence reference number; and
 - f) Where environmental information relating to the facility can be obtained.

3.4 Facility Security

- 3.4.1 Within six months of the date of grant of this licence, the licensee shall provide adequate security and stockproof fencing and gates around the facility. 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.
- 3.4.2 The licensee shall remedy any defect in the gates and/or fencing as follows:
 - a) A temporary repair shall be made by the end of the working day; and
 - b) A repair to the standard of the original gates and/or fencing shall be undertaken within three working days.
- 3.5 Facility Roads and Site Surfaces

- 3.5.1 Site roads shall be provided and maintained to ensure the safe movement of vehicles within the facility.
- 3.5.2 The facility entrance area, the Construction and Demolition Waste Recovery Area, the vehicle cleaning area, the Waste Inspection and Quarantine Areas and vehicle fuelling areas shall be paved and maintained.

3.6 Facility Office

- 3.6.1 The licensee shall provide and maintain an office at the facility. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation.
- 3.6.2 The licensee shall provide and maintain a working telephone and a method for electronic transfer of information at the facility.
- 3.7 Waste Inspection and Quarantine Areas
 - 3.7.1 A Waste Inspection Area and a Waste Quarantine Area shall be provided and maintained at the facility. Unless otherwise agreed by the Agency, drainage from these areas shall pass through a silt trap and oil interceptor and then be directed to the on-site wastewater treatment system.
 - 3.7.2 These areas shall be constructed and maintained in a manner suitable, and be of a size appropriate, for the inspection of waste and subsequent quarantine if required. The waste inspection area and the waste quarantine area shall be clearly identified and segregated from each other.
- 3.8 Weighbridge
 - 3.8.1 The licensee shall provide and maintain a weighbridge at the facility.
- 3.9 Wheel Cleaning
 - 3.9.1 Within three months of the date of grant of this licence, the licensee shall establish and maintain a wheelwash at the facility. The licensee shall agree the discharge arrangements (if any) for the wheelwash with the Agency in advance of its installation.
- 3.10 Waste Water Treatment System
 - 3.10.1 The licensee shall provide and maintain a Wastewater Treatment System at the facility for the treatment of wastewater arising from toilets and water services on-site. Within six months of the date of grant of this licence, the licensee shall ensure that any septic tanks and percolation areas being used at the facility are operated in accordance with the Agency's Wastewater Treatment Manual: Treatment Systems for Single Houses. A report on its operation and design shall be submitted as part of the AER.
- 3.11 Tank and Drum Storage Areas
 - 3.11.1 All tank and drum storage areas shall be rendered impervious to the materials stored therein.
 - 3.11.2 Within three months of the date of grant of this licence, all tank and drum storage areas shall, as a minimum, be bunded, either locally or remotely, to a volume not less than the greater of the following:-
 - (a) 110% of the capacity of the largest tank or drum within the bunded area; or
 - (b) 25% of the total volume of substance which could be stored within the bunded

- 3.11.3 All drainage from bunded areas shall be diverted for collection and safe disposal.
- 3.11.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.11.5 The integrity and water tightness of all the bunds and their resistance to penetration by water or other materials stored therein shall be confirmed by the licensee and shall be reported to the Agency within three months of the date of grant of this licence.

This confirmation shall be repeated at least once every three years thereafter and reported to the Agency on each occasion, or following the installation of any new bunds and prior to their use as a storage area.

3.12 Landfill Lining

- 3.12.1 The landfill liner shall comprise:-
 - (i) A base and side wall; and
 - (ii) A mineral layer of a minimum thickness of 1m with a hydraulic conductivity less than or equal to 1.0×10^{-7} m/s, or similar with equivalent protection to the base and side wall.
- 3.12.2 The liner detailed design and its construction shall be in accordance with the guidelines provided in the Agency's Landfill Manual, Landfill Site Design.
- 3.12.3 Formation levels of the cells shall be agreed with the Agency prior to cell development. The formation level of the base of the liner (prior to emplacement of the mineral layer or equivalent) shall be constructed at least 1m above the groundwater table level.
- 3.13 Leachate Management Infrastructure
 - 3.13.1 Leachate management infrastructure which maybe required following the completion of the risk assessment referred to under Condition 5.13 shall be provided and maintained by the licensee within a timescale to be agreed by the Agency.
- 3.14 Landfill Gas Management
 - 3.14.1 Landfill gas management infrastructure which may be required following the completion of the risk assessment referred to under Condition 5.13 shall be provided and maintained by the licensee within a timescale to be agreed by the Agency.
- 3.15 Surface Water Management
 - 3.15.1 Effective surface water management infrastructure shall be provided and maintained at the facility during construction, operation, restoration and aftercare of the facility. As a minimum, the infrastructure shall be capable of the following:
 - a) The prevention of contaminated water and leachate discharges into surface water drains and courses; and
 - b) The collection/diversion of run-off arising from capped and restored areas.
 - 3.15.2 Within six months of the date of grant of this licence, all surfacewater run-off arising from the maintenance building and associated hardstanding areas (including any areas used for washing vehicles) shall pass through a silt trap and an oil interceptor prior to discharge into a sedimentation pond. The silt trap and oil interceptor shall be adequately sized and shall be in accordance with European Standard prEN 858 (installations for the separation of light liquids).

- 3.15.3 Following the installation of the Construction and Demolition Waste Recovery Area and the Waste Inspection and Quarantine Areas, all surfacewater run-off arising from hardstanding areas here shall pass through a silt trap and an oil interceptor prior to discharge.
- 3.15.4 Any accumulated surfacewater within the facility which requires removal prior to lining shall be directed to a suitably designed sedimentation pond prior to discharge. Discharges of surfacewater from the sedimentation pond shall only be undertaken with the prior agreement of the Agency.

3.16 Groundwater Management

- 3.16.1 Effective groundwater management infrastructure shall be provided and maintained at the facility during construction, operation, restoration and aftercare of the facility. As a minimum, the infrastructure shall be capable of the following:
 - a) The protection of the groundwater resources from pollution by the waste activities; and
 - b) The protection of other infrastructure, such as the liner, from any adverse effects caused by the groundwater.

3.17 Construction and Demolition Waste Recovery Area

3.17.1 Prior to the commencement of waste recovery operations, the licensee shall provide and maintain a construction and demolition waste recovery area at a location to be agreed in advance with the Agency. The storage and processing of all waste at this area shall be carried out on an impermeable concrete slab.

3.18 Monitoring Infrastructure

3.18.1 Landfill Gas

- a) Within six months from the date of grant of this licence, the licensee shall install four landfill gas monitoring points at locations to be agreed with the Agency.
- b) Within six months from the date of grant of this licence, the licensee shall install an effective permanent gas monitoring system in the site office.

3.18.2 Groundwater

a) Within six months from the date of grant of this licence, the licensee shall install three additional monitoring points at locations to be agreed in advance with the Agency to allow for the sampling and analysis of groundwater. One of these shall be located upgradient of the facility and the other two shall be located downgradient of the facility. Each monitoring point shall include two separate standpipes and shall be screened appropriately such that overburden and bedrock groundwater can be sampled independently of each other.

3.18.3 Leachate

a) The licensee shall install and maintain a minimum of one leachate monitoring point within each cell to allow for the sampling and analysis of leachate.

3.18.4 Replacement of Infrastructure

a) Monitoring infrastructure which is damaged or proves to be unsuitable for its purpose shall be replaced within three months of it being damaged or recognised as being unsuitable.

REASON: To provide appropriate infrastructure for the protection of the environment.

CONDITION 4 RESTORATION AND AFTERCARE

- 4.1. Within nine months of the date of grant of this licence, the licensee shall submit to the Agency for agreement a Restoration and Aftercare Plan for the facility. The licensee shall restore the facility on a phased basis in accordance with the agreed Restoration and Aftercare Plan (and any subsequent amendments). The plan shall have regard to the Agency's Landfill Manual, Landfill Restoration and Aftercare, and shall incorporate the following:
 - a) Restoration of areas where domestic waste has previously been deposited, including as a priority, measures to decrease rainwater infiltration in this area;
 - b) Restoration of other parts of the facility where waste has previously been deposited;
 - c) Details of the landscaping to be carried out on completed areas;
 - d) A drawing which shows the final profile/contours of the facility; and
 - e) Appropriate timescales for the completion of each phase of restoration.
- 4.2. The final height of the facility (i.e. in areas where waste has been deposited) shall not exceed 22 mOD Malin.
- 4.3. Final Capping
 - 4.3.1. Unless otherwise agreed by the Agency, the final capping of all new cells shall consist of the following:
 - a) Top soil (150 300mm); and
 - b) Subsoils, such that total thickness of top soil and subsoils is at least 1m.
 - 4.3.2. The final capping of areas where waste has previously been deposited shall be agreed with the Agency following the completion of the Risk Assessment referred to under Condition 5.13.
- 4.4. No material or object that is incompatible with the proposed restoration of the facility shall be present within one metre of the final soil surface levels.
- 4.5. Soil Storage
 - 4.5.1. All soils shall be stored to preserve the soil structure for future use.

REASON: To provide for the restoration of the facility.

CONDITION 5 FACILITY OPERATION AND WASTE MANAGEMENT

- 5.1 Waste Deposition
 - 5.1.1 No waste shall be disposed of at the facility other than into cells lined in accordance with Condition 3.12.
 - 5.1.2 Wastes shall not be accepted or deposited in any cell or part of the landfill without the prior agreement of the Agency.
 - 5.1.3 Prior to the commencement of waste activities, the licensee shall submit to the Agency for its agreement the proposed development and filling sequence plan for the facility. The plan shall include the retention of certain ecological habitats (as detailed in

Section 5.3.2 of the EIS). The landfill shall be filled in accordance with this agreed plan.

- Waste shall only be accepted at the facility from holders of waste collection permits issued under the Waste Management (Collection Permit) Regulations, 2001. The licensee must maintain copies of these waste collection permits on-site.
- 5.3 Waste Acceptance and Characterisation Procedures
 - 5.3.1 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.
 - 5.3.2 Any waste deemed unsuitable for processing at the facility and/or in contravention of this licence, shall be removed for recovery or disposal at an appropriate alternative facility. Such waste shall be stored in the Waste Quarantine Area only. No waste shall be stored in the Waste Quarantine Area for more than three months.

5.4 Working Face

- 5.4.1 Unless the prior agreement of the Agency is given, only one working face shall exist at the landfill at any one time for the disposal of waste.
- 5.5 Daily and Intermediate Cover
 - 5.5.1 Any cover material at any location within the facility which is eroded, washed off or otherwise removed shall be replaced by the end of the working day.

5.6 Landscaping

5.6.1 The existing hedgerow network which forms the boundary of the facility shall be retained by the licensee.

5.7 Operational Controls

- 5.7.1 All large hollow objects and other large articles deposited at the facility shall be crushed, broken up, flattened or otherwise treated.
- 5.7.2 Wastes once deposited and covered shall not be excavated, disturbed or otherwise picked over, unless with the prior agreement of the Agency.
- 5.7.3 Completed areas of the landfill shall be profiled so that no depressions exist in which water may accumulate. Any depressions arising after profiling shall be rectified by the emplacement of suitable capping or restoration materials.
- 5.7.4 Filled cells shall be permanently capped within twelve months of the cells having been filled to the required level.
- 5.7.5 Scavenging shall not be permitted at the facility.
- 5.7.6 Gates shall be locked shut when the facility is unsupervised.
- 5.7.7 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
- 5.7.8 Within three months of the date of grant of this licence, fuels shall only be stored at appropriately bunded locations on the facility.
- 5.7.9 All tanks and drums shall be labelled to clearly indicate their contents.
- 5.7.10 No smoking shall be allowed on the facility other than in the facility office.

5.7.11 Vehicle cleaning at the facility shall only be done on impervious concrete areas such that any run-off generated can be collected and treated in accordance with Condition 3.15.2.

5.8 Off-site Disposal and Recovery

- 5.8.1 Waste sent off-site for recovery or disposal shall only be conveyed by a waste contractor agreed by the Agency.
- 5.8.2 All waste transferred from the facility shall only be transferred to an appropriate facility agreed by the Agency.
- 5.8.3 All wastes removed off-site for recovery or disposal shall be transported from the facility to the consignee in a manner which will not adversely affect the environment.

5.9 Construction and Demolition Waste Recovery Area

5.9.1 Only those Construction and Demolition wastes specified in *Table A.2.2 Waste for Recovery of Schedule A: Waste Acceptance*, of this licence shall be accepted at this Area. Wastes which are capable of being recovered shall be separated and shall be stored temporarily in this area prior to being subjected to other recovery activities at the facility or transport off the facility.

5.10 Leachate Management

5.10.1 Any leachate collected at the facility shall be disposed of by tankering off-site in fully enclosed road tankers to a treatment facility agreed by the Agency.

5.11 Maintenance

- 5.11.1 All treatment/abatement and emission control equipment shall be calibrated and maintained, in accordance with the instructions issued by the manufacturer/supplier or installer. Written records of the calibrations and maintenance shall be made and kept by the licensee.
- 5.11.2 The licensee shall maintain and clearly label and name all sampling and monitoring locations.
- 5.11.3 The wheel-wash shall be inspected on a daily basis and drained as required. Silt, stones and other accumulated material shall be removed as required from the wheel-wash and disposed of at the working face or to a skip.
- 5.12 All imported aggregate material (i.e. raw materials which are intended for processing at the facility) shall only be stored in designated areas so as to ensure that it does not become mixed/deposited with any waste held on-site. A drawing showing the location of such designated areas shall be submitted to the Agency within three months of the date of grant of this licence.

5.13 Risk Assessment Report

- 5.13.1 Within six months of the date of grant of this licence, the licensee shall submit to the Agency for its agreement a Risk Assessment report. The risk assessment shall address the following issues:
 - a) The nature, extent and type of wastes previously deposited at the facility, including estimated quantities of each and measures to remediate the environmental impact of previously deposited wastes taking account of the findings of the risk assessment;
 - b) The nature and extent of groundwater contamination (particularly any BTEX compounds, mineral oil, Diesel Range Organics and List I/II organic substances) and measures to remediate contaminated or polluted groundwater;
 - c) The location of nearby groundwater receptors (e.g. wells);

- d) Proposals for leachate management to minimise the quantity of leachate being generated, to abstract and collect leachate, monitoring procedures (including frequencies); and
- e) Proposals for landfill gas management to minimise the quantity of landfill gas being generated, to collect and flare/vent landfill gas, monitoring procedures (including frequencies) and measures to prevent the migration of landfill gas off-site.
- 5.13.2 The licensee shall implement the measures agreed by the Agency following receipt of the report required under Condition 5.13.1 within a timescale to be determined by the Agency.

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

CONDITION 6 EMISSIONS

- 6.1. No specified emission from the facility shall exceed the emission limit values set out in Schedule C: Emission Limits, of this licence. There shall be no other emissions of environmental significance.
- 6.2. The licensee shall ensure that the activities shall be carried out in a manner such that emissions do not result in significant impairment of, or significant interference with the environment beyond the facility boundary.
- 6.3. Landfill Gas
 - 6.3.1. The following are the trigger levels for landfill gas emissions from the facility measured in any service duct or manhole on at or immediately adjacent to the facility and/or at any other point located outside the body of the waste:
 - a) Methane, greater than or equal to 1.0% v/v; or
 - b) Carbon dioxide greater than or equal to 1.5% v/v.
- 6.4. Groundwater
 - 6.4.1 There shall be no direct emissions to groundwater.
 - 6.4.2 Within six months of the date of grant of this licence, the licensee shall submit to the Agency for its agreement groundwater monitoring trigger levels in accordance with the requirements of Directive 1999/31/EC. The groundwater trigger levels for each monitoring location shall be based on previous groundwater monitoring results from those locations.
- 6.5. Emissions to Surface Water
 - 6.5.1. No leachate or contaminated surface water shall be discharged to surface waters.
 - 6.5.2. No substance shall be discharged in a manner, or at a concentration which following initial dilution, causes tainting of fish or shellfish.

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

CONDITION 7 NUISANCE CONTROL

- 7.1 The licensee shall ensure that vermin, birds, flies, mud, dust, litter and odours do not give rise to nuisance at the facility or in the immediate area of the facility. Any method used by the licensee to control any such nuisance shall not cause environmental pollution.
- 7.2 The road network in the vicinity of the facility shall be kept free from any debris caused by vehicles entering or leaving the facility. Any such debris or deposited materials shall be removed without delay.

7.3 Litter Control

7.3.1 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. Such waste shall be disposed of at an appropriate facility.

7.4 Dust Control

- 7.4.1 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 nursance.
- 7.4.2 All stockpiles of waste shall be maintained so as to minimise dust generation.
- 7.5 Prior to exiting the facility, all waste vehicles shall use the wheelwash.

REASON: To provide for the control of nuisances.

CONDITION 8 MONITORING

- 8.1 The licensee shall carry out such monitoring and at such locations and frequencies as set out in Schedule D: Monitoring, of this licence and as specified in this licence. Unless otherwise specified by this licence, all environmental monitoring shall commence no later than two months from the date of grant of this licence.
- 8.2 The licensee shall amend the frequency, locations, methods and scope of monitoring as required by this licence only upon the written instruction of the Agency and shall provide such information concerning such amendments as may be requested in writing by the Agency. Such alterations shall be carried out within any timescale nominated by the Agency.
- 8.3 Monitoring and analysis equipment shall be operated and maintained in accordance with the manufacturers' instructions (if any) so that all monitoring results accurately reflect any emission, discharge or environmental parameter.
- 8.4 The licensee shall provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency.
- 8.5 All persons conducting the sampling, monitoring and interpretation of monitoring results as required by this licence shall be suitably competent.
- 8.6 Groundwater Monitoring

- 8.6.1 Subject to the agreement of the well owners, all private wells within 250m of the facility boundary shall be included in the monitoring programme set out in *Schedule D: Monitoring*, of this licence.
- 8.7 Meteorological Monitoring
 - 8.7.1 Prior to the commencement of waste activities, the licensee shall either provide and maintain a meteorological station at the facility capable of monitoring the parameters listed in *Schedule D.5: Meteorological Monitoring* of this licence, or make arrangements for representative meteorological data to be collated for the facility to fulfil the requirements of *Schedule D.5: Meteorological Monitoring*, of this licence.
- 8.8 Topographical Survey
 - 8.8.1 A topographical survey shall be carried out within six months of the date of grant of this licence. The survey shall include a measurement of the remaining available void space. It shall be repeated annually thereafter. The survey shall be in accordance with any written instructions issued by the Agency.
- 8.9 Archaeological Assessment
 - 8.9.1 Prior to the development of any undisturbed area, the advice of Dúchas the Heritage Service shall be sought. On completion of such development a report of the results of any archaeological monitoring shall be submitted to Dúchas and to the Agency.
- 8.10 Stability Assessment
 - 8.10.1 Within six months of the date of grant of this licence, and annually thereafter, the licensee shall carry out a stability assessment of the side slopes of the facility.
- 8.11 Nuisance Monitoring
 - 8.11.1 The licensee shall, at a minimum of one week intervals, inspect the facility and its immediate surrounds for nuisances caused by litter, vermin, birds, flies, mud, dust and odours.

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

CONDITION 9 CONTINGENCY ARRANGEMENTS

- 9.1. In the event of an incident the licensee shall immediately:
 - a) Identify the date, time and place of the incident;
 - b) Carry out an immediate investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
 - c) Isolate the source of any such emission;
 - d) Evaluate the environmental pollution, if any, caused by the incident;
 - e) Identify and execute measures to minimise the emissions/malfunction and the effects thereof; and
 - f) Provide a proposal to the Agency for its agreement within one month of the incident occurring to:-

- a) Identify and put in place measures to avoid reoccurrence of the incident;
- b) Identify and put in place any other appropriate remedial action.
- 9.2. The licensee shall within six months of the date of grant of this licence, submit a written Emergency Response Procedure (ERP) to the Agency for its agreement. The ERP shall address any emergency situations which may originate on the facility and shall include provision for minimising the effects of any emergency on the environment. This shall include a risk assessment to determine the requirements at the facility for fire fighting and fire water retention facilities. The Fire Authority shall be consulted by the licensee during this assessment.
- 9.3. The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the facility. Once used the absorbent material shall be disposed of at an appropriate facility.

9.4. Emergencies

- 9.4.1. All significant spillages occurring at the facility shall be treated as an emergency and immediately cleaned up and dealt with so as to alleviate their effects.
- 9.4.2. No waste shall be burnt within the boundaries of the facility. A fire at the facility shall be treated as an emergency and immediate action shall be taken to extinguish it and notify the appropriate authorities.
- 9.4.3. In the event that monitoring of local wells indicates that the facility is having a significant adverse effect on the quantity and/or quality of the water supply, this shall be treated as an emergency and the licensee shall provide an alternative supply of water to those affected.
- 9.4.4. In the event that monitoring of the side slopes of the facility indicates that there may be a risk of slope failure this will be treated as an emergency.

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

CONDITION 10 RECORDS

- 10.1 The licensee shall keep the following documents at the facility office:
 - a) The current waste licence relating to the facility;
 - b) The current EMS for the facility;
 - c) The previous year's AER for the facility; and
 - d) All written procedures produced by the licensee which relate to the licensed activities.
- 10.2 The licensee shall maintain a written record for each load of waste arriving at the facility. The licensee shall record the following:
 - a) The date;
 - b) The name of the carrier (including if appropriate, the waste carrier registration details);
 - c) The vehicle registration number;
 - d) The name of the producer(s)/collector(s) of the waste as appropriate and details of the waste collection permit;
 - e) The name of the waste facility (if appropriate) from which the load originated including the waste licence or waste permit register number;
 - f) A description of the waste including the associated EWC codes;

- g) The quantity of the waste, recorded in tonnes;
- h) The name of the person checking the load; and
- i) Where loads or wastes are removed or rejected, details of the date of occurrence, the types of waste and the facility to which they were removed.

10.3 Written Records

The following written records shall be maintained by the licensee:-

- a) The types and quantities of waste recovered and disposed of at the facility each year. These records shall include the relevant EWC Codes;
- b) The types and quantities of recovered materials sold to third parties (e.g. as aggregate material);
- c) All training undertaken by facility staff;
- d) Results from all integrity tests of bunds and other structures and any maintenance or remedial work arising from them;
- e) Details of all nuisance inspections; and
- f) The names and qualifications of all persons who carry out all sampling and monitoring as required by this licence and who carry out the interpretation of the results of such sampling and monitoring.
- 10.4 The licensee shall maintain a written record of all complaints relating to the operation of the facility. Each such record shall give details of the following:
 - a) Date and time of the complaint;
 - b) The name of the complainant;
 - c) Details of the nature of the complaint;
 - d) Actions taken on foot of the complaint and the results of such actions; and
 - e) The response made to each complainant.
- 10.5 A written record shall be kept of each consignment of leachate removed from the facility. The record shall include the following:
 - a) The name of the carrier;
 - b) The date and time of removal of leachate from the facility;
 - c) The volume of leachate, in cubic metres, removed from the facility on each occasion;
 - d) The name and address of the Waste Water Treatment Plant to which the leachate was transported; and
 - e) Any incidents or spillages of leachate during its removal or transportation.
- 10.6 A written record shall be kept for each load of waste departing from the facility. The following shall be recorded:
 - a) The name of the carrier;
 - b) The vehicle registration number;
 - c) The destination of the waste (facility name and waste licence/permit number as appropriate);
 - d) A description of the waste (if recovered or rejected waste, the specific nature of the waste);
 - e) The quantity of waste, recorded in tonnes;

- f) The name of the person checking the load; and
- g) The time and date of departure.

REASON: To provide for the keeping of proper records of the operation of the facility.

CONDITION 11 REPORTS AND NOTIFICATIONS

- 11.1 Unless otherwise agreed by the Agency, all reports and notifications submitted to the Agency shall:
 - a) Be sent to Administration, Waste Enforcement Section, at the Agency's headquarters;
 - b) Comprise one original and three copies unless additional copies are required;
 - c) Be formatted in accordance with any written instruction or guidance issued by the Agency;
 - d) Include whatever information as is specified in writing by the Agency;
 - e) Be identified by a unique code, indicate any modification or amendment, and be correctly dated to reflect any such modification or amendment;
 - f) Be submitted in accordance to the relevant reporting frequencies specified by this licence, such as in Schedule E: Recording and Reporting to the Agency, of this licence;
 - Be accompanied by a written interpretation setting out their significance in the case of all monitoring data; and
 - h) Be transferred electronically to the Agency's computer system if required by the Agency.
- 11.2 In the event of an incident occurring on the facility, the licensee shall:
 - a) Notify the Agency as soon as practicable and in any case not later than 1000 hrs the following working day after the occurrence of any incident;
 - b) Submit a written record of the incident, including all aspects described in Condition 9.1 (a-f), to the Agency as soon as practicable and in any case within five working days after the occurrence of any incident;
 - c) In the event of any incident which relates to discharges to surfacewater, notify the Eastern Regional Fisheries Board as soon as practicable and in any case not later than 1000 hrs on the following working day after such an incident; and
 - d) Should any further actions be taken as a result of an incident occurring, the licensee shall forward a written report of those actions to the Agency as soon as practicable and no later than ten days after the initiation of those actions.

11.3 Waste Recovery Report

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

- a) The recovery of Construction and Demolition Waste; and
- b) Inert waste to be used for cover/restoration material at the facility.
- 11.4 Leachate Handling Procedures

11.4.1 The licensee shall submit to the Agency for its agreement prior to the commencement of any leachate handling on the facility, leachate handling procedures for the removal of leachate and its subsequent transport off-site.

11.5 Monitoring Locations

11.5.1 Within six months of the date of grant of this licence, the licensee shall submit to the Agency for its agreement an appropriately scaled drawing(s) showing all the monitoring locations that are stipulated in this licence. The drawing(s) shall include a unique reference code and the twelve figure National Grid Reference for each monitoring point.

11.6 Annual Environmental Report

- 11.6.1 The licensee shall submit to the Agency for its agreement an Annual Environmental Report (AER) by the 31st January each year. The AER shall be submitted on an annual basis thereafter.
- 11.6.2 The AER shall include as a minimum the information specified in *Schedule F:*Content of Annual Environmental Report of this licence, and it shall be prepared in accordance with any relevant written guidance issued by the Agency.

الله الال

REASON: To provide for proper reports to and notifications to the Agency.

CONDITION 12 CHARGES AND FINANCIAL PROVISIONS

12.1 Agency Charges

- 12.1.1 The licensee shall pay to the Agency an annual contribution of €19,676.50 or such sum as the Agency from time to time determines, towards the cost of monitoring the activity or otherwise in performing any functions in relation to the activity, as the Agency considers necessary for the performance of its functions under the Waste Management Act, 1996. The licensee shall in 2004 and subsequent years, not later than January 31 of each year, pay to the Agency this amount updated in accordance with changes in the Public Sector Average Earnings Index from the date of the licensee to the renewal date. The updated amount shall be notified to the licensee by the Agency. For 2003, the licensee shall pay a pro rata amount from the date of this licence to 31st December. This amount shall be paid to the Agency within one month of the date of grant of this licence.
- 12.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased the licensee shall contribute such sums as determined by the Agency to defraying its costs.

12.2 Financial Provision for Closure, Restoration and Aftercare

12.2.1 Within twelve months of the date of grant of this licence, the licensee shall arrange for an independent third party risk assessment of the facility to be carried out. The risk assessment shall have particular regard to the report prepared under condition 5.13.1 and also any accidents, emergencies, or other incidents, which might occur at the facility and their effect on the environment, on the neighbours of the facility and on adjoining land-uses. The risk assessment shall include a comprehensive and fully costed Environmental Liabilities Risk Assessment for the facility together with a

proposal for Financial Provision arising from the carrying on of the activities to which this licence relates.

- 12.2.2 The amount of financial provision, held under Condition 12.2.1 shall be maintained by the licensee and be reviewed and revised as necessary, but at least annually. Any proposal for such a revision shall be submitted to the Agency for its agreement.
- 12.2.3 The licensee shall within two weeks of purchase, renewal or revision of the financial provision required under Condition 12.2.1, forward to the Agency written proof of such indemnity.
- 12.2.4 Unless otherwise agreed any revision to the fund shall be computed using the following formula:-

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

Where:-

Cost = Revised restoration and aftercare cost.

ECOST = Existing restoration and aftercare cost.

WPI = Appropriate Wholesale Price Index [Capital Goods, Building & Construction (i.e. Materials & Wages) Index], as published by the Central Statistics Office, For the year since last closure calculation/revision.

CiCC = Change in compliance costs as a result of change in site conditions, changes in law, regulations, regulatory authority charges, or other significant changes.

12.3 Cost of Landfill of waste

12.3.1 The licensee shalf ensure that the costs of the setting up, operation of, provision of financial security and closure and after-care of the facility for a period of at least 30 years shall be covered by the price to be charged for the disposal of waste at the facility.

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

SCHEDULE A: Waste Acceptance

A.1 Waste Acceptance

Table A.1 Waste Categories and Quantities

Total	750,000
Inert Waste for Recovery	12,000
Inert Waste for Disposal	738,000
WASTE TYPE	MAXIMUM (TONNES PER ANNUM) Note 1

Note 1: The tonnage to be recovered may be increased by agreement with the Agency subject to the total tonnage not exceeding 750,000 tonnes (as specified in the total above).

A.2 Acceptable Waste

Only those wastes which are listed in Table A.2.1 and Table A.2.2 shall be accepted at the facility for disposal or recovery, unless otherwise agreed with the Agency.

Table A.2.1 Waste for Disposal

INERT OR INACTIVE WASTE			
Subsoil	Pottery and China	Concrete Note 1	
Clay	Brickwork	Solid Road Planings, Solid Tarmacadam, Solid Asphalt	
Stone, Rock and Slate	Natural Sand	Tailings and other wastes derived from washing and cleaning of minerals Note 2	

Note 1: Only solid concrete shall be accepted for disposal. Liquid concrete or unsolidified washings from any tanks used for holding/transporting concrete shall not be accepted for disposal.

Note 2: Limited to such waste (EWC code 01 04 12) derived from on-site quarrying, washing or processing of sand and gravel aggregates.

Table A.2.2 Waste for Recovery

Table A.2.2 Waste to Recovery WASTE			
Topsoil	Pottery and China	Metals	
Subsoil	Brickwork	Solid Road Planings, Solid Tarmacadam, Solid Asphalt	
Clay	Natural Sand	Tailings and other wastes derived from washing and	
Stone, Rock and Slate	Concrete Note 1	cleaning of minerals Note 2	

Note 1: Only solid concrete shall be accepted. Liquid concrete or unsolidified washings from any tanks used for holding / transporting concrete shall not be accepted.

Note 2: Limited to such waste (EWC code 01 04 12) derived from on-site quarrying, washing or processing of sand and gravel aggregates.

SCHEDULE B: Specified Engineering Works

Specified Engineering Works

Development of the facility including preparatory works and lining.

Final capping.

Installation of Landfill Gas Management Infrastructure.

Installation of Leachate Management Infrastructure.

Installation of Groundwater Control Infrastructure.

Installation of Surface Water Management Infrastructure, including the sedimentation pond.

Any other works notified in writing by the Agency.

SCHEDULE C: Emission Limits

C.1 Noise Emissions:

(Measured at the noise sensitive locations indicated in Table D.1.1).

Day Db(A) L _{Aeq} (30 minutes)	Night dB(A) L _{Aeq} (30 minutes)
55	in the or 45

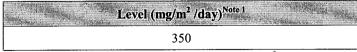
C.2 Landfill Gas Concentration Limits:

(Measured in any building on or adjacent to the facility).

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

C.3 Dust Deposition Limits:

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



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

Monitoring SCHEDULE D:

D.1 Monitoring Locations

Monitoring locations shall be those as set out in Table D.1.1.

Table D.1.1 Monitoring Locations

Landfill Gas Stations Note 1	Dust Deposition Stations Note 3	Noise Stations Note 3	Surface Water Stations Note 4	Ground Water Stations Note 4	Leachate Stations Note 4
GP1	NMP5	NMP5	ST1	MW 1	MW_7
GP2	NMP7	NMP7	ST2	MW 2	MW 8
GP5	NMP8	NMP8		MW 3	MW 9 Note 7
GP6	NMP13	NMP13		MW 4	MW10 Note 7
4 other locations Note 2		On-site plant		MW 5	1 location per cell Note 8
				MW 6	
				MW11	
		•.		3 other locations Note 5	
			S.	Private Wells Note 6	

As shown on "Map of Landfill Gas Monitoring Locations" in Article 13 response received by the Agency on 7/11/02 from Note 1: ार्थि, आर् Bord na Mona.

Note 2: As per the requirements of Condition 3.18.1.

As shown on Figure no. 3.7 Rev. 1 (Location of Environmental Monitoring Points) in Article 12 response received by the Note 3: Agency on 24/9/02.

Note 4: As shown on Figure no. 1 (Site Location and Monitoring Locations) in Article 13 response received by the Agency on 24/9/02.

As per the requirements of Condition 3.18 Note 5:

As per the requirements of Condition \$6.1 and including PW1 and PW2 as shown on Figure 1 (Site Location and Note 6:

Monitoring Locations).

Leachate quality monitoring not necessary for MW 9 and MW10. Only leachate levels to be recorded at these locations. Note 7:

As per the requirements of Condition 3.18.3. Note 8:

Frequency analysis to be done for all on-site plant (whilst operating) for the first monitoring event and thereafter only as Note 9: required by the Agency.

D.2 Landfill Gas

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

Parameter	Monitoring l	requency	Analysis Method Note1/Technique Note2
Falls and Configure is being at a company of the configuration of the co	Gas Boreholes/Wells	Site Office	
Methane (CH ₄) % v/v	Quarterly	Weekly	Infrared analyser/flame ionisation detector
Carbon dioxide (CO ₂) % v/v	Quarterly	Weekly	Infrared analyser/ flame ionisation detector
Oxygen(O ₂) % v/v	Quarterly	Weekly	Electrochemical cell
Atmospheric Pressure	Quarterly	Weekly	Standard
Temperature	Quarterly	Weekly	Standard

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

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

D.3 Dust Monitoring

Table D.3.1 Dust Monitoring Frequency and Technique

Parameter	Monitoring Frequency	Analysis Method/Technique
Dust Deposition (mg/m²/day) Note 1	Quarterly Note 2	Standard Method Note 3

Note 1: A wind rose, obtained from the meteorological station for the relevant sampling period, shall be submitted with each set of results.

Note 2: At least twice during the period May to September.

Note 3: Standard method VDI2119 (Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method)
German Engineering Institute). Any modifications to eliminate interference due to algae growth in the gauge should be reported to the Agency.

D.4 Noise

 Table D.4.1
 Noise Monitoring Frequency and Technique

Parameter Parameter	Monitoring Frequency	Analysis Method/Technique
L(A) _{EQ} [30 minutes]	Bi-annually Note 1	Standard Note 2
L(A) ₁₀ [30 minutes]	Bi-annually Note I	Standard Note 2
L(A) ₉₀ [30 minutes]	Bi-annually Note 1	Standard Note 2
Frequency Analysis (1/3	Bi-annually Note 10 the	Standard Note 2
Octave band analysis)	es Cot	,

Note 1: At least one monitoring event to be carried out during concrete/stone crushing operations.

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

D.5 Meteorological Monitoring

Data to be obtained from a source agreed with the Agency.

Table D.5.1 Meteorological Monitoring:

able D.S.T Wetcorological Worthorning.				
Parameter	Monitoring Frequency	Analysis Method/Technique		
Precipitation Volume	Daily	Standard		
Temperature (min/max.)	Daily	Standard		
Wind Force and Direction	Daily	Standard		
Evaporation	Daily	Standard		
Humidity	Daily	Standard		

D.6 Surface Water, Groundwater and Leachate

Table D.6.1 Water and Leachate - Parameters / Frequency

PARAMETER Note 1	SURFACE WATER Note 7	GROUNDWATER	LEACHATE
	Monitoring Frequency	Monitoring Frequency	Monitoring Frequency
Visual Inspection/Odour Note 2	Weekly	Quarterly	Quarterly
Groundwater Level	Not Applicable	Quarterly	Not Applicable
Leachate Level	Not Applicable	Not Applicable	Quarterly
Ammoniacal Nitrogen	Bi-annually	Quarterly	Quarterly
BOD	Bi-annually	Not Applicable	Annually
COD	Bi-annually	Not Applicable	Annually
Chloride	Bi-annually	Quarterly	Annually
Dissolved Oxygen	Bi-annually	Quarterly	Not Applicable
Electrical Conductivity	Bi-annually	Quarterly	Annually
Ph	Bi-annually	Quarterly	Annually
Total Suspended Solids	Bi-annually	Not Applicable	Not Applicable
Temperature	Bi-annually	Quarterly	Annually
Metals / non metals Note 3	Bi-annually	Annually	Annually
Cyanide (Total)	Bi-annually	Annually	Annually
Fluoride	Not Applicable	Annually	Annually
List I/II organic substances Note 4	Once off Note 5	Annually Annually Annually Note 5	Annually Note 5
Mercury	Once off of	Annually	Annually
Sulphate	Bi-annually	Annually	Annually
Total Alkalinity	Bicannially	Annually	Not applicable
Total P/orthophosphate	Biannually	Annually	Annually
Total Oxidised Nitrogen	Not Applicable	Annually	Annually
Total Organic Carbon	Not Applicable	Quarterly	Not Applicable
Residue on evaporation	Bi-annually Bi-annually Bi-annually Examinate Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Annually	Not Applicable
Phenols	Not Applicable	Quarterly	Annually
Faecal Coliforms Note 6	Not Applicable	Annually	Not Applicable
Total Coliforms Note 6	Not Applicable	Annually	Not Applicable

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

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

Note 3: Metals and elements to be analysed by AA/ICP should include as a minimum: boron, cadmium, calcium, chromium (total), copper, iron, lead, magnesium, manganese, nickel, potassium, sodium and zinc.

Note 4: 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 (USEPA method 525 or equivalent, and pesticides (USEPA method 608 or equivalent).

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

Note 6: In the case where groundwater is extracted for drinking water, if there is evidence of bacterial contamination, the analysis at up gradient and downgradient monitoring points should include enumeration of total bacteria at 22°C and 37°C and faecal streptococci.

Note 7: Surfacewater monitoring to be done at times when flows are occurring.

SCHEDULE E: Recording and Reporting to the Agency

Report	Reporting Frequency Note 1	Report Submission Date
Environmental Management System Updates	Annually	One month after the end of the year reported on.
Annual Environment Report (AER)	Annually	By the 31st January 2004 and within one month after the end of each calendar year thereafter.
Record of incidents	As they occur	Within five days of the incident.
Bund, tank and container integrity assessment	Every three years	Three months from the date of grant of licence and one month after the end of the three year period being reported on (or prior to the use of new structures).
Specified Engineering Works	As they arise	Prior to the works commencing.
Monitoring of Landfill Gas	Quarterly	Ten days after end of the quarter being reported on.
Monitoring of Surface Water	Bi-annually	Ten days after end of the six-month period being reported on.
Monitoring of Groundwater	Quarterly	Ten days after end of the quarter being reported on.
Monitoring of Leachate	Annually	Ten days after end of the year being reported on.
Meteorological Monitoring	Annuallycite	One month after end of the year being reported on.
Dust Monitoring	Quarterly	Ten days after the period being reported on.
Noise Monitoring	Bi-annually	Ten days after end of the six-month period being reported on.
Risk Assessment Report (Condition 5.13)	Quarterly Di-annually Once Off	Within six months of the date of grant of the licence.
Topographical Survey	Annually	Within six months of the date of grant of the licence and one month after the end of the year being reported on.
Stability Assessment	Annually	Six months from the date of grant of licence and one month after the end of the year being reported on.
Waste Recovery Report	Once Off	Within nine months of the date of grant of the licence.
Any other monitoring	As they occur	Within ten days of obtaining results.

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

SCHEDULE F: Content of the Annual Environmental Report

Annual Environmental Report Content

Reporting Period.

Waste activities carried out at the facility.

Quantity and Composition of waste received, disposed of and recovered during the reporting period and each previous year.

Types and Quantity of recovered materials sold to third parties (e.g. as aggregate material).

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

Methods of deposition of waste.

Summary report on emissions.

Summary of results and interpretation of environmental monitoring.

Resource and energy consumption summary.

Proposed development of the facility and timescale of such development.

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

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

Report on restoration of completed cells / phases.

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

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

Estimated annual and cumulative quantity of incircot emissions to groundwater.

Annual water balance calculation and interpretation.

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

Schedule of Environmental Objectives and Targets for the forthcoming year.

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

Tank, pipeline and bund testing and inspection report.

Report on the performance and compatibility of the septic tank (and associated percolation area) with the Agency's Wastewater Treatment manual: "Treatment Systems for Single Houses".

Reported incidents and Complaints summaries.

Review of Nuisance Controls, including an assessment of dust and noise control measures.

Reports on financial provision made under this licence, management and staffing structure of the facility, and a programme for public information.

Report on training of staff.

Any other items specified by the Agency.

Sealed by the Seal of the Agency on this the 5th day of June 2003

PRESENT when the seal of the Agency was affixed hereto:

Padraic Larkin, Director/Authorised Person

Consent of copyright owner required for any other use.

Section 47 of the Waste Management Acts 1996 to 2003, Section 94 of The Environmental Protection Agency Acts 1992 & 2003 Transfer of a Waste Licence.

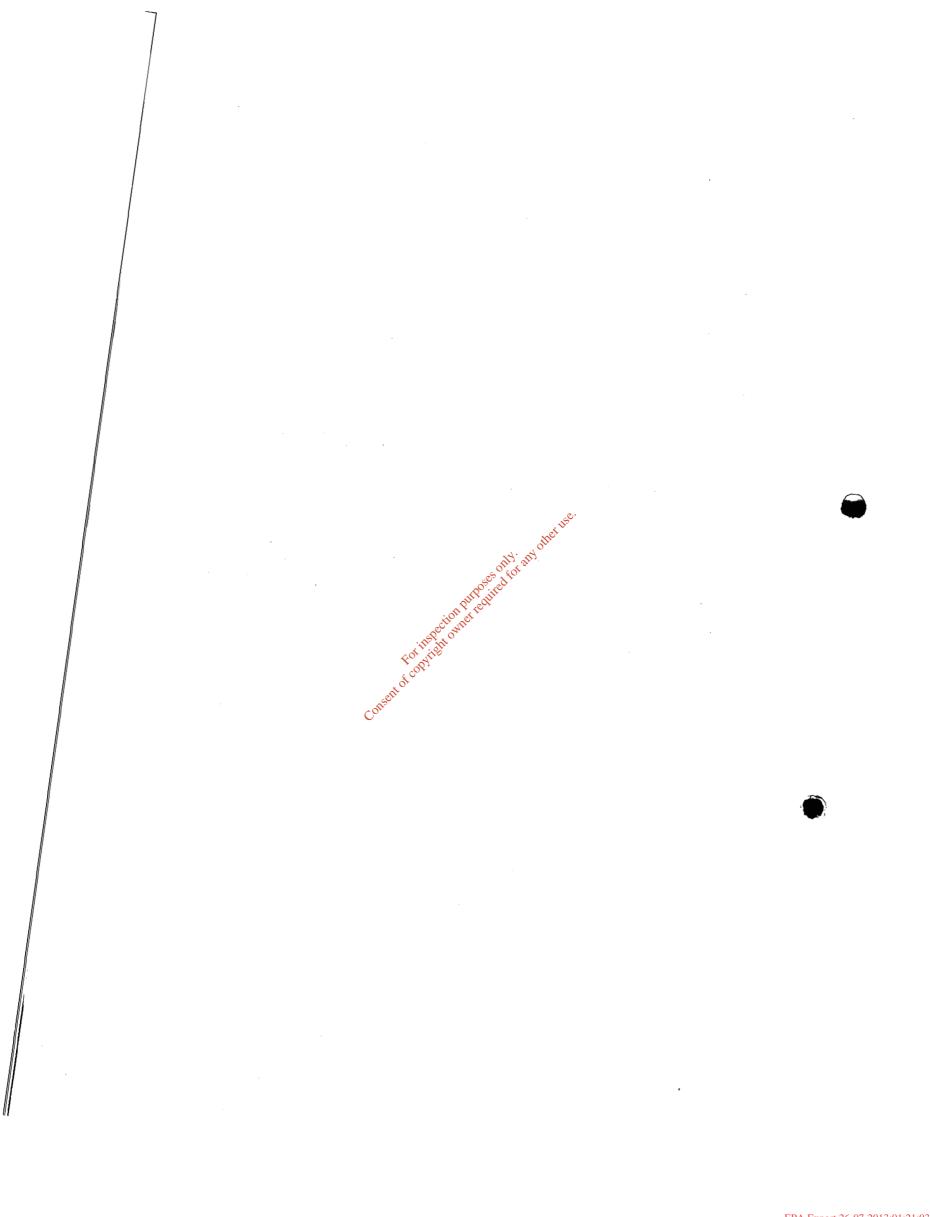
Attachment F:

EPA Correspondence Re. Restoration Costs at Hollywood

Please note that this assessment will be reviewed and associated financial provision revised, where necessary, in compliance with W0129-02 licence conditions relating to CRAMP (Closure, Restoration and Aftercare Management Plan) and ELRA (Environmental Liabilities Risk Assessment).



Patel Tonra Ltd. for Murphy Environmental Hollywood Limited, August 2008.



patel tonra ltd. environmental solutions

For the Attention of

Mr Eamonn Merriman

Inspector

EPA Regional Inspectorate

Richview

Clonskeagh Road

Dublin 14

Our Ref.:

129-1/LOD/260303(2)

Direct Dial:

01 802 0523

Direct Fax:

01 802 0525

Mobile:

086 8333724

e-mail:

louise.odonnell@pateltonra.com

Date:

26 Jun. 03

Dear Eamonn,

Waste Licence:	129-1 Hollywood Great	
	Restoration & Aftercare Costs	
Condition(s):	12.2	
Enclosed Docs:	-	్డల.

In consultation with site staff at Hollywood, and previous landfill restoration costs in Ireland, the following restoration and aftercare costs are proposed for the Hollywood site:

	on Park	Cost per	Total cost for 3 phases	
	itsectionic	phase (€)	Once-off cost	Recurring cost per year
Stage 1	Restoration Design: Subsoil Layer (0.5m) Soil Assessment	0.00	0.00	<u>-</u>
	Soil Assessment	300.00	900.00	<u>-</u>
	Soil Placement:	900.00	2,700.00	-
	 Soil handling operations Landform construction Landscaping features, e.g. ponds, wetlands Soil depth, type and distribution 			
	Maintenance of existing infrastructural installations: Pathways Access points and signposting	-	-	300.00
	Car parks			
	Decommissioning infrastructure	-	2,500.00	-

		Cost per	Total cost for 3 phases	
		phase (€)	Once-off cost	Recurring cost per year
Stage 2	Aftercare vegetation establishment:			
The state of the s	 Sowing of Grass (ca. 33 acres at €30/acre) 	-	1,000.00	· · · · · · · · · · · · · · · · · · ·
	 Planting of boundary hedgerow, trees, shrubs (ca. 1,630m @ €3/m) 	-	4,900.00	.
	Maintenance (Grass, planting, fencing, gates, etc.)	-		350.00
Stage 3	Monitoring: Meteorological (daily) Groundwater Levels (6 mthly) Groundwater composition (yearly) Leachate volume (yearly) Leachate composition (yearly) Topographical survey	Possolity any other us	- -	9,000.00
	TOTAL COSTS (€)		12,000.00	9,650.00

It is anticipated that soil costs will not be incurred by Murphy Environmental for restoration purposes, due to the nature of the incoming waste streams. Only such soil suitable for the subsoil and topsoil layers will be used for restoration works, and should it be necessary to purchase such materials, the above costs will be revised to reflect such costs.

If you have any comments on this proposal, I would be most grateful if you speak to the Facility Manager at Hollywood at your soonest convenience.

Yours sincerely

on behalf of Murphy Environmental (a division of Murphy Concrete Manufacturing Ltd.)

Louise O'Donnell

Environmental Consultant

Patel Tonra Ltd.

By mail and fax

CC. Mark Heffernan, Patricia Ronney, Murphy Environmental